

Discussion

- It is important to note that many jurisdictions reviewed have not yet made recommendations publicly available for the 2021-22 school year, and measures reported are limited to those available in spring 2021 guidance, which are likely under review and expected to be updated before fall 2021. This scan may not have identified all relevant guidance documents from the jurisdictions reviewed about some measures, including management of exposed contacts in schools, and this requires further consideration, as it will impact schools', students' and families' ability to plan for potential disruptions related to exposures to cases in schools. Finally, increases in the B.1.617.2 (Delta) VOC may impact jurisdictional or local school and other community IPAC measures not reflected in available school guidance.⁶⁸
- For each jurisdiction included in this environmental scan, a combination of IPAC measures have been implemented or planned which align with multiple levels of the BCCDC hierarchy of control measures for community settings: public health measures (i.e., vaccination, screening, surveillance, contact tracing), environmental measures (i.e., cleaning/disinfection, ventilation, being outdoors), administrative measures (i.e., distancing, cohorting, gatherings and events, extra-curricular activities), and personal measures (i.e., PPE, masks, hand hygiene).
- Ongoing screening, encouraging vaccination for those eligible, supporting local public health organizations to conduct contact tracing, assessing and/or enhancing ventilation, and facilitating regular hand hygiene are reported in every jurisdiction for which comprehensive school IPAC measures were available (i.e., excluding Israel).
- Nearly all jurisdictions also highlight the need to provide equitable supports to all members of school communities, for example by reaching out to families who have been disproportionately impacted by the pandemic (e.g., Black and Indigenous communities, students with disabilities and diverse abilities, students from low-income families, and students in vulnerable positions or at risk of trauma) and ensuring students receive adequate and compassionate supports.
- Of the Canadian jurisdictions which have announced less stringent IPAC measures in fall 2021, (i.e., BC and Quebec), the majority of restrictions being lifted align with the lower levels of the hierarchy of control measures: administrative and personal measures. For example, both jurisdictions plan to no longer require masks, physical distancing or cohorting, and will begin to allow gatherings, events, and extracurricular activities without restrictions. Routine cleaning will be continued. Most measures aligning with public health and administrative measures will be maintained: encouraging vaccination for ages 12 and up, screening, ongoing contact tracing, and enhanced ventilation.
- California has also made IPAC recommendations for the 2021-22 school year available. The key restrictions being lifted are at the administrative level: physical distancing and cohorting will no longer be required. IPAC guidance for schools in California continues to heavily emphasize public health measures by encouraging all who are eligible to get vaccinated, and facilitating a robust screening, surveillance, and contact tracing system to minimize COVID-19 introduction or transmission in schools. Environmental and personal IPAC measures include recommending daily cleaning, disinfecting when needed, ensuring ventilation is optimized, continuing to require all students and staff to wear masks at all times indoors, and promoting routine hand hygiene.
- The US jurisdictions of New York and Minnesota overall report similar IPAC guidance from the spring to early summer of 2021. Similar to the included Canadian jurisdictions, public health and environmental measures are strongly emphasized. Different from the Canadian jurisdictions,

New York and Minnesota also maintain many administrative and personal measures in their current IPAC measures. For example, masks are required for all staff and students, physical distancing and cohorting is encouraged as much as possible, and limiting or highlighting IPAC considerations for events and school-related extracurricular activities.

- Overall, the included European jurisdictions (i.e., England, Scotland, Wales, and Ireland) also maintain many administrative and personal IPAC measures on top of emphasizing public health and environmental measures. Available guidance for these jurisdictions is from the spring of 2021. Of note, in contrast to all other included jurisdictions, youth ages 12 to 17 are not yet eligible for vaccination in England, Scotland, Wales, or Ireland. Guidance around masks varies across these four jurisdictions, but all consistently require adults wear masks when physical distancing cannot be maintained, and most also encourage this for secondary school students. Physical distancing and cohorting are generally not mandated, but schools are encouraged to facilitate these measures as much as is feasible without interfering with student's learning and wellbeing. Allowances for gatherings, events, and extracurricular activities vary across these jurisdictions.
- Limited information was available to report school IPAC measures for Israel. Public health measures include encouraging vaccination for all who are eligible, including youth ages 12 to 17, and if a student tests positive for COVID-19, all classmates and the teacher must also be tested before returning to class. Details of environmental measures were not available. A spring 2021 press release indicates cohorting is no longer required, no further administrative measures were found. Finally, the requirement for masks indoors for all students and staff had been lifted, but was recently re-implemented on June 25, 2021, in the context of school outbreaks in Israel.

Implications for Practice

- A return to in-person learning in Ontario in September 2021, after almost 26 weeks of remote learning during the pandemic, requires significant planning to ensure safety measures are commensurate with infection risk, which will then support the well-being of students, staff and the community. Vaccination has been the key turning point of the pandemic, and achieving highest possible rates of vaccination in the community (among all eligible age groups, which currently excludes children under 12 years of age) is a priority ahead of the 2021-22 school year.
- In addition to vaccination, and because vaccination is not available to a significant proportion of the school community, the maintenance of public health, environmental, administrative and personal measures is still likely required. Some relaxation of select measures may be considered if there is low community transmission, and considering the potential impact on more vulnerable individuals. For example, while masking is lower in the IPAC hierarchy as a personal measure, it has been adopted by most as a relative norm through the pandemic, and may remain a crucial measure in schools due to the anticipated mix of vaccinated and unvaccinated individuals at schools. Some measures that require advanced planning (e.g., ventilation upgrades, cohort scheduling) should also be prioritized ahead of the return to school. Planning should also account for how vaccination could be rapidly delivered to younger age cohorts as soon as they are approved for use by Health Canada, which is anticipated in the fall/winter of 2021-22.
- Current and emerging variants with increased transmissibility and potential for vaccine escape pose uncertainty to the future epidemiological state of COVID-19 in Ontario in the fall of 2021. Recognizing the need to consider both benefits and harms of prevention measures in schools,

cautious application of more levels of measures at the start of the school year with progressive relaxation of levels while closely monitoring school and broader community epidemiology and health system impacts (i.e., acute care and local public health capacity), may be preferred over having to re-implement more restrictive measures in the context of worsening epidemiology. Some measures that require significant lead-time planning may be more difficult to re-implement quickly in response to worsening epidemiological context (e.g., should rapid spread occur in unvaccinated/under-vaccinated groups, as has been observed in recent B.1.617.2 [Delta] variant outbreaks in Ontario and in schools in other jurisdictions).

- Measures that reduce the risk of introduction of cases and the need for classroom/school dismissals as a result of COVID-19 case exposures/outbreaks should be prioritized to maintain as much in-person learning as possible due to the many known harms for children and youth not attending in-person learning at school.

References

1. European Centre for Disease Prevention and Control. COVID-19 in children and the role of school settings in transmission - second update [Internet]. Stockholm: European Centre for Disease Prevention and Control; 2021 [cited 2021 Jul 09]. Available from: <https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission>
2. National Collaborating Centre for Methods and Tools. Living rapid review update 16: what is the specific role of daycares and schools in COVID-19 transmission? [Internet]. Hamilton, ON: National Collaborating Centre for Methods and Tools; 2021 [cited 2021 Jul 15]. Available from: <https://www.nccmt.ca/covid-19/covid-19-rapid-evidence-service/19>
3. Centers for Disease Control and Prevention. Science brief: transmission of SARS-CoV-2 in K-12 schools and early care and education programs – updated [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [modified 2021 Jul 09; cited 2021 Jul 15]. Available from: https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission_k_12_schools.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fmore%2Fscience-and-research%2Ftransmission_k_12_schools.html
4. BC Centre for Disease Control; British Columbia Ministry of Health. COVID-19: infection prevention and control guidance for community-based allied health care providers in clinic settings [Internet]. Victoria, BC: Province of British Columbia; 2020 [cited 2021 Jul 15]. Available from: http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_IPCGuidelinesCommunityBasedAlliedHCPsClinicSettings.pdf
5. Gouvernement du Québec. Back-to-school 2021-2022 – covid-19 [Internet]. Québec, QC: Gouvernement du Québec; 2021 [cited 2021 Jun 28]. Available from: <https://www.quebec.ca/en/education/back-to-school-2021>
6. BC Centre for Disease Control; British Columbia Ministry of Health. Public health guidance for K-12 schools: outlook for the 2021-22 school year [Internet]. Victoria, BC: Province of British Columbia; 2021 [modified 2021 Jun 17; cited 2021 Jun 28]. Available from: http://www.bccdc.ca/Health-Info-Site/Documents/COVID_public_guidance/Schools_Outlook.pdf
7. New York State. Reopening New York: guidelines for in-person instruction at pre-K to grade 12 schools [Internet]. Albany, NY: New York State; 2021 [cited 2021 Jul 05]. Available from: https://www.governor.ny.gov/sites/default/files/atoms/files/P12_EDU_Summary_Guidelines.pdf
8. New York State, Department of Health. Interim guidance for in-person instruction at pre-K to grade 12 schools during the COVID-19 public health emergency [Internet]. Albany, NY: New York State; 2021 [cited 2021 Jul 05]. Available from: https://www.governor.ny.gov/sites/default/files/atoms/files/Pre-K_to_Grade_12_Schools_MasterGuidance.pdf
9. Minnesota Department of Health. COVID-19 prevention guidance for summer school [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 09]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/schools/summer.pdf>

10. California Department of Public Health. COVID-19 public health guidance for K-12 schools in California, 2021-22 school year [Internet]. Sacramento, CA: California Department of Public Health; 2021 [cited 2021 Jul 14]. Available from: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/K-12-Guidance-2021-22-School-Year.aspx>
11. United Kingdom. National Health Service. Coronavirus (COVID-19) vaccines [Internet]. London: Crown Copyright; 2021 [cited 2021 Jul 05]. Available from: https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/coronavirus-vaccine/?gclid=CjwKCAjw_o-HBhAsEiwANqYhpyB61yqeP-RCDoW4t_FQuJkftA6WIE2hv5JQQOkiz2Zfww24xF7Y9MxoCQNwQAvD_BwE
12. Ireland. Health Service Executive. Getting your COVID-19 vaccine [Internet]. Dublin: Health Service Executive; 2021 Jul 6 [cited 2021 Jul 6]. Available from: <https://www2.hse.ie/screening-and-vaccinations/covid-19-vaccine/get-the-vaccine/getting-your-vaccine/>
13. United Kingdom. Department for Education. Schools coronavirus (COVID-19) operational guidance [Internet]. London: Crown Copyright; 2021 [modified 2021 May 24; cited 2021 Jun 28]. Available from: <https://www.gov.uk/government/publications/actions-for-schools-during-the-coronavirus-outbreak/schools-covid-19-operational-guidance>
14. Scottish Government. Coronavirus (COVID-19): guidance on reducing the risks in schools [Internet]. Edinburgh: Crown Copyright; 2021 [cited 2021 Jun 28]. Available from: <https://www.gov.scot/publications/coronavirus-covid-19-guidance-on-reducing-the-risks-in-schools/>
15. Welsh Government. Operational guidance for schools and settings (until 31 August 2021) [Internet]. Cardiff: Welsh Government; 2021 [cited 2021 Jun 28]. Available from: <https://gov.wales/operational-guidance-schools-and-settings-html>
16. Ireland. Department of Education. COVID-19 response plan for the safe and sustainable operation of primary and special schools [Internet]. Dublin: Government of Ireland; 2021 [cited 2021 Jul 05]. Available from: <https://www.gov.ie/en/publication/e1141-covid-19-response-plan-for-the-safe-and-sustainable-operation-of-primary-and-special-schools/>
17. Ireland. Department of Education. COVID-19 response plan for safe and sustainable operation of post primary schools [Internet]. Version 4. Dublin: Government of Ireland; 2021 [cited 2021 Jul 05]. Available from: <https://assets.gov.ie/83312/6c36aac-22fc-44fd-a4be-88cea4db82d6.pdf>
18. United Kingdom. Department for Education. Coronavirus (COVID-19) asymptomatic testing in schools and colleges [Internet]. London: Crown Copyright; 2021 [modified 2021 Mar 30; cited 2021 Jun 28]. Available from: <https://www.gov.uk/government/publications/coronavirus-covid-19-asymptomatic-testing-in-schools-and-colleges/coronavirus-covid-19-asymptomatic-testing-in-schools-and-colleges>
19. United Kingdom. Department for Education. Rapid asymptomatic coronavirus (COVID-19) testing for staff in primary schools, school-based nurseries and maintained nursery schools [Internet]. London: Crown Copyright; 2021 [modified 2021 Mar 24; cited 2021 Jun 28]. Available from: <https://www.gov.uk/government/publications/coronavirus-covid-19-asymptomatic-testing-for-staff-in-primary-schools-and-nurseries/rapid-asymptomatic-coronavirus-covid-19-testing-for-staff-in-primary-schools-school-based-nurseries-and-maintained-nursery-schools>

20. Parent Club. FAQs on Scottish schools reopening [Internet]. Edinburgh: Scottish Government; 2021 [cited 2021 Jun 28]. Available from: <https://www.parentclub.scot/articles/faqs-on-scottish-schools-reopening>
21. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Evidence on school reopening in the context of variants of concern and select approaches in England and Ireland [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 15]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/phm/2021/05/covid-19-school-reopening-evidence-approaches.pdf?sc_lang=en
22. Gallagher-Mackay K, Srivastava P, Underwood K, Dhuey E, McCreedy L, Born KB, et al. COVID-19 and education disruption in Ontario: emerging evidence on impacts. Science Briefs of the Ontario COVID-19 Science Advisory Table. 2021;2(34):1-36. Available from: <https://doi.org/10.47326/ocsat.2021.02.34.1.0>
23. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Negative impacts of community-based public health measures during a pandemic (e.g., COVID-19) on children and families [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2021 Jun 28]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/covid-19-negative-impacts-public-health-pandemic-families.pdf?la=en>
24. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Negative impacts of community-based public health measures on children, adolescents and families during the COVID-19 pandemic: update [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jun 28]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/he/2021/01/rapid-review-neg-impacts-children-youth-families.pdf?la=en>
25. Centers for Disease Control and Prevention. Guidance for COVID-19 prevention in K-12 schools [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [modified 2021 Jul 09; cited 2021 Jul 14]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>
26. World Health Organization, Regional Office for Europe. Schooling during COVID-19: recommendations from the European Technical Advisory Group for schooling during COVID-19 [Internet]. Copenhagen: WHO Regional Office for Europe; 2021 [cited 2021 Jul 12]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/342075/WHO-EURO-2021-2151-41906-59077-eng.pdf?sequence=1&isAllowed=y>
27. Government of Ontario. COVID-19 vaccines for youth [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [modified 2021 Jul 02; cited 2021 Jul 05]. Available from: <https://covid-19.ontario.ca/covid-19-vaccines-youth#:~:text=Health%20Canada%20has%20approved%20the,to%20fight%20against%20COVID%2D19>
28. New York State. COVID-19 vaccine: safe, effective, free [Internet]. Albany, NY: New York State; 2021 [cited 2021 Jul 05]. Available from: <https://covid19vaccine.health.ny.gov/>
29. Israel. Ministry of Health. Very high response rates for the call for vaccination among the youth [Internet]. Jerusalem: State of Israel; 2021 [cited 2021 Jul 06]. Available from: <https://www.gov.il/en/departments/news/03072021-01>

30. Roxby P, Trigg N. Covid: children aged 12-17 unlikely to be offered vaccine in UK. BBC News [Internet], 2021 Jun 16 [cited 2021 Jul 05]; Coronavirus. Available from: <https://www.bbc.com/news/health-57496074>
31. Erman M, Banerjee A. Pfizer to test COVID-19 vaccine in larger group of children below 12. Reuters [Internet], 2021 Jun 08 [cited 2021 Jul 08]; Healthcare & Pharmaceuticals. Available from: <https://www.reuters.com/business/healthcare-pharmaceuticals/pfizer-start-large-study-test-covid-19-vaccine-children-below-12-2021-06-08/>
32. Government of Ontario. COVID-19 school and child care screening [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 06]. Available from: <https://covid-19.ontario.ca/school-screening/>
33. Minnesota Department of Health. Recommended COVID-19 decision tree for people in schools, youth programs, and child care programs [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 12]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/schools/exguide.pdf>
34. Government of Ontario. Guide to reopening Ontario's schools [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2021 Jul 05]. Available from: <https://www.ontario.ca/page/guide-reopening-ontarios-schools>
35. Government of Ontario. COVID-19: data for asymptomatic testing of students and school staff [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 08]. Available from: <https://www.ontario.ca/page/covid-19-data-asymptomatic-testing-students-and-school-staff>
36. California Department of Public Health. K-12 school-based COVID-19 testing strategies for school year 2021-22 [Internet]. Sacramento, CA: California Department of Public Health; 2021 [cited 2021 Jul 14]. Available from: <https://testing.covid19.ca.gov/wp-content/uploads/sites/332/2021/07/School-Testing-Considerations.pdf>
37. BC Centre for Disease Control; British Columbia Ministry of Health. COVID-19 public health guidance for K-12 schools [Internet]. Victoria, BC: Province of British Columbia; 2021 [modified 2021 Feb 04; cited 2021 Jul 06]. Available from: http://www.bccdc.ca/Health-Info-Site/Documents/COVID_public_guidance/Guidance-k-12-schools.pdf
38. Gouvernement du Québec. COVID-19 procedure to follow in educational institutions [Internet]. Québec, QC: Gouvernement du Québec; 2021 [cited 2021 Jul 08]. Available from: https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/education/publications-adm/covid-19/COVID-19_Procedure_to_follow.pdf?1611770685
39. Minnesota Department of Health. Recommendations for handling a confirmed case of COVID-19 [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 09]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/schools/casehandle.pdf>
40. Scottish Government. Coronavirus (COVID-19): test and protect [Internet]. Edinburgh: Crown Copyright; 2021 [cited 2021 Jun 18]. Available from: <https://www.gov.scot/publications/coronavirus-covid-19-test-and-protect/>

41. Welsh Government. Test trace protect: our strategy for testing the general public and tracing the spread of coronavirus in Wales [Internet]. Cardiff: Welsh Government; 2021 [cited 2021 Jun 29]. Available from: <https://gov.wales/test-trace-protect-html>
42. United Kingdom. Department of Health and Social Care. NHS test and trace: what to do if you are contacted [Internet]. London: Crown Copyright; 2021 [cited 2021 Jul 15]. Available from: <https://www.gov.uk/guidance/nhs-test-and-trace-how-it-works#how-nhs-test-and-trace-works>
43. Times of Israel Staff. Ministers vote to fully reopen schools, scrapping pods, starting Sunday. Times of Israel [Internet], 2021 Apr 12 [cited 2021 Jul 05]. Available from: <https://www.timesofisrael.com/ministers-set-to-vote-on-fully-reopening-schools-scrapping-pods/>
44. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Checklist: COVID-19 preparedness and prevention in elementary and secondary (K-12) schools [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 05]. Available from: <https://www.publichealthontario.ca/-/media/documents/nCoV/sch/2020/09/covid-19-checklist-preparedness-schools.pdf?la=en>
45. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Heating, ventilation and air conditioning (HVAC) systems in buildings and COVID-19 [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 09]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2020/09/covid-19-hvac-systems-in-buildings.pdf?la=en>
46. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Use of portable air cleaners and transmission of COVID-19 [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2021 Jul 09]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2021/01/faq-covid-19-portable-air-cleaners.pdf?la=en>
47. Institut nationale de santé publique du Québec. Support document intended for the Advisory Committee on the transmission of COVID-19 in schools and healthcare settings and on the role of ventilation. Québec, QC: Gouvernement du Québec; 2021. Available from: <https://www.inspq.qc.ca/publications/3097-transmission-covid-19-milieus-scolaires-soins-ventilation-covid19>
48. California Department of Public Health. Indoor air quality (IAQ) section: airborne diseases [Internet]. Sacramento, CA: California Department of Public Health; 2020 [cited 2021 Jul 14]. Available from: <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/Airborne-Diseases.aspx>
49. Minnesota Department of Health. Ventilation guidance for schools: COVID-19 [Internet]. St. Paul, MN: State of Minnesota; [cited 2021 Jul 09]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/schools/vent.html>
50. Salhotra P, Zimmer A. All classrooms to have 2 air purifiers next year, New York City officials pledge. Chalkbeat New York [Internet], 2021 Jun 23 [cited 2021 Jul 06]; Coronavirus New York. Available from: <https://ny.chalkbeat.org/2021/6/23/22547814/all-classrooms-to-have-2-air-purifiers-next-year-new-york-city-officials-pledge>
51. British Columbia Ministry of Education. Provincial COVID-19 health & safety guidelines for K-12 settings [Internet]. Victoria, BC: Province of British Columbia; 2021 [modified 2021 Apr 16; cited 2021 (ARCHIVED) COVID-19 Infection Prevention and Control Measures for In-Person Learning in Schools in Select Jurisdictions

Jun 28]. Available from: <https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/safe-caring-orderly/k-12-covid-19-health-safety-guidelines.pdf>

52. Israel. Ministry of Health. The government has approved the extension of the current restrictions and the extensive reopening of the education system [Internet]. Jerusalem: State of Israel; 2021 [cited 2021 Jul 06]. Available from: <https://www.gov.il/en/departments/news/13042021-01>

53. California Department of Public Health. COVID-19 and reopening in-person instruction framework & public health guidance for K-12 schools in California, 2020-2021 school year [Internet]. Sacramento, CA: California Department of Public Health; 2021 [cited 2021 Jun 28]. Available from: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID19-K12-Schools-InPerson-Instruction.aspx>

54. Province of British Columbia. COVID-19 safe schools [Internet]. Victoria, BC: Province of British Columbia; 2021 [modified 2021 Jun 17; cited 2021 Jun 28]. Available from: <https://www2.gov.bc.ca/gov/content/education-training/k-12/covid-19-safe-schools>

55. Lemay G, Peters V. Preliminary report on solutions for teaching music in schools following the impact of COVID-19 in Quebec [Internet]. Québec City, QC: Laval University; 2020 [cited 2021 Jul 15]. Available from: <https://corpus.ulaval.ca/jspui/bitstream/20.500.11794/67178/1/Preliminary%20Report%20on%20Solutions%20for%20Teaching%20Music%20in%20Schools%20Following%20the%20Impact%20of%20COVID-19%20in%20Quebec.pdf>

56. Minnesota Department of Health. Recommendations for music activities and performances during COVID-19 [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 12]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/musicguide.pdf>

57. Centers for Disease Control and Prevention. Considerations for youth sports administrators [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2020 [modified 2021 Dec 31; cited 2021 Jul 12]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports.html>

58. Centers for Disease Control and Prevention. Sports programs FAQs [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [archived; modified 2021 May 12; cited 2021 Jul 12]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports-faq.html>

59. Spiro A. Health Ministry weighs returning indoor mask mandate amid school outbreaks. Times of Israel [Internet], 2021 Jun 20 [cited 2021 Jul 05]. Available from: <https://www.timesofisrael.com/health-ministry-weighs-returning-indoor-mask-mandate-amid-school-outbreaks/>

60. Israel. Ministry of Health. Effective today (25.6) at 12:00: masking is required anywhere except outdoors [Internet]. Jerusalem: State of Israel; 2021 [cited 2021 Jul 06]. Available from: <https://www.gov.il/en/departments/news/25062021-01>

61. Government of Ontario. COVID-19: support for students and parents [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 08]. Available from: <https://www.ontario.ca/page/covid-19-support-students-and-parents>

62. British Columbia Ministry of Education. K-12 education recovery plan: guidelines for boards of education and independent school authorities for the 2021/22 school year [Internet]. Victoria, BC: Province of British Columbia; 2021 [cited 2021 Jun 28]. Available from: <https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/safe-caring-orderly/k-12-education-recovery-plan.pdf>
63. California. Office of Governor. California releases new summer programming and school reopening data, launches parental engagement campaign [Internet]. Sacramento, CA: State of California; 2021 [cited 2021 Jul 06]. Available from: <https://www.gov.ca.gov/2021/06/07/california-releases-new-summer-programming-and-school-reopening-data-launches-parental-engagement-campaign/>
64. Minnesota Department of Health. Health equity and COVID-19 [Internet]. St. Paul, MN: State of Minnesota; [cited 2021 Jul 12]. Available from: <https://www.health.state.mn.us/communities/equity/about/covid19.html>
65. Minnesota Department of Health. COVID-19 vaccine equity in Minnesota [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 12]. Available from: <https://www.health.state.mn.us/diseases/coronavirus/vaccine/mnsvi.html>
66. Minnesota Department of Health. COVID-19 contracts for diverse media messaging and community outreach [Internet]. St. Paul, MN: State of Minnesota; 2021 [cited 2021 Jul 12]. Available from: <https://www.health.state.mn.us/communities/equity/funding/covidcontracts.html>
67. Ireland. Department of Education, National Educational Psychological Service (NEPS). Spring back to school: supporting the wellbeing of school communities: guidance for schools: returning to school: spring 2021 [Internet]. Dublin: Government of Ireland; 2021 [cited 2021 Jul 06]. Available from: <https://assets.gov.ie/127164/ccbfacda-1865-413b-9856-108700238367.pdf>
68. Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19 public health measures related to the COVID-19 Delta variant [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 08]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/voc/2021/07/covid-19-public-health-measures-delta-variant.pdf?sc_lang=en
69. Government of Ontario. COVID-19 guidance: school case, contact and outbreak management [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 06]. Available from: <https://www.ontario.ca/page/covid-19-guidance-school-case-contact-and-outbreak-management>
70. Centers for Disease Control and Prevention. Cleaning and disinfecting your facility: every day and when someone is sick [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [modified 2021 Jul 15; cited 2021 Jul 15]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>
71. Centers for Disease Control and Prevention. Cleaning, disinfection, and hand hygiene in schools – a toolkit for school administrators [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [archived; modified 2021 Apr 16; cited 2021 Jul 15]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/clean-disinfect-hygiene.html>

72. United States Environmental Protection Agency. About list N: disinfectants for coronavirus (COVID-19) [Internet]. Washington, DC: United States Environmental Protection Agency; 2021 [cited 2021 Jul 15]. Available from: <https://www.epa.gov/coronavirus/about-list-n-disinfectants-coronavirus-covid-19-0>
73. Scottish Government. Coronavirus (COVID-19): ventilation guidance [Internet]. Edinburgh: Crown Copyright; 2021 [cited 2021 Jun 28]. Available from: <https://www.gov.scot/publications/coronavirus-covid-19-ventilation-guidance/>
74. United Kingdom. Department for Business, Energy & Industrial Strategy; Department for Digital, Culture, Media & Sport. Working safely during coronavirus (COVID-19) [Internet]. London: Crown Copyright; 2021 [cited 2021 Jul 15]. Available from: <https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19/performing-arts>
75. Education Scotland, National Improvement Hub. Practical activities guidelines [Internet]. Livingston: Education Scotland; 2021 [cited 2021 Jun 29]. Available from: <https://education.gov.scot/improvement/covid-19-education-recovery/covid-19-return-to-educational-establishments/>
76. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): how to wash your hands / how to use hand sanitizer [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2021 Jul 15]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/factsheet/factsheet-covid-19-hand-hygiene.pdf?la=en>
77. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to hand wash [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [cited 2021 Jul 15]. 2 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-handwash>
78. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to hand rub [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2021 Jul 15]. 1 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-handrub>
79. Health Canada. Hard-surface disinfectants and hand sanitizers (COVID-19): list of hand sanitizers authorized by Health Canada [Internet]. Ottawa, ON: Government of Canada; 2021 [modified 2021 Jul 13; cited 2021 Jul 15]. Available from: <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/hand-sanitizer.html>

Appendix A: COVID-19 Infection Prevention and Control Measures for In-Person Learning in Schools

The British Columbia Centre for Disease Control’s (BCCDC) hierarchy for infection prevention and control guidance for communicable disease in community-based allied health settings documents practices to mitigate the impact of COVID-19.⁴ The BCCDC’s hierarchy of control measures is as follows: public health measures (i.e., vaccination, screening, surveillance testing, contact tracing), environmental measures (i.e., cleaning/disinfection, ventilation), administrative measures (i.e., distancing, cohorting, gatherings and events, extra-curricular activities), and personal measures (i.e., PPE, masks, hand hygiene).⁴ The implementation of control measures helps create a safe environment, and the control measures at the top of the hierarchy are more effective and protective than those at the bottom. By implementing a combination of measures at each level, the risk of COVID-19 is substantially reduced.

Table 1 summarizes information from an environmental scan of planned or implemented IPAC practices to mitigate the impact of COVID-19 in schools. Public health, environmental, administrative, and personal measures have been implemented in jurisdictions that have reopened schools to in-person learning in spring 2021, and guidance for fall 2021 also plan for the implementation of these measures. Table 1 includes Ontario’s current school IPAC measures as a Reference. Ontario IPAC measures are informed by Ontario Ministry of Health and Public Health Ontario (PHO) resources. Key results of the scan of select Canadian provinces (British Columbia [BC], Quebec), select jurisdictions from the US (New York, California, Minnesota), select European jurisdictions (England, Wales, Scotland, Wales, Ireland), and Israel are presented alongside Ontario’s existing IPAC measures for comparison.

Important to note, existing guidance for Ontario, New York, Minnesota, all European jurisdictions, and Israel are from spring 2021 and are expected to be reviewed and updated before the 2021-22 school year. BC, Quebec, and California have available guidance for fall 2021.

Table 1. School COVID-19 IPAC measures in Ontario and select jurisdictions

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
Public Health Measures: Vaccination	<p>Recommend vaccination for all who are eligible (ages 12+; students, staff, teachers, families). Accelerated second doses are available for youth ages 12 to 17 beginning July 5, 2021.²⁷</p> <p>It is anticipated that data from Pfizer-BioNTech vaccine trials in children ages 5 to 11 will be available in September 2021, and if emergency use is authorized this age group may also be eligible for vaccination early in the 2021-22 school year.³¹</p>	<p>BC,⁶ Quebec,⁵ New York,^{8,28} California,¹⁰ Minnesota,⁹ Israel:²⁹ Recommend vaccination with both doses for all those who are eligible, including those aged 12 to 17.</p> <p>England, Scotland, Wales: As per the National Health Service (NHS) in the UK, adults over the age of 18 are eligible for the COVID-19 vaccine.¹¹ The Joint Committee on Vaccination and Immunisation (JCVI) in the UK has not yet expanded vaccine eligibility to youth ages 12 to 17.³⁰</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
<p>Public Health Measures: Symptom screening</p>	<p>Students and staff must screen for COVID-19 every day before going to school using the Ministry of Health screening tools.³² An answer of “Yes” to one or more symptoms or questions on the screening tool means the individual must stay home, isolate for 14 days, and arrange for an assessment/COVID-19 test.³²</p> <p>Schools will conduct daily on-site confirmation of self-screening for secondary students, staff and visitors before entering school or at the start of the school day.³⁴</p> <p>Always refer to provincial screening requirements and local requirements, which may vary.⁴⁴ If active on-site symptom screening for COVID-19 is being implemented a process must be in place to manage a student, staff, or visitor who screens positive for symptoms (i.e., separated from others until next steps determined), in a supportive and non-stigmatizing way.⁴⁴</p>	<p>Ireland:¹² Current vaccine eligibility is limited to adults age 18 and older.</p> <p>BC:⁶ All students and staff must complete a daily COVID-19 screening health check (available as a website and app) and stay home when sick.</p> <p>Quebec:⁵ Plans include to continue to evaluate children with symptoms and isolate them, if necessary.</p> <p>California:¹⁰ Any students or staff with symptoms of COVID-19 are directed not to attend school, and to get tested for COVID-19. They may not return to school until they have met all of the following criteria: at least 24 hours with no fever without the use of fever-reducing medications; other symptoms have resolved; and a negative COVID-19 test, or documentation from a healthcare provider that symptoms are typical of an underlying condition, or a healthcare provider confirmed an alternate diagnosis, or at least 10 days have passed since symptom onset.</p> <p>New York:⁸ Requires a temperature check and daily COVID-19 screening questionnaire for staff, students, and any other individual entering the school. The questionnaire should determine whether the individual has: been a contact in the last 14 days, tested positive in the last 14 days, experienced symptoms in the last 14 days, or travelled in the past 14 days (according to the state’s travel advisories). Any individual who screens positive for COVID-19 exposure or symptoms, or who presents with a temperature greater than 100.0°F, must not be allowed to enter the school if screened outside, and must be immediately sent home with instructions to contact their health care provider for assessment and testing.</p> <p>Minnesota:^{9,33} All members of schools communities (staff, students, families, visitors) should monitor for COVID-19 symptoms. It is strongly recommended schools follow the COVID-19 Decision Tree provided by the Minnesota Department of Health</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
		<p>to determine who must stay home or be sent home from school based on screening. Schools should develop policies to prevent the spread of disease, including: staff and students staying home if they have tested positive for COVID-19, have symptoms of COVID-19, or are ill and waiting for a COVID-19 test result; and staff and students staying home when they have had recent close contact with a person with COVID-19.</p> <p>England,¹³ Scotland,¹⁴ Wales:¹⁵ Routinely taking the temperature of students is not recommended as this is an unreliable method to identify COVID-19. Students, staff and other adults must screen for COVID-19 every day before going to school, and must not come into the school (and not attend for at least 10 days) if they fail any screening questions (any COVID-19 symptom, member of the household with symptoms, have had a positive COVID-19 test, close contact with COVID-19 case, or required to isolate due to travel or public health direction). Those with symptoms are expected to arrange to have a COVID-19 test. All school staff and secondary school students are encouraged to participate in the twice weekly asymptomatic testing programme.</p> <p>Ireland:^{16,17} All students and staff must screen for COVID-19 every day before going to school and must stay home if they fail any screening questions (any symptom of COVID-19, close contact or household member of confirmed COVID-19 case, travelled outside of Ireland, isolating per public health direction). Staff must receive a COVID-19 test before returning to work and complete a return to work form.</p> <p>Israel: Screening not reported in available school IPAC measures.</p>
<p>Public Health Measures: Surveillance</p>	<p>Surveillance is the responsibility of the local Public Health Unit, who:^{34,69}</p> <ul style="list-style-type: none"> • Monitor and assess local epidemiology related to the burden of COVID-19 cases, transmission risks in the local community, and absenteeism in schools. 	<p>California:³⁶ Robust funding has been provided for the Department of Health to provide schools with multiple resources depending on their needs and community transmission status in the 2021-22 school year, including subject matter experts, and free testing resources to support screening testing (e.g., software, test kits, shipping, testing, etc.). Testing options include:</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<ul style="list-style-type: none"> • Enter cases, outbreaks, and school exposures in the provincial surveillance system, in accordance with data entry guidance provided by PHO. <p>Ontario school boards have the option to partner with public health and offer voluntary asymptomatic testing to students and school staff, data is published weekly.³⁵</p>	<ul style="list-style-type: none"> • Periodic testing of a portion of unvaccinated asymptomatic staff and students to understand school rates of COVID-19 when community transmission is low. • Frequent testing of all unvaccinated students and staff to prevent in-school transmission and outbreaks, especially when community transmission is higher. • In the context of a school outbreak, testing of all unvaccinated close contacts aims to identify any asymptomatic cases who need to isolate at home. • Testing students and staff with symptoms, and testing to modify quarantine for unvaccinated close contacts (described under Contact Tracing below), to help keep students in school and minimize time spent isolating at home. • Universal testing of unvaccinated individuals prior to starting school only provides a snapshot, but may provide an understanding of baseline rates and avoid introduction of COVID-19 at the beginning of the school year. <p>Scotland:¹⁴ Several public health COVID-19 surveillance programs are in place which allow regular reporting on overall incidence and swab positivity in Scotland, in school-age children and school staff, clusters and outbreaks in educational settings, and asymptomatic transmission among older student and school staff.</p> <p>Ireland, Israel, BC, Quebec, New York, Minnesota: Surveillance not reported in available school IPAC measures.</p>
Public Health Measures: Contact Tracing	<p>Schools must immediately report any suspected or confirmed cases of COVID-19 within the school to the local public health unit and provide any materials (e.g., daily attendance and transportation records) to public health officials to support case management and contact tracing and other activities in accordance with all applicable legislation.³⁴ Public health officials will determine any additional steps required, including but not limited to the declaration of an outbreak and closure of classes and/or schools.³⁴</p>	<p>BC:^{6, 29} Public health will continue to monitor cases of COVID-19 and determine if actions should be taken to prevent or control spread. Schools should continue to maintain accurate attendance records and class and bus lists to assist with contact tracing. In the event of a COVID-19 cluster or outbreak, the Medical Health Officer determines any required measures to prevent further transmission, such as requiring testing of all potentially exposed individuals, or ordering closure of the school for a period of time.</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<p>Guidance for local public health units on how to investigate COVID-19 cases, outbreaks and suspected outbreaks in elementary and secondary schools.³⁴</p>	<p>Quebec:³⁸ A COVID-19 procedure to follow in educational institutions is available, outlining directions for: if a student shows one or more symptoms while in class; if a student shows one or more symptom while at home; if a student in the same school tests positive for COVID-19; and when there are several cases of COVID-19 in the same class or an outbreak involved several classes. When any student tests positive, all parents and staff of the school are notified, public health follows up with contact tracing and anyone considered moderate to high risk must be isolated and tested, and those who are low risk can continue attending school and monitor for symptoms. In the event of several cases or outbreaks, public health authorities will determine if additional measures need to be taken (e.g., classroom or school closure).</p> <p>California:¹⁰ Schools are required to report COVID-19 cases to the local public health department, and schools should have a COVID-19 liaison to assist the local health department with contact tracing and investigation. Quarantine recommendations for unvaccinated students exposed when both parties were wearing a mask in an indoor classroom setting: Unvaccinated students who are close contacts (more than 15 minutes over a 24-hour period within 0-6 feet indoors) may undergo a modified 10-day quarantine. They may continue to attend school in-person if they:</p> <ul style="list-style-type: none"> • Are asymptomatic; • Continue to appropriately mask, as required; • Undergo at least twice weekly testing during the 10-day quarantine; and • Continue to quarantine for all extracurricular activities at school, including sports, and activities within the community setting. <p>Quarantine recommendations for unvaccinated close contacts who were not wearing masks or for whom the infected individual was not wearing a mask during the indoor exposure; or unvaccinated students as described above. For those who remain</p>

asymptomatic may discontinue self-quarantine under the following conditions:

- Quarantine can end after Day 10 from the date of last exposure without testing; OR
- Quarantine can end after Day 7 if a diagnostic specimen is collected after Day 5 from the date of last exposure and tests negative.

To discontinue quarantine before 14 days following last known exposure, asymptomatic close contacts must:

- Continue daily self-monitoring for symptoms through Day 14 from last known exposure; AND
- Follow all recommended non-pharmaceutical interventions (e.g., wearing a mask when around others, hand washing, avoiding crowds) through Day 14 from last known exposure.
- If any symptoms develop during this 14-day period, the exposed person must immediately isolate, get tested and contact their healthcare provider with any questions regarding their care.

New York:⁸ Notify the state and local health department immediately upon being informed of any positive COVID-19 diagnostic test result by an individual within school facilities; develop and maintain plans to support local health departments in tracing all contacts of the individual. School must continue to make reports to the New York State Department of Health COVID-19 School Report Card Dashboard every day that school is in session, regardless of whether any new tests have been reported or whether the school was completely remote on that day.

Minnesota:^{9,39} The Department of Health has produced recommendations for handling a confirmed case of COVID-19 in school settings. Schools are strongly recommended: to complete daily documentation of student seating to support contact notification in the event of an exposures; to develop policies to manage case follow-up and notification of exposed people; develop systems to allow staff and students/families to self-report COVID-19 symptoms, close contact, or positive test; and to

Hierarchy of IPAC Measures⁴

Current Ontario IPAC Measures

IPAC Measures Implemented or Planned in Select Jurisdictions

designate a staff member to respond to any school COVID-19 concerns and coordinate with local health authorities. Anyone who tests positive for COVID-19 should stay home until all three of the following are true: they feel better; their cough, shortness of breath, or other symptoms are better and it has been 10 days since they first felt sick or tested positive; and, they have had no fever for at least 24 hours, without using medicine that lowers fever. To identify close contacts, gather and review the student's or staff member's activity. This review should look back two days prior to the date symptoms started, or two days prior to the date of the positive test if there are no symptoms.

England:¹³ Schools should promote and engage with the NHS [Test and Trace](#)⁴² process. A record should be kept of all visitors with sufficient detail to support rapid contact tracing if required.

Scotland:¹⁴ Schools must effectively apply [Test and Protect](#)⁴⁰ in the school environment, led by their local Health Protection Team. Schools are defined as complex settings for contact tracing purposes, meaning any positive case who has spent time in a school during the infectious period will be escalated to the local Health Protection Team.

Wales:¹⁵ Schools must engage with the [Test Trace Protect](#)⁴¹ strategy to manage confirmed cases of COVID-19 among the school community and contain any outbreak by following local health protection team advice.

Ireland:^{16,17} Detailed sign in/out records must be maintained, and a log of staff and student contacts in order to promptly identify and isolate potentially infectious individuals.

Israel:⁴³ If a child tests positive for the coronavirus, all students and teaching staff in that grade will be tested before returning to the classroom.

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
<p>Environmental Measures: Cleaning/ disinfection</p>	<p>Ontario's existing guidance for schools recommends school boards should review their cleaning protocols and reinforce them if needed to meet current public health requirements.³⁴ It is anticipated new guidance will be updated for fall 2021.</p> <p>Recommendation and options have been developed outlining the timing and frequency (i.e., at least twice daily and more frequently if needed) for cleaning and disinfecting washrooms, eating areas, and other high-touch surfaces, as well as shared objects between uses.⁴⁴</p> <p>Items that are difficult to clean or cannot be adequately cleaned and disinfected (e.g., toys, stuffed animals, sand, water (if not single use/dedicated per student)) have been removed from classrooms and/or other commonly shared spaces. If items are used they should be quarantined for a minimum of three days.⁴⁴</p>	<p>BC:⁶ Since the risk of COVID-19 transmission from surfaces is low, it is anticipated that transitioning to sector-specific cleaning practices will be recommended for the 2022-21 school year.</p> <p>Quebec:⁵ Continue with cleaning and disinfection measures, particularly with regard to frequently touched surfaces in the 2021-22 school year.</p> <p>California:¹⁰ In general, cleaning once a day is usually enough to sufficiently remove potential virus that may be on surfaces. Disinfecting removes any remaining germs on surfaces, which further reduces any risk of spreading infection. If a person with COVID-19 has been present in a school building within the last 24 hours, clean AND disinfect the spaces occupied by that person during that time. Additional resources are available to schools: Cleaning and Disinfecting Your Facility.⁷⁰</p> <p>New York:⁸ Two scenarios that require cleaning and disinfecting multiple times per day:</p> <ul style="list-style-type: none"> • High risk areas including health offices, classrooms, lunchrooms/dining rooms, athletic rooms, bathrooms, and high traffic areas. Responsible parties must establish procedures for surfaces that must be sanitized after use, such as gym mats, health office cots, and lunch/dining tables. • High touch surfaces including lunch tables, desks and chairs, light switches, handrails, door handles/push plates, faucets, equipment handles and buttons, shared equipment and electronics, bus seats, and handrails. <p>Minnesota:⁹ It is recommended that school develop a daily schedule for routine cleaning and disinfection of high-touch surfaces in classrooms and common spaces, and to schedule routine environmental cleaning when students and staff are not occupying the space. Additional detailed guidance recommended for review: CDC,⁷¹ EPA.⁷²</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
<p>Environmental Measures: Ventilation</p>	<p>The heating, ventilation and air conditioning (HVAC) system is regularly maintained (e.g., by the HVAC contractor).⁴⁴</p> <p>Weather permitting, windows and doors are kept open if this can be done safely (ventilation with outdoor air is preferred).</p> <p>Where possible, air from portable fans or air conditioners is not blowing at typical breathing height (i.e., at head level); e.g., airflow directed upwards.⁴⁴</p> <p>General considerations for ventilation and filtration (not specific to schools) include professional assessment, maintenance and optimization for mechanical ventilation systems and appropriate selection, sizing, placement and maintenance of portable air cleaning units where used.^{45,46}</p>	<p>England,¹³ Scotland,¹⁴ Wales,¹⁵ Ireland:^{16,17} Maintain an enhanced cleaning schedule, including more frequent cleaning of shared spaces and items, frequently touched surfaces, and bathrooms. If possible, allocate groups to dedicated spaces, bathrooms or items, and minimize movement of people between rooms and sharing of items.</p> <p>Ireland:^{16,17} Clean and disinfect rooms where any person with suspected COVID-19 was present.</p> <p>Israel: Cleaning/disinfection not reported in available school IPAC measures.</p> <p>BC:^{6,37} Continue to ensure all mechanical heating, ventilation and air conditioning (HVAC) systems are working properly. Open windows when the weather permits.</p> <p>Quebec:^{5,47} An expert in industrial ventilation from the Ministère-network technical committee will guide the Ministère to implement enhance ventilation in schools. Ventilation is one of the measures to be applied among a series of complementary measures to control the transmission of SARS-CoV-2 in indoor areas.</p> <p>California: For indoor spaces, ventilation should be optimized, which can be done by following CDPH Guidance.^{10,48} <i>Outdoor air ventilation:</i> The system should provide at least the code-required minimum ventilation rate. In classrooms with no ventilation and no filtration, the risk of long-range airborne infection would be over six times as high as that for classrooms with code-required ventilation and a MERV 8 filter. <i>Filtration:</i> Ventilation system filters should be MERV-rated at MERV 13 or better. They should also be properly installed (i.e., no gaps that would allow air to bypass the filter) and properly maintained (i.e., replaced as often as recommended). MERV-rated filters can provide substantial protection from long-range airborne infection, especially if ventilation is poor.</p>

Hierarchy of IPAC Measures⁴

Current Ontario IPAC Measures

IPAC Measures Implemented or Planned in Select Jurisdictions

In-room (portable) air cleaners: Air cleaners used to reduce the risk of long-range airborne transmission should provide high-efficiency filtration and a sufficient “clean air delivery rate” (CADR) (i.e., at least 2/3 of the floor area). Such air cleaners can provide substantial additional protection, especially in naturally ventilated classrooms (in which air is supplied only through open windows or doors) or in classrooms with non-functioning or poorly functioning ventilation systems. Multiple devices per classroom may be necessary for sufficient total air cleaning.

New York:^{7,8,50} Instead of physical barriers for mitigation (where physical distancing cannot be maintained) the CDC’s current preferred approach is enhanced ventilation and air filtration. The selection, installation, and maintenance of portable filtration devices should be made in consultation with an indoor air quality professional. The use of portable filtration devices does not decrease the need for mask wearing, physical distancing, sanitation practices, or adequate ventilation. In some jurisdictions across New York State, all classrooms will have two air purifiers for the 2021/22 school year.

Minnesota:⁴⁹ Buildings with complex HVAC systems typically work with HVAC professionals to evaluate and improve ventilation. HVAC maintenance and upgrades should take place when school is not in session, and at minimum one week before the building is occupied to ensure the system is operating correctly. Opening windows may help facilitate natural ventilation, though effectiveness and feasibility depends on temperature, and pressure differences between indoor and outdoor air. Open windows can also affect HVAC systems, therefore consultation with an HVAC profession is recommended to change natural ventilation. Pollen, pollution, and other factors can affect people with asthma, and air filtration can help relieve these issues.

England:¹³ Mechanical ventilation systems should be adjusted to increase the ventilation rate wherever possible and checked to

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
<p>Administrative Measures: Distancing</p>	<p>As much distancing as possible between students, between students and staff and between staff members should always be promoted.³⁴</p> <p>Desks and/or chairs are spaced as far apart as possible and face the same direction, if possible.⁴⁴ If individual desks are not used (e.g., tables for younger students), maximize space between groups and use alternate seats, if possible. Visual cues, such as markings on the floor or markings to indicate areas that should</p>	<p>confirm that normal operation meets current guidance and that only fresh outside air is circulated. Opening window and doors can also assist with ventilation.</p> <p>Scotland:¹⁴ Improved ventilation is being viewed as an increasingly important IPAC measure in schools. Emphasis should be placed on ventilation by keeping windows open as much as possible, and doors open when feasible and safe to do so. The Scottish Government have also published ventilation guidance⁷³ (intended primarily for relevant local authority teams – it is not expected that school staff should have the expertise to apply it independently).</p> <p>Wales:¹⁵ Local authorities have a legal duty to provide adequate ventilation to schools, updated advice is available to help employers provide adequate ventilation during the pandemic. Maximizing fresh air can be achieved through natural or mechanical ventilation, or a combination.</p> <p>Ireland:^{16,17} Windows should be open as fully as possible when classrooms are not in use (e.g. during break-times or lunch-times and also at the end of each school day) and partially open when classrooms are in use. The guidance provides that good ventilation can be achieved in classrooms without causing discomfort, particularly during cold weather.</p> <p>Israel: Ventilation not reported in available school IPAC measures. BC:^{6,51} It is anticipated that physical distancing of two metres will not be required for the 2021-22 school year. Recommendations for the 2020-21 school year included staff maintaining two metres distance from each other and from students, two metres distance between middle and secondary students, and two metres distance for elementary students interacting outside of their learning groups.</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<p>not be used (e.g., seats), are placed where needed to promote physical distancing.⁴⁴</p> <p>Nutrition breaks and lunch times are staggered to facilitate physical distancing in staff break rooms and/or other commonly shared spaces.⁴⁴ Limit the number of staff permitted entry at one time as needed to enable physical distancing. Furniture is spaced apart to maintain physical distancing of two metres.⁴⁴</p>	<p>Quebec:⁵ Planning for no distancing requirements in the 2021-22 school year. Physical distancing measures to be re-introduced if required (i.e., in case of school outbreak).</p> <p>California:¹⁰ Plans for the 2021-22 school year indicate in-person instruction can occur safely without physical distancing requirements when other mitigation strategies (e.g., masking) are fully implemented. Physical distancing should be maximized when eating and therefore masks cannot be worn, this may involve using additional spaces outside of cafeterias and classrooms. Arrange for eating outdoors as much as is feasible.</p> <p>New York:^{7,8} Ensure that appropriate physical distancing is maintained between individuals while in school facilities and on school grounds, inclusive of students, faculty, and staff, unless safety or the core activity (e.g., instruction, moving equipment, using an elevator, traveling in common areas) requires a shorter distance or individuals are of the same household. Physical distancing requirements may be reduced to a minimum of three feet between students in classroom settings, subject to adherence to other mitigation measures.</p> <p>Minnesota:¹⁷ It is recommended schools evaluate classrooms and create as much space as possible between students, aiming for a minimum of three feet of distance, and up to six feet in areas of high community transmission in settings where cohorting is not possible. A distance of six feet should be maintained: between staff and students; between staff and other staff or visitors; when masks cannot be worn such as when eating; and during activities with increased exhalation such as singing, or during physical activity. Other distancing recommendations include staggering arrival and dismissal times to minimize crowding, and maintaining distanced seating assignments for meal times.</p> <p>England,¹³ Scotland,¹⁴ Wales,¹⁵ Ireland,^{16,17} Staff should maintain two metre distance from each other and from students. Distancing</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
<p>Administrative Measures: Cohorting</p>	<p>All available strategies (including use of all available spaces in the school and outdoor learning spaces) can be used to enable physical distancing wherever feasible and limit the number of potentially exposed individuals in a cohort as much as possible.⁴⁴</p> <p>Elementary school students in K-8 remain in one cohort for the full day, including recess and lunch. Cohorted classes will stay together and with one teacher, where possible.³⁴</p> <p>Secondary schools were encouraged to adopt timetabling methods that emphasize cohorting of students as much as possible, to limit the number of student-to-student contacts.³⁴ In order to reduce risk of transmission and to support contact tracing, school boards developed timetables that over a one-to-two-week period:</p> <ul style="list-style-type: none"> • limit indirect and direct student contacts to approximately 100 students in the school • encourage keeping secondary school students in a maximum of two in-person class cohorts. <p>For subjects taught by a teacher other than the regular/homeroom teacher, the student cohort remains in the same classroom and the teacher(s) move from classroom to classroom, where feasible/ practical.^{34,44}</p>	<p>between students should be facilitated and encouraged where possible, but not required (e.g., discourage any physical contact, avoid congregation points, stagger breaks, drop-offs, and pick-ups). Schools should make adaptations to the classroom to support distancing where possible. That should include seating pupils side by side and facing forwards, rather than face-to-face or side-on. It might also include moving unnecessary furniture out of the classroom to make more space.</p> <p>Israel: Distancing not reported in available school IPAC measures. BC:⁶ Cohorts will not be recommended in the 2021-22 school year. It is anticipated that physical distancing will not be recommended; however, schools will continue to be encouraged to spread people out within available space and to prevent crowding in indoor common spaces (e.g. entrances, hallways, etc.) as practical.</p> <p>Quebec:⁵ Plan for normal school organization, without restrictions requiring stable class groups in the 2021-22 school year. In case of outbreak, cohorting and assigned bus seating may be re-introduced.</p> <p>California:¹⁰ There are no cohorting requirements in California’s guidance for the 2021-22 school year.</p> <p>New York:⁸ Enact measures to prevent intermingling across cohorts, to the greatest extent possible (e.g., separation by appropriate physical distancing, particular if there are multiple cohorts in one area). Staff should make reasonable efforts to ensure that cohorts are fixed – meaning contain the same students – for the duration of the school year. Faculty may instruct more than one cohort so long as appropriate physical distancing is maintained.</p> <p>Minnesota:¹⁷ Students and staff should be kept in small cohort groups which stay together as much as possible through the day, and from day to day, especially among younger students who are</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<p>The use of shared objects and storage (e.g., art supplies, sports equipment, computers, lockers/cubbies, etc.) can be limited where possible.⁴⁴ If shared, objects are kept within the same cohort where possible, cleaned and disinfected between each use and students are advised to perform hand hygiene before and after use.⁴⁴</p>	<p>not eligible for vaccination. Cohorts should maintain six feet of distance between them, and mixing between cohorts should be avoided, for example during meal breaks or recess.</p> <p>England:¹³ Try to implement ‘bubbles’ of an appropriate size to achieve the greatest reduction in contact and mixing. Make sure this will not affect the quality and breadth of teaching or access for support and specialist staff and therapists. All teachers and other staff can operate across different classes and year groups, and where staff need to move between groups, they should try and keep their distance from pupils and other staff as much as they can, ideally two metres from other adults.</p> <p>Scotland:¹⁴ In both primary and secondary settings, wherever possible, efforts should be made to keep children and young people within the same groups for the duration of the school day. The practical and timetabling challenges of these approaches, particularly in secondary schools, are recognised, as are the variations in size, context and physical structure across schools. If groups cannot reasonably be maintained, or if groups require to be larger in size with some mixing permitted, the application of other risk mitigation measures becomes even more important.</p> <p>Wales:¹⁵ Students should be grouped together in as small a group as possible. Avoid mixing between separate contact groups, including during arrival at school, break/lunch times and leaving school. Staff responsible for younger learners should remain with set contact groups. Only under exceptional circumstances should they interchange between different groups.</p> <p>Ireland: ^{16,17} Primary school students and teaching staff should consistently be in the same Class Bubbles although this will not be possible at all times. Different Class Bubbles should where possible have separate breaks and meal times or separate areas at break or meal times. Secondary school students to be assigned to a main</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
		<p>class cohort which would remain in the classroom for most subjects, with teachers moving between rooms.</p> <p>Israel:^{43,52} In Israel, as of April 18, 2021, there were no restrictions on teachers or teacher assistants' ability to move between classes and schools, and students were no longer required to study in socially distanced cohorts.</p> <p>Scotland,¹⁴ Wales,¹⁵ BC,⁵⁴ New York,^{7,8} Minnesota:¹⁷ IPAC measures include recommendations to utilize outdoor space for instruction, meals, physical activity, and for general student well-being wherever possible, and considering safety (i.e., air quality, allergies, temperature).</p> <p>California:¹⁰ Consider using outdoor space for meals is feasible, to maximize physical distancing while eating and masks cannot be worn.</p> <p>England, Ireland, Israel, Quebec: General use of outdoor space not reported in available school IPAC measures.</p>
Administrative Measures: Outdoor space	<p>In Ontario, it is recommended that physical education takes place outdoors as much as possible.³⁴ Lunch and nutrition breaks can be taken outside, provided physical distancing is maintained (weather permitting and where feasible).^{34,44} Other options include using school outdoor areas and/or nearby park space for learning and recess/breaks.⁴⁴ Physical distancing should be maintained between cohorts, and, where possible/practical, within cohorts. Masks should be worn by students outdoors when physical distancing cannot be maintained.^{34,44}</p>	<p>California:^{10,53} Outdoor singing and band practice are permitted, provided that precautions such as physical distancing and mask wearing are implemented to the maximum extent possible. Playing of wind instruments (any instrument played by the mouth, such as a trumpet or clarinet) is strongly discouraged. School officials, staff, parents, and students should be aware of the increased likelihood for transmission from exhaled aerosols during singing and band practice, and physical distancing beyond six feet is strongly recommended for any of these activities. Updated guidance for the 2021-22 school year does not include IPAC measures specific to music.¹⁰</p> <p>New York:^{7,8} Individuals participating in activities that require projecting the voice (e.g., singing) or playing a wind instrument must be six feet apart and there must be six feet of distance between the performers and the audience during performances and concerts.</p>
Administrative Measures: Music	<p>Current Ontario school guidance indicates music instruction has a variety of delivery options, including fully distanced learning, in-person teaching and instruction with lower-risk creative performance opportunities (e.g., large space, restrictions on type of instruments in a group setting), and in-person teaching instruction with no live performance.²²</p>	

Hierarchy of IPAC Measures⁴

Current Ontario IPAC Measures

IPAC Measures Implemented or Planned in Select Jurisdictions

Minnesota:⁵⁶ General recommendations to reduce risk during musical activities include wearing masks, reviewing ventilation, and using outdoor spaces when possible. Guidance notes that music produced by singing, woodwind or brass instruments, and mixing of vaccinated and unvaccinated individuals can lead to higher risk for COVID-19 spread, and recommend extra precautions are considered for these activities. Extra precautions include: avoiding shared equipment and/or ensuring thorough cleaning after each use; encourage physical distancing between all participants; reduce the number of musicians in ensembles; and utilize face and instrument coverings designed to reduce droplet spread while playing.

England:¹³ Continue teaching music, dance and drama as part of school curriculum. Singing, wind and brass instrument playing can be undertaken in line with this and other guidance, including guidance on [working safely during COVID-19 in the performing arts](#).⁷⁴ Resources that are shared between classes or bubbles, such as sports, arts, and science equipment should be cleaned frequently.

Scotland:¹⁴ Education Scotland has produced specific [guidelines](#)⁷⁵ covering art and design and photography, music (including singing), dance, and drama. These documents set out the hierarchy of risk in terms of the different types of activities and the different kinds of mitigations which can be put in place, providing schools with guidance on how to facilitate these important learning elements as fully as they can while remaining safe within the confines of public health advice.

Wales:¹⁵ Activities run for the development and well-being of children and young people, such as sports clubs and drama classes, are allowed. This applies to children under 18 (or persons who were aged under 18 on 31 August 2020). There is no limit on

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
		<p>the number of children and young children that can attend these activities, but organizers should be mindful of the space available.</p> <p>Ireland:^{16,17} Choir practices/performances and music practices/performances involving wind instruments may pose a higher level of risk and special consideration should be given to how they are held ensuring that the room is well-ventilated and the distance between performers is maintained.</p> <p>Israel, BC, Quebec, New York: Specific recommendations related to music not reported in available school IPAC measures.</p>
<p>Administrative Measures: Physical education and sports</p>	<p>Health and physical education classes are held outdoors when feasible and adapted to support current public health recommendations.^{34,44}</p> <p>Health and physical education classes should be held indoors only if physical distancing can be maintained and shared use of equipment is limited with cleaning and disinfecting after use by each cohort.^{34,44}</p>	<p>California:⁵³ School athletic activities and sports should follow the CDPH Outdoor and Indoor Youth and Adult Recreational Guidance. Note that risk of infection transmission increases for indoor activities; indoor sports are higher risk than outdoor sports due to reduced ventilation. And transmission risk increases with greater exertion levels. Updated guidance for the 2021-22 school year does not include IPAC measures specific to physical activity or sports.¹⁰</p> <p>Minnesota:^{9,57,58} Guidance recommends schools review the CDC resources Considerations for Youth Sports, and Sports Program FAQs. Currently, these CDC resources emphasize that close contact or indoor sports should be avoided due to increased risk of COVID-19 spread, and if participating in these activities risk can be reduced by being vaccinated, wearing a mask, playing outside, maintaining six feet of distance from others, and avoiding crowds. Overall, assessing the risk of COVID-19 during sports should consider current community levels of COVID-19, the physical closeness of players and whether this can be modified, the level of intensity of the activity, the setting (i.e., indoors, outdoors), the amount of necessary shared equipment, the size of the team, whether nonessential visitors or spectators are permitted, among others.</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
		<p>England,¹³ Wales:¹⁵ Outdoor sports should be prioritised where possible, and large indoor spaces used where it is not, maximising natural ventilation flows (through opening windows and doors or using air conditioning systems wherever possible), distancing between pupils, and paying scrupulous attention to cleaning and hygiene. Sports equipment shared between groups should be cleaned frequently.</p> <p>Scotland:¹⁴ Class sports days are allowed, whole school events are not. As it should not be necessary for any parental supervision, parents as spectators are not allowed.</p> <p>Ireland:^{16,17} Minimize equipment sharing and clean shared equipment between uses by different people.</p> <p>Israel, BC, Quebec, New York: Specific recommendations related to physical education and sports not reported in available school IPAC measures.</p>
Administrative Measures: Gatherings/ events	In-person large gatherings such as assemblies, concerts, dances or large in-person staff meetings are not planned and instead are offered virtually. ^{34,44}	<p>BC,⁶ Quebec:⁵ In the 2021-22 school year it is anticipated that most gatherings, events, and usual full education services will be able to take place by school start. Types and sizes of gatherings and events should align with those permitted as per related public health recommendations and Orders.</p> <p>England,¹³ Wales,¹⁵ Scotland:¹⁴ Avoid large gatherings such as assemblies or collective worship with more than one group (2020-21 school guidance).</p> <p>Ireland, Israel, California, New York, Minnesota: Recommendations related to gatherings and events not reported in available school IPAC measures.</p>
Administrative Measures: School-based extra-curricular activities	Field trips and/or activities requiring group transportation are not planned (excludes use of walkable local parks, subject to local school or board of education requirements). ^{34,44}	<p>BC:⁶ In the 2021-22 school year it is anticipated all extracurricular activities and schools trips, including inter-school sports, arts events and special-interest activities (e.g. overnight trips) will be able to take place by school start.</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<p>Clubs and/or organized sports are only offered in accordance with current provincial and local public health recommendations, as well as local board of education decisions. If offered, physical distancing should be maintained and use of shared equipment and/or spaces is limited. Such equipment and/or spaces are cleaned and disinfected after each use.^{34,44}</p>	<p>Quebec:⁵ Plan to resume all extracurricular activities.</p> <p>California:¹⁰ Updated guidance for the 2021-22 school year does not include IPAC measures or restrictions related to school-based extracurricular activities.¹⁰</p> <p>New York:^{7,8} Policies regarding extracurricular programs and which activities will be allowed need to consider physical distancing, PPE, and cleaning and disinfection, as well as risk of COVID-19 transmission. Policies should consider how to maintain cohorts during these programs/activities, if applicable, or members of the same household.</p> <p>Minnesota:¹⁷ No extracurricular guidance beyond that for music and physical activity.</p> <p>England:¹³ From May 17, 2021 (in line with the commencement of Step 3 of the roadmap for reopening), where wraparound and other extra-curricular activities for children are taking place indoors, they will be able to take place in groups of any number. However, it remains important to continue to minimize mixing between children, where possible. Indoor and outdoor competition between different schools can now take place. You can work with external coaches, clubs and organizations for curricular and extra-curricular activities.</p> <p>Scotland:¹⁴ As of May 17, 2021, additional restrictions around physical education and expressive arts are determined by the local restriction level.</p> <p>Wales:¹⁵ Schools should only consider team sports where the relevant national governing body has developed guidance for their safe operation in respect of coronavirus, and schools and settings should consider this guidance in delivering lessons containing such sports. Activities run for the development and well-being of children and young people, such as sports clubs and drama</p>

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
Personal Measures: Personal Protective Equipment (PPE)	<p>School staff and any visitors are required to wear a medical mask indoors at all times (except when eating or if alone in a private space), and when outdoors if physical distancing cannot be consistently maintained, unless exempt.^{34,44} Staff are strongly recommended to wear eye protection (e.g., face shield, goggles), in addition to a medical mask, in situations where physical distancing of at least two metres cannot be adequately and consistently maintained.^{34,44}</p> <p>Teachers and other school-based staff who have been designated to act as a lead for COVID-19 related activities in the school, which may include caring for an ill student or staff member, have received education and training on the selection and use of appropriate personal protective equipment.⁴⁴</p>	<p>classes, are allowed. This applies to children under 18. There is no limit on the number of children and young children that can attend these activities, but organizers should be mindful of the space available.</p> <p>Ireland:^{16,17} Music and physical education detailed listed above.</p> <p>Israel: Recommendations related to extracurricular activities not reported in available school IPAC measures.</p> <p>England,¹³ Scotland,¹⁴ Wales,¹⁵ Ireland:^{16,17} For the majority of staff in schools, PPE is not required or necessary. If a student becomes unwell with symptoms of COVID-19, needs assistance, and a 2m distance cannot be maintained, then staff are to don appropriate PPE. Appropriate PPE should also be worn if assisting any student with close personal care.</p> <p>Minnesota:¹⁷ PPE is strongly recommended for staff providing direct student support services to reduce the risk of COVID-19 transmission in situations that involve close, physical, or prolonged contact.</p> <p>Israel, BC, Quebec, California, New York: PPE not reported in available school IPAC measures.</p>
Personal Measures: Masks (medical or non-medical)	<p>Students in kindergarten are strongly encouraged, and students in grades 1 to 12 are required to wear a mask (medical or nonmedical) or mask in indoor spaces (including in hallways and during classes) and on school buses, unless exempt. A mask or mask should also be worn outdoors if physical distancing of two metres cannot be maintained. Some schools and boards of education may require masking for kindergarten students.⁴⁴</p>	<p>BC:⁵⁴ During the 2020-21 school year, masks are required for all staff and student in grades 4 to 12 in indoor settings. Masks are encouraged but not required for students in grades K to 3. No update for the 2021-22 school year.</p> <p>Quebec:⁵ Plan for the 2021-22 school years is to not require masks for any students or staff. Mask requirements may be re-introduced in the event of an outbreak.</p> <p>California:¹⁰ All staff and K-12 students are required to wear masks while at school. School must develop protocols to provide masks to anyone who inadvertently fails to bring one to school. A strong emphasis on universal masking in schools allows the removal of</p>

physical distancing requirements. It also helps to avoid potential negative impacts of masking requirements based on vaccination status, such as potential stigma, bullying, or isolation, depending on the culture, attitudes, and beliefs in the school and the surrounding community. Masks are optional when outdoors. Those exempted from wearing a mask due to a medical condition must wear a non-restrictive alternative, such as a face shield with a drape on the bottom edge, as long as their condition permits it.

New York:^{7,8} Masks are required at all times in indoor school facilities, except for meals. Effective June 7, 2021, face masks are not required to be worn outdoors on school grounds, including during outdoor school sports.

Minnesota:¹⁷ It is strongly recommended all people entering school buildings (students, staff, visitors, parents) wear a mask. Those who are unable to tolerate wearing a face covering because of a medical condition, mental health condition, or disability, and children under age 2, are not required to wear masks. Schools are encouraged to maintain a supply of masks for students and staff who forget them.

England:¹³ Masks no longer recommended for pupils in classrooms or communal areas in all schools, and no longer recommended for staff in classrooms. Masks should be worn by staff and visitors in situations outside of classrooms where social distancing is not possible.

Scotland:^{14,20} Masks should be worn by adults, staff and secondary school students at all times in classrooms, in communal areas and when moving about the school. Primary school students are not expected to wear masks.

Wales:¹⁵ Masks should be worn by staff at all times. Masks should be worn by secondary school students when physical distancing

Hierarchy of IPAC Measures⁴

Current Ontario IPAC Measures

IPAC Measures Implemented or Planned in Select Jurisdictions

cannot be maintained. Masks should not be worn during physical activity.

Ireland:^{16,17} Requirement for masks to be worn by staff members and secondary school students when physical distancing cannot be maintained. Primary school students are not required to wear masks.

Israel:^{59,60} Effective June 25, 2021 masking is required anywhere except the outdoors, which includes schools. This comes after reports of outbreaks in schools across Israel.

BC,⁶ Quebec:⁵ Continue to practice regular hand hygiene in the 2021-22 schools year.

California,¹⁰ New York:^{7,8} Hand-washing stations and hand sanitizer are available, and their safe and appropriate use are promoted and incorporated into routines for staff and students. Respiratory etiquette is taught and reinforced. Ensure adequate supplies to support healthy hygiene behaviors, including soap, tissues, no-touch trashcans, masks, and hand sanitizers with at least 60 percent ethyl alcohol for staff and children who can safely use hand sanitizer.

Minnesota:¹⁷ Schools must ensure the availability of appropriate hygiene supplies and strategically place in areas where they can be frequently used. Regular hand hygiene should be incorporated and reinforced in the daily schedule for all students and staff, including but not limited to arrival and dismissal; before during, and after preparing or eating food; after using the bathroom; after coughing or sneezing or using a tissue; and after touching shared objects.

England,¹³ Scotland,¹⁴ Wales,¹⁵ Ireland:^{16,17} Schools must ensure that staff and students clean their hands regularly: upon arrival at school, returning from breaks, when changing rooms, before and after eating, and before and after using the toilet. Respiratory

Personal Measures: Hand hygiene

Staff and students should be provided with targeted, age-appropriate education in proper hand hygiene and respiratory etiquette, and have easily accessible supplies to conduct appropriate hand hygiene and respiratory etiquette.³⁴

Resources:

- [How to Wash Your Hands](#)⁷⁶
- [How to Hand Wash](#)⁷⁷
- [How to Hand Rub](#)⁷⁸

Alcohol-based hand rub (ABHR) with a concentration of 60%-90% is should be available:^{34,44}

- At all school entrances/exits
- In each classroom
- In other commonly shared spaces (e.g., gym, library, etc.)
- Near high-touch surfaces (e.g., water fountains/dispensers, outside of washrooms)
- In staff break rooms and other spaces commonly shared by staff
- In the space designated for isolating symptomatic students, teacher, staff, or visitors

Resource: [Hard-surface disinfectants and hand sanitizers \(COVID-19\): List of hand sanitizers authorized by Health Canada](#).⁷⁹

Hierarchy of IPAC Measures ⁴	Current Ontario IPAC Measures	IPAC Measures Implemented or Planned in Select Jurisdictions
	<p>Signage may be posted throughout the school reinforcing the importance of hand hygiene and respiratory etiquette.⁴⁴</p>	<p>etiquette is encouraged. Adequate facilities should be available for hand hygiene.</p> <p>Israel: Hand hygiene not reported in available school IPAC measures.</p>

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19 infection prevention and control measures for in-person learning in schools in select jurisdictions. Toronto, ON: Queen's Printer for Ontario; 2021.

Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication. The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use. This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

Public Health Ontario

Public Health Ontario is an agency of the Government of Ontario dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca

©Queen's Printer for Ontario, 2021

