

COVID-19 Living Evidence Profile #3

(Version 1: 7 May 2021)

Question

What is known about how schools (K-12) and post-secondary institutions (colleges and universities) adjust COVID-19 transmission-mitigation measures as infection rates change and vaccination rates increase?

What we found

This living evidence profile is designed to complement two existing living evidence syntheses that address COVID-19 transmission [in schools](#) (kindergarten to Grade 12) and [in post-secondary institutions](#) (colleges and universities), which provide comprehensive syntheses of empirical evidence. We complement these syntheses by profiling guidelines, which are not included in these existing syntheses, and describing experiences from seven other countries and from all Canadian provinces and territories. The experiences of greatest interest are those related to how governments approach matching the type and intensity of transmission-mitigation measures to local infection and vaccination rates. The rationale for the selection of the countries, as well as additional details about our approach, are provided in Box 1. We organized our findings using the framework below.

Organizing framework

- When should adjustment be made (i.e., triggers for change)?
 - Case rates and other epidemiological indicators
 - Vaccination-related factors (e.g., proportion of school- or college/university-age population vaccinated, proportion of population vaccinated, and proportion of high-risk population vaccinated)
 - Community capacity (e.g., public-health capacity for contact tracing)
- Where should measures be changed?
 - Grade schools

Box 1: Our approach

We identified new research evidence addressing the question by searching the COVID-END [inventory of best evidence syntheses](#) and resources prioritized in the COVID-END [guide to key COVID-19 evidence sources](#) on 22-23 April 2021. We identified jurisdictional experiences by searching jurisdiction-specific sources of evidence listed in the same COVID-END guide to key COVID-19 evidence sources, and by hand searching government and stakeholder websites, in the 3-5 May 2021 period. We selected seven countries that are likely to have developed and/or implemented plans to adjust transmission-mitigation measures in schools or post-secondary institutions either because they have high vaccination rates (Chile, Israel, United Kingdom and United States) or because of having consistently low transmission rates for several months (Australia, China and New Zealand).

Given that two living evidence syntheses already exist about transmission in schools and in post-secondary schools, we focused only on identifying guidelines in our search, which are not included in the living evidence syntheses.

We appraised the quality of the guidelines we identified as being highly relevant using three domains in the AGREE II tool (stakeholder involvement, rigour of development, and editorial independence), and classified guidelines as robust if they were scored as 60% or higher across all three domains.

This living evidence profile was prepared in the equivalent of three days of a ‘full-court press’ by all involved staff, and will be updated in six weeks and then two months after that to provide evidence updates that can support returns to schools and post-secondary institutions.

- Kindergarten and elementary schools
 - High schools
- Post-secondary institutions
- What measures should be changed?
 - Operation of schools
 - Online instruction (whole or partial)
 - Student supports
 - Instructor supports
 - Staffing ratios
 - Classroom changes (e.g., limiting number of students; increasing distance between students)
 - Facility changes (e.g., expanding classroom size by using additional facilities; providing class outside)
 - Skill redevelopment programs
 - Operation of residences in post-secondary schools
 - Building occupancy
 - Room occupancy (e.g., single, double or more)
 - Access to and rules for common spaces for gatherings
 - Enforcement of rules
 - Engagement in extracurricular activities (e.g., athletics, music or other school-based or post-secondary clubs)
 - Intramural
 - Inter-collegiate
 - Accompanying public-health measures
 - Infection prevention
 - Washing hands
 - Wearing masks
 - Disinfecting surfaces and facilities
 - Physical distancing (e.g., within and between cohorts, limits to class size, desk spacing)
 - Temporal distancing (e.g., holiday staggering, time-of-day staggering)
 - Ventilation maximization
 - Public-focused behaviour-change supports
 - Infection control
 - Screening (e.g., active, passive, symptom awareness, different tests and in different settings)
 - Quarantining of exposed or potentially exposed individuals
 - Testing
 - Isolation of suspected or confirmed cases
 - Contact tracing
- Reported challenges implementing any of the measures above

What we found

We identified 11 relevant guidelines that met our minimum requirements for a guideline (i.e., includes explicit recommendations and an explicit process for developing them). We deemed five to be highly relevant because they had direct relevance to one or more categories in the organizing framework and were produced since December 2020 (i.e., when the vaccine roll-out began), with the one exception of a guideline that was produced in October 2020 which was deemed to still provide

highly relevant insights. Of the five highly relevant guidelines, two were from the Public Health Agency of Canada (both were last updated on 21 February 2021), and the remaining were from the U.S. Centers for Disease Control and Prevention (last updated 19 March 2021), the American Academy of Pediatrics (last updated 25 March 2021), and the French Pediatric Society (last updated 27 October 2021). [The guideline developed by the American Academy of Pediatrics was assessed as high quality](#) using AGREE II, and the remaining four highly relevant guidelines were deemed to be low quality.

Note that guidelines that did not meet the minimum requirements to be considered a guideline yet described relevant jurisdictional experiences were instead included in our jurisdictional scan.

We outline insights from the highly relevant guidelines and from the jurisdictional scans in narrative form below. This is accompanied by Table 1 (key findings from each of the highly relevant guidelines), Table 2 (experiences from other countries), and Table 3 (experiences from Canadian provinces and territories).

For those who want to know more about our approach, we provide a detailed summary of our methods in Appendix 1. In addition, we provide all guidelines identified from our searches in Appendix 2, and guidelines excluded at the final stages in Appendix 3.

Key findings from highly relevant guidelines

When should adjustments be made (i.e., case rates, vaccination-related factors, community capacity)?

For grade schools, a high-quality guideline from the [American Academy of Pediatrics](#) and a guideline from the [U.S. Centers for Disease Control and Prevention \(CDC\)](#) stated that adjusting prevention strategies (e.g., physical distancing, cohorting, and whether to engage in sports and extracurricular activities) are dependent on school case rates, compliance with prevention strategies, and levels of community transmission. The U.S. CDC defined levels of community transmission (total new cases per 100,000 persons in the past seven days) as the following:

- low: 0 – 9
- moderate: 10 – 49
- substantial: 50 – 99
- high: more than 100.

The guideline from the U.S. CDC also provides examples of how prevention strategies could be adapted based on the level of community transmission (e.g., at least three metres between students in classrooms when there are low levels of transmission or cohorting when possible).

For vaccination-related factors, the U.S. CDC guideline indicated that the U.S. Department of Health and Human Services issued a Secretarial Directive on 2 March 2021 to widen the eligibility criteria to include teachers and school staff as a priority group for vaccination across the U.S. In terms of community capacity, the guidelines from the American Academy of Pediatrics and the U.S. CDC recommended that grade schools should work with local health authorities for contact tracing, where there must be enough contact tracers such that contacts are notified within 48 hours of a confirmed COVID-19 case. Finally, a guideline from the [Public Health Agency of Canada \(PHAC\)](#) [specific to grade schools](#) briefly described that schools and local health authorities should establish case management and contact strategies (e.g., use of attendance records).

For post-secondary institutions, the second guideline from PHAC [developed five examples of indicators](#) to guide an increase or removal of restrictions, which focused on:

- level of on-campus transmission;
- level of community transmission (e.g., particularly within campus buildings and student housing);
- compliance with public-health mitigation strategies;
- healthcare capacity on campus or at local facilities and clinics; and
- space to manage students (individually or cohorts) to quarantine or self-isolate.

What measures should be changed (i.e., operation of schools, operation of residences in post-secondary schools, engagement in extracurricular activities, accompanying infection-prevention measures)?

Related to the operation of grade schools, several of the guidelines provide high-level guidance, which indicated that:

- classroom closure is justified if at least three students are infected from the same class ([French Pediatric Society](#));
- schools should consider in-person, virtual or at-home learning, or a hybrid of the two, with progressive introduction of in-person attendance based on grade level, with primary schools preceding secondary schools ([PHAC](#));
- schools should be the last setting to close and the first to re-open ([U.S. CDC](#));
- younger children in elementary schools are likely to have less risk of in-school transmission than older students in middle or high schools due to low susceptibility and transmission rates ([U.S. CDC](#)); and
- school staff should limit non-essential interactions between other staff in addition to students ([U.S. CDC](#)).

Additionally, PHAC released guidance specific to the operations of post-secondary institutions (e.g., physical distancing, quarantine and isolation policies within residences), in which they provided some examples of mitigation strategies such as:

- seating students at least two metres apart;
- offering virtual lectures and online exams;
- offering activities outdoors;
- allowing students living in residence to self-isolate in their dorm room or designated on-campus or off-campus rooms/residences; and
- cohorting students who tested positive for COVID-19 and ensuring appropriate care and support such as meals.

We also identified recommendations and guidelines for students engaging in extracurricular activities in both grade schools and post-secondary institutions, which emphasized the use of risk-mitigation approaches and tools. Some examples of risk-mitigation approaches and recommendations include:

- postponing team sports, field trips, and/or extracurricular activities or limiting/prohibiting spectators where physical distancing cannot be maintained ([PHAC guidelines for grade schools](#) and for [post-secondary schools](#));
- prioritizing the re-opening of in-person classroom instruction over extracurriculars ([U.S. CDC guidelines for grade schools](#));
- selecting physical education and recreational activities where physical distancing can be maintained ([PHAC guidelines for grade schools](#) and for [post-secondary schools](#));

- moving music extracurricular activities to outdoor spaces or well-ventilated areas (e.g., band practice, singing) where physical-distancing strategies can be implemented (e.g., no sharing of instruments, at least two metres apart, not facing each other directly, fewer performers) ([PHAC guidelines for grade schools](#)); and
- utilizing risk mitigation-based tools when making decisions for school settings such as the following tools and frameworks:
 - [risk-mitigation tool for child and youth settings operating during the COVID-19 pandemic](#) (PHAC),
 - [risk-mitigation tool for gatherings and events operating during the COVID-19 pandemic](#) (PHAC),
 - [risk-mitigation tool for outdoor recreation spaces and activities operating during the COVID-19 pandemic](#) (PHAC),
 - [COVID-19 Return to High Performance Sport Framework](#) (PHAC), and
 - [K-12 Schools COVID-19 Mitigation Toolkit](#) (U.S. CDC).

There was general consensus across the guidelines on key infection-prevention measures within grade schools and post-secondary school, such as:

- wearing masks consistently and correctly throughout the school and while on school transportation (with some exceptions related to students with certain disabilities);
- physical-distancing strategies (e.g., at least three metres between students in classrooms; at least six metres at all times in school buildings especially in common areas such as school lobbies and auditoriums; when masks cannot be worn while eating and participating in physical activities; cohorting and staggered schedules; limitations on school visitors; and visual cues to encourage physical distancing);
- handwashing and respiratory etiquette (e.g., signage and education on hand hygiene, avoiding face touching and implementation of frequent handwashing schedules);
- cleaning and maintaining healthy facilities (e.g., modifying layouts, regularly cleaning high-touch surfaces and avoiding self-serve food or drink options);
- increasing ventilation (e.g., opening windows, moving activities outdoors and increasing air exchanges through HVAC adjustments); and
- contact tracing in combination with quarantine and isolation (e.g., symptom screening policies and education, diagnostic testing if symptoms are apparent, self-isolate for at least 14 days or since the start of symptoms, partnerships with local health authorities).

Some of the guidelines provided additional considerations related to case management and contact tracing. For example, the high-quality guideline from the [American Academy of Pediatrics](#) released guidance specific to age groups of students (pre-kindergarten, elementary school and secondary school) for mask wearing, physical distancing, hand hygiene, cohorting, use of outdoor spaces, and air ventilation and school staff, as well as for staff (e.g., for use of PPE, symptom screening and implementation of plans). More details of these plans are provided in Table 1 and in Appendix 2. In addition, the older guideline from the [French Pediatric Society stated that screening tests for an entire classroom is only warranted](#) if the teacher or at least two students are symptomatic and are found to be positive with COVID-19. The guideline also recommended that any students exposed to a COVID-19 case at home should be tested before returning to school. Furthermore, as part of the comprehensive guidelines from the U.S. CDC, it was stated that [close contacts of a COVID-19 case must quarantine unless they are fully vaccinated or have tested positive in the last three months and do not have symptoms](#).

Key findings from the jurisdictional scan

We identified several insights across the domains of the organizing framework based on the experiences with adjusting COVID-19 transmission-mitigation measures in schools and post-secondary institutions in seven countries (Australia, China, Chile, Israel, New Zealand, the United Kingdom (U.K.), and the United States (U.S)), as well as all provinces and territories in Canada. We summarize these insights according to each domain of the framework below.

In terms of triggers for adjustments, we found that:

- most countries and Canadian provinces have a reopening plan or strategy that is dependent, in part, on COVID-19 transmission metrics and is used to guide the easing or restricting of public-health measures that apply to schools and post-secondary institutions;
- according to the guidance documents for educational institutions in Australia, Canada, China, New Zealand, and the U.K., the presence of COVID-19 transmission in schools or in the surrounding community can trigger the need for restrictions in attendance, gatherings on campus, or even school closures;
- in-person learning in schools and post-secondary institutions is currently allowed in most of the countries due to declining COVID-19 case rates in recent weeks;
- COVID-19 surges have outpaced vaccination rates in Chile and in most Canadian provinces, leading to school closures and lockdowns in recent weeks to limit community transmission;
- in January 2021 when Israel's vaccine roll-out was well underway, the vaccination of students aged 17 and 18 years old was prioritized to allow them to return to school and write their matriculation exams;
- in countries and Canadian provinces where education staff and adult students are not prioritized for vaccination, educators may have still been eligible for early vaccination because of their age or risk of severe illness;
- vaccinations may be expanding to grade-school children in Canada soon given that the Pfizer-BioNTech vaccine was approved by Health Canada for use in children ages 12 to 15 on 5 May 2021, and the province of Alberta has already begun vaccinating children in this age range with underlying health conditions;
- contact-tracing capacity for schools and post-secondary institutions in New Zealand is managed by the Ministry of Health's National Contact Tracing Solution that uses data from New Zealand's COVID-19 tracker app to manage contact tracing in the country;
- capacity for contact tracing in most Canadian grade schools and post-secondary institutions is highly dependent on the school's processes for responding to suspected or confirmed COVID-19 cases, and the ability of the provincial public-health authority to respond to suspected or confirmed cases and their contacts in a timely manner; and
- in the U.K., the availability of home-based and on-site rapid testing for secondary-school students and all education staff has allowed for COVID-19 testing to be done voluntarily twice a week by students and staff.

In terms of what measures should be changed, we found that:

- in New Zealand, the U.S., and Canadian provinces, when COVID-19 transmission rates increase in a school's community, more physical distancing, screening, disinfection, and in-person attendance measures are put in place, and more supports are provided to facilitate online learning;
- China's guidelines require schools and post-secondary institutions to establish a transmission-response mechanism, provide training for staff and students, ensure good ventilation, and strengthen preventive disinfection measures on campus;

- Chile's plan for safely reopening schools included an initial exam to diagnose the current state of learning among schools and a set of tools for teachers to manage students' emotions while returning to in-person classes;
- in most of the Canadian provinces reviewed, all schools and post-secondary institutions are required to have a plan that defines how the institution will operate safely during the pandemic, and the province of Ontario has recently asked all educational institutions to offer remote learning as an option for all students in their plans for the 2021-22 academic year;
- post-secondary institutions in Canada must ensure that campus residents arriving from outside the country can quarantine safely for 14 days until the government's mandatory quarantine rules for international arrivals are changed or lifted;
- most provincial governments have recommended that post-secondary institutions operating during the pandemic should have separate rooms or residences dedicated for symptomatic residents or confirmed COVID-19 cases, implement measures to support physical distancing in residences, and ensure that contact information of all residents remains current to facilitate contact tracing if necessary;
- countries with low transmission rates allow students to engage in extracurricular activities once hand hygiene and infection-prevention and control measures are followed;
- U.S. states are advised to prioritize in-person learning over extracurricular activities;
- infection-prevention and control measures are maintained to some degree in all countries regardless of transmission rates or level of vaccination;
- in countries where transmission rates are low, face covering/mask mandates for students in school are relaxed, but hand hygiene and regular cleaning and disinfecting are maintained;
- both China and New Zealand require all educational institutions to maintain a register of all visitors to educational institutions;
- daily screening assessments for COVID-19 symptoms are required for students, staff and visitors at schools and post-secondary institutions in most Canadian provinces, and any staff or student who displays symptoms while on campus must be isolated immediately and tested for COVID-19; and
- Canadian schools may benefit from increased access to rapid testing from the federal government in the coming weeks, as seen in Alberta and Saskatchewan where plans are already underway to implement rapid-testing programs in their grade schools.

In terms of reported challenges implementing any of the measures, we found that:

- teachers expressed frustration with the U.K. government on the lack of decisive guidance on face masks in secondary schools;
- some students in the U.S. are less likely to have access to the broadband internet, resources and other supports necessary to participate in high-quality remote education;
- provinces and territories in Canada have yet to make full use of additional supports offered by the Government of Canada, such as additional rapid-test kits and contact tracers to ensure safe in-person learning at schools and post-secondary institutions; and
- despite having detailed protocols and guidelines for the reopening of schools, several provinces have been unable to avoid COVID-19 transmission in many grade schools and post-secondary institutions, ultimately resulting in a mixture of school closures and reopening at different points throughout the pandemic.

Table 1: Key findings from highly relevant guidelines about adjusting transmission-mitigation measures as vaccination rates increase and infection rates decrease

Organizing framework domains		Key findings focused on grade schools	Key findings focused on post-secondary schools
When should adjustments be made (i.e., triggers for change)?	Case rates and other epidemiological indicators	<ul style="list-style-type: none"> The U.S. Centers for Disease Control and Prevention (U.S. CDC) released comprehensive guidance that describes prevention strategies for elementary, middle and high schools specific to the level of community transmission (low, medium, substantial, and high transmission thresholds) (low-quality AGREE II rating; last updated 19 March 2021) The American Academy of Pediatrics released COVID-19 guidance for safe schools and stated that schools could remain open in communities with low and high community transmission, but is primarily based on safety prevention measures and guidance from local health authorities (high-quality AGREE II rating; last updated 25 March 2021) 	<ul style="list-style-type: none"> The Public Health Agency of Canada (PHAC) described 10 epidemiological indicators to guide either the increase of restrictions or to lift restrictions for grade-school settings (low-quality AGREE II rating; last updated 21 February 2021)
	Vaccination-related factors	<ul style="list-style-type: none"> PHAC recommended that existing school immunization requirements should be maintained and highly encourages influenza vaccination for all children, staff and volunteers (low-quality AGREE II rating; last updated 21 February 2021) The U.S. CDC stated that vaccinating teachers and staff is one layer of prevention and protection, which resulted in Health and Human Services issuing a Secretarial Directive on 2 March 2021 that allowed teachers and staff working in kindergarten to Grade 12 schools to be eligible for a vaccine across the U.S. (specific U.S. CDC guidance is available for teachers and school staff) (low-quality AGREE II rating; last updated 19 March 2021) 	None identified

	Community capacity (e.g., public-health capacity for contact tracing)	<ul style="list-style-type: none"> • The American Academy of Pediatrics stated that students or staff members who have had a known exposure to COVID-19 should self-quarantine for 14 days and school districts should partner with their local health officials to facilitate contact tracing in their schools (high-quality AGREE II rating; last updated 25 March 2021) • The CDC recommended that schools should collaborate with local health authorities when a positive case is reported, and provided guidance on staying at home, isolation, case investigation and contact tracing <ul style="list-style-type: none"> ○ For schools to remain open, local health authorities need to have enough contact tracers such that contacts are notified within 48 hours of a positive test result ○ Close contacts must quarantine unless they are fully vaccinated or have tested positive in the last three months and do not have symptoms ○ Schools should be last to close and first to re-open for in-person instruction (over non-essential businesses and activities such as indoor dining, bars, social gatherings, close-contact sports) (low-quality AGREE II rating; last updated 19 March 2021) • PHAC recommended that schools and local public-health authorities should establish processes for case management and contact tracing (e.g., attendance records) (low-quality AGREE II rating; last updated 21 February 2021) • The American Academy of Pediatrics recommended that school districts should partner with local health authorities to facilitate contact tracing (high-quality AGREE II rating; last updated 25 March 2021) 	<ul style="list-style-type: none"> • PHAC recommended that post-secondary institutions could facilitate contact tracing with existing technologies (e.g., on-campus video cameras, electronic-lock records, contact-tracing mobile applications) to complement traditional contact tracing
What measures should be changed?	Operation of schools	<ul style="list-style-type: none"> • The French Pediatric Society indicated that class closure is justified if at least three students are 	<ul style="list-style-type: none"> • PHAC provided examples of mitigation strategies such as seating students at least two metres apart, offering virtual lectures, online

		<p>infected from the same class (low-quality AGREE II rating; last updated 27 October 2020)</p> <ul style="list-style-type: none"> • PHAC provides detailed considerations for jurisdictions in relation to COVID-19 prevention measures for grade schools: <ul style="list-style-type: none"> ○ Consider a layered approach when physical distancing is not possible ○ Consider in-person school attendance, virtual or at-home learning, or a hybrid of the two (with progressive introduction of in-person attendance based on grade level, with primary schools preceding secondary schools) (low-quality AGREE II rating; last updated 21 February 2021) • The U.S. CDC recommended that staff should limit non-essential interactions between adults (and adults and students) (low-quality AGREE II rating; last updated 19 March 2021) • The U.S. CDC guideline also stated that younger children in elementary schools are likely to have less risk of in-school transmission than older students in middle or high schools due to low susceptibility and transmission rates (low-quality AGREE II rating; last updated 19 March 2021) 	<p>exams, and offering activities outdoors (low-quality AGREE II rating; last updated 21 February 2021)</p>
	Operation of residences in post-secondary schools	Not applicable	<ul style="list-style-type: none"> • PHAC provides additional guidance related to residences, quarantine and isolation policies (e.g., allowing students living in residence to self-isolate in their dorm room or designated on-campus rooms/residences, off-campus accommodations, cohorting students positive with COVID-19, and appropriate care and support such as meals) (low-quality AGREE II rating; last updated 21 February 2021)
	Engagement in extracurricular activities	<ul style="list-style-type: none"> • The U.S. CDC recommends that in-person instruction should be prioritized over extracurricular activities (including sports and school events), and that extracurricular activities such as singing, band, sports and exercise should 	<ul style="list-style-type: none"> • In terms of extracurricular activities, the PHAC guidance document encouraged institutions to use risk-mitigation approaches when considering if and how these types of activities could proceed on- and off-campus (e.g.,

		<p>be moved outside (low-quality AGREE II rating; last updated 19 March 2021)</p> <ul style="list-style-type: none"> • PHAC recommended that assemblies, team sports, field trips, or extracurricular activities where physical distancing cannot be maintained should be postponed (low-quality AGREE II rating; last updated 21 February 2021) • PHAC provides guidance for specific educational activities, which all depend on risk-mitigation approaches: <ul style="list-style-type: none"> ○ Schools should choose physical education and recreational activities where physical distancing can be maintained ○ Schools should consider outdoor music and band practices with appropriate physical distancing, no sharing of instruments or mouthpieces, and to clean instruments at a distance or in a disposable cloth ○ Schools should consider outdoor singing activities with appropriate physical distancing (or with fewer performers) (low-quality AGREE II rating; last updated 21 February 2021) • Additional risk-mitigation decision-making tools are available, including the following: <ul style="list-style-type: none"> ○ Risk-mitigation tool for child and youth settings operating during the COVID-19 pandemic (PHAC) ○ Risk-mitigation tool for gatherings and events operating during the COVID-19 pandemic, (PHAC) ○ Risk-mitigation tool for outdoor recreation spaces and activities operating during the COVID-19 pandemic (PHAC) ○ COVID-19 Return to High Performance Sport Framework (PHAC) ○ K-12 Schools COVID-19 Mitigation Toolkit (U.S. CDC) 	<p>postponing sports events/activities and limiting/prohibiting spectators), with further guidance available related to COVID-19 Return to High Performance Sport Framework (low-quality AGREE II rating; last updated 21 February 2021)</p>
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	Accompanying infection-prevention measures	<ul style="list-style-type: none"> • Regardless of the level of transmission, the U.S. CDC recommended that all schools should implement five key prevention strategies: <ul style="list-style-type: none"> ○ Universal and correct use of masks and physical distancing should be prioritized ○ Masks should be worn within the school and on school buses ○ Elementary students and middle- and high-school students with low community transmission should be at least three feet apart, but students with high community transmission should be at least six feet apart (if cohorting is not possible) ○ Use cohorting where possible (especially when case rates are substantial or high) ○ Schools should only offer referrals for diagnostic testing if they are exhibiting symptoms at school, but screening tests may be useful especially in communities with moderate to high transmission (low-quality AGREE II rating; last updated 21 February 2021) • The American Academy of Pediatrics provided specific guidance on infection-prevention measures based on age group and staff (pre-kindergarten, elementary schools, secondary schools) <ul style="list-style-type: none"> ○ Pre-kindergarten risk mitigation measures include mask wearing for adults and children aged two years or older, cohort classes, use of outdoors, air ventilation (open windows) and hand hygiene ○ Elementary schools are recommended to mandate universal masks for both students and adults, cohort classes, physical distancing, use of outdoor spaces, air ventilation, and hand hygiene ○ Secondary schools are recommended to mandate universal masks for both students and 	<ul style="list-style-type: none"> • The Public Health Agency of Canada released detailed guidance and considerations for post-secondary institutions during the COVID-19 pandemic, including personal prevention measures, domestic and international travel, on-campus assessments and mitigation strategies, academic institutions, experiential learning and research activities, on-campus housing, supporting community gatherings and student life. and off-campus activities <ul style="list-style-type: none"> ○ In terms of screening, they encourage institutions to provide basic information on how to recognize and monitor symptoms, and provide appropriate instructions on seeking medical care (low-quality AGREE II rating; last updated 21 February 2021)
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		<p>adults, cohort classes, physical distancing, air ventilation, and public education to students and parents</p> <ul style="list-style-type: none"> ○ School health staff should have access to PPE ○ Schools should have policies regarding symptom screening for teachers and staff upon reopening, and a rapid response plan for students, teachers or staff members (high-quality AGREE II rating; last updated 25 March 2021) ● The Public Health Agency of Canada released considerations for risk-mitigation measures <ul style="list-style-type: none"> ○ Schools could use the risk-mitigation tool to determine which measures are applicable and relevant to grade level (e.g., hygiene protocols for younger and older children) ○ Prohibit students who have symptoms and/or exposure to COVID-19 from entering the school ○ Promote infection control (e.g., hand hygiene, avoid face touching, signage, how to wash hands, implement schedule for frequent hand hygiene) ○ Promote physical distancing (e.g., two-metre distance, restrict or manage flow of people in common areas, visual cues to encourage physical distancing, limit visitors, play stations with limited number of children, recommend one parent do drop-offs/pick-ups) ○ Increase ventilation (e.g., move activities outdoors, ensure ventilation system operates properly, increase air exchanges by adjusting HVAC systems, open windows) ○ Reduce exposure to high-touch surfaces ○ Modify how long students are in contact with each other (e.g., modify delivery of program, divide or cohort classes, stagger break times and schedules, staff travel between classes instead of 	
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		<p>children (low-quality AGREE II rating; last updated 21 February 2021)</p> <ul style="list-style-type: none"> • The French Pediatric Society released guidance for school re-entry in October 2021: <ul style="list-style-type: none"> ○ Soap or hand sanitizer distribution stations at the entrances of schools and classrooms along with education about regular use ○ Mandatory masks for all adult staff at all times ○ Masks for middle- and high-school students, unless physical distancing is possible in the classrooms ○ A child exposed to a COVID-19 positive individual at home must be tested before returning to the school ○ A symptomatic child (of at least six years old) must be screened unless another diagnosis is made ○ Screening of an entire class only warranted if one teacher or at least two students are symptomatic and COVID-19 positive ○ Students positive with COVID-19 must remain home for at least seven days (low-quality AGREE II rating; last updated 27 October 2020) 	
	Accompanying infection-control measures	None identified	None identified
Reported challenges implementing any of the measures above		None identified	None identified

Table 2: Experiences in other countries with adjusting transmission-mitigation measures as vaccination rates increase and infection rates decrease

Organizing framework domains		Key findings focused on grade schools	Key findings focused on post-secondary schools
When should adjustments be made (i.e., triggers for change)?	Case rates and other epidemiological indicators	Australia <ul style="list-style-type: none"> Australia has a three-step plan to guide the easing of public-health restrictions, including those that have an impact on the opening of primary and secondary schools Each state or territory can implement the plan at their own discretion based on exposure risk and transmission rates COVID-19 cases in Australia declined in April 2020 and currently the country is reporting an average of 21 new cases per day over the past week 	Australia <ul style="list-style-type: none"> Australia has a three-step plan to guide the easing of public-health restrictions, including those that have an impact on the opening of tertiary-education facilities Each state or territory can implement the plan at their own discretion based on exposure risk and transmission rates
		Chile <ul style="list-style-type: none"> Face-to-face classes were suspended in Chile for one year, from March 2020 to March 2021, due to the COVID-19 pandemic Schools were not opened even when COVID-19 case counts significantly decreased after August 2020 (the school year in Chile runs from March to December) When schools reopened in March 2021, they only remained open for a few weeks after a new surge in COVID-19 cases caused health officials to close schools again and move students to online learning 	Chile <ul style="list-style-type: none"> Face-to-face classes were suspended in Chile for one year, from March 2020 to March 2021, due to the COVID-19 pandemic
		Israel <ul style="list-style-type: none"> COVID-19 cases in Israel have significantly declined since the start of the vaccination campaign in December 2020, with about 100 to 150 new cases daily (with continued decline) On 18 April 2021, Israel's schools (Grades 1 to 12) resumed full in-person learning six days a 	

		<p>week, a decision that was made based on low COVID-19 transmission rates in the country</p> <p>China</p> <ul style="list-style-type: none"> On 26 February 2021, prevention and control guidelines for day care/pre-school, elementary schools and high schools operating during the spring semester were updated by China's National Health Commission (NHC) and Ministry of Education based on the current pandemic situation and characteristics of schools <ul style="list-style-type: none"> Once new cases appear in local areas, it is necessary to strictly implement prevention and control measures such as temperature screening of employees and students Once new cases occur on campus, class suspension, closed management, and nucleic acid testing for all employees and students will be conducted as appropriate Schools in Ruili City, in southwest China's Yunnan Province, have been suspended since 31 March 2021 following reports of new COVID-19 cases <ul style="list-style-type: none"> Students and teachers are required to quarantine at home and attend online classes <p>New Zealand</p> <ul style="list-style-type: none"> New Zealand has a four-level alert system in place that guides how and when public-health restrictions in primary and secondary schools should be eased based on COVID-19 transmission rates in the country or in a specific region Restrictions for in-person learning are triggered in Alert Levels 3 and 4 <ul style="list-style-type: none"> In Alert Level 3, multiple active COVID-19 clusters are in multiple regions, and there are restrictions on attendance and gatherings for in-person school 	<p>China</p> <ul style="list-style-type: none"> China's prevention and control guidelines for post-secondary institutions operating during the spring semester were also updated on 26 February 2021, in response to the current pandemic situation and characteristics of schools <ul style="list-style-type: none"> Once new cases appear in a local area, it is necessary to strictly implement prevention and control measures such as temperature screening of employees and students Once new cases occur on campus, class suspension, closed management, and nucleic acid testing for all employees and students will be taken as appropriate <p>New Zealand</p> <ul style="list-style-type: none"> New Zealand has a four-level alert system in place that guides how and when public-health restrictions in tertiary schools should be eased based on COVID-19 transmission rates in the country or in a specific region Restrictions for in-person learning are triggered in Alert Levels 3 and 4 <ul style="list-style-type: none"> In Alert Level 3, multiple active COVID-19 clusters are in multiple regions, and there are restrictions on attendance and gatherings for in-person school
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		<ul style="list-style-type: none"> ○ In Alert Level 4, widespread outbreaks and sustained community transmission is occurring and schools are closed ○ In-person school can occur in Alert Levels 1 and 2 with public-health measures 	<ul style="list-style-type: none"> ○ In Alert Level 4, widespread outbreaks and sustained community transmission is occurring and schools are closed ○ In-person school can occur in Alert Levels 1 and 2 with public-health measures
		United Kingdom (U.K.) <ul style="list-style-type: none"> • The number of daily new COVID-19 cases in the U.K. has begun to drop as the vaccination program is well underway <ul style="list-style-type: none"> ○ About 2,350 new cases have been reported daily in the country • The U.K. government has a five-level alert system in place to guide decisions of its public-health response measures • The U.K. also has a COVID-19 recovery strategy that outlines three steps to guide the order of the lifting of public-health measures <ul style="list-style-type: none"> ○ In step 1, infection rates are high and schools should remain closed, with the exception of vulnerable children or the children of critical workers who would benefit from attending in-person ○ In step 2, a phased return for childcare and schools can be implemented based on reduced infection rates 	
		United States (U.S.) <ul style="list-style-type: none"> • The U.S. CDC provides guidance for reopening and operational procedures during the COVID-19 pandemic across several sectors and services, including childcare and K-12 schools • However, states and territories can decide whether and how they will apply this guidance at their own discretion • The U.S. CDC recommends a phased prevention approach in K-12 schools based on two indicators 	

		<ul style="list-style-type: none"> ○ Indicator 1: the total new cases per 100,000 persons in the past seven days ○ Indicator 2: the percentage of nucleic acid amplification tests (NAATs), including RT-PCR tests, that are positive during the last seven days ● For Indicator 1, 0 to 9 cases per 100,000 is considered low, 10 to 49 cases is considered moderate, 50 to 99 cases is considered substantial, and more than 100 cases per 100,000 is considered high ● For Indicator 2, a nucleic acid percentage of less than 5% is considered low, 5% to 7.9% is considered moderate, 8% to 9.9% is considered substantial, and more than 10% nucleic acid percentage is considered high 	
	Vaccination-related factors	<p>Australia</p> <ul style="list-style-type: none"> ● As of 25 April 2021, a total of 1,937,300 vaccine doses have been administered to Australian residents ● According to Australia's current vaccine roll-out strategy, staff and students of primary and secondary schools will not be prioritized for early vaccination ● Australia is vaccinating the population based on age and risk of severe illness <p>Chile</p> <ul style="list-style-type: none"> ● As of 20 April 2021, 40.89% of the total population in Chile has received at least one dose of the vaccine ● Teachers and other educational workers were considered a prioritized group to get vaccinated <ul style="list-style-type: none"> ○ No information was found on how many teachers have been vaccinated to date ● Students are not yet eligible to be vaccinated <p>Israel</p>	<p>Australia</p> <ul style="list-style-type: none"> ● As of 25 April 2021, a total of 1,937,300 vaccine doses have been administered to Australian residents ● According to Australia's current vaccine roll-out strategy, staff and students of colleges and universities will not be prioritized for early vaccination ● Australia is vaccinating the population based on age and risk of severe illness <p>Chile</p> <ul style="list-style-type: none"> ● As of 20 April 2021, 40.89% of the total population in Chile has received at least one dose of the vaccine ● Teachers and other educational workers were considered a prioritized group to get vaccinated <ul style="list-style-type: none"> ○ No information was found on how many teachers have been vaccinated to date ● Students are not yet eligible to be vaccinated

		<ul style="list-style-type: none"> As of 20 April 2021, 60% of the population has received at least one dose and 56% of the population is fully vaccinated Earlier in the year on 23 January 2021, some health plans prioritized the vaccination of students aged 17 and 18 years old to allow them to return to school and write their matriculation exams at the end of the lockdown 	
		China <ul style="list-style-type: none"> China's prevention and control guidelines recommend COVID-19 vaccination for eligible education staff on a voluntary, informed basis The guideline developed by China's National Health Commission on 2 April 2021 does not recommend that people under 18 should be vaccinated since no clinical trial data has been obtained for people in this age group 	China <ul style="list-style-type: none"> China's prevention and control guidelines recommend COVID-19 vaccination for eligible education staff on a voluntary, informed basis On 3 April 2021, China's Ministry of Education has issued a notice to ask local education departments and universities to proactively cooperate with local vaccination work by: <ul style="list-style-type: none"> Making reasonable plans for on-campus inoculations Providing school infirmaries, stadiums, and other facilities to act as temporary vaccination sites Calling for greater publicity and mobilization on campus with scientific information on vaccination
		New Zealand <ul style="list-style-type: none"> According to New Zealand's vaccine roll-out plan, staff of educational facilities will not be prioritized for early vaccination They will be eligible for COVID-19 vaccination with the general population starting July 2021, unless they are elderly or at high risk of severe illness (vaccination begins in May 2021) Students 16 and older will also be eligible for vaccination in July 2021 	New Zealand <ul style="list-style-type: none"> According to New Zealand's vaccine roll-out plan, staff of educational facilities will not be prioritized for early vaccination They will be eligible for COVID-19 vaccination with the general population starting July 2021, unless they are elderly or at high risk of severe illness (vaccination begins in May 2021) Students 16 and older will also be eligible for vaccination in July 2021
		U.K.	U.K.

		<ul style="list-style-type: none"> • More than 28 million people (63.8% of adults over 18) have received at least one dose of COVID-19 vaccine in the U.K. • As of 26 April 2021, adults aged 44 years and older are eligible for vaccination • Education staff have not been prioritized for early vaccination in the U.K.'s vaccine roll-out strategy 	<ul style="list-style-type: none"> • More than 28 million people (63.8% of adults over 18) have received at least one dose of COVID-19 vaccine in the U.K. • As of 26 April 2021, adults aged 44 years and older are eligible for vaccination • Education staff have not been prioritized for early vaccination in the U.K.'s vaccine roll-out strategy
		United States <ul style="list-style-type: none"> • On 2 March 2021, the Health and Human Services Secretary issued a Secretarial Directive that directs all COVID-19 vaccination providers administering vaccines purchased by the U.S. government to make vaccines available to those working in K-12 schools • The U.S. CDC provides guidance for the allocation and administration of vaccines for teachers and staff and vaccine toolkits for school and childcare settings 	
	Community capacity (e.g., public-health capacity for contact tracing)	Australia <ul style="list-style-type: none"> • All schools must keep a record of staff and visitor contact details for contact tracing purposes 	Australia <ul style="list-style-type: none"> • All schools must keep a record of staff and visitor contact details for contact tracing purposes
		China <ul style="list-style-type: none"> • The local pandemic prevention and control policies and requirements will be considered for the preparations for the spring semester in 2021 	China <ul style="list-style-type: none"> • The local pandemic prevention and control policies and requirements will be considered for the preparations for the spring semester in 2021
		New Zealand <ul style="list-style-type: none"> • All education facilities in New Zealand are required to display a QR Code poster that can be scanned by staff, students and visitors to keep track of where they have been by using the New Zealand COVID Tracer App <ul style="list-style-type: none"> ○ This assists with contact tracing at all alert levels by creating a “digital diary” of the places people have been that enables the Ministry of Health to quickly contact people 	New Zealand <ul style="list-style-type: none"> • All education facilities in New Zealand are required to display a QR Code poster that can be scanned by staff, students and visitors to keep track of where they have been by using the New Zealand COVID Tracer App <ul style="list-style-type: none"> ○ This assists with contact tracing at all alert levels by creating a “digital diary” of the places people have been that enables the Ministry of Health to

		<p>who have been in close contact with a COVID-19-positive person</p> <ul style="list-style-type: none"> • Close contacts of people who have tested positive for COVID-19 are contacted by the Ministry of Health or Public Health Unit (PHU) • The Ministry of Health has developed a technology system called the National Contact Tracing Solution (NCTS) to manage contact tracing in New Zealand <ul style="list-style-type: none"> ○ It enables accurate and timely information about contacts to be recorded, and also enables PHUs to delegate contact tracing tasks to other PHUs if required 	<p>quickly contact people who have been in close contact with a COVID-19-positive person</p> <ul style="list-style-type: none"> • Close contacts of people who have tested positive for COVID-19 are contacted by the Ministry of Health or Public Health Unit (PHU) • The Ministry of Health has developed a technology system called the National Contact Tracing Solution (NCTS) to manage contact tracing in New Zealand <ul style="list-style-type: none"> ○ It enables accurate and timely information about contacts to be recorded, and also enables PHUs to delegate contact tracing tasks to other PHUs if required
		<p>U.K.</p> <ul style="list-style-type: none"> • The U.K. moved to a home-based asymptomatic testing model for students and staff in secondary schools where rapid testing using Lateral Flow Devices (LFDs) are provided for students and staff to test themselves twice a week at home <ul style="list-style-type: none"> ○ Testing is voluntary but strongly encouraged • As of 8 March 2021, secondary schools were asked to offer students COVID-19 testing onsite for those who are unable or unwilling to test themselves at home • Staff of primary schools are also asked to test themselves twice a week using the LFDs • Test results must be reported to NHS Test and Trace, and students and staff should share their result with the school to assist contact-tracing efforts 	<p>U.K.</p> <ul style="list-style-type: none"> • COVID-19 test results must be reported to NHS Test and Trace, and students and staff should share their result with the school to assist contact-tracing efforts
		<p>United States</p> <ul style="list-style-type: none"> • Parents should be asked to report positive cases to schools to help facilitate contact tracing • Similarly, school administrators should notify staff, teachers, families, and emergency contacts 	

		or legal guardians immediately of any case of COVID-19	
What measures should be changed?	Operation of schools	Australia <ul style="list-style-type: none"> Schools reopened for in-person learning in late April/early May 2020 	Australia <ul style="list-style-type: none"> With low transmission of COVID-19 in Australia, Monash University has supported the return of all staff back to on-site work effective 23 April 2021 On-site teaching and instruction will continue for students that are currently residing within the country
		Chile <ul style="list-style-type: none"> In March 2021, the Ministry of Education announced a plan to safely reopen schools during the year called “Chile recovers and learns” (Chile recupera y aprende) that includes: <ul style="list-style-type: none"> An initial exam to diagnose the current state of learning among schools A set of tools for teachers to manage students’ emotions while returning to in-person classes A system will be created to detect children who are not part of the educational system, and to detect early students at risk of leaving the educational system In-person classes are not allowed under lockdown phases in the Government of Chile’s four-step plan for reopening, which are the steps that most of the country is currently in 	Chile <ul style="list-style-type: none"> In-person classes are not allowed under lockdown phases in the Government of Chile’s 4-step plan for reopening, which are the steps that most of the country is currently in
		Israel <ul style="list-style-type: none"> As of 18 April 2021, all students from daycare to Grade 12 will return to in-person classes, which ends the requirement to teach children in smaller class sizes 	Israel <ul style="list-style-type: none"> Some universities resumed in-person classes after the Passover holiday Entry to campus will only be allowed to students who have been vaccinated, recovered from COVID-19, or have a negative PCR test Some universities planned to do hybrid classes for students who have not been vaccinated
		China	China

		<ul style="list-style-type: none"> • The updated guidelines require kindergarten, elementary and high schools to: <ul style="list-style-type: none"> ○ Establish the "point-to-point" coordination, monitoring and response mechanism among health institutions, schools, and families ○ Provide training for all staff and employees ○ Stockpile anti-epidemic supplies, such as hand sanitizers, disinfectants, masks, thermometers ○ Strengthen preventive disinfection of campus, facilities, equipment (including air conditioning and ventilation systems) ○ Ensure good ventilation 	<ul style="list-style-type: none"> • The updated guidelines require higher-education institutions to: <ul style="list-style-type: none"> ○ Establish the "point-to-point" coordination, monitoring and response mechanism among health institutions, schools and families ○ Provide training for all staff and employees ○ Stockpile anti-epidemic supplies, such as hand sanitizers, disinfectants, masks, thermometers ○ Strengthen preventive disinfection of campus, facilities, equipment (including air conditioning and ventilation systems) ○ Ensure good ventilation
		<p>New Zealand</p> <ul style="list-style-type: none"> • All fundamental public-health measures (physical distancing, hand hygiene, regular cleaning and disinfecting) should be followed at all alert levels • Under Alert Levels 1 and 2, in-person attendance at school and early-learning facilities is allowed for all children/students <ul style="list-style-type: none"> ○ Distance learning is provided for those who are required to self-isolate, are waiting for a test result, or are staying home because they at a higher risk of severe illness from COVID-19 • Under Alert Level 3, schools (years 1 to 10) and early-childhood education centres can remain open at limited capacity for children who cannot be supervised at home <ul style="list-style-type: none"> ○ Virtual learning is recommended ○ School bubbles of no more than 20 children/students are required and a two-metre distance must be kept between bubbles; to reduce congestion, it is recommended that class and break activities be staggered 	<p>New Zealand</p> <ul style="list-style-type: none"> • Tertiary-education organizations (TEOs) should maintain their ability to deliver courses remotely and fully transition to remote learning if required • Guidelines have been developed for TEOs based on New Zealand's alert level system <ul style="list-style-type: none"> ○ Under Alert Level 1, all teaching, research and learning activities can operate as normal with no COVID-19 restrictions ○ Under Alert Level 2, there are no size restrictions on teaching, research and learning activities, but TEOs should ensure that public health measures are strictly followed, and capacity should be restricted to enable physical distancing ○ Under Alert Level 3, all teaching, research and other on-site activities must be done remotely, and where it is not possible to deliver teaching online, some facilities may remain open but must remain limited to 20 people or less ○ Under Alert Level 4, all educational facilities are closed and examinations must be conducted remotely if possible • Upon advice from the local Medical Officer of Health, any education facility connected to a

		<ul style="list-style-type: none"> ○ Staff and children who are at a higher risk of severe illness from COVID-19 should stay home ○ Voluntary flexibility for some year 12 and 13 students to return to in-person school is allowed 	confirmed or probable case of COVID-19 should be closed for at least 72 hours to allow time for contact tracing and cleaning/disinfecting
		<p>U.K.</p> <ul style="list-style-type: none"> ● On 8 March 2021, all U.K. students resumed in-person learning ● Full-time return to school in Scotland for all children and young people started on 12 April 2021 and the following arrangements will be put in place: <ul style="list-style-type: none"> ○ Removal of strict two-meters physical distancing between students in secondary schools ○ Attendance in schools will include teaching and support staff ● Protective measures and mitigations set out in this released guidance will remain in place for all schools at Level 3 from 26 April 2021 ● From 12 April 2021, primary, special and secondary schools in Wales will resume in-person learning <ul style="list-style-type: none"> ○ Schools are to ensure that appropriate mitigations are in place and in line with the operational guidance for schools and settings ● From 12 April 2021, primary, special and secondary schools in Northern Ireland will resume in-person learning 	<p>U.K.</p> <ul style="list-style-type: none"> ● The U.K. government released operational guidance for higher education that outlines reopening of buildings, social distancing on campus, face coverings, and additional protective measures ● Universities in Scotland will follow staggered return periods, in which universities will continue to maintain in-person teaching at any one time at the currently designated 5% maximum until 26 April 2021 <ul style="list-style-type: none"> ○ After 26 April 2021, risk assessments will be updated regularly, following the Health and Safety guidance
		<p>United States</p> <ul style="list-style-type: none"> ● Students should be spaced at least three feet apart in classrooms in elementary, middle, and high schools ● When cases are in the high range, middle and high schools that cannot cohort should distance students six feet apart in the classroom 	<p>United States</p> <ul style="list-style-type: none"> ● The U.S. CDC provides guidance on Considerations for Institutions of Higher Education, which identifies virtual-only learning options, activities and events as the lowest risk, hybrid learning models (where students participate in virtual learning and in-person learning is limited

		<ul style="list-style-type: none"> In cases where schools must be temporarily closed for in-person instruction, schools should make efforts to provide continuity of instruction through synchronous remote learning or at-home activities 	<p>to courses and laboratory instruction that cannot be delivered remotely as some risk)</p> <ul style="list-style-type: none"> Hybrid learning models that provide a mix of virtual learning and in-person learning for all courses, and in-person-only models of learning are designated as medium and high risk, respectively
	Operation of residences in post-secondary schools	<p>China</p> <ul style="list-style-type: none"> The updated guideline recommends elementary and high schools should strengthen boarding management, including implementing strict leave procedures, conducting temperature screening at the entrance, strengthening room disinfection and ventilation 	<p>China</p> <ul style="list-style-type: none"> The updated guideline recommends higher-education institutions should strengthen management, disinfection and ventilation of dormitories
			<p>New Zealand</p> <ul style="list-style-type: none"> Under Alert Level 1, student accommodations may operate with no COVID-19 restrictions and students may travel domestically as normal Under Alert Level 2, student accommodations can be open to all students and no documentation is required for domestic travel within Alert Level 2 areas <ul style="list-style-type: none"> Social events with external visitors should not be held in student residences, but visits of close family and friends may occur when managed by TEOs Under Alert Level 3, strict physical-distancing ‘bubbles’ should be maintained at all times and on-campus food retail venues should be open only to residents of student accommodations <ul style="list-style-type: none"> Students may move into new accommodations if relocating on a permanent or long-term basis and if they need to travel into, out of, or through an Alert Level 3 area Under Alert Level 4, student accommodations may remain open to allow residents to self-isolate, and strict physical distancing, infection-prevention

			<p>measures, and ‘bubbles’ should be maintained at all times</p> <ul style="list-style-type: none"> ○ On-campus food retail venues should be open only to residents of student accommodations
	Engagement in extracurricular activities	Australia <ul style="list-style-type: none"> • With low infection rates of COVID-19 in New South Wales (NSW), restrictions to singing-based activities have been removed, social events which include dancing can proceed in a COVID-safe way, and sporting activities can resume in accordance with community sporting guidelines 	
		Israel <ul style="list-style-type: none"> • Students will be required to wear masks indoors but are allowed to take them off during gym class, when they eat, and in between classes • If a COVID-19 case is discovered in the school, the affected student’s age group will need to get tested before being allowed back to school • Hygiene and ventilation measures are still in place and will remain mandatory, with physical distancing required between teachers and students as much as possible 	
		China <ul style="list-style-type: none"> • The updated guidelines recommend the population intensity should be controlled and gathering activities are not encouraged 	China <ul style="list-style-type: none"> • The updated guidelines recommend the population intensity should be controlled and gathering activities are not encouraged <ul style="list-style-type: none"> ○ Open classrooms, study rooms, libraries, stadiums and other public spaces ○ Strengthen the approval management of various gathering activities
		New Zealand <ul style="list-style-type: none"> • Under Alert Level 1, there are no limits on gatherings, playgrounds are open, and all extracurricular activities are allowed • Under Alert Levels 2 and 3, gatherings without physical distancing for school-related activities 	New Zealand <ul style="list-style-type: none"> • Under Alert Level 1, there are no restrictions on gatherings for extracurricular or recreation activities

		<p>are allowed, but once the activity involves bringing people onsite who are not there for education purposes, distancing is required (e.g., sporting event)</p> <ul style="list-style-type: none"> ○ Hygiene practices should be observed before and after playing with equipment, and there should be extra emphasis on hand hygiene and cleaning equipment for extracurricular activities where physical distancing is not possible • Under Alert Level 3, extracurricular activities that cannot maintain a two-metre distance or where the same equipment must be touched by different students are not allowed <ul style="list-style-type: none"> ○ Playgrounds are closed • Under Alert Level 4, all educational facilities are closed, and gatherings for extracurricular activities are not allowed 	<ul style="list-style-type: none"> • Under Alert Level 2, there are no restrictions on gatherings, but recreation activities should operate in accordance with public-health measures • Under Alert Level 3, gymnasiums and recreation areas must be closed, and outdoor gatherings are not allowed • Under Alert Level 4, gatherings for extracurricular activities are not allowed, and residents should only leave their accommodations if they are going for exercise or picking up essential goods
		<p>United States</p> <ul style="list-style-type: none"> • To minimize the risk of transmission in schools and protect in-person learning, in-person instruction should be prioritized over extracurricular activities • For low and moderate transmission levels, sports and extracurricular activities should occur with at least six feet of physical distance • It is suggested that schools limit spectators and attendees for sports and extracurricular activities to ensure six feet of physical distance and require the use of masks • Schools should also consider screening testing for student athletes and adults (e.g., coaches and trainers) who support these activities • For substantial and high transmission levels, sports and extracurricular activities should only occur if they can be held outdoors with more than six feet of physical distancing 	

	Accompanying infection-prevention measures	Australia <ul style="list-style-type: none"> • Appropriate hand hygiene, disinfecting, and ventilation measures are still enforced • As of 15 April 2021, grade schools in NSW permit the entry of parents/guardians and the mixing of cohorts and years for school-related activities • As of 9 April 2021, schools in Victoria have relaxed their face-masks measures and they are now only recommended when physical distancing cannot be maintained 	
		China <ul style="list-style-type: none"> • The updated guidelines recommend that infection-prevention measures should be implemented in kindergarten and elementary/high schools, including hand hygiene, physical distancing, wearing masks (if necessary) 	China <ul style="list-style-type: none"> • The updated guidelines recommend that the infection-prevention measures should be implemented in higher-education institutions, including hand hygiene, physical distancing, wearing masks (if necessary)
		New Zealand <ul style="list-style-type: none"> • Under Alert Level 2, children under 12 years old are exempt from wearing face coverings on public transport and aircrafts <ul style="list-style-type: none"> ◦ Face coverings are also not required on school buses • Under Alert Levels 1, 2 and 3, schools will close for cleaning and contact tracing if there is a confirmed case who was infectious while at school • Under Alert Level 1, regular cleaning of surfaces in schools is recommended • Under Alert Levels 2 and 3, all surfaces must be cleaned and disinfected daily, and hand sanitizer should be provided at the entry to classrooms and in shared spaces 	New Zealand <ul style="list-style-type: none"> • Under Alert Levels 2 and 3, contact tracing information must be collected for students, staff and any on-site visitors who have been in controlled learning environments and residential accommodations <ul style="list-style-type: none"> ◦ The Ministry of Health recommends that students bring face coverings and masks with them when attending on-site activities • Under Alert Level 4, deep cleaning and additional sanitizing should be implemented • Wearing a face covering is mandatory on all public transport
		U.K. <ul style="list-style-type: none"> • U.K. guidance on the use of face coverings for schools outlines that: 	U.K. <ul style="list-style-type: none"> • The U.K. government is working with higher-education providers to offer twice weekly

		<ul style="list-style-type: none"> ○ In schools and colleges for students in year 7 and above, face coverings are recommended to be worn when moving around the premises, outside of classrooms and in communal areas ○ Face coverings do not need to be worn by students when outdoors on the premises ○ Children in primary school and early-years settings should not wear face coverings ● This is subject to change based on the U.K.'s roadmap process' step 3 in which these cautionary measures will no longer be recommended, no earlier than 17 May 2021 ● The U.K.'s operational guide on returning to school outlines that schools must maintain hygiene, cleaning and ventilation measures, and mitigations 	<p>asymptomatic testing to all staff and students residing in their term accommodation or accessing university facilities, using lateral flow devices</p> <ul style="list-style-type: none"> ● A higher-education operational guide outlines maintaining two metres apart for people, and for universities and colleges to conduct risk assessments to understand the number of students and staff likely to be within a learning space ● In cases in which social distancing or good ventilation is difficult to maintain, such as in workshops, laboratories and teaching rooms, face masks should still be worn by education providers
		<p>United States</p> <ul style="list-style-type: none"> ● All schools should engage in universal and correct use of masks, physical distancing, handwashing and respiratory etiquette, and cleaning and maintaining healthy facilities ● Testing strategies in partnership with schools should be part of a comprehensive prevention approach ● The CDC provides recommendations as part of a tiered approach of diagnostic testing for COVID-19, and testing recommendations by level of community transmission 	<p>United States</p> <ul style="list-style-type: none"> ● The U.S. CDC's guidance on Considerations for Institutions of Higher Education includes hygiene practices, using masks, how and when to disinfect facilities, and physical-distancing practices for communal spaces, travel and transit, and food services
	Accompanying infection-control measures	<p>Australia</p> <ul style="list-style-type: none"> ● Students and staff are to continue to remain at home if they are feeling unwell (and are highly encouraged to get tested) 	<p>Australia</p> <ul style="list-style-type: none"> ● Students and staff are to continue to remain at home if they are feeling unwell (and are highly encouraged to get tested)
		<p>China</p> <ul style="list-style-type: none"> ● China's updated guidelines require kindergarten and elementary/high schools to: 	<p>China</p> <ul style="list-style-type: none"> ● The updated guidelines for higher education require schools to: <ul style="list-style-type: none"> ○ Conduct the screening at the entrance

		<ul style="list-style-type: none"> ○ Conduct screening for COVID-19 symptoms at the entrance ○ Register all visitors ○ Set up observation rooms or temporary isolation rooms for people who have suspected symptoms when entering the campus ○ Implement monitoring, registering and reporting systems 	<ul style="list-style-type: none"> ○ Register all visitors ○ Use information technology for staff and students entering and exiting the campus ○ Set up observation rooms or temporary isolation rooms for people who have suspected symptoms when entering the campus ○ Implement monitoring, registering and reporting systems
		New Zealand <ul style="list-style-type: none"> ● Under Alert Levels 1, 2 and 3, any child or staff member who develops cold or flu-like symptoms should stay home and seek advice about getting tested ● All schools must record student attendance and visitors coming on-site <ul style="list-style-type: none"> ○ Visitor registers must be kept for at least two months ● Schools are asked to encourage parents to check in to the New Zealand COVID Tracer App 	New Zealand <ul style="list-style-type: none"> ● Schools are asked to encourage visitors to check in to the New Zealand COVID Tracer App
		United States <ul style="list-style-type: none"> ● All schools should engage in contact tracing in combination with isolation and quarantine measures 	United States <ul style="list-style-type: none"> ● The U.S. CDC guidance also covers contact tracing and protocols for when a positive case is identified
		Australia <ul style="list-style-type: none"> ● Grade school teachers are not currently prioritized to receive the COVID-19 vaccine and students under the age of 18 are not recommended to be vaccinated under the national vaccine distribution roll-out plan 	
Reported challenges implementing any of the measures above		Israel <ul style="list-style-type: none"> ● The Health Ministry Director of Israel stated that 20% of teachers have not yet been vaccinated, and there are risks given that students aged 16 years and under are not able to get the vaccine until next month 	
		U.K.	

	<ul style="list-style-type: none"> • The U.K. government has not yet included school and childcare workers in the COVID-19 vaccination priority groups • Teachers expressed frustration and asked the U.K. government to provide decisive guidance on face masks in secondary schools 	
	<p>United States</p> <ul style="list-style-type: none"> • According to Executive Order 14000, Supporting the Reopening and Continuing Operation of Schools and Early Childhood Education Providers, every student in America deserves a high-quality education in a safe environment • Some students, including students from low-income backgrounds, students of colour, LGBTQ+ students, English learners, students with disabilities, American-Indian and Alaska-Native students, students who are migratory, students in foster care, students in correctional facilities, and students experiencing homelessness, are less likely to have access to the broadband, resources and other supports necessary to participate in high-quality remote education 	

Table 3: Experiences in Canada with adjusting transmission-mitigation measures as vaccination rates increase and infection rates decrease

Organizing framework domains		Key findings focused on grade schools	Key findings focused on post-secondary schools
When should adjustments be made (i.e., triggers for change)?	Case rates and other epidemiological indicators	Canada <ul style="list-style-type: none"> As of 3 May 2021, Canada has recorded a total of 1,243,242 cases of COVID-19, and the risk to Canadians is considered high Canada is currently in its third wave of COVID-19 infections and many provinces are either managing outbreaks in multiple child/youth settings or have suspended in-person learning altogether, except for those providing childcare for essential workers According to Health Canada, measures put in place to mitigate COVID-19 risks in child/youth settings should be proportionate to the risk of COVID-19 transmission in the community 	Canada <ul style="list-style-type: none"> In its guidance for post-secondary institutions during the COVID-19 pandemic, Health Canada includes significant decreases in COVID-19 transmission on-campus and in the surrounding community as indicators to guide the lifting of restrictions
		Alberta <ul style="list-style-type: none"> Alberta is currently the province with the highest rate of COVID-19 infection per 100,000 people in Canada, with the highest infection rates being reported in adults aged 30-59 years On 3 May 2021, Grades 7 to 12 of schools in hot spot regions shifted to online learning in response to rising cases On 4 May 2021, the Premier of Alberta announced that in response to the spike in COVID-19 cases in the province, all schools in Alberta (K-12) will be closed for two weeks and moved to online learning starting 7 May 2021 <ul style="list-style-type: none"> The Premier also mentioned that the province currently has approximately 80,000 students and staff in self-isolation due to COVID-19 exposure The Alberta government tracks the status of COVID-19 in kindergarten to Grade 12 schools in 	Alberta <ul style="list-style-type: none"> Alberta is currently the province with the highest rate of COVID-19 infection per 100,000 people in Canada, with the highest infection rates being reported in adults aged 30-59 years On 4 May 2021, the Premier of Alberta announced that all post-secondary institutions in the province will be moved to online learning effective immediately for three weeks

		the province, and classifies schools as “Open”, “Alert” (one to four cases), and “Outbreak” (five or more cases)	
		Ontario <ul style="list-style-type: none"> The Government of Ontario uses five colour-coded levels of public-health measures that are assigned to zones throughout the province (“green – prevent”; “yellow – protect”; “orange – restrict”; “red – control”; “grey – lockdown”) and which are based on key quantitative thresholds and indicators based on case rate, health-system capacity, and public health-capacity The Government of Ontario maintains a dashboard of COVID-19 cases in schools and childcare centres (but is currently paused given that in-person learning is suspended in the province) 	Ontario <ul style="list-style-type: none"> The Government of Ontario uses five colour-coded levels of public health measures that are assigned to zones throughout the province (“green – prevent”; “yellow – protect”; “orange – restrict”; “red – control”; “grey – lockdown”) and which are based on key quantitative thresholds and indicators based on case rate, health-system capacity, and public-health capacity
		Québec <ul style="list-style-type: none"> The Government of Québec maintains a detailed dashboard with case rate information found within the school systems (public and private schools) The Government of Québec uses four alert levels (“level one – vigilance”; “level two – early warning”; “level three – alert”; “level four – maximum alert”) and implements these levels according to case rate, transmission control, and healthcare-system capacity (quantitative thresholds are unavailable) throughout the province 	Québec <ul style="list-style-type: none"> The Government of Québec uses four alert levels (“level one – vigilance”; “level two – early warning”; “level three – alert”; “level four – maximum alert”) and implement these levels according to case rate, transmission control, and healthcare-system capacity (quantitative thresholds are unavailable) throughout the province
		New Brunswick <ul style="list-style-type: none"> Currently most of New Brunswick is in Yellow COVID-19 alert level, and one region is in the Orange alert level Although cases are decreasing, the Office of the Chief Medical Officer of Health has indicated no plans to reassess the existing levels 	
		Nova Scotia	

		<ul style="list-style-type: none"> • Premier and Chief Medical Officer of Health of Nova Scotia announced on 22 April 2021 that restrictions are back in place for Halifax Regional Municipality (HRM) and surrounding areas due to increasing rates of COVID-19 • As of 28 April 2021, Nova Scotia entered a provincewide lockdown for two weeks as a circuit-breaker measure to slow the spread of COVID-19 	
		Prince Edward Island (P.E.I.) <ul style="list-style-type: none"> • The Council of Atlantic Premiers agreed to delay the reopening of the Atlantic Bubble to 3 May 2021, and will determine if further delay to 10 May 2021 is required • Beginning on 13 March 2021 until May 2021, post circuit-breaker measures are in place in the province to slow the spread of COVID-19 	
		Newfoundland and Labrador <ul style="list-style-type: none"> • Three separate scenarios for the 2020-21 school year were developed based on the risk of COVID-19 transmission in the community: <ul style="list-style-type: none"> ○ Scenario 1: In-school classes resume (near normal with health measures) when the risk of COVID-19 transmission is very low ○ Scenario 2: In-school classes partially resume (with additional health measures) when the risk of COVID-19 transmission is low to moderate ○ Scenario 3: At-home learning continues (in-school classes are suspended/cancelled) when there is moderate to widespread transmission of COVID-19 • Several indicators related to COVID-19 surveillance conditions and considerations were applied for school scenario changes, including: <ul style="list-style-type: none"> ○ The effective reproductive number (Rt) ○ Number of positive cases ○ Non-epi-linked cases ○ Public-health capacity ○ Outbreak risks managed 	

		<ul style="list-style-type: none"> ○ Management of imported cases • These indicators are based on current best evidence and epidemiology and are subject to change as both evolve • These indicators may not be considered individually, but when taken together, could indicate the need to move to a different scenario • Decisions to change scenarios for a school or school community will be made after consultation with regional public-health authorities 	
		Yukon <ul style="list-style-type: none"> • If a student or school staff tests positive for COVID-19 it does not mean the whole class or school will need to self-isolate or close <ul style="list-style-type: none"> ○ Yukon Communicable Disease Control will provide guidance based on the specific circumstances of the case, and gather information (e.g., risk of exposure to any close contacts) • Based on the direction of Yukon’s Chief Medical Officer of Health, the plan for the 2020–21 school year includes flexibility to reduce the number of students in schools if there is: <ul style="list-style-type: none"> ○ An increased risk of transmission, or ○ A second wave, or ○ Community outbreak of COVID-19 	
		Nunavut <ul style="list-style-type: none"> • In Nunavut, learning environments and education strategies change based on a four-tier stage system where restrictions to in-school learning environments increase as the risk of COVID-19 transmission increases 	
	Vaccination-related factors	Canada <ul style="list-style-type: none"> • The National Advisory Committee on Immunization (NACI) in Canada recommended sequencing of populations for COVID-19 	Canada <ul style="list-style-type: none"> • As Canadian provinces and territories progress through their vaccine roll-outs, education staff have started to join the priority groups becoming eligible for vaccination

		<p>vaccinations in Canadian provinces and territories that prioritizes:</p> <ul style="list-style-type: none"> ○ Those at high risk of severe illness and death ○ Those most likely to transmit COVID-19 to those at high risk of severe illness and death ○ Individuals contributing to the maintenance of essential services ○ Those whose living or working conditions put them at high risk of infection <ul style="list-style-type: none"> • NACI highlights that essential workers and those living and working in conditions that put them at high risk of infection should be defined, prioritized, and informed by federal/provincial/territorial discussions • As of 3 May 2021, 33.6% of Canada's population has been vaccinated with at least one dose of COVID-19 vaccine • As Canadian provinces and territories progress through their vaccine roll-outs, education staff have started to join the priority groups becoming eligible for vaccination <ul style="list-style-type: none"> ○ Approaches for determining when education staff have or will become eligible for vaccination varies by province/territory • On 5 May 2021, Health Canada approved the use of the Pfizer-BioNTech COVID-19 vaccine in children 12 years and older • NACI recommends that if a risk assessment deems that the benefits of vaccination outweigh the potential risks, and if informed consent is obtained, adolescents 12 to 15 years of age may be offered the Pfizer-BioNTech vaccine • The Government of Canada has yet to offer guidance or recommendations for fully vaccinated individuals in Canada 	<ul style="list-style-type: none"> ○ Approaches for determining when education staff have or will become eligible for vaccination varies by province/territory • Although adults attending post-secondary institutions have not been prioritized for COVID-19 vaccination in Canada, many students may get early access to vaccines if they fall into a prioritized vaccine group within a province, such as living in a designated hotspot in Ontario • The Government of Canada has yet to offer guidance or recommendations for fully vaccinated individuals in Canada
		<p>Alberta</p> <ul style="list-style-type: none"> • Starting 4 May 2021, Alberta teachers and school support staff became eligible to book COVID-19 	<p>Alberta</p> <ul style="list-style-type: none"> • Although education staff and students of post-secondary schools have not been prioritized for

		<p>vaccine appointments through the Alberta Health Services (AHS) online booking tool, 811, or participating pharmacies provincewide</p> <ul style="list-style-type: none"> On 26 April 2021, Alberta Health Services approved the Pfizer-BioNTech vaccine for use in individuals under 16 years old, and young Albertans ages 12 to 15 years old with underlying health conditions became eligible to receive the vaccine 	<p>early vaccination, some may currently be eligible based on their age and/or where they live in the province</p> <ul style="list-style-type: none"> Adults aged 40 and older provincewide and adults aged 30 years and older living in Banff and the Regional Municipality of Wood Buffalo are eligible for a COVID-19 vaccine in Alberta
		<p>Ontario</p> <ul style="list-style-type: none"> Starting 3 May 2021, all remaining elementary and secondary school staff in Ontario (i.e., educators, custodial, school-bus drivers, administrative staff) will be eligible for a vaccine 	
		<p>Québec</p> <ul style="list-style-type: none"> Primary and secondary school staff in Québec are considered essential workers in environments at high risk of an outbreak (priority group nine) and are currently eligible for a vaccine 	
			<p>Newfoundland and Labrador</p> <ul style="list-style-type: none"> Newfoundland and Labrador has released its COVID-19 immunization plan, which states that until more evidence emerges, the population must continue to comply with the Special Measures Order and the public-health guidance for all alert levels, even after vaccination
		<p>Yukon</p> <ul style="list-style-type: none"> Education and childcare facilities will have additional restrictions removed when children can receive COVID-19 vaccinations 	<p>Yukon</p> <ul style="list-style-type: none"> People must continue to follow the Safe 6 plus 1, get tested when necessary, and follow all self-isolation requirements even they have received immunization in Yukon or outside the territory
	Community capacity (e.g., public-health capacity for contact tracing)	<p>Canada</p> <ul style="list-style-type: none"> The Canadian government has pledged to support provinces and territories in building capacity throughout the pandemic; however, they respect provincial jurisdiction to determine how community capacity will be enhanced 	<p>Canada</p> <ul style="list-style-type: none"> The Canadian government has pledged to support provinces and territories in building capacity throughout the pandemic; however, they respect provincial jurisdiction to determine how community capacity will be enhanced

		<p>Alberta</p> <ul style="list-style-type: none"> • All COVID-19 positive cases should be reported to Alberta Health Services for follow-up • Alberta has launched the ABTraceTogether mobile contact-tracing app that helps residents know if they have been exposed to COVID-19 <ul style="list-style-type: none"> ○ AHS uses data from the ABTraceTogether app to facilitate contact tracing • In late January 2021, AHS added more than 2,000 contact tracers to increase their contact-tracing capacity and investigate all COVID-19 positive cases confirmed everyday, after the contact-tracing system in the province collapsed at the end of 2020 <ul style="list-style-type: none"> ○ Given the recent spike in COVID-19 cases in the province, it is unknown if AHS currently has sufficient contact-tracing capacity 	<p>Alberta</p> <ul style="list-style-type: none"> • According to the province's Guidance for Post-Secondary Institutions, post-secondary institutions should consider collecting the contact information for all staff and students and are encouraged to collect daily attendance lists for in-person classes • Alberta has launched the ABTraceTogether mobile contact-tracing app that helps residents know if they have been exposed to COVID-19 <ul style="list-style-type: none"> ○ The government has recommended that post-secondary institutions encourage their staff, students and volunteers to download and use the ABTraceTogether app to facilitate contact tracing • The University of Alberta has a Contact Tracing and Rapid Response Plan that provides guidance to staff, faculty and students on responding to a COVID-19 case: <ul style="list-style-type: none"> ○ A web-based tool launched by the school should be used to record the buildings and rooms a staff, faculty or student visits in order to improve contact-tracing efforts ○ All faculties, departments and groups are required to have a rapid-response plan should a COVID-19 case be identified in their work area ○ Individuals directed by AHS to self-isolate must contact their supervisor or instructor immediately
		<p>Ontario</p> <ul style="list-style-type: none"> • The Government of Ontario is currently strengthening the guidance and capacity for public-health units where individuals would be contacted within 24 hours if they were in close contact with a positive case <ul style="list-style-type: none"> ○ Public-health units work together with schools and post-secondary institutions to provide 	<p>Ontario</p> <ul style="list-style-type: none"> • The Government of Ontario is currently strengthening the guidance and capacity for public-health units where individuals would be contacted within 24 hours if they were in close contact with a positive case <ul style="list-style-type: none"> ○ Public-health units work together with schools and post-secondary institutions to

		<p>contact-tracing guidance (e.g., proper attendance and records)</p> <ul style="list-style-type: none"> ○ Ontario has access to 1,700 staff from the federal government and the Ontario Public Service 	<p>provide contact-tracing guidance (e.g., proper attendance and records)</p> <ul style="list-style-type: none"> ○ Ontario has access to 1,700 staff from the federal government and the Ontario Public Service
What measures should be changed?	Operation of schools	<p>Canada</p> <ul style="list-style-type: none"> • In relation to school operations, Health Canada makes several recommendations to support the opening of child/youth settings during the pandemic: <ul style="list-style-type: none"> ○ Where possible, establish a two-metre distance between children/youth, staff and volunteers and use visual cues to encourage physical distancing ○ Assess what infrastructure can be enhanced to provide more space for physical distancing ○ Stagger break times ○ Increase desk distance between children/youth ○ Consider the option of virtual learning, especially for older youth or those at risk of severe illness ○ Increase the frequency of cleaning and disinfection, especially on high-touch surfaces, and avoid sharing communal equipment and supplies 	<p>Canada</p> <ul style="list-style-type: none"> • Examples of mitigation strategies provided by Health Canada for the operation of post-secondary institutions during the pandemic include: <ul style="list-style-type: none"> ○ Offering virtual lectures simultaneously to in-person lectures to limit the number of individuals in classrooms ○ Offering online exams when possible ○ Adjusting HVAC systems or opening windows to increase ventilation ○ Scheduling access to campus facilities, such as labs and gymnasiums ○ Cohorting students in small groups to minimize individuals' number of contacts ○ Keeping a safe and secure attendance record system for contact tracing purposes • The Government of Canada has provided financial supports for students and recent graduates as part of its COVID-19 Economic Recovery Plan
		<p>British Columbia</p> <ul style="list-style-type: none"> • The Provincial COVID-19 Health and Safety Guidelines for K-12 Settings were updated on 16 April 2021, and include guidance on classroom changes, online instruction, and student support <ul style="list-style-type: none"> ○ The Five-Stage Framework for K-12 Education includes guidelines on learning-group size, density targets, in-class instruction, and remote learning where transitions between stages are dependent on the community risk of COVID-19 in British Columbia 	<p>British Columbia</p> <ul style="list-style-type: none"> • With the support of the Ministry of Advanced Education and Skills Training, post-secondary institutions in British Columbia created the COVID-19 Go Forward Guidelines for B.C.'s Post-Secondary Sector, which includes recommendations for accessing campus safely, education delivery, and student support <ul style="list-style-type: none"> ○ All post-secondary institutions are required to develop COVID-19 safety plans for reducing transmission and reopening campuses safely

		<ul style="list-style-type: none"> ○ Learning groups (cohorts) and physical distancing are to be implemented, with guidelines provided for the maximum learning-group size in elementary, middle, and secondary schools at each stage of the Five-Stage Framework ○ Key considerations for supporting students with disabilities/diverse abilities are outlined, including prioritizing their attendance in in-person learning, their participation in learning groups, and alternate teaching methods to facilitate learning while maintaining prevention and exposure control measures • The provincial guidelines for K-12 settings include a flow chart of classroom considerations for secondary schools and school boards when planning instructional delivery: <ul style="list-style-type: none"> ○ Organize students and staff into learning groups ○ Create timetables for in-learning group and cross-learning group classes with physical distancing requirements for each group ○ Supplement in-class instruction with remote learning for courses that cannot operate through learning groups or physical distancing approaches • On 2 March 2021 the First Nations Education Steering Committee and First Nations Schools Associations released a guidance document to support First Nations schools in the reopening of school facilities adapted from the B.C. Ministry of Education's Provincial COVID-19 Health and Safety Guidelines for K-12 Schools, which includes a school reopening planning template and health and safety considerations 	<ul style="list-style-type: none"> ○ Institutions should provide supports to students learning remotely and guidance should be provided to instructors on teaching in the remote format
		Alberta <ul style="list-style-type: none"> • On 4 May 2021, the Premier of Alberta announced that in response to the spike in 	Alberta <ul style="list-style-type: none"> • According to the province's Guidance for Post-Secondary Institutions, before reopening to in-

		<p>COVID-19 cases in the province, all schools in Alberta (K-12) will be closed for two weeks and moved to online learning starting 7 May 2021</p> <ul style="list-style-type: none"> • AHS recommends that during the pandemic, physical distancing should be enhanced in schools by reorganizing rooms to allow for more physical space, creating cohorts of students by class, guiding traffic flow through entrances and hallways, and avoiding large gatherings like assemblies 	<p>person attendance, post-secondary institutions should establish their own COVID-19 response plans that include:</p> <ul style="list-style-type: none"> ○ Adaptations to education spaces to meet maximum attendance and physical-distancing requirements ○ A schedule for enhanced cleaning and disinfection of high-traffic areas ○ Plans to respond to and manage illness of staff and students <ul style="list-style-type: none"> • Most post-secondary institutions in Alberta have continued to deliver courses and services to students remotely • On 4 February 2021, Alberta's Minister of Advanced Education said that post-secondary institutions should prepare to return students to full-time on-campus learning in September 2021 • The Alberta government provides information on its website about grading, admissions, transfers, financial support, and placements for post-secondary students <ul style="list-style-type: none"> ○ Student services and supports vary by institution, and students are advised to contact the institution directly for more information on supports available
		<p>Saskatchewan</p> <ul style="list-style-type: none"> • The Saskatchewan Safe Schools Plan outlines eight priority areas of action for the safe return of students to schools during COVID-19, including classroom changes and online instruction considerations <ul style="list-style-type: none"> ○ Four levels of education delivery are to be provided: level 1) in-class learning with additional measures to ensure safety; level 2) in-class learning with mask usage for staff and students; level 3) reduced in-class learning with cohorts and hybrid learning models; and level 4) transition to alternative learning opportunities 	

		<ul style="list-style-type: none"> ○ Transitions between levels are determined through consultations with local school divisions and local public-health officials ● Facility changes should include modifying room configurations to promote physical distancing, increasing signage in hallways, and minimizing shared surfaces with adequate soap and sanitizer near school entrances 	
		Manitoba <ul style="list-style-type: none"> ● On 20 October 2020, the Government of Manitoba released the COVID-19 K-12 School Settings Practice Guidance and Protocols advising parents, caregivers and students on what to expect when returning to school: <ul style="list-style-type: none"> ○ Designated entrances and exits ○ One-way hallways ○ Spacing between desks and tables ○ Limiting bathroom occupancy ● In partnership with the Ministry of Education, the Remote Learning Support Centre portal was launched by stakeholders from the educational sector to provide resources and tools to support learning at home for students and teachers 	Manitoba <ul style="list-style-type: none"> ● The Guidelines for Boarding Schools (K-12) and University/College Residences in Manitoba outline protocols for room occupancy and common areas in residences <ul style="list-style-type: none"> ○ Single occupancy should be implemented where possible, otherwise students should be grouped together based on the same classes and year ○ Washrooms can be assigned to students and a shower schedule can be implemented ○ Communal areas such as kitchens can remain open with ongoing cleaning, disinfection and physical-distancing measures in place ○ Limits should be placed on time spent in communal areas
		Ontario <ul style="list-style-type: none"> ● The Government of Ontario released guidance to reopening schools for the 2020-21 school year <ul style="list-style-type: none"> ○ As of 12 April 2021, grade schools have closed in-person instruction and moved to remote learning indefinitely ○ Prior to closure, elementary schools were re-opened for in-person instruction with enhanced health and safety protocols (e.g., cohorted group for class, recess and lunch, staggered breaks) ○ Secondary schools had the option for conventional or adapted in-person instruction (e.g., class cohorts of 15 students with alternate 	Ontario <ul style="list-style-type: none"> ● The Government of Ontario is investing \$106.4 million to financially assist public colleges and universities due to decreases in tuition and ancillary and incurred expenses ● Most universities in Ontario remain open with limited staff and students on campus, and the majority of students are currently doing remote learning during the current lockdown <ul style="list-style-type: none"> ○ Some universities have cancelled in-person meetings, closed athletic facilities, and limited the mobility for students living in residence

		<p>schedules and at least 50% of instructional days)</p> <ul style="list-style-type: none"> • It was announced 4 May 2021 at a provincial press conference that remote learning will be available to students for the next school year • The Government of Ontario provided COVID-19 resources to the education sector in addition to increased funding for health and safety training, supports for students and staff (e.g., special-education needs, increased funding for mental health services, testing) and increased testing capacity (totalling \$1.6 billion) <ul style="list-style-type: none"> ○ It was announced on 4 May 2021 at a provincial press conference that schools would be receiving temporary COVID-19 funding, totalling more than \$1.6 million, for improving ventilation systems, filter replacements, remote learning, and recovery 	
		<p>Québec</p> <ul style="list-style-type: none"> • The Government of Québec routinely updates school closures: (last updated 29 April 2021) <ul style="list-style-type: none"> ○ Pre-school and elementary schools in certain regions and municipalities will resume in-person instruction starting 3 May 2021 (Communauté métropolitaine de Québec and Chaudière-Appalaches) ○ Pre-school and elementary schools in Gatineau and the Outaouais region will remain closed until 7 May 2021 ○ Secondary schools and vocational training centres in Communauté métropolitaine de Québec, Gatineau, Chaudière-Appalaches, and Outaouais are closed until 7 May 2021 ○ Unless stated, pre-school and elementary school students will do their classes online • The Government of Québec invested \$138 million to improve student access to school resources (e.g., homework assistance, direct services for 	<p>Québec</p> <ul style="list-style-type: none"> • Emergency measures within specific regions and municipalities continue to affect post-secondary schools (in effect until 9 May 2021) including Communauté métropolitaine de Québec and the entire Chaudière-Appalaches, Outaouais regions, and in the Bas-Saint-Laurent region • The Government of Québec strongly recommends distance learning unless the student's education requires in-person evaluation <ul style="list-style-type: none"> ○ McGill University and Concordia University have scheduled summer courses to be offered primarily through distance learning with potential in-person teaching activities ○ Les CEGEPs du Québec provides detailed up-to-date frequently asked questions and answers related to COVID-19 (last updated 22 April 2021) • Travel between regions is highly discouraged

		<p>students with disabilities, distance-learning tools, 75 new special classes, supports to stay at home, tutoring, mental health services)</p>	<ul style="list-style-type: none"> • Student residences and common spaces within them are closed (with certain exceptions) • The Government of Québec invested a total of \$135 million to improve student access and support (e.g., psychosocial support, new pedagogical methods, material support)
		<p>New Brunswick</p> <ul style="list-style-type: none"> • Provincial government of New Brunswick announced that high-school students will not return to full-time in-person learning this school year <ul style="list-style-type: none"> ○ It is expected that in-person classes will resume for all students in September 2021 • The Department of Education and Early Childhood Development's return-to-school plan outlines expectations and standards for the safe operation of public schools • Each public school will develop a COVID-19 operational plan in consultation with the school district occupational health and safety coordinators • A guide for school districts and schools provides direction for schools that have previously returned in September 2020, and will continue to evolve and change as new information becomes available • Information on changes in directive is provided when a school or early learning and childcare facility in an area has shifted between orange and yellow alert zones 	<p>New Brunswick</p> <ul style="list-style-type: none"> • An operational plan guide has been developed to assist educational institutions develop their COVID-19 operational plan outlining management of daily operations (e.g., physical distancing, hand and respiratory hygiene, screening and testing)
		<p>Nova Scotia</p> <ul style="list-style-type: none"> • As of 27 April 2021, all public schools in the Halifax Regional Municipality (HRM) and surrounding areas closed, and as of 29 April 2021 were moved to at-home learning <ul style="list-style-type: none"> ○ This includes all pre-primary children and primary to Grade 12 for public and private schools 	<p>Nova Scotia</p> <ul style="list-style-type: none"> • Due to the return of public-health restrictions after an increase in COVID-19 cases in Nova Scotia, local universities have adapted their plans for their summer offerings, operations and work

		<ul style="list-style-type: none"> • The Government of Nova Scotia released an updated back to school plan that outlines operations when students return to school in September 2021: <ul style="list-style-type: none"> ○ Preparation of schools for staff and students ○ Plans for school activities and protocols ○ Plans for maintaining respiratory, hand hygiene, and environmental cleaning • The back-to-school plan outlines three separate scenarios for the 2021-2022 school year: <ul style="list-style-type: none"> ○ September 2021 full opening with additional measures in place ○ Partial or blended opening in which many measures within this plan align with the full opening plan, with additional protocols. This plan includes that pre-primary to Grade 8 students will receive in-class instruction in smaller class sizes, and Grades 9 to 12 will be supported to learn from home ○ At-home learning in which schools will close and at-home learning will be applied provincewide 	
		<p>Prince Edward Island</p> <ul style="list-style-type: none"> • Post circuit-breaker measures indicate that full-time classroom learning for kindergarten to Grade 12 will resume with public-health measures in place and schools to develop contingency plans for remote learning • Guidelines for return to school in September 2020 include: <ul style="list-style-type: none"> ○ Public-health measures for students, staff, parents and visitors ○ Public-health measures for facilities ○ Programming and instruction ○ Student transitions and movement throughout the facility ○ Transportation ○ Access to buildings 	<p>Prince Edward Island</p> <ul style="list-style-type: none"> • Post circuit-breaker measures indicate that post-secondary education and training will resume either online or in-person with public health measures in place • University of Prince Edward Island announced plans to return a normal academic experience in September 2021

		<p>Newfoundland and Labrador</p> <ul style="list-style-type: none"> Newfoundland and Labrador public-health guidance for K-12 schools was updated on 7 April 2021 and addresses public-health measures, environmental measures, administrative measures, personal measures, and personal protective equipment (including masks), including: <ul style="list-style-type: none"> Providing education for children about hand hygiene, cough and sneeze etiquette Considering different classroom and learning-environment configurations to allow distance Implementing mitigation measures for bus transportation, cafeterias and food services, and music programs Guidance about a safe return to school was updated on 26 February 2021 and includes a framework that describes: <ul style="list-style-type: none"> Stakeholder consultation: engaging in dialogue with educational partners Preparation of schools and work sites for the return of staff and students Preparation of staff for school re-opening with enhanced professional learning, understanding of possible re-entry scenarios, and human resources considerations Preparation of students for the return to school Planning for school operations: planning for school activities and protocols Planning for hygiene and cleaning procedures for schools and work sites Three separate scenarios for the 2020-21 school year were identified: <ul style="list-style-type: none"> Scenario 1: in-school classes resume (near normal with health measures) when the risk of COVID-19 transmission is very low Scenario 2: in-school classes partially resume (with additional health measures) when the risk of COVID-19 transmission is low to moderate 	<p>Newfoundland and Labrador</p> <ul style="list-style-type: none"> All College of the North Atlantic (CNA) campuses remain closed to the public and only employees and students directly involved in the delivery of practical training components are permitted on campus until further notice
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		<ul style="list-style-type: none"> ○ Scenario 3: at-home learning continues (in-school classes are suspended/cancelled) when there is moderate to widespread transmission of COVID-19 ● Guidance about online learning was developed ● Resources are available for parents and students to prepare for the new school year 	
		<p>Yukon</p> <ul style="list-style-type: none"> ● Each school is following its own school-specific operational plans in the 2020–21 school year, which are approved by public-health officials and school superintendents <ul style="list-style-type: none"> ○ In Whitehorse, Grades 10 to 12 students at F.H. Collins, Porter Creek and Vanier Catholic secondary schools returned to full-time, in-class learning on 19 April 2021; kindergarten to Grade 9 students should be in school for full-day in-class instruction (five days per week) ○ In rural communities, kindergarten to Grade 12 students should be in school for full-day in-class instruction (five days per week) ● School operations during the pandemic are as follows: <ul style="list-style-type: none"> ○ When the pandemic risk is low and the school capacity is 100%, kindergarten to Grade 12 students should be in classes in schools full-time for the maximum instructional time possible (five days per week) and be provided with flexible learning programs ○ When the pandemic risk is low and the school capacity is 50%, school full-time should be provided for essential groups and part-time rotating schedules for other students (flexible learning programs for all students) ○ When the pandemic risk is low and the school capacity is 20%, only essential groups (e.g., students with disabilities or diverse learning needs, students in need of additional support) 	<p>Yukon</p> <ul style="list-style-type: none"> ● Guidance was developed for post-secondary studies and apprenticeships during COVID-19 <ul style="list-style-type: none"> ○ Students can continue to apply online for student funding and grant programs ○ The federal government is rolling out supports for students ○ Some in-school technical training and examinations were suspended in Yukon (e.g., all monthly apprenticeship and trade certification level exams and interprovincial exams at the Department of Education building) ○ All scheduled trade qualification exam sessions were cancelled

		<p>could be in school; and the majority of students should be arranged for distance learning</p> <ul style="list-style-type: none"> ○ When the pandemic risk is high and the school capacity is 0%, face-to-face learning should be suspended; and distance learning should be arranged for all students ● Temporary school programming relocation was arranged to support safe spacing at school during the 2020–21 school year ● Guidance was developed about continuing learning at home for students and families, including short- and long-term plans ● Guidance was developed about student learning in the 2020–21 school year during the COVID-19 pandemic, which includes: <ul style="list-style-type: none"> ○ Guiding the delivery of blended learning in Yukon schools ○ Meeting all students where they are at in their learning ○ Adapting school programming and instruction 	
		<p>Northwest Territories</p> <ul style="list-style-type: none"> ● When planning for the 2020-21 school year, the Government of Northwest Territories released guidance for reopening schools wisely that emphasized the importance of prioritizing in-person learning ● Schools in the Northwest Territories are implementing various strategies including in-person learning for students who are well, remote learning for students who are self-isolating), and home schooling for students placed on an approved Home-Schooling Program by a parent ● The Northwest Territories have a list of learning resources, which include supports for distance learning and learning on-the-land 	
		Nunavut	

		<ul style="list-style-type: none"> As of 28 April 2021, Nunavut announced that Schools in Kinngait and Iqaluit continue to be closed for in-person learning as stage 4 continues to be in effect, and other schools alter their learning strategies according to the four-tier stage system Nunavut provides supports for remote learning for parents of children who are learning at home 	
	Operation of residences in post-secondary schools	Not applicable	Canada <ul style="list-style-type: none"> Post-secondary institutions should ensure that workers providing support to individuals living in residences are aware of the government's guidance for infection prevention and control for homecare workers Health Canada recommends that in cases where there is more than one individual sharing housing, institutions may consider treating them as a family unit with corresponding terms for scheduling activities and physical-distancing expectations Student supports and services should be offered online or by telephone when possible
			British Columbia <ul style="list-style-type: none"> The COVID-19 Go Forward Guidelines for B.C.'s Post-Secondary Sector outlines protocols for housing and student residence operations <ul style="list-style-type: none"> Students in shared accommodations should be separated if one student becomes ill Stagger move-in dates Reduce furniture in common-room areas Residence-life programming should be provided virtually or outdoors in line with public-health guidelines
			Alberta <ul style="list-style-type: none"> Staff, students, visitors and volunteers who access residences should screen for symptoms

			<p>before they enter the residence using the Alberta Health Daily Checklist</p> <ul style="list-style-type: none"> • Guidance from the province advises that residences should consider having rooms dedicated for symptomatic residents and residents with COVID-19, develop plans for re-opening that support physical distancing, keep current contact information for contact tracing, and adopt enhanced cleaning and disinfection schedules for residences
			<p>Ontario</p> <ul style="list-style-type: none"> • To guide local partners and post-secondary institutions in the community, Toronto Public Health developed COVID-19 guidance with related checklists and decision tools <ul style="list-style-type: none"> ○ Students who fall ill may be isolated in specified rooms (e.g., rooms at one end of the hall, designated wing, or floor) <ul style="list-style-type: none"> ▪ Staff and students must wear appropriate PPE ▪ Students should have access to food, water and medications, and washrooms and common areas that are cleaned regularly ▪ Policies and procedures should be in place for continued delivery of services and supports such as mental health ○ Universities and colleges may decide to keep campus residences open for out-of-province students ○ Residences should impose restrictions that allow for physical distancing in common living areas and washrooms ○ Students should limit their mobility into and/or between rooms and residences ○ Only residents, essential staff, and visitors should be permitted into residences ○ Visible signage should be posted throughout the residences

	Engagement in extracurricular activities	<p>Canada</p> <ul style="list-style-type: none"> Health Canada’s recommendations for engagement in extracurricular activities in child/youth settings include: <ul style="list-style-type: none"> Postponing assemblies, team sports or extracurricular activities where physical separation cannot be maintained or touching common equipment cannot be avoided Limiting or cancelling activities that bring children together from multiple groups or classrooms 	<p>Canada</p> <ul style="list-style-type: none"> When considering if and how extracurricular activities will occur on- and off-campus, post-secondary institutions are encouraged to use a risk-based approach A risk-mitigation tool for gatherings and events during the pandemic has been provided by Health Canada
		<p>British Columbia</p> <ul style="list-style-type: none"> The province is following recommendations released by the British Columbia Music Educators’ Association and the Coalition for Music Education in British Columbia, which provide guidance for implementing music classes during COVID-19 aligned with each stage of the 5 Stage Framework for K-12 Education <ul style="list-style-type: none"> Guidelines are provided for room configurations, cleaning and disinfecting musical instruments and hand hygiene, models for curriculum delivery including online, hybrid, and in-person classes, and physical-distancing requirements for learning groups No in-person inter-school competitions, performances, or events should occur The Government of British Columbia’s current recommendations for school sports include physical distancing, cleaning and disinfectant, and indoor and outdoor considerations <ul style="list-style-type: none"> Sports including intramurals, sports team practices, and games can take place if they do not include prolonged physical contact, and masks must be worn by all staff and other adults when indoors Stationary high-intensity physical activities should occur two metres apart if taking place 	<p>British Columbia</p> <ul style="list-style-type: none"> Implementation of performing arts activities should follow the protocols for performing arts created by WorkSafe BC Post-secondary schools should adhere to the Government of British Columbia’s guidelines for sports and other athletic activities

		<p>indoors, or should be moved outdoors, otherwise the activity must not take place</p> <ul style="list-style-type: none"> ○ Students from the same learning group are not required to maintain physical distancing during high-intensity physical activities that involve movement, but students from different learning groups must maintain two metres of distance ○ Students are required to wear masks indoors when participating in low-intensity sport activities ○ Sporting activities should take place outdoors whenever possible 	
		<p>Alberta</p> <ul style="list-style-type: none"> • Schools must follow the province's Guidance for Sport, Fitness and Recreation when extracurricular activities occur, which requires facilities to implement practices to minimize the risk of transmission, have rapid-response plans in the event of potential exposure to attendees, and ensures proper infection-control practices 	<p>Alberta</p> <ul style="list-style-type: none"> • Post-secondary institutions must follow the province's Guidance for Sport, Fitness and Recreation that requires facilities to implement practices to minimize the risk of transmission, have rapid-response plans in the event of potential exposure to attendees, and ensures proper infection-control practices
		<p>Saskatchewan</p> <ul style="list-style-type: none"> • Restarting extracurricular activities should be in accordance with applicable Re-Open Saskatchewan Guidelines, which outlines phases for which different activities may be implemented with public-health measures <ul style="list-style-type: none"> ○ Extracurricular sports programs and activities can continue in groups of eight ○ Activities should occur outdoors whenever possible, and contact must be avoided in any sports ○ Spectator maximum capacity is 30 people within facilities with physical distancing to be maintained 	
		<p>Manitoba</p> <ul style="list-style-type: none"> • All activities that involve movement should occur outside, with indoor or outdoor non-contact 	

		<p>sports permitted with physical-distancing restrictions in place</p> <ul style="list-style-type: none"> Schools should follow the Manitoba High Schools Athletic Association's Return to School Sport Plan when considering re-instating extracurricular sports, which outlines the maximum number of players for football activities, and guidelines for spectators, tournaments and championships 	
		<p>Ontario</p> <ul style="list-style-type: none"> The Government of Ontario released guidance to reopening schools for the 2020/2021 school year <ul style="list-style-type: none"> A range of low-risk delivery options are encouraged for music and arts curriculum such as in-school instruction in larger spaces, restrictions in type of instrument, or in-person instruction with no live performance Additional guidance is provided by the Ontario Music Educators' Association Students cannot engage in moderate to vigorous physical activity indoors and must maintain physical distancing when they take place outdoors School gymnasiums are restricted to moderate physical activity where physical distancing and masking is feasible Organized sports can take place as long as physical distancing and proper cleaning measures are in place Field trips and school assemblies are highly discouraged 	<p>Ontario</p> <ul style="list-style-type: none"> To guide local partners and post-secondary institutions in the community, Toronto Public Health developed COVID-19 guidance with related checklists and decision tools <ul style="list-style-type: none"> Indoor and outdoor organized sports must comply with provincial orders and local directives and by-laws <ul style="list-style-type: none"> Outdoor activities are highly encouraged, and gymnasiums should only be used if physical distancing is allowed Shared equipment should be disinfected between cohort use and students must practise hand hygiene and respiratory etiquette Music education such as in-person choir and band practices should be canceled <ul style="list-style-type: none"> If necessary, persons singing or playing brass/wind instruments should be separated with physical barriers (e.g., plexiglass) Instruments should not be shared between individuals In-person teaching and instruction could occur if it is low-risk (e.g., larger spaces, restricting the type of instrument)
		<p>Québec</p> <ul style="list-style-type: none"> The Government of Québec routinely updates guidelines specific to education (last updated 29 April 2021) 	

		<ul style="list-style-type: none"> ○ As of 12 April 2021, extracurricular activities are prohibited in red zones and some activities are permitted in orange zones with prevention measures ○ Specific projects (e.g., sports-études, arts-études, concentrations) have continued within cohorted groups (“stable class groups”), otherwise individuals outside of these cohorted groups must maintain two-metres distance at all times ○ When activities are allowed, secondary school students can remove their masks during physical activities and extracurricular activities (e.g., exercise, band) as long as physical distance is available (at least two metres) 	
		Prince Edward Island <ul style="list-style-type: none"> • Planned events that typically take place at school (e.g., parent-teacher conferences) will follow the multiple gatherings guidance 	
		Newfoundland and Labrador <ul style="list-style-type: none"> • School administrators should determine the composition of the cohorts, which should remain consistent for all activities that occur in school including, but not limited to, learning and breaks (lunch, recess, classroom changes, etc.) • Gatherings should occur within the class cohort and not exceed the maximum gathering size established by the Chief Medical Officer of Health <ul style="list-style-type: none"> ○ Schools should seek virtual alternatives for larger gatherings and assemblies 	Newfoundland and Labrador <ul style="list-style-type: none"> • All large-scale gatherings outside of regular program-related activities/curriculum and office-related duties at the College of the North Atlantic will be postponed until a later date, or they will be cancelled depending on their nature <ul style="list-style-type: none"> ○ Employees and students are encouraged to utilize online services to conduct meetings and group conversations
		Yukon <ul style="list-style-type: none"> • The following programs and services have been identified as requiring program specific guidance and should still observe the general public health guidance <ul style="list-style-type: none"> ○ Music, arts and drama ○ Physical education class ○ Recess/playgrounds 	

		<ul style="list-style-type: none"> ○ Cooking class ○ Outdoor/on-the-land education, field trips and overnight trips ○ Libraries ○ Computer labs and IT equipment 	
	Accompanying infection-prevention measures	<p>Canada</p> <ul style="list-style-type: none"> • Personal protective measures, such as frequent hand hygiene and respiratory etiquette, should be promoted and facilitated within child/youth settings according to Health Canada • Health Canada also recommends that non-medical masks or face coverings should be considered for children over the age of two, as long as the masks can be worn correctly in settings where consistent physical distancing cannot be maintained • Physical-barrier mitigation measures should also be increased 	<p>Canada</p> <ul style="list-style-type: none"> • According to Health Canada, core personal protective practices that every individual in the post-secondary community should observe are: <ul style="list-style-type: none"> ○ Practising proper hand hygiene ○ Staying home or isolated when ill or exposed to COVID-19 ○ Maintaining physical distance whenever possible ○ Wearing a medical or non-medical mask when it is not possible to consistently maintain a two-metre physical distance or when required by local government ○ Reducing personal non-essential travel
		<p>British Columbia</p> <ul style="list-style-type: none"> • The Government of British Columbia's provincial guidelines for K-12 settings includes recommendations for hand hygiene standards and frequency, respiratory etiquette, personal protective equipment use for both students and staff • Learning groups and staggered recess, snack, lunch, and class transition times should be implemented • Physical-distancing requirements vary depending on the stage of the province's 5 Stage Framework for K-12 Education • Environmental measures including general ventilation and air circulation considerations, the use of floor markings and posters to direct traffic flow with designated entrance and exit doors, and barriers made of transparent materials are recommended 	<p>British Columbia</p> <ul style="list-style-type: none"> • Post-secondary institutions should adhere to the COVID-19 Go Forward Guidelines for B.C.'s Post-Secondary Sector for cleaning and sanitation protocols, faculty, staff and student hygiene standards, and the use of personal protective equipment and non-medical masks

		<ul style="list-style-type: none"> On 30 March 2021, the B.C. Centre for Disease Control updated its guidance on the use of masks for all staff, adults, visitors and Grades 4 to 12 students, now requiring the use of a non-medical mask or face covering at all times while indoors at school and on a bus, except for those in which exemptions apply 	
		Alberta <ul style="list-style-type: none"> Alberta Health Services provides several resources for schools and teachers to guide infection-prevention measures in schools that are open, including resources on: <ul style="list-style-type: none"> Cleaning guidance Hygiene Physical distancing Visitors Supporting physical activity at school 	Alberta <ul style="list-style-type: none"> The Alberta Government's Guidance for Post-Secondary Institutions provides recommendations on infection-prevention measures, including: <ul style="list-style-type: none"> Physical distancing (e.g., staggering start and end times for classes, using signage, limiting bathroom occupancy) Cleaning and sanitation Planning for rapid response to illness Risk-mitigation at dorm residences and food services
		Saskatchewan <ul style="list-style-type: none"> Under level 2 of the Saskatchewan Safe Schools Plan, staff and students in Grades 9 through 12 may be required to wear masks in classrooms where physical distancing is not possible, or if a student is attending a class outside of their cohort On 11 August 2020, the Chief Medical Officer of Health provided additional guidance on level 2 protocols for the province, where school staff and students in Grades 4 to 12 are required to wear masks in hallways and on buses The Saskatchewan Safe Schools Plan outlines cohorting requirements for staff and students <ul style="list-style-type: none"> Schools should focus on cohorting teachers to a limited number of students In elementary schools, cohorts will include the entire classroom 	

		<ul style="list-style-type: none"> Schools are to follow the Primary and Secondary Educational Institution Guidelines which include protocols for: <ul style="list-style-type: none"> Hygiene Physical distancing with staggered snack, lunch, and class transition times, and staggered entry and exists, limited pickup and drop-offs, and separate group entrances Cleaning, disinfection and sanitation 	
		Manitoba <ul style="list-style-type: none"> Student cohorts with a maximum cohort size of 75 students should be implemented, and physical distancing should be maintained within the cohort through a minimum one-metre separation between student desks and tables The COVID-19 K-12 School Settings Practice Guidance and Protocols include recommendations for ventilation, hygiene practices, and cleaning and disinfecting best practices Students in Grades 4 to 12, staff, and visitors are required to wear non-medical masks in schools when two-metre physical-distancing requirements are not possible 	
		Ontario <ul style="list-style-type: none"> The Government of Ontario released guidance to reopening schools for the 2020/2021 school year <ul style="list-style-type: none"> Secondary schools are required to create cohorts (15 students in each class) in order to limit contacts to 100 students in the entire school and keep students in a maximum of two in-person class cohorts Secondary schools developed new timetable formats (e.g., “quadmester”, in-person attendance for at least 50% of instructional days, and “study hall model”) All students and staff are required to self-screen for symptoms before attending school 	Ontario <ul style="list-style-type: none"> To guide local partners and post-secondary institutions in the community, Toronto Public Health developed COVID-19 guidance with related checklists and decision tools <ul style="list-style-type: none"> Staff and students are encouraged to learn proper hand hygiene and respiratory etiquette Physical-distancing strategies could include maintaining a distance of two metres at all times, limiting the total number of students permitted in each instructional space, limiting mixing of different groups of students, staggering schedules, designating single entry and exit points, and implementing structural barriers

		<ul style="list-style-type: none"> ○ Students may decide to attend school remotely on a full-time basis ○ Schools were responsible for developing hand hygiene training and educational materials, and scheduling appropriate hand hygiene throughout the day ○ Grade 1 to 12 students are required to wear non-medical or cloth masks indoors (including common areas, classes, and on school transportation) and outdoors where physical distancing cannot be maintained (kindergarten students are encouraged but not required) ○ Staff are provided medical masks, eye protection, and other PPE by the Ontario Government ○ Schools are responsible for limiting or prohibiting visitors, including parents ○ Schools are encouraged to review cleaning protocols and reinforce them based on current public-health requirements ● Public Health Ontario developed a checklist for COVID-19 preparedness and prevention in elementary and secondary schools with additional tools and resources available on its website 	<ul style="list-style-type: none"> ○ Masks are mandatory in all public indoor settings across the province ○ Post-secondary settings must develop or update infection prevention and control policies and procedures including: screening, attendance management for contact tracing, cohorting, isolation and quarantine for students with COVID-19 (e.g., transportation, meals, accommodations), physical distancing, hand hygiene, mask requirements, return to work for symptomatic staff and students, enhanced cleaning and disinfection, food safety practices, use of PPEs, communication plans, management of cases and outbreaks ○ Students and staff should be trained on signs and symptoms of COVID-19 ○ Students and staff should be screened before coming on campus every day ○ Ventilation systems must be adequately maintained ○ Further guidance is available for on-campus dining, student placements, access to campus amenities, libraries, water fountains, campus clubs, communities with special needs, mental health and well-being, and international staff and students
		<p>Québec</p> <ul style="list-style-type: none"> ● The Government of Québec routinely updates guidelines specific to education (last updated 29 April 2021) <ul style="list-style-type: none"> ○ Preschool, elementary, and high school students are cohorted into smaller groups (“stable class groups”), where students in the same cohort groups do not have to comply with physical-distancing guidelines ○ Preschool, elementary, and high school students must comply with a two-metre distance 	<p>Québec</p> <ul style="list-style-type: none"> ● McGill University and Concordia University have detailed directives that outline safety and prevention measures to prevent the spread of COVID-19 on campus

		<p>between different cohort groups and while moving during common areas (including hallways)</p> <ul style="list-style-type: none"> ○ As of 8 March 2021, elementary Grades 1 to 6 must wear pediatric masks instead of a face covering (in classrooms, in common areas in the school, and during school transportation) ○ High school teachers move between classes when they are teaching and students remain in the same room ○ As of 12 April 2021, secondary students in Secondary III, IV and V are required to alternate between in-person and remote attendance (one out of two days) and must wear masks at all times (in class, in common areas inside and outside of school, and during school transportation) ○ The government hired additional maintenance staff for more frequent cleaning and disinfection ○ The government conducted rigorous air-quality testing in all schools ● The Québec National Institute of Public Health (INSPQ) released preventive-measures recommendations for staff members in educational settings (published 25 August 2020): <ul style="list-style-type: none"> ○ Adjust work schedules and modality (e.g., teleworking and allow flexible hours, where possible) ○ Triage symptomatic workers (e.g., conduct a symptom-based questionnaire, self-monitor) ○ Promote and practise hand hygiene and respiratory etiquette (e.g., wash stations entering and leaving work, clean frequently touched surfaces) ○ Promote physical distancing (e.g., pick up children at the front door of the building, stagger breaks, recesses, and schedules for 	
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		<p>phased arrivals/departures, limit visitors, maintain two-metre distance, physical barriers installed if two metres is not possible)</p> <ul style="list-style-type: none"> ○ Avoid sharing utensils, dishes or glasses ○ Wear quality medical procedure masks when interacting with individuals for more than 15 minutes in a day ○ Disinfect locations where a confirmed case of COVID-19 was detected 	
		<p>New Brunswick</p> <ul style="list-style-type: none"> • The province's return to school guide for parents and the public outlines health and safety protocols, including: <ul style="list-style-type: none"> ○ Students in kindergarten to Grade 5 are not required to wear a mask on school buses ○ Students in Grades 6 to 12 are required to wear masks on school buses, except when sitting next to a member of the same household ○ Access to schools are limited (e.g., parents must schedule an appointment to enter schools) ○ Enhanced cleaning protocols have been established ○ Hand sanitization stations at the entrance of each class and school ○ Class sizes will be based on grades, for example kindergarten to Grade 5 will have reduced sizes, and Grades 6 to 8 will have regular group sizes 	
		<p>Nova Scotia</p> <ul style="list-style-type: none"> • The updated back to school plan for September 2021 includes the following guidance for pre-primary classes: <ul style="list-style-type: none"> ○ School visitor limitations, including parents and/or guardians ○ Pre-primary classes will be cohorted and encouraged to conduct outside learning ○ Additional cleaning and disinfecting protocols will be in place, such as children and staff required to clean their hands before entering 	<p>Nova Scotia</p> <ul style="list-style-type: none"> • The Government of Nova Scotia directs post-secondary students to visit their institution's website to review their COVID-19 prevention plan, all approved by the Chief Medical Officer of Health and the Department of Labour and Advanced Education

		<p>the school, before and after eating, and throughout the day</p> <ul style="list-style-type: none"> ○ Pre-primary children are not required to wear a mask while in school ○ Staff working with children will be required to wear a mask ○ Guidance for transportation indicates that children, students and drivers on the school bus will be required to wear non-medical masks, and buses will be cleaned twice daily ● Back to school plan for September 2021 includes the following guidance for primary to Grade 12 classes: <ul style="list-style-type: none"> ○ Cohorting practices for classes ○ Schools will utilize directional signs to control movements in school hallways, common areas and outside spaces ○ Reconfiguration of instructional spaces to allow physical distancing ○ Additional cleaning and disinfecting protocols will be in place such as children and staff required to clean their hands before entering the school, before and after eating, and throughout the day ○ Students in primary to Grade 3 are not required to wear a mask while in school ○ All students in Grades 4 to 12 are required to wear a mask if they cannot physically distance from others, including in their classroom in their cohort ○ Guidance for transportation indicates that students and drivers on the school bus will be required to wear non-medical masks, and buses will be cleaned twice daily 	
		<p>Prince Edward Island</p> <ul style="list-style-type: none"> ● Principals will monitor staff and students for illness or COVID-19 symptoms 	

		<ul style="list-style-type: none"> ○ Staff will frequently screen themselves and monitor their students for illness or symptoms ● Staff must have signed a declaration form at the beginning of the school year indicating that they are free of COVID-19 symptoms, have not travelled outside the country, and are not required to self-isolate ● Staff will track their attendance using an internal provincewide online system in case contact tracing is required ● Based on guidelines for return to school, schools will implement hand hygiene, physical distancing practices, class cohorts, and staggering of movement in and out of buildings ● School transportation services have implemented the following strategies to mitigate COVID-19 risks: <ul style="list-style-type: none"> ○ Re-routing buses where necessary to minimize ridership ○ Encourage students to wash hands before and immediately upon disembarking ○ All students and drivers to wear masks while riding the bus 	
		<p>Newfoundland and Labrador</p> <ul style="list-style-type: none"> ● Environmental measures recommended for K-12 schools include: <ul style="list-style-type: none"> ○ Regular cleaning and disinfection ○ Using floor markings and posters to address traffic flow throughout the school ○ Installing barriers for physical distance ○ Increasing ventilation ● Cohorts and physical distancing should be implemented in K-12 school settings as administrative measures ● Some personal measures recommended for K-12 schools include: <ul style="list-style-type: none"> ○ Practising hand hygiene ○ Respiratory etiquette 	

		<ul style="list-style-type: none"> ○ Wearing masks 	
		<p>Yukon</p> <ul style="list-style-type: none"> • Health and safety guidelines for K-12 school settings were developed to help teachers, administrative staff, students and families prepare for a safe return to school, and addresses the following: <ul style="list-style-type: none"> ○ Wearing masks ○ Physical distancing ○ Handwashing and personal hygiene ○ Cleaning and disinfecting ○ Food or meals at school ○ Limits on sharing school supplies and learning materials ○ Physical education and school sports ○ Singing and music ○ School field trips • School bus services for the 2020–21 school year have been adapted based on the health and safety guidelines for school bus operations, which include: <ul style="list-style-type: none"> ○ Requiring bus drivers and children 5 years and older to use non-medical masks ○ Supporting physical distancing by organizing how students enter and exit the bus, seating students at a two-metre (six-feet) distance from school bus drivers, seating two students per seat if they are in high school and three students per seat if they are in elementary school or they are from the same household, and assigning seating when appropriate ○ Requiring students and bus drivers to stay home when sick ○ Ensuring students and bus drivers wash or sanitize their hands before and after boarding the school bus ○ Cleaning and disinfecting buses after each trip, including high-touch areas 	

		Northwest Territories <ul style="list-style-type: none"> Students attending in-person education in the Northwest Territories must monitor for COVID-19 symptoms and parents are to keep their children at home if they are showing one major or two minor COVID-19 symptoms, if they have been outside the territory or in contact with someone who is ill, or if they have a suspected or confirmed case of COVID-19 Parents in the Northwest Territories should model safe physical distancing and handwashing for students 	
		Nunavut <ul style="list-style-type: none"> The Health and Safety Guidelines for Nunavut Schools provides guidance for preventing COVID-19 from entering schools, including hygiene, the use of personal protective equipment (PPE), cleaning, classroom structure, physical distancing and changes to transport and student drop-off and pick-up 	
	Accompanying infection-control measures	Canada <ul style="list-style-type: none"> As part of a “layered” approach to mitigating the risks of COVID-19 spread, infection-control measures recommended by Health Canada for child/youth settings include: <ul style="list-style-type: none"> Prohibiting individuals who have symptoms of or have been exposed to COVID-19 from entering the setting Following directions of local public-health units about entry screening for symptoms or exposure Implementing absenteeism/attendance policies that support staff, volunteers and children to stay home if exhibiting symptoms or if in self-isolation due to exposure The Government of Canada promotes the use of its COVID Alert app that notifies Canadian residents using the app, including parents of 	Canada <ul style="list-style-type: none"> As of 25 March 2020, all travellers incoming to Canada, including international students, are subject to mandatory 14-day quarantine (self-isolation) <ul style="list-style-type: none"> Schools must implement policies and procedures to ensure that students who have arrived in Canada follow government orders for quarantining The Government of Canada promotes the use of its COVID Alert app that notifies Canadian residents using the app, including post-secondary students and staff, if they have been exposed to someone who has tested positive for COVID-19

		<p>school children, if they have been exposed to someone who has tested positive for COVID-19</p>	
		<p>British Columbia</p> <ul style="list-style-type: none"> • Parents and caregivers are recommended to conduct a daily health check for their child before sending them to school using the K to 12 Health Check App • Staff are required to complete a daily health check before entering the school using the BC Centre for Disease Control's Self-Assessment Tools, with school and district administrators responsible for verifying staff health checks • Students and staff who 1) have been confirmed by the health authority as testing positive for COVID-19; or 2) have been confirmed by the health authority as having been in close contact of a confirmed case of COVID-19; or 3) have travelled outside of Canada in the last 14 days, are required to stay home and self-isolate • The Ministry of Education released a guidance document on management of illness and confirmed cases for schools and district administrators, which outlines protocols for when students or staff develop symptoms at school, when there is a confirmed case of COVID-19 in the school, and when students or staff can return to school • Staff and students who show symptoms while at school and who cannot be picked up immediately should wait in a designated space separated from others and be provided with a non-medical mask, with supervising staff to wear a non-medical mask and face shield when engaging with the isolated individual 	<p>British Columbia</p> <ul style="list-style-type: none"> • All staff and students should complete a daily COVID-19 symptom assessment before coming to campus, with some institutions requiring individuals to provide self-reporting declarations
		<p>Alberta</p> <ul style="list-style-type: none"> • Schools in Alberta are required to implement practices to minimize the risk of transmission of infection, provide rapid-response procedures for 	<p>Alberta</p> <ul style="list-style-type: none"> • Each post-secondary institution has developed processes or procedures to respond to COVID-19 based on the province's public-health

		<p>attendees who fall ill, ensure high levels of sanitation and personal hygiene are maintained by attendees, and comply with all provincial health guidance</p> <ul style="list-style-type: none"> • All students in Alberta who attend kindergarten to Grade 12 must complete the Alberta Health Daily Checklist for children under 18 before attending school • In the next few weeks, rapid testing in schools will be expanded in Alberta and 440,000 rapid test kits will be distributed to schools <ul style="list-style-type: none"> ○ Students and staff who do not have symptoms can get tested while attending school ○ The number of schools where testing is offered may vary based on school size and the time required to administer the tests 	measures and recommendations for infection control
		<p>Saskatchewan</p> <ul style="list-style-type: none"> • The Government of Saskatchewan has developed a school testing plan which includes testing of students with parental consent, monitoring and reporting of COVID-19 cases, and priority testing for teachers and staff <ul style="list-style-type: none"> ○ On 22 March 2021, the Ministry of Health shipped 100,000 rapid testing kits to school divisions, high schools, and qualified independent schools ○ Schools participating in rapid testing are determined based on population density and specific grade levels, with communities experiencing high infection rates prioritized for testing 	
		<p>Manitoba</p> <ul style="list-style-type: none"> • Staff should self-administer symptom screening daily before arriving at school, with staff who display symptoms to stay home and self-isolate • In the case of an outbreak, schools are to close off areas used by the infected individual and follow cleaning and disinfecting protocols 	

		<p>Ontario</p> <ul style="list-style-type: none"> • The Government of Ontario released guidance to reopening schools for the 2020/2021 school year <ul style="list-style-type: none"> ○ Students who are symptomatic and/or test positive for COVID-19 may not return until they are cleared ○ Schools are expected to maintain records of classes (including seating charts, bus cohorts, daily records) for contact-tracing purposes ○ Schools are expected to immediately report cases to their local public-health unit • Additional guidance is provided for COVID-19 management in schools by the Ontario government, such as exposures, management, confirmed cases, and returning to school 	<p>Ontario</p> <ul style="list-style-type: none"> • To guide local partners and post-secondary institutions in the community, Toronto Public Health developed COVID-19 guidance with related checklists and decision tools <ul style="list-style-type: none"> ○ Daily records of all staff, students and visitors entering the campus should be recorded (e.g., name, contact information, date, time of arrival/departure, reason for visit, rooms/areas visited, completion of screening) and retained for at least one month ○ Individuals who fall ill should immediately return home or to their dormitory and follow protocols such as getting tested and self-isolating for 14 days <ul style="list-style-type: none"> ▪ Ensure physical distancing can be maintained, wear masks, have a handwashing sink, provide tissues, designate washrooms separate from other students, open windows, clean and disinfect areas ○ If any individual tested positive for COVID-19, they must self-isolate for 10 days and cannot return until they are cleared by public health ○ Post-secondary settings must immediately report laboratory-confirmed cases to Toronto Public Health ○ Post-secondary settings can request on-site COVID-19 testing (e.g., for suspected outbreaks in residences)
		<p>Prince Edward Island</p> <ul style="list-style-type: none"> • The public health department will lead the response and provide guidance to schools in the circumstance of a confirmed case of COVID-19, including: <ul style="list-style-type: none"> ○ Contact tracing will be conducted 	

		<ul style="list-style-type: none"> ○ Offer testing to staff and students who may have been exposed to a positive case • Public-health department will assess the need for partial or full school closure based on the following criteria: <ul style="list-style-type: none"> ○ Sporadic cases or clusters in the local community ○ Sporadic cases in school ○ Clear clusters in school across cohorts ○ Widespread local community transmission • Students or staff members exhibiting COVID-19 symptoms at school must be picked up or leave school immediately, asked to wear a mask and self-isolate in an isolated room, get tested for COVID-19 	
		Newfoundland and Labrador <ul style="list-style-type: none"> • Any student, staff or other person within the school must stay home, self-isolate, and follow the advice of public health if they: <ul style="list-style-type: none"> ○ Have symptoms of COVID-19, or ○ Have travelled outside the province or outside the communities along the Labrador-Quebec border in the last 14 days, or ○ Were identified as a close contact of a confirmed case or outbreak • Parents, students and school staff must review the self-screening questionnaire each day before going to a school building, and visitors must also use this questionnaire to determine if they may enter a school 	
		Yukon <ul style="list-style-type: none"> • Students and staff must stay home when they are sick or showing symptoms, and guidance was developed for children aged six months to five years old, and children six years and older 	
		Northwest Territories	

		<ul style="list-style-type: none"> Schools in the Northwest Territories will contain a dedicated room where a student can safely isolate in the event that they show symptoms of COVID-19 while at school Students asked to self-isolate in the Northwest Territories can return to in-person learning once a healthcare practitioner indicates to the parents/guardians and school that it is safe 	
		Nunavut <ul style="list-style-type: none"> The Health and Safety Guidelines for Nunavut Schools provides guidance for controlling infection of COVID-19 in schools, including cohorting and isolation protocols for students 	
Reported challenges implementing any of the measures above		Canada <ul style="list-style-type: none"> The Government of Canada has offered supports for provinces and territories throughout the pandemic, but they have not always been fully used <ul style="list-style-type: none"> According to the federal government, it has shipped more than 41 million rapid tests to Canadian provinces, but only 1.7 million tests have actually been used The Government of Canada also continues to offer Statistics Canada operators to make contact tracing calls during the pandemic, but the operators' services have not been used anywhere near their full capacity 	
		Alberta <ul style="list-style-type: none"> One day after requiring remote learning for students in Grades 7 to 12 in hotspot regions only, the Premier of Alberta announced that all schools and post-secondary institutions will have to move to remote learning after thousands of students and staff were found to be in isolation due to COVID-19 exposure 	
		Ontario <ul style="list-style-type: none"> Increasing rates of COVID-19 cases were reported in children and youth aged four to 17 	Ontario <ul style="list-style-type: none"> Most universities in Ontario remain open with limited staff and students on campus, but some

	years in addition to increased school outbreaks from mid-February to mid-March 2021 in Ontario, resulting in provincewide school closures after the April break	universities continue to face outbreaks on campus <ul style="list-style-type: none"> ○ Select universities have asked students to move out of residences earlier due to rising case rate and variants of concern (VOCs)
	Québec <ul style="list-style-type: none"> • Despite public-health measures, a rise in positive active cases has been reported among students and staff, which may reflect the rise in VOCs and limited vaccinations for school-age groups in Québec 	Québec <ul style="list-style-type: none"> • There are concerns from students related to some CEGEP programs scheduling in-person exams

Bain T, Bhuiya A, Al-Khateeb S, Wang Q, Mansilla C, Rintjema J, DeMaio P, Alam S, Gauvin FP, Santesso N, Lavis JN, Wilson MG. COVID-19 living evidence profile #3 (version 3.1): What is known about how schools (K-12) and post-secondary institutions (colleges and universities) adjust COVID-19 transmission-mitigation measures as infection rates change and vaccination rates increase? Hamilton: McMaster Health Forum, 7 May 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 rapid evidence profiles like this one. This rapid evidence profile 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.



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Appendix 1: Methodological details

We use a standard protocol for preparing living evidence profiles (LEP) to ensure that our approach to identifying research evidence as well as experiences from other countries and from Canadian provinces and territories are as systematic and transparent as possible in the time we were given to prepare the profile.

Identifying research evidence

For each LEP, we search our continually updated [inventory of best evidence syntheses](#) and [guide to key COVID-19 evidence sources](#) guidelines, which we define as providing recommendations or other normative statements derived from an explicit process for evidence synthesis.

Each source for these documents is assigned to one team member who conducts hand searches (when a source contains a smaller number of documents) or keyword searches to identify potentially relevant documents. A final inclusion assessment is performed both by the person who did the initial screening and the lead author of the living evidence profile, with disagreements resolved by consensus or with the input of a third reviewer on the team. The team uses a dedicated virtual channel to discuss and iteratively refine inclusion/exclusion criteria throughout the process, which provides a running list of considerations that all members can consult during the first stages of assessment.

During this process we include published, pre-print and grey literature. We do not exclude documents based on the language of a document. However, we are not able to extract key findings from documents that are written in languages other than Chinese, English, French or Spanish. We provide any documents that do not have content available in these languages in an appendix containing documents excluded at the final stages of reviewing.

Identifying experiences from other countries and from Canadian provinces and territories

For each LEP, we collectively decide on what countries to examine based on the question posed. For other countries we search relevant sources included in our continually updated guide to key COVID-19 evidence sources. These sources include government-response trackers that document national responses to the pandemic. In addition, we conduct searches of relevant government and ministry websites. In Canada, we search websites from relevant federal and provincial governments, ministries and agencies (e.g., Public Health Agency of Canada).

While we do not exclude countries based on language, where information is not available through the government-response trackers, we are unable to extract information about countries that do not use English, Chinese, French or Spanish as an official language.

Assessing relevance and quality of evidence

We assess the relevance of each included evidence document as being of high, moderate or low relevance to the question. We then use a colour gradient to reflect high (darkest blue) to low (lightest blue) relevance.

Two reviewers independently appraised the quality of the guidelines we identified as being highly relevant using AGREE II. We used three domains in the tool (stakeholder involvement, rigour of

development and editorial independence) and classified guidelines as high quality if they were scored as 60% or higher across each of these domains.

Preparing the profile

Each included document is hyperlinked to its original source to facilitate easy retrieval. For all included guidelines, we prepare a small number of bullet points that provide a brief summary of the key findings, which are used to summarize key messages in the text. We then draft a brief summary that highlights the total number of guidelines identified, as well as their key findings, date last updated or published, and quality.

Appendix 2: Key findings of guidelines that address the question, sorted by relevance to the question and COVID-19

Type of document	Relevance to question	Key findings	Recency or status
Guidelines developed using a robust process	<ul style="list-style-type: none"> When should adjustment be made? <ul style="list-style-type: none"> Case rates Community capacity Where should measures be changed? <ul style="list-style-type: none"> Grade schools <ul style="list-style-type: none"> Kindergarten and elementary schools High schools What measures should be changed? <ul style="list-style-type: none"> Operation of schools <ul style="list-style-type: none"> Online instruction (whole or partial) Engagement in extracurricular activities <ul style="list-style-type: none"> Intramural Accompanying public-health measures <ul style="list-style-type: none"> Infection prevention <ul style="list-style-type: none"> Washing hands Wearing masks Physical distancing Temporal distancing Ventilation maximization Infection control <ul style="list-style-type: none"> Screening Quarantining of exposed or potentially exposed individuals Testing Isolation of suspected or confirmed cases Contact tracing 	<ul style="list-style-type: none"> The U.S. Centers for Disease Control and Prevention (CDC) released comprehensive guidance on the operational strategy for grade schools (kindergarten to Grade 12) The CDC recommends the consistent use of prevention strategies (e.g., universal masking, physical distancing, testing and vaccination for eligible groups, handwashing and respiratory etiquette, cleaning and contact tracing with isolation and quarantine) through a layered approach The guidance document described prevention strategies specific to level of community transmission for elementary, middle and high schools Universal and correct use of masks and physical distancing should be prioritized <ul style="list-style-type: none"> Masks should be worn within the school, on school buses and by visitors (but may exclude groups such as individuals with disabilities who may not be able to wear a mask) Elementary students and middle- and high-school students with low transmission should be at least three feet apart, but students with high transmission should be at least six feet apart if cohorting is not possible Maintain six feet of distance between adults and between adults and students at all times Use cohorting where possible (especially when case rates are substantial or high) Move activities such as singing, band, sports and exercise outside Face desks in the same direction Eliminate non-essential interactions between adults (teachers and staff) 	Last updated 23 April 2021

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> ○ Consider staggered scheduling and alternate schedules with fixed cohorts • School should be the last setting to close and the first to reopen • In-person instruction should be prioritized over extracurricular activities (including sports and school events) • Schools should only offer referrals for diagnostic testing if they are exhibiting symptoms at school, but screening tests may be useful especially in communities with moderate to high transmission <p>Source (U.S. Centers for Disease Control and Prevention; AGREE II Rating: Low-quality)</p>	
	<ul style="list-style-type: none"> • When should adjustment be made? <ul style="list-style-type: none"> ○ Case rates • Where should measures be changed? <ul style="list-style-type: none"> ○ Grade schools <ul style="list-style-type: none"> ▪ Kindergarten and elementary schools ▪ High schools • What measures should be changed? <ul style="list-style-type: none"> ○ Operation of schools <ul style="list-style-type: none"> ▪ Student supports ▪ Instructor supports ▪ Staffing ratios ▪ Classroom changes ▪ Facility changes ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Disinfecting surfaces and facilities - Physical distancing - Ventilation maximization - Public-focused behaviour-change supports 	<ul style="list-style-type: none"> • This guidance uses available evidence to inform local leadership in education and public health in creating policies for safe schools during the COVID-19 pandemic • The following recommendations are for each age group in the context of COVID-19: <ul style="list-style-type: none"> ○ For pre-kindergarten, the impact of physical distancing among children is likely small based on current evidence, and program planning should focus on effective risk-mitigation strategies which include mask wearing for adults and children over the age of 2 years, cohort classes, utilizing outdoor spaces, allowing air circulation by opening windows, and hand hygiene ○ For elementary schools, it is recommended to wear masks for both children and adults, cohort classes, physical distancing (i.e., a distance of six feet and a distance of at least three feet for desks), utilize outdoor spaces, allow air circulation, and hand hygiene ○ For secondary schools, it is recommended for universal use of masks for both adults and 	Last updated 25 March 2021

Type of document	Relevance to question	Key findings	Recency or status
	<ul style="list-style-type: none"> ▪ Infection control <ul style="list-style-type: none"> - Screening - Testing - Isolation of suspected or confirmed cases 	<p>students, cohort classes, physical distancing, allow air circulation, education for students and families on the importance of mitigation measures when not in the school building</p> <ul style="list-style-type: none"> ○ For special education, each child and adolescent's individualized education program should be reviewed with the student and family, and attempts for mitigation measures should meet the needs of the individual child and/or adolescent • School health staff should be provided with appropriate medical personal protective equipment (PPE), including universal N95 masks, surgical masks, gloves, disposable gowns, and face shields • Schools should have policies regarding symptom screening for teachers and staff upon reopening, and a rapid response plan for students, teachers or staff members. In addition, the Centers for Disease Control and Prevention (CDC) recommends weekly screening of teachers and school staff, and screening of students at certain levels of community spread. • Students or staff members who have had a known exposure to COVID-19 should self-quarantine for 14 days, and school districts should partner with their local health officials to facilitate contact tracing in their schools <p>Source (American Academy of Pediatrics; AGREE II Rating: High-quality)</p>	
	<ul style="list-style-type: none"> • Where should measures be changed? <ul style="list-style-type: none"> ○ Grade schools <ul style="list-style-type: none"> ▪ Kindergarten and elementary schools ▪ High schools • What measures should be changed? <ul style="list-style-type: none"> ○ Operation of schools <ul style="list-style-type: none"> ▪ Online instruction (whole or partial) 	<ul style="list-style-type: none"> • The Public Health Agency of Canada provided detailed considerations for jurisdictions in relation to COVID-19 prevention measures to schools from kindergarten to Grade 12 <ul style="list-style-type: none"> ○ Consider a layered approach when physical distancing is not possible 	Last updated 21 February 2021

Type of document	Relevance to question	Key findings	Recency or status
	<ul style="list-style-type: none"> ○ Engagement in extracurricular activities <ul style="list-style-type: none"> ▪ Intramural ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Physical distancing - Temporal distancing - Ventilation maximization ▪ Infection control <ul style="list-style-type: none"> - Screening - Quarantining of exposed or potentially exposed individuals - Testing - Isolation of suspected or confirmed cases - Contact tracing 	<ul style="list-style-type: none"> ○ Consider in-person school attendance, virtual or at-home learning, or a hybrid of the two (with progressive introduction of in-person attendance based on grade level, with primary schools preceding secondary schools) ○ Use the risk-mitigation tool to determine which measures are applicable and relevant to grade level (e.g., hygiene protocols for younger and older children) ○ Prohibit students who have symptoms and/or exposure to COVID-19 from entering the school ○ Promote infection control (e.g., hand hygiene, avoid face touching, signage, how to wash hands, implement schedule for frequent hand hygiene) ○ Promote physical distancing (e.g., two-metre distance, restrict or manage flow of people in common areas, visual cues to encourage physical distancing, limit visitors, play stations with limited number of children, recommend one parent do drop-offs/pick-ups) ○ Postpone assemblies, team sports, field trips, or extracurricular activities where physical distancing cannot be maintained ○ Increase ventilation (e.g., move activities outdoors, ensure ventilation system operates properly, increase air exchanges by adjusting HVAC systems, open windows) ○ Reduce exposure to high-touch surfaces ○ Modify how long students are in contact with each other (e.g., modify delivery of program, divide or cohort classes, stagger break times and schedules, staff travel between classes instead of children) 	

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> Additional considerations are provided for cafeteria use, music bands and choirs, libraries, physical education, use of non-medical cloth masks, reporting absences, food insecurity, students with disabilities, transportation, and psychosocial needs <p>Source (Public Health Agency of Canada; AGREE II Rating: Low-quality)</p>	
	<ul style="list-style-type: none"> When should adjustment be made? <ul style="list-style-type: none"> Case rates Community capacity Where should measures be changed? <ul style="list-style-type: none"> Post-secondary institutions What measures should be changed? <ul style="list-style-type: none"> Operation of schools <ul style="list-style-type: none"> Online instruction (whole or partial) Engagement in extracurricular activities <ul style="list-style-type: none"> Intramural Accompanying public-health measures <ul style="list-style-type: none"> Infection prevention <ul style="list-style-type: none"> Washing hands Wearing masks Physical distancing Temporal distancing Ventilation maximization Infection control <ul style="list-style-type: none"> Screening Quarantining of exposed or potentially exposed individuals Testing Isolation of suspected or confirmed cases Contact tracing 	<ul style="list-style-type: none"> The Public Health Agency of Canada released detailed guidance and considerations for post-secondary institutions during the COVID-19 pandemic, including personal prevention measures, domestic and international travel, on-campus assessments and mitigation strategies, academic institutions, experiential learning and research activities, on-campus housing, supporting community gatherings and student life, and off-campus activities The guidance document also described planning for COVID-19 case management and outbreak response (e.g., monitoring, screening and testing, contact tracing, quarantine), responding and recovering from a COVID-19 outbreak, and psychosocial and mental health needs In terms of extracurricular activities, the guidance document encouraged institutions to use a risk-based approach when considering if and how these types of activities could proceed on- and off-campus (e.g., postponing sports events/activities and limiting/prohibiting spectators) with further guidance available related to COVID-19 Return to High Performance Sport Framework The guidance document described 10 epidemiological indicators to guide increasing restrictions or lifting of restrictions Additional guidance is provided for quarantine and isolation policies, and described the importance of 	Last updated 21 February 2021

Type of document	Relevance to question	Key findings	Recency or status
		<p>working with public-health authorities to reduce the transmission of COVID-19 (e.g., allowing students living in residence to self-isolate in their dorm room or designated on-campus rooms/residences, off-campus accommodations, cohorting students positive with COVID-19, and appropriate care and support such as meals)</p> <ul style="list-style-type: none"> • In terms of physical distancing, the guidance developers provided examples of mitigation strategies such as seating students at least two metres apart, offering virtual lectures, online exams, and offering activities outdoors • In terms of screening, they encourage institutions to provide basic information on how to recognize and monitor symptoms, and provide appropriate instructions on seeking medical care <p>Source (Public Health Agency of Canada; AGREE II Rating: Low-quality)</p>	
	<ul style="list-style-type: none"> • Where should measures be changed? <ul style="list-style-type: none"> ○ Grade schools <ul style="list-style-type: none"> ▪ Kindergarten and elementary schools ▪ High schools ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Physical distancing ▪ Infection control <ul style="list-style-type: none"> - Screening - Quarantining of exposed or potentially exposed individuals - Testing - Isolation of suspected or confirmed cases - Contact tracing 	<ul style="list-style-type: none"> • The French Pediatric Society released guidelines related to school re-entry and recommended the following: <ul style="list-style-type: none"> ○ Soap or hand sanitizer distribution stations at the entrances of school classrooms and education about regular use ○ Mandatory masks for all adult staff at all times ○ Masks for middle- and high-school students unless physical distancing is possible in the classrooms ○ An child exposed to a COVID-19 positive individual at home must be tested before returning to the school ○ A symptomatic child (of at least 6 years old) must be screened unless another diagnosis is made 	Published 27 October 2020

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> ○ Screening of an entire class only warranted if one teacher or at least two students are symptomatic and COVID-19 positive ○ Students positive with COVID-19 must remain home for at least seven days ○ Class closure is justified if at least three children are infected from the same class <p>Source (The French Pediatric Society; AGREE II Rating: Low-quality)</p>	
	<ul style="list-style-type: none"> ● Where should measures be changed? <ul style="list-style-type: none"> ○ Grade schools <ul style="list-style-type: none"> ▪ Kindergarten and elementary schools ▪ High schools ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection control <ul style="list-style-type: none"> - Screening - Quarantining of exposed or potentially exposed individuals - Testing - Isolation of suspected or confirmed cases - Contact tracing 	<ul style="list-style-type: none"> ● The U.S. Centers for Disease Control and Prevention (CDC) released guidance on screening students from kindergarten to Grade 12 for symptoms of COVID-19 ● CDC does not recommend schools conduct symptom screening on a routine basis ● Parents should monitor their children for symptoms ● Students who are sick should not attend school in-person ● The CDC provide three scenarios and a flow chart to determine the best course of action <ul style="list-style-type: none"> ○ A symptomatic student with no increased risk of exposure should stay home until symptoms have improved ○ A symptomatic student who had close contact with someone that had a positive COVID-19 test should not attend school and isolate until at least: a) 10 days since first symptoms appeared with; b) 24 hours without fever; and c) other symptoms have improved ○ Symptomatic students with no known close contact with an infected person but attend a school in a medium to high risk of transmission area, and received a positive COVID-19 test, should stay home and isolate until resolved 	Last updated 17 March 2021

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> ○ Asymptomatic student who was in close contact with a positive COVID-19 case should quarantine for 14 days (and if they develop symptoms, should isolate at least 10 days in addition to quarantine) ● Students returning to school after isolation should not require a COVID-19 viral test or doctor's note <p>Source (U.S. Centers for Disease Control and Prevention)</p>	
	<ul style="list-style-type: none"> ● What measures should be changed? <ul style="list-style-type: none"> ○ Engagement in extracurricular activities <ul style="list-style-type: none"> ▪ Intramural ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Disinfecting surfaces and facilities - Physical distancing - Ventilation maximization ▪ Infection control <ul style="list-style-type: none"> - Screening - Quarantining of exposed or potentially exposed individuals - Testing - Isolation of suspected or confirmed cases - Contact tracing 	<ul style="list-style-type: none"> ● This guideline outlines best practices for protecting staff in kindergarten to Grade 12 schools from COVID-19, including teachers, administrators, janitors and maintenance staff, nurses and health professionals, bus drivers, and extracurricular staff ● Regarding infection control, it is not recommended that schools conduct in-person screening or testing of staff for COVID-19, and instead staff are encouraged to self-screen at home ● Students and staff who display or report COVID-19 symptoms at school should be separated and isolated within a designated isolation area such as an unused restroom ● For infection prevention, increasing outdoor air ventilation by opening windows, using fans, and decreasing occupancy within rooms is recommended ● Student and staff schedules should be staggered to reduce the maximum occupancy in buildings and rooms, and social distancing and cohorting should be implemented ● Resuming extracurricular athletic activities should be determined based on the level of community transmission, the number of cases within schools, other indicators used by local public-health officials, 	Last updated 4 January 2021

Type of document	Relevance to question	Key findings	Recency or status
		<p>and by assessing the risk of transmission of each individual sport</p> <ul style="list-style-type: none"> Conducting classes outside for sports, music, choir, and the performing arts should be considered, and cohorts or pods of five to 10 students should be used for rehearsals <p>Source (Centers for Disease Control and Prevention)</p>	
	<ul style="list-style-type: none"> What measures should be changed? <ul style="list-style-type: none"> Operation of schools <ul style="list-style-type: none"> Staffing ratios Classroom changes Accompanying public-health measures <ul style="list-style-type: none"> Infection prevention <ul style="list-style-type: none"> Washing hands Wearing masks Disinfecting surfaces and facilities Physical distancing Ventilation maximization Public-focused behaviour-change supports Infection control <ul style="list-style-type: none"> Screening Quarantining of exposed or potentially exposed individuals Testing Isolation of suspected or confirmed cases Contact tracing 	<ul style="list-style-type: none"> This checklist was developed by the World Health Organization (WHO) to enhance compliance and adherence to public-health measures, and highlights multi-level coordination at the national, sub-national and individual school levels The checklist includes 38 essential actions for preparation and implementation of schools reopening and resurgence of COVID-19, divided by necessary measures at the national, sub-national and school levels Actions at the national level for reopening schools are as follows: <ul style="list-style-type: none"> Issue regularly updated national guidance on school reopening with contingency planning based on local transmission rates, that addresses: 1) risk assessment; 2) infection-prevention measures; 3) behavioural aspects; 4) curriculum expectations; 5) responses to national and local public-health policies; 6) monitoring and surveillance; and 7) contingency planning Issue a national policy on mask wearing in schools Issue school policies and guidelines on physical distancing, hand hygiene and environmental cleaning Adapt and disseminate health education messages Actions at the national level for preparation of COVID-19 resurgences are as follows: 	Published 11 December 2020

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> ○ Update national plan on disease outbreak preparedness and response ○ Update guidance on remote education support ○ Establish monitoring and evaluation ● Actions at the sub-national level for reopening schools are as follows: <ul style="list-style-type: none"> ○ Ensure epidemiological surveillance in schools ○ Ensure school response protocols are aligned with public-health department recommendations ○ Ensure schools are equipped with essential equipment and needs (e.g., soap, alcohol-based sanitizer, PPE for school health staff) ○ Disseminate health education messages ● Actions at the sub-national level for preparation of COVID-19 resurgences are as follows: <ul style="list-style-type: none"> ○ Local authorities to review and adapt contingency plans, which should include supporting schools' food distribution programs, re-establishing water, sanitation and hygiene (WASH) services in schools, and a plan for an emergency-response team to implement the contingency plan ● Actions at the school level for reopening schools are as follows: <ul style="list-style-type: none"> ○ Assess the feasibility of implementing protective measures ○ Revise personnel and attendance policies ○ Implement physical distancing in and outside classrooms ○ Promote adherence to hand hygiene and mask wearing ○ Ensure adequate air circulation and ventilation ○ Reorganize school layout ○ Maintain record of students' health status and development 	

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> • Actions at the school level for preparation of COVID-19 resurgences are as follows: <ul style="list-style-type: none"> ○ Disseminate information on hygiene and cleaning protocols ○ Continuation of school feeding and school-based services ○ Conduct training sessions on distance learning, safety and cleaning, disease-outbreak prevention, preparedness and response <p>Source (World Health Organization)</p>	
	<ul style="list-style-type: none"> • When should adjustment be made? <ul style="list-style-type: none"> ○ Case rates ○ Community capacity • Where should measures be changed? <ul style="list-style-type: none"> ○ Grade schools <ul style="list-style-type: none"> ▪ Kindergarten and elementary schools ▪ High schools • What measures should be changed? <ul style="list-style-type: none"> ○ Operation of schools <ul style="list-style-type: none"> ▪ Online instruction (whole or partial) ○ Engagement in extracurricular activities <ul style="list-style-type: none"> ▪ Intramural ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Physical distancing - Temporal distancing - Ventilation maximization ▪ Infection control <ul style="list-style-type: none"> - Screening - Quarantining of exposed or potentially exposed individuals - Testing - Isolation of suspected or confirmed cases 	<ul style="list-style-type: none"> • The World Health Organization (WHO) released considerations for school-related public-health measures in the context of COVID-19 <ul style="list-style-type: none"> ○ Schools should be guided by a risk-based approach, taking into consideration case rates and community capacity, and other health measures ○ Four levels of case rates dictate whether schools should remain open or close (i.e., open for no cases or sporadic cases, and consider closure during cluster transmissions or community transmission) ○ School-level measures could include: setting entry rules, cohorting, physical distancing, handwashing facilities, frequent cleaning of surfaces, proper ventilation, symptom screening, reorganization of school transportation, accessible sharing of information, school-based services (e.g., mental health and psychosocial support) ○ Classroom-level measures could include: physical distancing, wearing of masks, hand hygiene, respiratory etiquette, cleaning and disinfection, ventilation, spacing/grouping of desks 	Published 14 September 2020

Type of document	Relevance to question	Key findings	Recency or status
	<ul style="list-style-type: none"> - Contact tracing 	<ul style="list-style-type: none"> • The guidance also described how public-health measures could be implemented based on case rate (e.g., no case transmission does not require physical distancing at all times compared to community transmission when there should be a distance of at least one metre between all individuals) • The WHO recommends students aged 12 and older to follow national guidelines for adults, but using a risk-based approach for children between 6 and 11, and no masks for children under 5 • Related to sports and music, risk assessments and frequent cleaning should be considered • In terms of physical distancing between groups: limit mixing of classes and of age groups for school and after-school activities, staggering schedules, clear entry/exits and crowd control • In terms of screening and quarantine, the WHO encourages a “staying at home if unwell” policy and creating a symptom checklist for parents/student/staff, waive doctor’s note requirement, ensure positive cases stay home for 14 days, considering daily screening, and contact tracing from positive case (e.g., isolate a classroom or a group within a classroom) <p>Source (World Health Organization)</p>	
	<ul style="list-style-type: none"> • What measures should be changed? <ul style="list-style-type: none"> ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Washing hands - Wearing masks - Physical distancing ▪ Infection control <ul style="list-style-type: none"> - Screening 	<ul style="list-style-type: none"> • This guideline provides recommendations from the Health Information and Quality Authority (HIQA) on whether the minimum age for mask wearing should be reduced based on international best practices, current rates of transmission of COVID-19 variants of concern, and evidence surrounding the harms and benefits of mask wearing for children • In March 2021, Belgium began requiring children aged 10-12 to wear facemasks when in school 	Literature last searched 8 April 2021

Type of document	Relevance to question	Key findings	Recency or status
		<ul style="list-style-type: none"> • However, HIQA does not recommend a change in its current guideline, which states that face masks are not recommended for children under the age of 13 and those over this age should follow adult guidelines • Recommendations for layered mitigation measures are also provided, which includes physical distancing within schools and on school grounds, hand hygiene, and increasing ventilation • Citing a study from March 2021 out of the United States, school-based mitigation measures, including restricted entry to schools, spacing between desks, 50% student cohorting, daily symptom screening, and reduced class sizes, have been found to be effective, with an increased number of mitigation measures in schools associated with reduced household transmission <p>Source (Health Information and Quality Authority)</p>	
	<ul style="list-style-type: none"> • What measures should be changed? <ul style="list-style-type: none"> ○ Accompanying public-health measures <ul style="list-style-type: none"> ▪ Infection prevention <ul style="list-style-type: none"> - Wearing masks 	<ul style="list-style-type: none"> • This guidance developed by the World Health Organization (WHO) Infection Prevention and Control (IPC) Guidance Development Group (GDG) and experts from UNICEF and the International Paediatric Association (IPA) provides recommendations based on available evidence from international expert meetings for the use of masks for children in the context of COVID-19 to be taken up by decision-makers, the public and child-health professionals • Benefits of wearing masks in children for COVID-19 should be weighed against potential harms associated with masks, including feasibility, discomfort, low social acceptability, and poor mask fit • WHO and UNICEF provide the following advice for decision-makers when developing national policies in countries or areas where there is known 	Published 21 August 2020

Type of document	Relevance to question	Key findings	Recency or status
		<p>or suspected community transmission of SARS-CoV-2, and in settings in which physical distancing cannot be achieved:</p> <ul style="list-style-type: none"> ○ Children aged up to 5 years should not wear masks for source control, and this advice takes into consideration childhood developmental milestones and compliance challenges. Guidance and policies in some countries will recommend a different and lower age cut-off for mask use ○ A risk-based approach should be applied to the decision of mask use for children between 6 and 11 years of age. This approach should consider the intensity of transmission in the area, social and cultural environmental factors (e.g., beliefs, customs, social norms), and mask compliance ○ Advice on mask use for children and adolescents 12 years or older should follow WHO and/or the country's national guidance for mask use in adults ○ Advice on mask use for immunocompromised children or pediatric patients with certain illnesses (e.g., cancer, cystic fibrosis) usually recommends mask use, however this needs to be decided in consultation with the child's medical provider ● There is a need for data from high-quality studies in different settings on improving acceptance and compliance and the effectiveness of mask use in children <p>Source (World Health Organization and UNICEF)</p>	
Guidance developed using some type of evidence synthesis and/or expert opinion	None identified		

Appendix 3: Documents excluded at the final stages of reviewing

Type of document	Hyperlinked title
Guidance developed using some type of evidence synthesis and/or expert opinion	Framework for reopening schools Interim guidance for COVID-19 prevention and control in schools Guidance for families and pediatricians on camp attendance during the COVID-19 pandemic Safe back to school: A practitioner's guide Students returning to, and starting, higher education during Spring and Summer 2021 Calibrating long-term non-pharmaceutical interventions for COVID-19 Considerations for implementing and adjusting public health and social measures in the context of COVID-19 Key messages and actions for COVID-19 prevention and control in schools
Rapid reviews	Review of international public policy responses to easing restrictions introduced to limit the spread of COVID-19 Reopening schools during COVID-19 pandemic: A comprehensive roadmap for action COVID-19 supplement on school reopening (2 of 3): Impact of school closure/reopening and school management practices on COVID-19 pandemic