

COVID-19 existing resource response #12

(Last updated: 28 September 2021)

Question

What is the best-available evidence about the effects of public-health measures in schools (K-12), as well as about supporting adherence to these measures?

What we found

We searched the COVID-END global and domestic inventories of best evidence syntheses to identify evidence documents that focused on the effects of and supporting adherence to public-health measures in schools (K-12). The search terms used were: “school” AND (“effectiveness” OR “adherence” OR “public health measure” OR “public health” OR “measure”). We also contacted 40+ Canadian evidence-synthesis teams by email.

We identified 23 evidence documents that are listed in Table 1, which include:

- one guideline;
- one living review;
- four rapid reviews;
- five protocols for systematic reviews;
- one title/questions for reviews that are being planned;
- nine single studies; and
- two other types of documents (a government report and briefing document).

The [living systematic review](#) provides the most comprehensive and up-to-date assessment (last updated on 22 July 2021 with a planned update for October 2021) about the effects of public-health measures in schools. Specifically, Table 3 in the living review provides a summary of the outcomes associated with school transmission-mitigation measures. We found very little about adherence to public-health measures in schools, except for one single study focused on [adherence to mask-wearing requirements](#).

Box 1: Our approach

COVID-END in Canada responds to requests for evidence syntheses about topics related to COVID-19 that are likely to be explicitly considered by high-level decision-makers in multiple Canadian jurisdictions. This includes conducting rapid evidence profiles, living evidence profiles, rapid syntheses and living evidence syntheses. Examples of these evidence products can be viewed [here](#).

Sometimes requests are submitted about questions that have already been addressed by one or more recently updated, high-quality evidence syntheses or will be addressed soon by work underway (e.g., through a rapid synthesis underway with or being planned by a Canadian team, registered synthesis protocol or CIHR funding to conduct a synthesis). Other times all the requestor needs is a list of available evidence syntheses undertaken by COVID-END in Canada partners or COVID-END global partners. In these situations, we prepare a response that profiles these existing resources. These responses are typically prepared by a combination of: 1) searching both the COVID-END domestic inventory and the COVID-END global inventory; and 2) contacting 40+ Canada evidence-synthesis teams to identify any additional resources or work underway that is relevant to the question posed in a request. Such an existing resource response is equivalent to a rapid evidence profile prepared with the same turn-around time.

We followed this approach to prepare this existing resource response, which was prepared in one business day (and hence the equivalent to a one-day rapid evidence profile) to inform next steps in evidence synthesis, guideline development and/or decision-making related to the question that was posed.

Table 1: Hyperlinked titles to evidence documents about effectiveness of and supporting adherence to public-health measures in schools (K-12)

Evidence type	Evidence documents identified
Guidelines	<ul style="list-style-type: none"> • Measures to prevent and control SARS-CoV-2 transmission in schools: Living guideline (Association of the Scientific Medical Societies in Germany; last updated 7 February 2021)
Living reviews	<ul style="list-style-type: none"> • Living rapid review update 17: What is the specific role of daycares and schools in COVID-19 transmission? (AMSTAR rating 8/10; last updated 22 July 2021)
Full systematic reviews	<ul style="list-style-type: none"> • None identified
Rapid reviews	<ul style="list-style-type: none"> • Face coverings worn by children in school settings to reduce SARS-CoV-2 transmission (no AMSTAR rating available; last updated 19 August 2021) • Mask wearing in children and COVID-19: What we know so far (no AMSTAR rating available; last updated 12 July 2021) • Youth compliance with COVID-19 public health measures (no AMSTAR rating available; last updated 10 December 2020) • Measures implemented in the school setting to contain the COVID-19 pandemic: A rapid scoping review (AMSTAR rating 7/9; last updated 8 October 2020)
Protocols for reviews*	<ul style="list-style-type: none"> • School practices to promote social distancing for COVID-19: A living systematic review protocol (anticipated completion date: 17 May 2020) • What is the risk of transmission of COVID-19 within school and preschool settings, and how effective are interventions to reduce transmission? A rapid review (anticipated completion date: 24 July 2020) • The relative effectiveness of multilevel interventions in reducing risks of transmission of lethal viruses in Grade K-12 school communities and school linked populations: A systematic review and best-evidence synthesis (anticipated completion date: 29 August 2020) • How effective are school-based interventions to reduce the transmission of respiratory infections, including COVID-19, in a school setting? (anticipated completion date: 30 September 2020) • Evidence synthesis gaps in understanding disease burden of children, transmission parameters in schools and households and effects of measures implemented in schools during the COVID-19 pandemic – a rapid systematic review of systematic reviews (anticipated completion date: 31 March 2021)
Titles/questions for reviews that are being planned	<ul style="list-style-type: none"> • Unintended consequences of measures implemented in the school setting to contain the COVID-19 pandemic (registered on 30 April 2021)
Single studies	<ul style="list-style-type: none"> • Daily testing for contacts of individuals with SARS-CoV-2 infection and attendance and SARS-CoV-2 transmission in English secondary schools and colleges: an open-label, cluster-randomised trial (published 14 September 2021) • Social network-based cohorting to reduce the spread of SARS-CoV-2 in secondary schools: A simulation study in classrooms of four European countries (published 8 September 2021) • The first 100 days: Establishment and effectiveness of campus protection measures at a college during the COVID-19 pandemic (published 28 August 2021) • A cluster randomised trial of the impact of a policy of daily testing for contacts of COVID-19 cases on attendance and COVID-19 transmission in English secondary schools and colleges (pre-print posted 25 July 2021)

	<ul style="list-style-type: none"> • Implementation of a pooled surveillance testing program for asymptomatic SARS-CoV-2 infections in K-12 schools and universities (published 17 July 2021) • Household COVID-19 risk and in-person schooling (published 4 June 2021) • COVID-19 Mitigation Practices and COVID-19 Rates in Schools: Report on Data from Florida, New York and Massachusetts (pre-print posted 21 May 2021) • Adherence to masking requirement during the COVID-19 pandemic by early elementary school children (published 16 May 2021) • Effectiveness of 3 versus 6 ft of physical distancing for controlling spread of coronavirus disease 2019 among primary and secondary students and staff: A retrospective, statewide cohort study (published 10 March 2021)
Other types of documents	<ul style="list-style-type: none"> • Advisory sub-group on education and children's issues: Evidence on children, schools, early learning and childcare settings and transmission- Summary report (Scottish Government; published 12 August 2021) • Unintended consequences of measures implemented in the school setting to contain the COVID-19 pandemic (Science brief from the Ontario Science Table; published 19 July 2021)

*Given how old most of the protocols are, we checked for full reviews but did not identify any completed reviews for them. As a result, we included the protocols older than December 2020 in case reviews based on them will become available soon.

Wilson MG, Bain T, Bhuiya A, Mansilla C, Lavis JN. COVID-END in Canada existing resource response #12: What is the best-available evidence about the effects of public-health measures in schools (K-12), as well as about supporting adherence to these measures? Hamilton: McMaster Health Forum, COVID-END in Canada, 28 September 2021.

To help health- and social-system leaders as they respond to unprecedented challenges related to the COVID-19 pandemic, the McMaster Health Forum is preparing responses like this one. This response is funded by the Public Health Agency of Canada. The opinions, results, and conclusions are those of the McMaster Health Forum and are independent of the funder. No endorsement by the Public Health Agency of Canada is intended or should be inferred.