

POLICY BRIEF

November 2020

Physical distancing at school

Practice and evidence review

Background

School closures related to COVID-19 have affected nearly 1.6 billion (90%) children and adolescents worldwide. Even where remote learning has been provided, the physical closure of schools has demonstrated a range of negative social and health consequences for children and adolescents, affected learning outcomes, wellbeing, and exacerbated inequities. These adverse effects have occurred in part because, in addition to learning and socializing, schools often provide children and adolescents with other services, ranging from meal and physical exercise programs to the provision of health care and mental health services.

In this brief, we explored the national policies of selected high-income countries with regard to physical distancing in schools. For the majority of countries reviewed, physical distancing in the school setting, where recommended, is aimed at older students and adults. Many recommend keeping children in separate groups to allow for effective contact tracing and isolation in the event of a detected case. Increasing evidence from these and other countries demonstrates that transmission in schools is rare; reopening has not resulted in increased levels of community transmissions. However, strong physical distancing policies reduce allowable class sizes, the consequence of which is keeping children and adolescents out of school.

Objective

In this brief, we explore¹ the current evidence to support physical distancing in schools, including guidelines by global and regional disease prevention agencies and a number of high-income countries with large urban populations. We focus on this measure because of the significant associated implementation and resource requirements vis-à-vis increased physical space and teaching staff.

¹ We reviewed the most recent guidelines by health protection agencies (WHO, CDC, ECDC) published in their website and searched for national school policies for elementary schools of most populous Western and Central European Countries and English-speaking countries. For scientific evidence, we searched the COVID-19 databases of the Lancet, JAMA, and Nature journals and national public health agencies, as well as PubMed/MEDLINE and Science Direct databases. We included only peer-reviewed systematic and rapid reviews or large cohort studies and excluded preprints.



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Summary of evidence

The large multi-country and national cohort studies and systematic reviews show that compared to adults, children and adolescents are at lower risk of severe illness, hospitalization, and death from COVID-19, and that there are fewer reported COVID-19 cases in children and adolescents than in adults. (1)(2)(3)(4)

While most COVID-19 transmissions (46-66%) occur between household members,(5) the schools are not driving COVID-19 outbreaks.(6)(7)(8)(9): school re-opening has not resulted in increased levels of community transmission, child to child transmission in schools is uncommon, and children in school settings are not the primary transmitters of COVID-19 to adults.(7)(9)(10)(11) Surveillance testing of staff and children in schools in New York City, including in the most affected neighborhoods, confirm these findings.(12)(13)

Evidence on extended school closures from previous experience in both high and lower income settings shows an association with poorer academic performance and learning, dropout, food insecurity,(14) increased vulnerability to violence and child abuse,(15) and adolescent pregnancy.(16) Evidence from the ongoing COVID-19 epidemic suggests increased anxiety, depression and loneliness among children and adolescents. These impacts are likely to continue after social isolation as this age group is also disproportionately affected by social deprivation. (17)(18)

Published peer-reviewed evidence on the effectiveness of physical distancing in reducing the spread of COVID-19 is limited. We identified only one systematic review by Chu et al. according to which at least 1 meter distancing is likely associated with a reduction in infection. However, none of the studies included in this review were from a school setting and only a few were specific to COVID-19.(19)

Global and regional policy

While no specific studies had been conducted with regard to COVID-19, the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) both recommend physical distancing be practiced in schools.

The recommendations of these two agencies differ in terms of the distance that should be maintained between students and with teachers. The CDC recommends physical distancing at least 6 feet apart, physical barriers where this distance cannot be maintained, and mask use for all students and staff while acknowledging challenges in use for children in up to third grade, and people with breathing difficulties or special educational or healthcare needs.(20) WHO recommends 1 meter (3.3 ft) distancing and mask for adults and children over 12 years in areas defined as having *community transmission*¹ of COVID-19. In areas with less transmissions (*cluster transmission*² and *sporadic/no cases*³) distancing is not recommended between students although it is recommended for adults.(22) European Centre for Disease Prevention and Control (ECDC) follows the WHO guidance on 1 meter desk spacing in schools.(23)

Country policies - examples

A number of countries have developed their own national policies for physical distancing in schools. Many recommend keeping children in separate groups to allow for effective contact tracing and isolation in the event of a detected case.(24)(25)(26) For the majority of countries reviewed, physical distancing in the school setting, where recommended, is aimed at older students and adults. The recommended distance ranges from none to 2 meters.

¹ Defined as "countries/territories/areas experiencing cases, clustered in time, geographic location and/or by common exposures."

² Defined as "countries/territories/areas experiencing cases, clustered in time, geographic location and/or by common exposures." (21)

³ Defined as "countries/territories/areas with no cases or one or more cases, imported or locally detected.(21)

Norway for instance has no requirements for younger children but recommends 1 meter for older children and adults.(24)

In New Zealand, a 1-meter distance is recommended only between adults during a risk of community transmission, and also between students during high risk of transmission.(27)

France, (28) Portugal, (26) and Italy (29) –countries that have reintroduced strict public restrictions– recommend a distance of 1 meter for all students and adults. In addition, they recommend masks ranging from age 6 years and above in France to 10 years in Portugal, and 6 or 12 years in Italy, depending on the local epidemiological situation.

In Spain, 1.5 meter desk spacing is advised with the exception of grades 1-2 (6-8 year olds). Masks are obligatory from age 6 onwards.(30)

Australia has no requirements for students but recommends that adults keep a distance of 1.5 meters.(31) The UK has no distancing requirement for students and encourages 2 meters for adults.(25) Scotland requires 2 meters for adults and recommends 2 meters for older students.(32)

Germany has a federal recommendation of 1.5 meters for all students and adults,(33) however, states can make their own decisions. Berlin for example has no distancing requirements for students.(34) In Switzerland, the decision making is also at state level. Geneva has no distancing requirement for students, although it does recommend distancing of 1.5 meters for adults, (35) whereas Zurich recommends 1.5 meters for both older students and adults. (36)

Conclusion

Given the negative consequences associated with school closures, countries where current physical distancing requirements are more stringent than those proposed by WHO should consider the effects of their policy on learning and student well-being. The risks and benefits of the measures need to be carefully considered, in particular as according to the increasing evidence, transmissions in schools are rare and re-opening has not resulted in increased levels of community transmissions.

This evidence brief was developed by:

1. **Nina Schwalbe** (Visiting Principal Fellow, UNU-IIGH / Principal, Spark Street Advisors)
2. **Susanna Lehtimäki** (Senior Advisor, Spark Street Advisors)

References

1. Viner RM, Mytton OT, Bonell C, Melendez-Torres GJ, et al. Susceptibility to SARS-CoV-2 infection amongst children and adolescents compared with adults: a systematic review and meta-analysis. *JAMA*. 2020 Sep 25;
2. Castagnoli R, Votto M, Licari A, Brambilla I, et al. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children and Adolescents A Systematic Review. *JAMA Pediatr*. April 22, 2020.
3. Swann OV, Turtle O, Fairfield CJ, Egan C, et al. Clinical characteristics of children and young people admitted to hospital with covid-19 in United Kingdom: prospective multicentre observational cohort study. *The BMJ*. 2020 Aug 27;370:m3249.
4. Götzinger F, Santiago-García B, Noguera-Julián A, Lanaspá M, et al. COVID-19 in children and adolescents in Europe: a multinational, multicentre cohort study. *Lancet Child Adolesc Health*. 2020 Sep 1;4(9):653–61.
5. Lee EC, Wada NI, Grabowski MK, Gurley ES, Lessler J. The engines of SARS-CoV-2 spread. *Science*. 2020 Oct 23;370(6515):406–7.
6. National Centre for Immunisation Research and Surveillance (NCIRS). COVID-19 in schools – the experience in NSW [Internet]. NCIRS; 2020. Available from: http://ncirs.org.au/sites/default/files/2020-04/NCIRS%20NSW%20Schools%20COVID_Summary_FINAL%20public_26%20April%202020.pdf
7. Public Health Agency of Sweden. Covid-19 in schoolchildren. A comparison between Finland and Sweden [Internet]. Stockholm: Public Health Agency of Sweden; 2020. Available from: <https://www.folkhalsomyndigheten.se/contentassets/c1b78bffbde4a7899eb0d8ffdb57b09/covid-19-school-aged-children.pdf>
8. ECDC. Q & A on COVID-19 in children aged 0 – 18 years and the role of school settings in COVID-19 transmission [Internet]. Stockholm: ECDC; 2020. Available from: <https://www.ecdc.europa.eu/en/covid-19/facts/questions-answers-school-transmission>
9. ECDC. COVID-19 in children and the role of school settings in COVID-19 transmission [Internet]. Stockholm: ECDC; 2020 [cited 2020 Oct 20]. Available from: <https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission>
10. Faust SN & Munro APS. It's Time to Put Children and Young People First During the Global COVID-19 Pandemic. *JAMA*. 2020 Sep 25;
11. Ismail SA, Saliba V, Lopez Bernal J, Ramsay ME, Ladhani SN. SARS-CoV-2 infection and transmission in educational settings: cross-sectional analysis of clusters and outbreaks in England [Internet]. London: Public Health England; 2020. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911267/School_Outbreaks_Analysis.pdf
12. New York State. COVID-19 Report Card. Positive Tests by Region [Internet]. 2020 [cited 2020 Oct 20]. Available from: <https://schoolcovidreportcard.health.ny.gov/#/summary>
13. Rubinstein D & Goodman DJ. Surprising Results in Initial Virus Testing in N.Y.C. Schools. *N Y Times* [Internet]. 2020 Oct 19 [cited 2020 Oct 20]; Available from: <https://www.nytimes.com/2020/10/19/nyregion/schools-coronavirus.html>
14. Lancker WV & Parolin Z. COVID-19, school closures, and child poverty: a social crisis in the making. *Lancet Public Health*. 2020 May 1;5(5):243–4.
15. Cluver L, Lachman JM, Sherr L, Wessels I, et al. Parenting in a time of COVID-19. *The Lancet*. Published online March 25, 2020.
16. Plan International. Ebola: beyond the health emergency Summary of research into the consequences of the Ebola outbreak for children and communities in Liberia and Sierra Leone. London: Plan International; 2015.
17. Loades ME, Chatburn E, Higson-Sweeney N, Reynolds S, et al. Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19. *J Am Acad Child Adolesc Psychiatry*. 2020 Nov 11;59(11):1218–39.
18. Xie X, Xue Q, Zhou Y, Zhu K, et al. Mental Health Status Among Children in Home Confinement During the Coronavirus Disease 2019 Outbreak in Hubei Province, China. *JAMA Pediatr*. April 24, 2020.
19. Chu DK, Akl EA, Duda S, Solo K, et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *Lancet*. 2020 Jun;395(20242):1973–87.
20. CDC. Operating schools during COVID-19: CDC's Considerations [Internet]. 2020 [cited 2020 Oct 20]. Available from: https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fschoools-childcare%2Fguidance-for-schools.html
21. WHO. Public health surveillance for COVID-19 [Internet]. Geneva: WHO; 2020. Available from: <https://www.who.int/publications/i/item/who-2019-nCoV-surveillanceguidance-2020.72>. WHO. Q&A: Schools and COVID-19 [Internet]. 2020 [cited 2020 Oct 20]. Available from: <https://www.who.int/news-room/q-a-detail/q-a-schools-and-covid-19>

23. ECDC. Guidelines for the implementation of non-pharmaceutical interventions against COVID-19 [Internet]. Stockholm: ECDC; 2020. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-guidelines-non-pharmaceutical-interventions-september-2020.pdf>
24. Utdanningsdirektoratet/Norwegian Directorate for Education and Training. Veileder om smittevern for ungdomsskole og videregående skole under covid-19 utbruddet 2020 [Internet]. 2020 [cited 2020 Oct 20]. Available from: <https://www.udir.no/kvalitet-og-kompetanse/sikkerhet-og-beredskap/informasjon-om-koronaviruset/smittevernveileder/skoletrinn-1-7/smitteforebyggende-tiltak/#nivainndeling-av-smitteverntiltak-trafikklysmode>
25. The UK Department for Education. Guidance for full opening: schools [Internet]. London: Government of the UK; 2020. Available from: <https://www.gov.uk/government/publications/actions-for-schools-during-the-coronavirus-outbreak/guidance-for-full-opening-schools>
26. A Direção-Geral da Saúde, Portugal. Referencial Escolas – Controlo da transmissão de COVID-19 em contexto escolar [Internet]. Lisbon: The Government of Portugal; 2020. Available from: <https://www.portugal.gov.pt/download-ficheiros/ficheiro.aspx?v=%3d%3dBQAAAB%2bLCAAAAAAABAAzNDAXNgQAZLafLAUAAAA%3d>
27. New Zealand Government. COVID-19. Guidance for schools for Alert Levels 1 - 4 [Internet]. Wellington, NZ: Ministry of Education, New Zealand; 2020 [cited 2020 Oct 20]. Available from: <https://www.education.govt.nz/covid-19/advice-for-schools/guidance-for-schools-for-alert-levels-1-4/>
28. République Française. Rentrée de novembre : des règles sanitaires renforcées dans les établissements scolaires [Internet]. 2020 [cited 2020 Nov 1]. Available from: <https://www.service-public.fr/particuliers/actualites/A14409>
29. Ministero della Salute, Italia. Covid-19, Cts: raccomandazioni tecniche per l'apertura delle scuole in sicurezza [Internet]. Rome: The Government of Italy; 2020. Available from: http://www.salute.gov.it/portale/news/p3_2_1_1_1.jsp?lingua=italiano&menu=notizie&p=dalministero&id=5036
30. Ministry of Education and Vocational Training, Government of Spain. Medidas de prevención, higiene y promoción de la salud frente a covid-19 para centros educativos en el curso 2020-2021 [Internet]. Madrid: Government of Spain; 2020. Available from: https://www.msccbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/Medidas_centros_educativos_Curso_2020_2021_17.09.20.pdf
31. Australian Health Protection Principal Committee. Australian Health Protection Principal Committee (AHPPC) advice on reducing the potential risk of COVID-19 transmission in schools [Internet]. Canberra: AHPPC; 2020. Available from: <https://www.health.gov.au/news/australian-health-protection-principal-committee-ahppc-advice-on-reducing-the-potential-risk-of-covid-19-transmission-in-schools-24-april-2020>
32. Scottish Government. Coronavirus (COVID-19): guidance on preparing for the start of the new school term in August 2020 - version 2 [Internet]. 2nd ed. Glasgow: Scottish Government; 2020. Available from: <https://www.gov.scot/publications/coronavirus-covid-19-guidance-preparing-start-new-school-term-august-2020-version-2/>
33. Kultusministerkonferenz. Corona-Pandemie. Rahmen für aktualisierte Infektionsschutz- und Hygienemaßnahmen. Beschluss der Kultusministerkonferenz vom 14.07.2020 [Internet]. Berlin: Sekretariat der Kultusministerkonferenz; 2020. Available from: https://www.kmk.org/fileadmin/Dateien/veroeffentlichungen_beschluesse/2020/2020_07_14-Infektionsschutz-Hygienemaassnahmen.pdf
34. Senatsverwaltung für Bildung, Jugend und Familie. Handlungsrahmen für das Schuljahr 2020/21 [Internet]. Berlin: Senatsverwaltung für Bildung, Jugend und Familie; 2020. Available from: <https://www.berlin.de/sen/bjf/coronavirus/aktuelles/briefe-an-schulen/>
35. République et canton de Genève. Plan de protection pour assurer l'accueil à l'enseignement obligatoire [Internet]. Geneva: République et canton de Genève; 2020. Available from: <https://www.ge.ch/document/plan-protection-assurer-accueil-enseignement-obligatoire>
36. Kanton Zürich. Informationen rund um Schulen, Kitas & Heime [Internet]. 2020 [cited 2020 Oct 22]. Available from: <https://www.zh.ch/de/gesundheit/coronavirus/informationen-rund-um-schulen-kitas-heime.html#1562853840>