Preamble

In considering the resumption of schools during the current phase of the coronavirus disease 2019 (COVID-19) pandemic, it is critical to balance the risk of direct infection and transmission of SARS-CoV-2 (the causative agent of COVID-19) in children with the harms of school closure on their physical and mental health. While school closures may have been reasonable as part of the early pandemic response, current evidence and experience support the concept that children can return to school in a manner that maximizes children’s health and minimizes risks from a Public Health perspective.1,2

The main objective of this document is to provide support and general guidance for school reopening during the COVID-19 pandemic. We acknowledge that we are not educators of elementary or secondary school children and may not appreciate all the operational and logistical considerations in running a classroom, school or a school board. With this in mind, this document is not intended as an exhaustive school guidance document or implementation strategy, as this is the primary responsibility of the Ministry of Education, with consideration for several key stakeholders (e.g. Ministry of Health, Ministry of Labour, Public Health authorities, teachers, schools, parents and children). It acknowledges the existence of various support documents from other jurisdictions aimed at providing guidance for the safe reopening of schools.3,4

Maximizing Children’s Health

Multiple reports from around the world indicate that children account for less than 5-10% of SARS-CoV-2 infections.5-7 In Canada, of 98,605 COVID-19 cases reported as of June 15th, 6,824 (6.90%) were in children aged 0-19 years.8 While this may, at least in part, be related to testing practices and early school closure, evidence is mounting that children may be less susceptible to SARS-CoV-2 infection and may be less likely to transmit the virus to others.9,10 There is also strong evidence that the majority of children who become infected with SARS-CoV-2 are either asymptomatic or have only mild symptoms, such as cough, fever, and sore throat.5,6,11-13 While serious disease requiring hospitalization is known in children, including multisystem inflammatory syndrome in children (MIS-C), this is relatively rare and is generally treatable.14 Severe disease requiring intensive care admission occurs in a small minority of paediatric cases, particularly among those with certain underlying medical conditions, but the clinical course is much less severe than in adults and deaths are uncommon.5,7,15 There have been no paediatric deaths reported in Canada to date.

The community based public health measures (national lockdown, school closures, stay at home orders, self-isolation etc.) implemented to mitigate COVID-19 and “flatten the curve” have significant adverse health and welfare consequences for children. Some of these unintended consequences include decreased vaccination coverage16, delayed diagnosis and care for non-COVID-19 related medical conditions, and adverse impact on children’s behaviour...
and mental health. Increased rates of depression, trauma, drug abuse and addiction and even suicide can be anticipated. Several organizations including the American Psychological Association (APA) and World Health Organization have highlighted concerns about the potential impact of lockdown on family discord, exposure to domestic violence, child abuse and neglect.20,21 Thus, the impetus to reopening schools is to optimize the health and welfare of children, not for the purposes of allowing parents to get back into the workforce or to facilitate re-opening of the economy.

As mentioned, it is critical that we balance the risks of COVID-19 in children, which appear to be minimal, with the harms of school closure which is impacting their physical and mental health. It should be recognized that it will not be possible to remove all risk of infection and disease now that SARS-CoV-2 is well established in many communities. Mitigation of risk, while easing restrictions, will be needed for the foreseeable future.

**Minimizing Individual and Public Health Risks**

Return to school has generally been associated with increases in cases of community-associated seasonal respiratory viral infections. As a result, it is anticipated that there will likely be an increase in cases of COVID-19 upon the resumption of school and as such, the appropriate measures should be proactively put in place to mitigate the effects of such an increase. This includes the need for readily available testing and contact tracing support, which is critical to avoid outbreaks. Consistency is essential for children and it will be important to ensure that once children return to school, the schools stay open to the extent possible. Furthermore, children rely on structure and schedule for stability, which supports the need for a daily school model.

With this in mind, the following document summarizes our recommendations for school reopening based on the available evidence as well as expert opinion, organized into the categories below:

1. Screening to prevent symptomatic individuals from entering the school
2. Hand hygiene
3. Non-medical and medical face masks for children
4. Physical distancing
5. Cohorting
6. Environmental cleaning
7. Ventilation
8. Mitigation of risk for students at higher risk for severe disease
9. Special Considerations for children and youth with medical and/or behavioural complexities
10. Mental health awareness and support for children
11. Protection of staff and at-risk persons or families
12. Communicating about COVID-19 to children, youth and parents/caregivers

1. Screening to prevent symptomatic individuals from entering the school

In order to prevent the spread of infection, students, teachers and other employees who have signs/symptoms of COVID-19 (according to Ministry of Health and local Public Health guidance) should stay home and decisions about testing and return to school should be guided by Ministry of Health in consultation with local Public Health protocols. In addition, return to school decisions for those who have had an exposure to SARS-CoV-2 should be in accordance with local Public Health recommendations.

**Guidance statement(s):**

- It is essential that strict exclusion policies are in place for symptomatic students and employees.
- Teachers and principals should be provided with information on signs and symptoms of COVID-19 in children so that appropriate action can be taken if children develop symptoms during the day.
- While student screening by school staff at the school may be appealing, it could result in increased lines and is not practical without significant staggering of start times.
- On site temperature taking is not recommended because fever is not a consistent symptom in children (present in about 50% of cases)22 and would result in lines and delayed school entry.
- We would strongly recommend that parents and caregivers be empowered by placing the responsibility for screening on the parents/caregiver. A checklist should be provided for them to do daily screening before arriving at school to clear for entry.
• Virtual learning or other forms of structured learning should be put in place for children who are required to stay home because they are sick or in isolation due to SARS-CoV-2 infection or exposure. It will be important to continue to work to identify options for students who have limited internet availability or other barriers to online learning.

2. Hand Hygiene
SARS-CoV-2 and other respiratory viruses are almost exclusively spread by respiratory droplet transmission. As a result, and because virus shedding may occur prior to symptom onset or in the absence of symptoms, routine, frequent and proper hand hygiene (soap and water or hand sanitizer) is critical to limit transmission. In fact, proper hand hygiene is one of the most effective strategies to prevent the spread of most respiratory viruses including SARS-CoV-2, particularly during the pre-symptomatic phase of illness.

Guidance statement(s):
• Children should be taught how to clean their hands properly (with age appropriate material) and to try and avoid touching their face, eyes, nose and mouth as much as possible. This should be done in a non-judgemental and positive manner.
• Respiratory etiquette: children who have symptoms of a respiratory tract infection should stay home and children should be reminded to sneeze or cough into their elbow/sleeve.
• There should be age-appropriate signage placed throughout the school to remind children to perform hand hygiene.
• A regular schedule for routine hand hygiene, above and beyond what is usually recommended (before eating food, after using the washroom etc.) is advised. Possible options would be to have regularly scheduled hand hygiene breaks based on a pre-specified schedule (for example, scheduling a minimum of 5 times during the day). For practical reasons and to avoid excess traffic in the hallways, the preferred strategy for these extra hand hygiene moments would be hand sanitizer unless sinks are readily available in the classroom.
• Access to hand hygiene facilities (hand sanitizer dispensers and sinks/soap) is critical with consideration for ensuring accessibility for those with disabilities or other
accommodation needs. Ideally, hand sanitizer (60-90% USP grade alcohol, not technical grade alcohol) should be available at the entry point for each classroom.

- Adequate resources and a replenishment process needs to be in place to ensure supplies are available to perform hand hygiene frequently. Liquid soap and hand sanitizer will need to be replenished and tissues available for drying. No-touch waste receptacles should be available for disposal of materials.

- Consider providing disposable disinfectant wipes so that commonly used surfaces can be wiped down by individuals before each use (teachers, older students).

3. Non-Medical and Medical Face Masks for children
Non-medical masks may reduce transmission from individuals who are shedding the virus.\textsuperscript{24} However, the extent of this benefit is unknown (especially in children) and would only be potentially beneficial if done properly. In fact, if worn incorrectly, it could lead to increased risk of infection and it is not practical for a child to wear a mask properly for the duration of a school day.\textsuperscript{24} It is noteworthy that several European countries have had children successfully return to school without face masks.\textsuperscript{2}

Guidance statement(s):

- Non-medical and medical face masks are not required or recommended for children returning to school.

The following points were considered in this recommendation:

- There is a lack of evidence that wearing a face mask prevents SARS-CoV-2 transmission in children.

- Children are not typically trained in their use and there is potential for increased risk of infection with improper mask use.

- In young children in particular, masks can be irritating and may lead to increased touching of the face and eyes which could increase the risk of infection.

- It is impractical for a child to wear a mask properly for the duration of the school day. Children would need assistance to follow appropriate procedures for putting on and taking off the mask (i.e. during meal times, snack times). In addition, during these times when the mask is removed, they would need to be stored appropriately to prevent infection spread.

- It is likely that masks will be disposed of improperly throughout the school and potentially lead to increased risk by children playing with them.

- The mask may not be tolerated by certain populations (i.e. children with underlying lung conditions, asthma, allergies) and especially during warm/humid time periods.

- It is recognized that some parents and children may choose to wear masks. This is a personal choice and should not be discouraged. To this end, equitable access to non-medical masks in the school setting is an important consideration.

- While at SickKids and other hospitals, patients have been required to wear a mask. This is a different situation as children can be closely monitored by their parents and hospital staff to ensure appropriate mask use and it is for a brief, defined period of time when there may be close interaction with a significantly immunocompromised population.
4. Physical distancing
The objective of physical distancing is to reduce the likelihood of contact that may lead to transmission and has been a widely used strategy during the pandemic. However, strict physical distancing should not be emphasized to children in the school setting as it is not practical and could cause significant psychological harm. Close interaction, such as playing and socializing is central to child development and should not be discouraged. The following are some recommendations and considerations for children in the school setting.

Guidance statement(s):

Classrooms
- When children are in the classroom, to the extent possible, efforts should be made to arrange the classroom furniture to leave as much space as possible between students.
- Smaller class sizes, if feasible, will aid in physical distancing. However, the daily school schedule routine should not be disrupted to accommodate smaller classes for physical distancing.
- If weather permits, consideration could be given to having classes outside.

Large gatherings/assembly
- Large gatherings/assemblies should be cancelled for the immediate future.
- Choir practices/performances and band practices/performances involving wind instruments may pose a higher level of risk and special consideration should be given to how they are held, the room ventilation and the distance between performers. To the extent possible, instruments should not be shared between students and if sharing is required, the instruments should be disinfected between use.

Lunch breaks
- Stagger break and lunch times (or have lunch in classrooms).
- Hand hygiene should be performed prior to and after lunch breaks
- If weather permits, consideration could be given to having lunch breaks outside.

Outdoor and other activities
- During outdoor activities, such as recess, physical distancing should not be required.
- Children should perform hand hygiene prior to sports activities/outdoor play/playground use.
- Sports and physical education classes should be encouraged and continue according to available protocols. There should be special consideration as to whether re-starting sports with a high degree of physical contact (i.e. rugby, football and wrestling) should be postponed or modified for the present time. Sports equipment (e.g. balls, hockey sticks etc.) should be cleaned at the conclusion of the activity.
- Schools should endeavor to offer as many of their usual clubs and activities as possible.

5. Cohorting
The purpose of cohorting is to limit the mixing of students and staff so that if a child or employee develops infection, the number of exposures would be reduced. However, cohorting should not be done in a manner that compromises daily school attendance or alters the curriculum options available to children.

Guidance statement(s):
- To the extent possible, cohorting classes could be considered for the younger age groups and for children with medical and/or behaviour complexities (see section 9), so that students stay with the same class group and there is less mixing between classes and years. This applies to both indoor as well as selected outdoor activities. However, the daily school schedule should not be disrupted in order to accommodate smaller cohorts.
- Student well-being and mental health should be prioritized, however, such that class or program switching should not be denied on the basis of cohorting.

6. Environmental cleaning
Detailed recommendations are beyond the scope of this document. In brief, SARS-CoV-2 has been detected on a variety or surfaces and it is possible that infection can be transmitted by touching contaminated surfaces and then touching mucous membranes (i.e. mouth, nose, eyes).
Guidance statement(s):

- A regular cleaning schedule should be used with emphasis on high touch surfaces.
- Efforts should be made to reduce the need to touch objects/doors (no-touch waste containers, prop doors open).
- Reinforce “no sharing” of food, water bottles or cutlery policies.
- All toys and equipment used should be made of materials that can be cleaned and disinfected.

7. Ventilation

Detailed recommendations are beyond the scope of this document. In brief, it is expected that environmental conditions and airflow influence the transmissibility of SARS-CoV-2. Adequately ventilated classroom environments (e.g. open windows with air flow, and improved airflow through ventilation systems) are expected to be associated with less likelihood of transmission compared with poorly ventilated settings.

Guidance statement(s):

- Attention should be paid to improving classroom ventilation (e.g. optimizing ventilation system maintenance and increasing the proportion of outside air brought in through these systems)
- The use of outdoors or environments with improved ventilation should be encouraged (e.g. keeping windows open, weather permitting).

8. Mitigation of risk for students at higher risk for severe disease

Some children may be at higher risk of adverse outcome from COVID-19 due to underlying medical conditions such as immunocompromised states or chronic medical conditions such as cardiac and lung disorders.15,28 Children and youth who are medically complex, particularly those with medical technological supports associated with developmental disabilities and/or genetic anomalies, are also in a potentially higher risk category.15 However, at the present time, there is no convincing evidence to suggest the level of medical risk to these children from SARS-CoV-2 is different from that posed by other respiratory viruses, such as influenza. As a result, given the unintended consequences associated with not attending school, attending school is recommended for the majority of these children. (For more details pertaining specifically to medically and behaviourally complex children and youth, see section 9 below)
Guidance statement(s):
- Children with underlying conditions may attend school as they would per usual. However, it is important for parents to work with their child’s health-care providers so that an informed decision can be made. This is particularly relevant for children with newly diagnosed illnesses requiring the first-time use of new or augmented immunosuppression.
- In the event that such children have a documented exposure to the virus, in addition to involvement of the local public health unit, it is recommended that the child’s parent/caregiver(s) contact the child’s health-care provider for further management.

9. Special Considerations for children and youth with medical and/or behavioural complexities
Return to school will present unique challenges to children and youth with medical and/or behavioural complexities (e.g. a child with cerebral palsy that requires feeding and respiratory supports in the classroom) and their families. Many of these families have had a prolonged period of time in home isolation compounded by a lack of respite and/or homecare supports. Transitioning medically and behaviourally complex children back to school requires specific focus and will be extremely important as many families are already in crisis mode.

Guidance statement(s):
- Liaise with parents to accommodate a more individualized return to school to ensure smoother transitions.
- Ensure that those families who choose to not send their children to school receive remote learning opportunities and do not lose access to home care and respite supports.
- Ensure that students continue to receive access to therapy and nursing services while in the school. Maximize continuity amongst those providing services and/or use virtual care for service provision, to decrease exposures.
- Provide environmental (e.g. smaller class size) and classroom supports (e.g. teacher aides) for those children who may need assistance with hygiene measures, such as some children with behavioural/developmental disorders.

10. Mental health awareness and support for all children
A proactive approach is important to minimize the mental health impact of the school closures on the return to school.

Where foreseeable, schools and school boards should make every effort to address known sources of distress and extend flexibility within existing administrative processes.

For example, many children enrolled in transition years (grades 5/6, 8, 12) during the 2019-2020 school year were required to make decisions regarding special education programs, school registration, or other specific educational programming in the absence of usual sources of information, including school visits or meetings. Every effort should be made to allow program flexibility in this regard during the first months of the school year, in the event that children and parents realize they have made an incorrect program or school choice. It can be anticipated that rigidity would likely lead to increased stress, anxiety, depression and school refusal that could be otherwise avoided.

Similarly, children can be anticipated to return to school at diverse academic levels even within a classroom. It will be critical to provide opportunities for early identification of learning needs and academic support to ensure that children neither become overwhelmed nor bored in the school setting, as these are frequent antecedents to school refusal and mental health problems. For children who may find the new school environment particularly challenging, such as some children with developmental disabilities, extra supports will be needed. Consultation with their parents and families to better understand their individual circumstances and needs is recommended.

It can be anticipated that children and youth may experience increased stress and anxiety related to the COVID-19 pandemic. In addition, children and youth may have mental health conditions, such as anxiety, depression and substance abuse, which may have been exacerbated by social distancing, including school closures, and may experience symptom escalation on return to school.

Guidance statement(s):
- Flexibility in program and/or school enrollment should be provided for children and youth who have transitioned to a new program or school for the 2020/2021 school year.
- Increased in-school educational support should be provided to students and classroom teachers to enable early identification and remediation of learning gaps that some students will have incurred during the school closures.
• Accessible mental health support services adapted for diverse groups and at risk populations should be provided.

11. Protection of staff and at-risk persons or families
While detailed recommendations are beyond the scope of this document, the safety of the school staff is an important consideration. Risk mitigation for teachers and other staff should be similar to those recommended for other public settings.

With regards to children's home environment, it would be appropriate to consider that the risk posed by potentially infected children to other household members likely varies in relation to socioeconomic status, household overcrowding and the presence of children and adults at increased risk of severe COVID-19 at home.

Guidance statement(s):
• Physical distancing of school staff from children and other staff should be emphasized.
• In general, masks should not be required for school staff if physical distancing is possible and is practiced appropriately. This is important as facial expression is an important part of communication which children should not be deprived of.
• If close prolonged contact with others cannot be avoided, wearing a mask is a reasonable option. However, if used in the classroom, the teacher should explain the rationale to the children.
• It is acknowledged that some teachers and other school staff may choose to regularly wear masks. This is a personal choice and should not be discouraged.
• Further guidance should be developed to mitigate risk in home situations where an affected child resides (in the same home) with siblings or older adults with underlying conditions that put them at increased risk for more severe disease.

12. Communicating about COVID-19 to children, youth and parents/caregivers
A detailed communication strategy is beyond the scope of this document. However, it is acknowledged that clear, age-appropriate communication about COVID-19 and what to expect when children and youth return to school should occur in advance of school reopening. In addition, it will be important that regular updates be provided to children and their parents/caregivers throughout the school year.

Guidance statement(s):
• Parents, children, youth and the community at large should be educated that SARS-CoV-2 is likely to persist and circulate like other respiratory viruses.
• They should be made aware that in general, SARS-CoV-2 causes mild disease in the majority of children and
young adults and that the best overall strategy for these cohorts and the population at large, taking into account the massive secondary adverse health and well-being implication of the lockdown, is to ease restrictions and return to school.

Summary:
This document provides guidance surrounding the reopening of schools as this relates to the measures to mitigate risks. As discussed, the risks of infection and transmission in children, which appear to be minimal, need to be balanced with the harms of school closure which is impacting their physical and mental health. On balance, it is recommended that children return to school and that the messaging around this clearly articulate the rationale for the recommendations outlined in this document in order to help reduce the fear and anxiety in parents, children and school staff. In our view, a daily school model is best as it allows for consistency, stability and equity regardless of the region in which children live. An important factor to consider in this respect is emerging evidence indicating inequalities in the social and economic burden of COVID-19, which may further disadvantage children living in higher burden areas where educational inequality and barriers to online learning may be more pronounced. In addition, we appreciate that the living conditions for children vary across socioeconomic groups and therefore recommend that further work be done to develop guidance and identify supports needed for situations where children reside within the same home as individuals with underlying conditions that put them at increased risk of more severe disease. Finally, it is important to note that these recommendations reflect the evidence available at the present time and may evolve as new evidence emerges and as information is gathered from other jurisdictions that have opened schools already.

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References


