

Children  
and youth  
don't get  
COVID-19  
as  
frequently  
as adults.

## Laboratory-confirmed COVID-19 in children and youth in Canada, January 15—April 27, 2020

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### Abstract

Understanding the epidemiology of COVID-19 among children and youth in Canada will help to inform public health measures in settings where children gather. As of April 27, 2020, provinces and territories provided the Public Health Agency of Canada with detailed information on 24,079 cases, of which 3.9% (n=938) were younger than 20 years of age. The detection rate per 100,000 population was lower in this age group (11.9), compared with those aged 20–59 years (72.4) and 60+ years (113.6). The median age among those younger than 20 years of age was 13 years, and cases were distributed equally across male and female genders. Among provinces and territories with more than 100 cases, 1.6% to 9.8% of cases were younger than 20 years of age. Cases in this age group were more likely to be asymptomatic: 10.7% compared with 2.4% in those aged 20–59 years and 4.1% in those aged 60+ years. Children and youth experienced severe outcomes less often, but 2.2% (n=15/672) of cases within this age group were severe enough to require hospitalization. Based on available exposure information, 11.4% (n=59/520) of cases aged younger than 20 years had no known contact with a case. Canadian findings align with those of other countries.

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**Editor's note:** This article has been submitted as a Rapid Communication to provide current information related to COVID-19 that may have immediate implications.

# When children get COVID-19 the illness course tends to be milder than adults.

- Children who are infected with the virus and develop COVID-19 have milder symptoms if any, and very few become critically ill.
- Children with COVID-19 illness typically have a fever, dry cough and fatigue but may have gastrointestinal symptoms.
- Gastrointestinal symptoms in children are commonly diarrhea and vomiting and may be the only symptoms at onset (no respiratory symptoms).

# Children don't appear to be drivers of the epidemic (i.e. not good spreaders of the virus).

- The majority of cases in children are the result of a household transmission by droplet spread from another family member with symptoms of COVID-19.
- Unlike adults the rates of transmission are unknown.
- There is no documented evidence of child-to-adult transmission.
- There are no documented cases of children bringing an infection into the home, from school or otherwise.
- This is likely the result of the limited number of cases and the mild symptoms in those who do have COVID illness.

# Children are impacted by COVID-19 population health measures.

- Loss of school routine, inaccessibility of mental health resources, and lack of peer engagement has negative psychological impacts and mental wellbeing.
- Health-conscious scheduling, personal hygiene, physical activity, and engagement with teachers can help alleviate negative impacts, with a specific focus towards children at risk of violence, abuse, and those at lower socioeconomic status

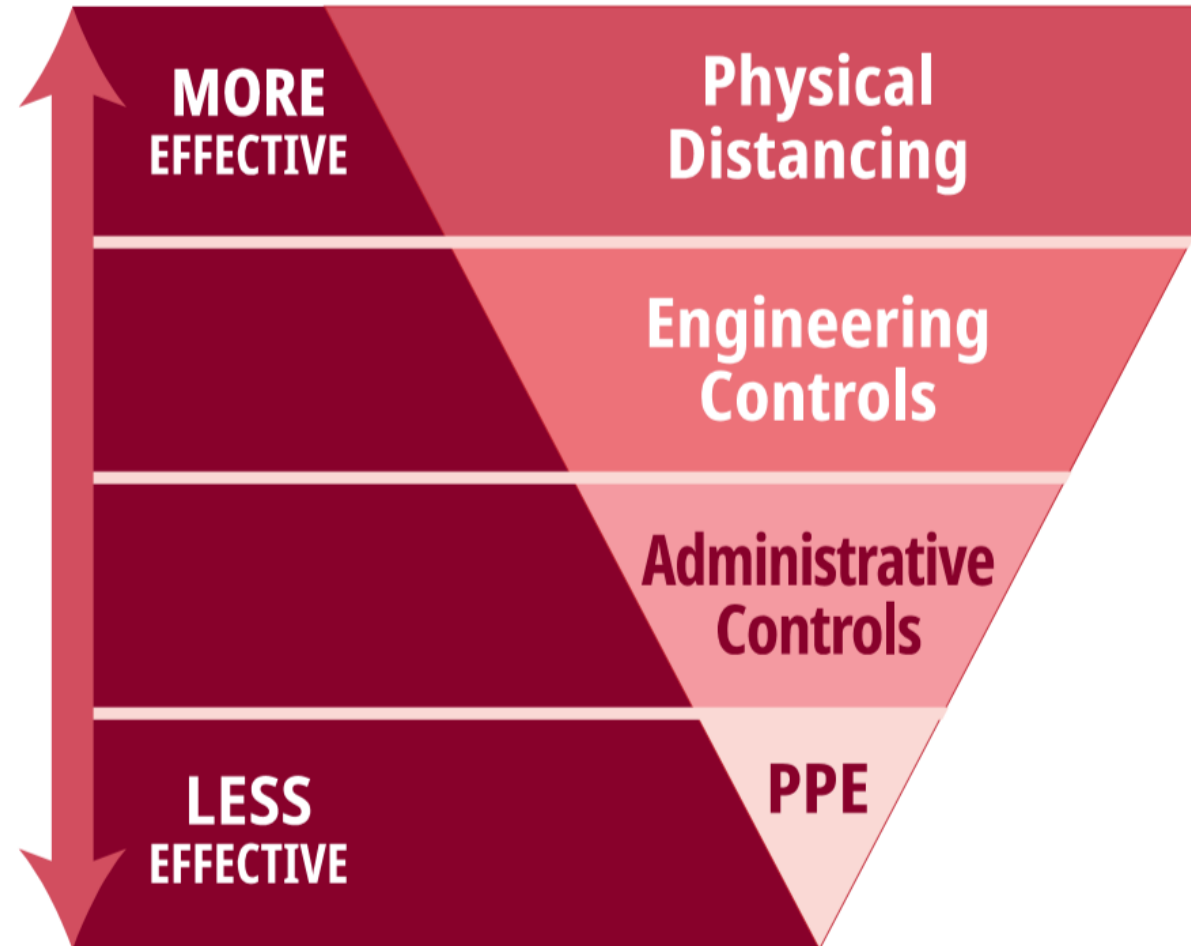
# Key Principles Going Forward

- ✓ Staying informed, being prepared and following public health advice.
- ✓ Practicing good hygiene (hand hygiene, avoid touching face, respiratory etiquette, disinfect frequently touched surfaces).
- ✓ Staying at home and away from others if feeling ill – not going to school/work.
- ✓ Maintaining physical distancing outside the household (e.g. no hand shaking or hugging, small numbers of contacts and keeping a safe distance).
- ✓ Making necessary contact safer with appropriate controls (e.g. plexiglass barriers, room design).
- ✓ Increasing environmental cleaning at home and work.
- ✓ Considering the use of non-medical masks in situations where physical distancing cannot be maintained (e.g. on transit, shopping).
- ✓ Reducing personal non-essential travel.

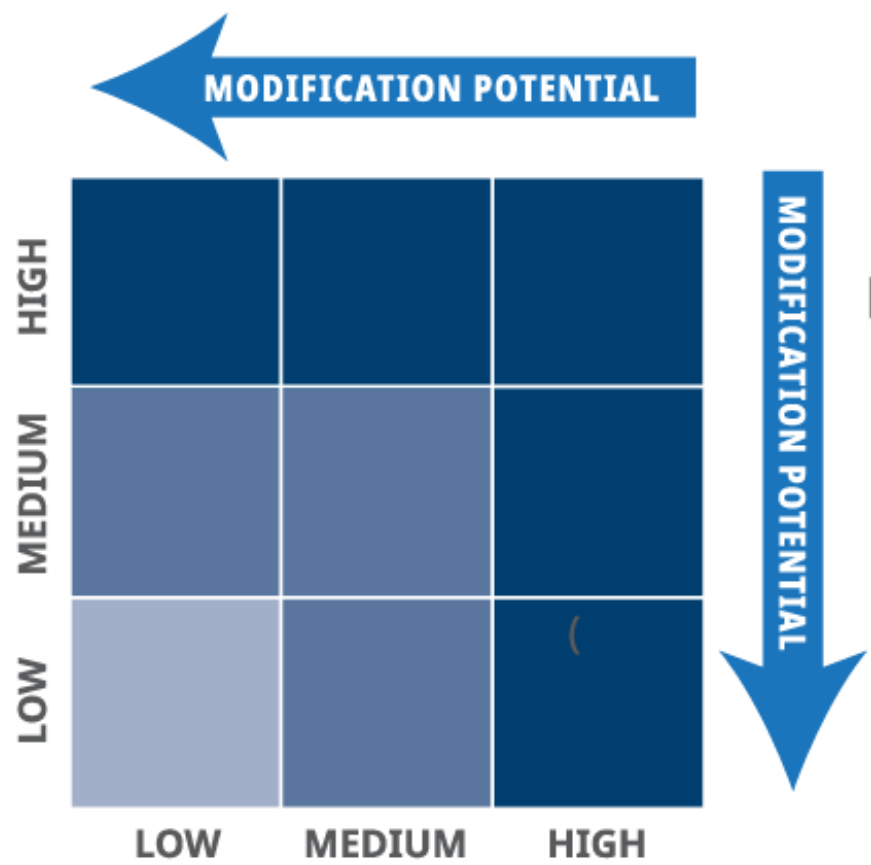
# Hierarchy of Controls For COVID-19

The hierarchy of controls is a framework for reducing transmission hazards. The most effective controls are at the top of the pyramid.

Source: Koehler, K, Rule A. Can a mask protect me? Putting homemade masks in the hierarchy of controls. [Internet] 2020 April 2. Johns Hopkins Education and Research Center for Occupational Safety and Health.



**CONTACT INTENSITY**  
A function of contact type (close to distant) and duration (brief to prolonged)



**NUMBER OF CONTACTS**  
Approximate number of people in a setting at the same time

**MODIFICATION POTENTIAL**  
Degree to which activities can be modified to reduce risk

# Some examples of what you may see ....

- Discourage individuals who are ill from entering the child/youth setting.
- Promote and facilitate personal public health measures.
- Promote physical distancing (keeping a distance of 2 metres from others).
- Create physical barriers between children/youth, staff and volunteers when physical distancing is not possible.
- Mitigate risks from exposure to high-touch surfaces.
- Mitigate risk for people at higher risk of severe illness.
- Modify practices to reduce how long children are in contact with each other and how many children come into contact with each other



# Illuminating the impacts of COVID-19 in BC

- BC COVID-19 SPEAK:
  - *Your story, our future is a population health survey to understand citizen experiences, knowledge and actions during the COVID-19 pandemic. This survey is the first of several activities that will strengthen our pandemic response and our understanding of the impacts of COVID-19 to date (social, economic, mental wellness and community wellness).*
- [www.bccdc.ca/covid19survey](http://www.bccdc.ca/covid19survey)