

# Impact of school closures on learning, and child and family well-being

As the COVID-19 pandemic surged in the spring, BC proactively suspended in-class instruction for kindergarten to grade 12 (school closures) to delay and flatten the outbreak peak, reduce the burden on the health care system, and protect high-risk populations.<sup>1,2</sup> School closure is an intervention for influenza outbreaks based on evidence that children are more infectious and susceptible to influenza than adults.<sup>3</sup> However, the effectiveness of school closures for influenza outbreaks is not clear, and schools are not routinely closed in practice.

Current evidence suggests that illness susceptibility and transmission dynamics of SARS-CoV-2 in children differ from influenza. Children are less susceptible to SARS-CoV-2 than adults. As of 24 September, children under 19 years accounted for approximately 9% of total BC cases (but 20% of the population) and no deaths.<sup>4</sup> If children are infected, they usually have no or mild symptoms and mortality is rare.<sup>5</sup> Children also do not tend to spread SARS-CoV-2 widely, particularly younger children, including in school and home settings.<sup>6</sup> As a result, the effectiveness of school closures as a prevention measure against COVID-19 has been questioned.

Experiences globally and within BC suggest that schools can be opened safely without substantial increases in COVID-19 transmission when school-based prevention measures are in place, along with strong control of community transmission.<sup>6</sup> Moreover, the potential benefits of school closures must be weighed against the detrimental effects of prolonged absences from school. The vast majority of

families responding to the BC COVID-19 survey reported impaired learning, increased child stress, and decreased connection with friends.<sup>7</sup> Increased loneliness in youth is correlated with anxiety and depression, which are predictors of poor future mental health outcomes if not identified early and treated. With a loss of supportive routines and structures, health behaviors declined dramatically during the pandemic, with only 5% of Canadian children meeting 24-hour guidelines for physical activity, sleep, and sedentary behavior.<sup>8</sup> School closures may particularly affect families of children with disabilities and mental and behavioral health needs, while existing geographic and socioeconomic disparities in educational attainment may expand.

Interrupted access to school-based resources may compound the broader societal impacts of the pandemic, making intervention more difficult. While federal reports indicate domestic violence has intensified during COVID-19, child protection reports from BC schools decreased by 75% with closures (electronic communication from Steven Yong, executive director, Modelling, Analysis and Information Management Branch, Ministry of Children and Family Development, 11 September 2020). One in seven Canadian households reported food insecurity during the pandemic, while the number of BC families accessing ongoing school food programs expanded considerably.<sup>9</sup> Adverse effects related to

extended school closures accumulate over time and are likely to be experienced disproportionately by families experiencing social inequities (i.e., single-parent families, families in poverty, those with unstable employment and housing, and racialized groups).

COVID-19 is likely to be a fact of life for the foreseeable future. School closures have a significant societal cost and are unsustainable in the long term. Return to school, while posing some risk of COVID-19 transmission, offers greater societal, family, and individual benefits than continuing to keep schools closed. Importantly, schools are not at higher risk of COVID-19 transmission than community settings. Attention to prevention measures within schools and maintenance of strong control of community transmission can further reduce the risk of

transmission in school settings. Keeping our schools open is essential for the learning and well-being of children and their families, now and for their future. ■

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**With a loss of supportive routines and structures, health behaviors declined dramatically during the pandemic, with only 5% of Canadian children meeting 24-hour guidelines for physical activity, sleep, and sedentary behavior.**

*This article is the opinion of the BC Centre for Disease Control and has not been peer reviewed by the BCMJ Editorial Board.*

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