Public Health Ontario | Santé publique Ontario

ENVIRONMENTAL SCAN

Update on Approach to Adapting Public Health Measures in Schools

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Key Findings

- Most jurisdictions that recently eased or lifted their public health measures in schools cited declining Coronavirus Disease 2019 (COVID-19) burden within the announcement for the change. No specific thresholds were provided by any jurisdiction with the exception of France.
- There is variation across the jurisdictions regarding the timing of lifting public health measures within the school setting (e.g., masking or cohorting within the school). There is also variation across the jurisdictions with regards to the sequence of lifting public health measures within the school versus the community; in a number of jurisdictions, school measures (e.g., masking requirements) were relaxed shortly before or concurrent with measures in other community settings.
- While many jurisdictions have announced lifting of public health measures, including masking, in schools, others have maintained some public health measures in schools (e.g., British Columbia [BC]) or continue to strongly recommend masking in schools and signal the potential need to reinstate masking requirements in schools in future (e.g., California). In Quebec, masking is no longer required in school classrooms, but remains required on school buses and in common spaces.
- A precautionary and phased approach, with monitoring of key public health and health care systems indicators can be helpful for mitigating SARS-CoV-2 resurgence. Evidence suggests there is a three to four week delay in the effect of lifting public health measures; therefore, three to four weeks of data should be monitored after lifting mask mandates or other school-based public health measures. As a precautionary approach in the short term, maintaining some public health measures in K-12 schools may help to reduce absenteeism and support sustained in-person learning, and mitigate against the harms associated with disruption to in-person learning. This should be balanced against potential negative consequences of the public health measures.
- Public health ethics as well as potential stigmatization are relevant considerations for recommendations about mask use in schools. Considerations may include best protection of children and school staff most susceptible to severe COVID-19 disease (e.g. immunocompromised, fragile children) through both source control and personal protection, considering ethical dimensions such as equity, reciprocity, individual liberty, proportionality and solidarity.

Objectives and Scope

- The objective of this document is to inform considerations on when (i.e., timing) to remove public health measures in K-12 schools in Ontario, including whether they should be lifted sequentially or all at once. This includes, but is not limited to, evidence-informed considerations in respect of masking requirements in K-12 schools.

- This document includes a scan of other jurisdictions' approaches to lifting public health measures in schools. Rationale for these changes are provided, if available.

- The following are out of scope for this document: detailed review of the evidence of the impact of each measure in schools/community settings; systematic review of masking mandates outside of school settings (although provided as context where possible); and systematic scanning of staff personal protective equipment considerations.

Background

Ontario K-12 students have experienced multiple, prolonged periods of loss of in-person learning during the COVID-19 pandemic,[1] and evidence continues to accrue demonstrating the harms of loss of in-person learning.[2] Given the importance of in-person schooling for the learning and overall well-being of children, in advance of the 2021-2022 school year, the Ontario Science Advisory Table (OSAT) recommended that schools should remain open with permanent public health measures in place to support ongoing operations (i.e., vaccination of all those eligible, asking students and staff to stay home while sick, hand hygiene, adequate ventilation and environmental cleaning). They also recommended that temporary school-based public health measures (e.g., masking, physical distancing, and cohorting) be informed by community COVID-19 burden, with a focus on disease severity and potential for immune escape as opposed to transmission rate, and take into consideration student age, grade, and vaccination status.[3] In January 2022, in anticipation of Ontario schools' winter return to in-person learning during the Omicron surge, the OSAT emphasized the importance of prioritizing a range of public health measures in schools, noting "vaccination, ventilation and filtration, cohorting, testing, staying home when sick and high-quality masks mitigate risks of SARS-CoV-2 transmission in schools", particularly in high-risk communities.[4] Similarly, Public Health Ontario (PHO) emphasized optimizing the multiple layers of prevention in schools, including masking, with a view to reducing Omicron transmission risk to limit disruption to in-person learning and mitigate the harms of disruption to in-person learning.[1]

In regards to masking in school settings, a recent synthesis of evidence on mask-wearing in children highlighted the findings and limitations of available evidence related to masking requirements in schools and SARS-CoV-2 incidence. Evidence related to adherence, respiratory function, cognitive impacts, and psychological, communicative and dermatologic impacts of child mask-wearing, are presented in the updated *Mask-wearing in Children and COVID-19…What We Know So Far*.[5]

Provincially-mandated school-based measures that were implemented and/or continued in response to Omicron include rigorous screening for staff and students, school-based vaccination clinics, access to rapid antigen tests for students and staff, enhanced ventilation, access to masks for both students and staff, cohorting, and temporarily pausing high-risk activities (e.g., sports and music).[6] More recently, the Ministry of Education eased restrictions on school extracurricular activities, allowing students to play without masks, except when they are not actively engaged in play.[7] Over this period, polymerase chain reaction (PCR) testing eligibility has been restricted (with school-based PCR testing initiatives discontinued), and the Ministry of Health has relaxed isolation and quarantine requirements outside of select highest risk priority settings, which do not include K-12 schools. This has limited who is required to self-isolate (e.g., school cohorts are no longer dismissed following a potential exposure to a case), and for many has limited the duration of isolation required,[8] while likely increasing the risk that an infected and infectious individual may attend school. Individuals with symptoms of COVID-19 are still required to stay home from school or work;[9] however, this does not capture all single symptom presentations compatible with mild COVID-19. Schools are required to report absenteeism levels exceeding a prescribed threshold to their local public health unit; however, the multiple limitations of these absenteeism data make it challenging to interpret for the purposes of informing public health action, without additional investigation or information.[10]

As of March 4, 2022, 28.6% of children aged 5-11 years and 90.9% of children aged 12-17 are fully vaccinated.[11] Individuals 5 years or older are eligible to complete their primary series of vaccination while individuals 12 years and older just recently became eligible for a booster dose.[12] Children less than five years old remain ineligible for COVID-19 vaccination.

Like many jurisdictions, Ontario is navigating the next stage of the COVID-19 pandemic with ongoing levels of sustained community transmission of SARS-CoV-2.[13] Evidence suggests there is a three to four week delay in the effect of lifting public health measures.[14] Thus, there is evidence to support public health measures being lifted in phases, with at least three weeks before lifting more measures. Tracking changes in school-based public health measures in jurisdictions with similar contexts (e.g., vaccination coverage, types of vaccines, and dominant SARS-CoV-2 variants) may be helpful in order to learn from their experience.

Methods

This environmental scan was informed by previous Public Health Ontario (PHO) reports, scanning of key government websites, as well as general Google searches for items related to public health measures in schools. A formal bibliographic database search was not conducted due to time constraints; thus, some relevant articles may not be included.

Results

Jurisdictional Scan

Below is a summary of recent school-based public health measure changes in select jurisdictions. The rationale or factors mentioned in the announcement of the change are provided, if available.

CANADA – JURISDICTIONS THAT EASED OR REMOVED SCHOOL-BASED PUBLIC HEALTH MEASURES

ALBERTA

- Effective February 14, 2022, as part of step 1 in Alberta's 3 stage program, masks are no longer required for K-12 schools along with removing the Restrictions Exemption Program. Capacity limits for large venues (500+) were still in place and physical distancing of 2 meters was still encouraged.[15] The community-wide mask mandate was not lifted until step two (i.e., March 1, 2022).

- Effective March 1, 2022, the remaining provincial school requirements (e.g., cohorting for K-6 and youth screening activities for entertainment and sports) were lifted. This change is among the second step of a three stage approach.[15]

- A subsiding Omicron wave and easing pressure on the health-care system were cited as reasons for easing public health measures.[15] For those at a higher risk of severe outcomes, it was still recommend to wear medical masks in settings with people outside of their household.[15]

- On February 14, 2022, there were 1462 patients hospitalized (non intensive care unit [ICU]) and 124 in the ICU. As of March 2, 2022, hospitalization was 4 per 100 cases and 76% of the population has had 2 doses of COVID-19 vaccination and 35.5% have received their third dose.[16]

SASKATCHEWAN

- Effective February 28, 2022, self-isolation for anyone who tests positive for COVID-19 and indoor masking for all students are no longer required.[17] These school-level changes occurred at the same time as the same measures were lifted in the community.[18] These changes come after other community measures (e.g., proof of vaccination and testing) were lifted on February 14, 2022.[17]

- For context, on May 4, 2021, the Government of Saskatchewan released the "Re-Opening Roadmap" for lifting public health measures based on vaccine thresholds in different age groups,[19] but no similar details or plan were made for lifting measures in February 2022.[20]

- As of February 6th, there were 332 individuals hospitalized, including 301 inpatient and 31 ICU hospitalizations.[21] As of February 24, 2022, the seven-day average of daily new cases was 11.9 per 100,000.[22] As of March 3, 2022, 76.3% of the population has received two doses and 38.2% have received their third dose.[23]

    - Based on data from February 19, 2022, Saskatchewan has recently seen a spike in emergency room visit in children ages one to four with respiratory-like illnesses that is likely COVID-19.[24]

    - Note that Saskatchewan no longer provides daily updates as February 7, 2022, and instead only provides updates monthly.[23]

QUEBEC

- Effective March 7, 2022, students in elementary and secondary school will no longer be required to wear masks in the classroom; however, masks will still be required in common areas and buses.[25] No direct rationale was provided; however, it was reported that the decreasing rate of COVID-19 absences was cited during the announcement.[26] It was also reported that vaccination rates played a factor in the decision.[27] This change comes one week after the change in masking policy in workplaces (i.e., February 28, 2022).[28]

    - It was publicly released on March 2, 2022, that Quebec is prepared to lift face mask requirements in all public places by mid-April in a phased out manner (for public transportation sometime in May). In addition, as of March 12, capacity limits for public places and tables will be lifted along with operating hours for hospitality.[29] However, in the news article, Health Minister Christian Dubé did mention that wearing a mask, even when it is no longer compulsory, still can reduce the risk of transmission in certain circumstances.

- As of March 3, 2022, 82.3% of the population has received two doses and 48.7% have received their third dose.[23] There are 1288 inpatient hospitalizations and 76 in the ICU, which is a decreasing trend from January 19, 2022 with 3425 inpatient hospitalizations and 285 in the ICU.[30]

MANITOBA

- Effective February 15, 2022, cohorting will only be required for K-6, masks will no longer be required during physical education classes, but masks are still required indoors for all other classes for both staff and students.[31,32] These changes come at the same time as some community public health measures are being lifted. However, the community mask mandate is not expected to be lifted until March 15, 2022.[31] School Divisions have not yet specified anything on their masking policy with community measures being lifted in March.[33] The easing of pressure on hospital systems was cited as the reason to ease community measures.[32]

- As of March 3, 2022, 79.4% of the population has received two doses and 41.9% have received their third dose.[23] In the week of February 13 to 19 there were 7,923 hospitalizations and 1,362 ICU admissions.[34]

NEW BRUNSWICK

- Effective March 14, 2022, masks will no longer be required in public schools. This change will occur at the same time as community public health measures, including community masking, are lifted. No direct rationale was provided; however, it was mentioned in the announcement that hospitalizations continue to decrease with less strain on the health-care system.[35]

- As of March 3, 2022, 82.9% of the population has received two doses and 46.2% have received their third dose,[23] with the hospital 7-day average of 89 and the ICU 7 day average of four.[36]

NOVA SCOTIA

- Effective March 21, 2022, all school-based public health measures including masking requirements will be lifted as part of phase three of a three-phase approach.[37] This change will occur simultaneously with the lifting of community masking; however, it will occur as the final phase (i.e., after other community measures were lifted beginning on February 28, 2022).[37] No rationale was given, but there has been a drop in COVID-19 related hospitalization since February 23, 2022.[38]

- As of March 3, 2022, 83.7% of the population has received two doses and 50.7% have received their third dose,[23] with 32 inpatient hospitalizations and 13 in the ICU.[39]

CANADA – JURISDICTIONS THAT MAINTAINED SCHOOL-BASED PUBLIC HEALTH MEASURES

BRITISH COLUMBIA (BC)

- On February 15, 2022, it was announced that changes in school guidelines are expected 'soon'.[40] Only 55% vaccination rates among 5 – 11 year olds were cited as an unacceptable level to change school guidelines currently.[40] This announcement came at the same time as it was announced that most community COVID-19 restrictions were being lifted on February 16, 2022.[40] However, community masking mandates and proof of immunity are still in effect until June 30, 2022 (whether schools would follow was not mentioned).[40] The high rate of immunization in BC was cited as the reason for lifting community restrictions.[40] Decreasing hospitalizations and severe illness was also mentioned in the announcement to lift community measures.[40]

- As of March 3, 2022, 81.9% of the population has received two doses and 49.7% have received their third dose. [23] Hospitalizations decreased from 452 in the week of February 6, 2022 to 319 in the week of February 13, 2022; ICU admissions also decreased from 59 to 54 in that same time period.[41]

YUKON

- On February 24, 2022, it was announced that Yukon will maintain its indoor mask mandate (including in schools) along with proof of vaccination, despite lifting other community public health measures.[42] No rationale was given; however, it was mentioned in a comment that Yukon is moving past the Omicron wave. As of March 3, 2022, 80.4% of the population has received two doses and 44.9% have received their third dose.[23] From February 7, to March 2, 2022, daily hospitalization and 7-day average has been zero with a constant total hospitalization of 123.[43]

AUSTRALIA

NEW SOUTH WALES (NSW) REGION IN AUSTRALIA

- Effective February 28, 2022, NSW lifted its mask mandate for students and staff in high schools.[44] This change comes shortly after the community-wide mask mandate was eased on February 25, 2022.[45] Cohorting and twice weekly antigen testing protocols were also lifted on February 28, 2022.[44] No direct rationale was provided; however, it was mentioned in the announcement that enforcing cohorting was a challenge for staff and that COVID-19 transmission was lower in schools than in households.

- Effective March 7, 2022, NSW lifted its mask mandate for students and staff in elementary schools.[44]

- Hospitalizations: the number of COVID-19 patients in hospital on February 28, 2022 was 7.5 per 100,000.[46]

EUROPE

ENGLAND

- Effective January 20, 2022, face masks are no longer required in classrooms.[47] Though not a direct rationale, stabilizing hospital admissions were noted in the announcement. This change came before England dropped its community-wide mask mandate on January 27, 2022.[48]

- Effective February 21, 2022, England no longer requires staff nor students in most education settings to test twice a week.[49] From February 24, other community measures were lifted such as no longer requiring self-isolation following a positive test and routine contact tracing.[49] No specific rationale was given, but data on high booster rates (65% over aged 12) and low hospitalization rates for the past six months was cited.[49]

- Hospitalizations: the 7-day average of the number of COVID-19 patients in hospital was 15,343 on January 20, 2022 and was 9,028 on February 21, 2022.[50]

DENMARK

- Effective February 1, 2022, Denmark simultaneously lifted its public health measures in schools and in the community.[51] Stable health care burden and high vaccination rates were provided as the rationale for this change.[52]

- Hospitalizations: the number of COVID-19 patients in hospital on February 1, 2022 was 18.4 per 100,000.[46]

FRANCE

- Effective February 21, 2022, February 28, 2022, or March 7, 2022 (date is dependent on which zone the school is in), France moved from a level 3 to a level 2 protocol in schools (i.e., lifted its outdoor mask mandate at schools and allowed students to play sports indoors without a mask).[53] These changes come after France started easing community measures on February 2, 2022 (removed its community-wide outdoor mask mandate).

- It was reported that it is expected that the community-wide indoor mask mandate will be further eased or lifted if the following thresholds are reached: fewer than 1500 patients in ICU; incidence rate (cases per 100,000 people) being between 300 and 500; and R rate below 1.[54] There are no details yet on what the new rules will look like (i.e., whether masking will be removed completely in schools).

- Hospitalizations: the number of COVID-19 patients in hospital on February 21, 2022 was 42.1 per 100,000 and 37.2 per 100,000 on February 28, 2022.[46]

IRELAND

- Effective February 28, 2022, Ireland lifted its protective measures in schools, including physical distancing measures and face coverings.[55] No direct rationale was provided; however, COVID-19-related epidemiology at the time of the announcement (i.e., February 18, 2022) was cited in the announcement. The lifting of the mask mandate in schools occurred simultaneously with the lifting of the community mask mandate.

- Hospitalizations: the number of COVID-19 patients in hospital on February 27, 2022 (the last recorded date) was 12.1 per 100,000.[46]

WALES

- Effective February 28, 2022, face coverings are no longer routinely recommended in the classroom.[56] Face masks should continue to be worn in communal areas outside the classroom (e.g., hallway). No rationale was given, but according to a news article, it mentioned a drop in community infection rate and decreased pressure on the National Health Service were indications for schools to return to more normality.[57] This change happened a month after most community COVID-19 restrictions such as social distancing, gathering size, and working from home were lifted on January 28, 2022.[58] Face masks are still required in shops and on public transit.[59]

- Hospitalizations: the number of COVID-19 patients in hospital on February 28, 2022 was 578.[60]

UNITED STATES (US)

NEW YORK STATE:

- Effective January 14, 2022, schools are no longer required to contact trace when a student or staff member tests positive, or has symptoms of, COVID-19.[61] This change occurred at the same time that contact tracing was ended in the community.[62] Rationale for this change is that Omicron has a shorter incubation period and contact tracing is not as effective.

- Effective March 2, 2022, students and staff no longer need to wear a mask at school. The declining COVID-19 rates, hospitalization, high vaccination rates, and new CDC guidance was cited as rationale for this change.[63] This change comes after their community mask mandate was eased on February 10, 2022 (only required in high-density places).[64]

- Hospitalizations: the number of COVID-19 patients in hospital was 9.3 per 100,000 on January 14, 2022 and 1.9 per 100,000 on March 2, 2022.[65]

CALIFORNIA:

- Effective March 11, 2022, the state lifted its mask mandate in schools; however, masks are still strongly recommended in schools. This change comes after the community-wide mask mandate was lifted for vaccinated individuals on February 15, 2022 and unvaccinated individuals on March 1, 2022.[66,67] It was stated that this change "is driven by the data and the science". It is important to note that communities can decide to continue requiring masks in the classroom (e.g., Los Angeles is bound by an agreement with their teacher's union to maintain masks until the end of the school year).[67]

- California's SMARTER plan (a plan that outlines the next phase of California's COVID-19 response) includes expanding school-based vaccination sites by 25% as eligibility expands[68] and preparing for universal masking in schools.[69] This plan does not provide specific thresholds or triggers for re-instating school-based public health measures, but instead explains that California will be ready to evaluate data quickly to determine how to handle future waves of COVID-19. For example, if wastewater surveillance shows increasing transmission of COVID-19, efforts will be made to quickly determine the risk.

- Hospitalizations: the number of COVID-19 patients in hospital was 2.2 per 100,000 on March 3, 2022 (the last reported date).[70]

Recent Changes in US Centers for Disease Control and Prevention Public Health Guidance on Easing Public Health Measures in Schools

On February 25, 2022, the US Centers for Disease Control and Prevention (CDC) changed its metrics categorizing communities by COVID-19 levels and recommended measures for communities with "high", "medium" and "low" levels of COVID-19.[71] The implication of this change is that most communities now fall in the "low" and "medium" levels;[72] thus, masks are no longer recommended indoors (including schools) for most communities in the US.[71] The CDC states that the new proposed COVID-19 community levels will provide an improvement over the previously used community transmission levels in identifying regions that will experience severe outcomes three weeks later.

Following CDC Community COVID-19 Thresholds for lifting masking mandates based on cases, hospitalizations, and staffed inpatient beds occupied by COVID-19 patients could result in high case counts, hospitalizations, inpatient bed occupancy levels and excess mortality in Ontario. The CDC threshold of 200 cases per 100,000 (7-day total) would correspond to approximately 29,500 cases per week in Ontario.[71] This is higher than the weekly PCR-confirmed cases at most pandemic peaks in Ontario when no testing restrictions were in place.[73] The US has higher per capita numbers of nurses,[74] hospital beds,[74,75] and critical care beds[76] than Ontario. Thus, using US thresholds for per-capita hospitalization rates or percentage of beds occupied by COVID-19 patients in Ontario is likely to lead to negative impacts to the healthcare system.

Discussion

- Overall, only jurisdictions that recently reduced school-based public health measures were included in the scan (outside of Canadian jurisdictions). Most jurisdictions that recently reduced public health measures in schools (including mask mandates) made those changes in February or March 2022 (with the exception of England, which lifted their school mask mandate in January 2022). Within Canada, many provinces have recently reduced public health measures in schools or have reported that they plan to do so later in the month of March.

- Of the included jurisdictions, most did not provide specific rationale for their changes to public health measures in publicly available documents included in this scan, but did cite contextual factors broadly related to the waning Omicron wave in their jurisdiction in the announcement that may have played a role in the decision. The most commonly reported factors were decreasing COVID-19 burden (e.g., declining hospitalizations) and overall high vaccination rates. Considerations of the potential for the emergence of a new variant of concern that is more transmissible and/or associated with more clinical severity and/or more immune escape were not noted in most school public health measure guidance updates or announcements.

- There was variation across the included jurisdictions with regards to the timing of easing school-specific public health measures (e.g., masking, cohorting, physical distancing). Further, there was also variation across the jurisdictions with regards to the timing of lifting public health measures within the school versus the community – most jurisdictions altered measures in schools either before or simultaneously with community measures.

- Rationale for the sequence of lifting public health measures (e.g. community before school, cohorts before masks) was rarely provided. An exception was BC, where the low vaccination rate in children aged 5-11 years old was cited as a reason for delaying changes to school-based measures, while going ahead with reducing measures in the community, with the notable exception of community masking mandates which to date are to remain in place until the end of June 2022.

- The magnitude and pace of changes to school-based public health measures also varied by jurisdiction. Many followed a step-wise approach. Some jurisdictions removed all temporary public health measures in schools while others maintained varying levels of public health measures. Approaches to maintaining some public health measures included:
    - Quebec no longer requires mask-use in the classroom; however, it is still required in common areas and buses.
    - Several jurisdictions removed the requirements for mask-use while outdoors or playing sports indoors (e.g., Manitoba, France).
    - California removed its mask requirement but still strongly recommends mask use in schools, and has signalled the potential need to return to universal masking mandates in future.

Implications for Practice

- The measures discussed throughout are largely temporary measures that were introduced in response to COVID-19 burden (e.g., masking, physical distancing, and cohorting).[3] However, it is important to note that most jurisdictions have previously made efforts to improve permanent public health measures in schools (e.g., air quality, hand hygiene, and vaccination), which are recommended as a means to support ongoing operations in schools.[3] It is important that such longer-term measures continue to be strengthened.
- Consideration of when and how to reduce or modify public health measures in Ontario schools should incorporate many factors and can be supported by ethical frameworks designed to guide pandemic planning,[77,78] as well as health equity considerations to anticipate and mitigate unfair, disproportionate negative consequences for some groups.
- Important considerations highlighted in this jurisdictional scan and in previous PHO reviews include:
    - The overall community burden of COVID-19 in terms of cases and hospitalizations and the population-level immunity are important in determining the potential harms from COVID-19 (and therefore benefits of public health measures).
    - In considering the effectiveness of school-based public health measures, mask use has been reviewed in detail elsewhere.[79] There is limited evidence on the effectiveness of other school-based public health measures in isolation from other layers of prevention.
    - While the majority of children are at low risk of severe disease (based on current and previous variants),[80,81] public health measures in school may help to reduce absenteeism and support sustained in-person learning. This should be balanced against potential negative consequences of the public health measures.
    - Previous reports have highlighted that school closures are linked to serious mental health[2] and educational attainment harms that exacerbate inequities experienced by marginalized groups.[4] Therefore, an important goal of additional public health measures in schools that goes beyond a reduction in direct COVID-19 disease burden, or acute health care system capacity, is keeping in-person school in place and also minimizing absenteeism due to COVID-19 or associated symptoms.

- If a goal of the pandemic response remains minimizing disruption to in-person learning, and absenteeism-related harms and inequitable distribution of harms, K-12 schools may benefit from a cautious, gradual, step-wise approach to lifting public health measures in schools. In the Ontario context, some layers of prevention have already been relaxed in school (e.g., lack of school cohort dismissals, relaxation of general self-isolation guidance for the public). Noting that some school indoor environments are 3-C settings (i.e., closed, crowded, close contact), in the short term, maintaining some layers of prevention (e.g., screening, masking) longer in the school setting could be a reasonable precautionary approach to mitigating in-school transmission, and in turn preventing symptomatic infection and disruptive school absences for students, families and education workers.

- Significant uncertainties remain with respect to the emergence of further SARS-CoV-2 variants of concern, further spread of the Omicron sub-variant BA.2, and the high risk of reinfection and breakthrough infections due to Omicron[82] that may further support a cautious and gradual approach to the timing and nature of any changes to school public health measures, as well as other community-based public health measures.

- In general, and not limited to school settings, as part of planning for potential future scenarios consideration should be given the potential need for reinstituting some public health measures in a range of settings, as well as how to prepare the public and key stakeholders for the need to adapt and/or re-implement some measures using approaches informed by behavioural science and risk communication best practices.

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