

# Shifting school health priorities pre–post cannabis legalization in Canada: Ontario secondary school rankings of student substance use as a health-related issue

Alexandra Butler<sup>1,\*</sup>, Amanda Doggett<sup>1</sup>, Julianne Vermeer<sup>1</sup>, Megan Magier<sup>2</sup>, Karen A. Patte<sup>2</sup>, Drew Maginn<sup>3</sup>, Chris Markham<sup>3</sup> and Scott T. Leatherdale<sup>1</sup>

<sup>1</sup>School of Public Health Sciences, University of Waterloo, 200 University Ave W, Waterloo, ON N2L 3G1, Canada,

<sup>2</sup>Department of Health Sciences, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, L2S 3A1, ON, Canada and

<sup>3</sup>Ophea, 12 Concorde Place, Suite 204B, Toronto, ON, Canada

\*Correspondence to: Alexandra Butler. E-mail: [alle.butler@uwaterloo.ca](mailto:alle.butler@uwaterloo.ca)

Received on 7 March 2022; editorial decision on 7 September 2022; accepted on 16 September 2022

## Abstract

This study examined how schools prioritize ten key health concerns among their student populations over time and whether schools' prioritization of alcohol and other drug use (AODU) corresponds to students' substance use behaviours and cannabis legalization as a major policy change. Data were collected from a sample of secondary schools in Ontario, Canada across four years (2015/16–2018/19 [ $N^{2015/16} = 65$ ,  $N^{2016/17} = 68$ ,  $N^{2017/18} = 61$  and  $N^{2018/19} = 60$ ]) as a part of the COMPASS study. School-level prevalence of cannabis and alcohol use between schools that did and did not prioritize student AODU as a health concern was examined. Ordinal mixed models examined whether student cannabis and alcohol use were associated with school prioritization of AODU. Chi-square tests examined changing health priorities among schools pre–post cannabis legalization. School priority ranking for AODU was mostly stable over time. While AODU was identified as an important health concern, most schools identified mental health as their first priority across the four years of the study. No significant changes to school AODU priorities were observed pre–post cannabis legalization nor was

school prioritization of AODU associated with student cannabis and alcohol use behaviours. This study suggests that schools may benefit from guidance in identifying and addressing priority health concerns among their student population.

## Introduction

Substance use during adolescence is a widely recognized public health concern considering the potential developmental, social and psychological impacts [1–4]. In 2019, alcohol and cannabis were the most prevalent substances used among grade 7–12 Canadian students (12–18 years old); ~44% of students reported having consumed alcohol in the past year and 18% of students had used cannabis in the past year [5].

In October 2018, cannabis was legalized (Cannabis Act, Bill C-45) for recreational use by adult Canadians (aged 18 years and over, depending on the province/territory) [6]. This bill aimed to regulate production, distribution, retail, possession and consumption of cannabis [6], while also emphasizing the importance of youth protection against cannabis-related harms [7]. The legalization of cannabis raised questions and concerns for

Canadian schools, given their role in influencing and protecting student health and wellbeing [8]. In response, several provincial policies in Ontario were developed (e.g. the Cannabis Control Act [9] and amended (e.g. Smoke-Free Ontario Act [10] and Education Act [11]), supplementing the laws under the federal Cannabis Act to ensure that elementary and high school students were protected from cannabis at school. Cross-sectional data from the National Cannabis Survey suggests that between 2018 (measured pre-legalization) and 2019 (post-legalization), prevalence of cannabis use among youth ages 15–17 declined from 19.8% to 10.4% [12]. Pre-legalization patterns of cannabis use among youth displayed a steady decline followed by a gradual increase surrounding federal discourse prior to legalization [13]. However, to date, changes in youth cannabis use have not been observed since the implementation of the Cannabis Act in Canada in October 2018 [12, 14].

The school environment has been identified as an important setting for equitable prevention strategies aimed at reducing risk behaviours, including substance use, among youth [15, 16]. However, education and health are often viewed as separate responsibilities at the local level [17]. While schools typically have a mandate for protecting student health and wellbeing, health-based decision-making and planning outside of curriculum and policy adherence are largely left to the school boards and schools. In 2013, the Ontario Ministry of Education released an update to the ‘Foundations for a Healthy School’, an optional resource that provides schools with a framework to guide integration of programs and policies that promote student well being and is based on a comprehensive school health model [18]. Additionally, annual school board improvement plans administered by school boards to schools are intended to guide strategies that advance school climate and student outcomes [19]. Organizations that support schools such as local public health units and school health experts (i.e. Ophea (<https://www.ophea.net/>), DASH (<https://dashbc.ca/>), EverActive (<https://everactive.org/>) and PHE Canada (<https://phecanada.ca/>)), also

provides standards to guide schools in addressing student health. Schools may also leverage information from external sources (e.g. Canadian Centre on Substance Use and Addiction and Center for Mental Health Association) that are not specific to schools, but produce accessible information on youth health.

Facilitating prevention programs within schools that target the entire scope of risky behaviours common among high school students (e.g. substance use, poor dietary behaviours, inadequate physical activity and sleep and excessive screen time) [18, 20] is not feasible, given the limited allocation of school resources and time [21–23]. In response, school personnel involved in planning school health initiatives may prioritize specific health topics within their respective schools. Prioritizing is also suggested in both aforementioned frameworks, where schools are guided to develop a plan based on the needs of the school community [17, 19]. As student behaviours tend to cluster within a school [24] and can often vary based on school neighbourhood characteristics (e.g. urbanicity and average socioeconomic status) [25, 26], this environment might be an effective avenue for tailoring prevention efforts towards most prevalent risk behaviours. However, these plans may be affected by competing factors, such as priorities dictated by their respective boards, social norms and changes in government policies (i.e. cannabis legalization).

There is a paucity of research examining how schools prioritize different health concerns among their student populations. It is possible that schools may have perceived cannabis and other drug use as a greater priority during the discourse and legalization of cannabis in Canada. Also, schools that perceive higher substance use among their students may prioritize addressing this risk behaviour over other health concerns; and considering the impact of school environments on students [15, 16], school prioritization of substance use may lead to changes in student behaviours as a result any actions taken. It remains unknown whether school health priorities correspond to their students’ risk behaviours, or if they are associated with political discourse and policy changes and population-level trends.

The legalization of cannabis in Canada provides the opportunity to explore this directly in relation to student cannabis use. Further understanding of school prioritization of student health concerns is important to guide decision-making and ensure resources are appropriately allocated to their respective school community needs. As such, the aim of this study was three-fold: to examine health topics prioritized by schools in Ontario and how these differ by school demographics; to examine changes in how schools rank alcohol and other drug use (AODU) over the period of cannabis legalization and lastly, to examine if student cannabis and alcohol use was associated with schools' ranking of alcohol and drug use as a health-related priority.

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## Methods

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### Design

The COMPASS study (COMPASS) is a prospective cohort study (2012–2021) that collects hierarchical data at the student- and school-levels in Canada and was designed to evaluate how policy and program changes impact youth health behaviour outcomes over time. COMPASS collects whole school data from a convenience sample of schools and students and uses an active information passive consent parental permission protocol. Secondary schools in Ontario, Quebec, Alberta and British Columbia, Canada, were eligible to participate if passive consent was permitted. All students attending secondary schools participating in COMPASS were eligible to participate in the COMPASS student questionnaire if their parents/guardians did not withdraw them from the study and students could decline or withdraw at any time [27]. The present study uses four cross-sectional waves of student- and school-level data collected from a sample of grade 9 to 12 students ( $n$ ) (aged: 14–18) attending Ontario (Canada) secondary schools ( $N$ ) in the 2015/16 (T1;  $n = 29\,870$ ,  $N = 65$ ), 2016/17 (T2;  $n = 32\,136$ ,  $N = 68$ ), 2017/18 (T3;  $n = 29\,523$ ,  $N = 61$ ) and 2018/19 (T4;  $n = 28\,219$ ,  $N = 60$ ) school years. Of the schools that participated, 41 schools participated in all four years

of the study. T1–T3 represents the three years preceding cannabis legalization and T4 occurred during cannabis legalization. A full description of the COMPASS study methods is available in print [28] and online ([www.compass.uwaterloo.ca](http://www.compass.uwaterloo.ca)). All COMPASS procedures were approved by the University of Waterloo Office of Research Ethics (ORE: 30118) and participating school boards.

### Measures

Data from two surveys were used in this study. The school policies and practice (SPP) questionnaire collects school-level data, tracking changes to school policies, programs or resources that relate to student health for each of the behavioural domains measured in the student questionnaire and is based on the previously validated Healthy School Planner tool [28]. The SPP questionnaire is completed online (via an emailed link) at the same time as the school's student data collection by school administrator(s) most familiar with the school's health environment. The COMPASS student questionnaire (Cq) is completed during class time and collects individual student data on several demographic characteristics (e.g. student grade, ethno-racial identity and weekly spending money) and health behaviours and outcomes (e.g. substance use, physical activity, healthy eating, mental health and bullying). School and student questionnaires are completed once annually.

### School-level measures (SPP)

#### *Priority health issue*

School priority was assessed by asking school administrators to rank the following health-related issues in terms of importance to their school (from 1 to 10; 1 = highest priority and 10 = lowest priority): tobacco use, AODU, healthy eating, physical activity, bullying/violence, mental health, sexual health, sun safety/tanning beds, obesity/overweight and sedentary behaviours. Due to few schools reporting AODU as their first priority, schools that had included AODU within their top three (i.e. 1, 2 or 3) identified priorities out of the

10 options listed, were assessed in all proceeding analyses.

### *School demographics*

School area median household income was assigned using the school's forward sortation area and median area household income data from the 2016 Census [29]. School urbanicity was determined based on the population centre in which the school resides and classified as either large urban (population of 100 000 or greater), medium urban (population of 30 000 to 99 999), small urban (population of 1000–29 999) or rural (population of <1000) using definitions established by Statistics Canada [30].

### **Student measures (Cq)**

#### *Cannabis use*

Cannabis use was assessed by asking students 'In the last 12 months, how often did you use marijuana or cannabis? (a joint, pot, weed, hash)' with response options including: 'I have never used marijuana; I have used marijuana but not in the last 12 months; less than once a month; once a month; 2 or 3 times a month; once a week; 2 or 3 times a week; 4–6 times a week; every day'. For binary responses of cannabis use, students who indicated having never used cannabis were recoded into 'never users' and all other responses were coded as 'ever users'. For ordinal responses, cannabis use frequency was recoded into 'never', if students had never used cannabis, 'rare' if respondents had ever used cannabis and use was less than once a month, 'monthly' if reported use was once to 3 times per month, 'weekly' if use ranged from 1–3 times a week, 'habitual' if reported use was 4–6 times a week and 'daily'. These measures are consistent with other research on youth cannabis use [31].

#### *Alcohol use (binge drinking)*

Binge drinking was used as a measure of excessive or higher risk alcohol consumption [32, 33] and was assessed by asking students 'In the last 12 months, how often did you have f drinks of alcohol

or more on one occasion?' with response options including: I have never done this; I did not have 5 or more drinks on one occasion in the last 12 months; less than once a month; once a month; 2–3 times a month; once a week; 2–5 times a week. For binary responses of binge drinking, students who indicated not having done this in the past 12 months, were classified as 'non-current binge drinkers' and all other responses were coded as 'current binge drinkers'. For ordinal responses, binge drinking frequency was collapsed into the following: 'non-current binge drinkers', consistent with the binary variable explained above; 'rare', if respondents indicated binge drinking less than once a month; 'monthly', if reported use was once to three times per month and 'weekly', if use ranged from once a week to daily. These measures are consistent with other research on youth alcohol use [31].

#### *Demographics*

Student covariates were included to reduce potential confounding and are as follows: grade [9–12]; sex (female, male); ethnicity (non-racialized [White], racialized [Black, Asian, First Nations, Métis, Inuit, Latin American or Hispanic, Other]); weekly spending money (\$0, \$1–\$20, \$21–\$100, >\$100, I don't know); truancy (no skipped classes, 1 or more missed classes in the past 4 weeks) and cigarette use (non-smoker, current smoker [reported smoking one or more cigarettes in the past month]). Cannabis use models controlled for binge drinking behaviour and binge drinking models controlled for cannabis use behaviours due to the tendency of substance use behaviours to cluster [4, 34].

### **Analysis**

All analyses were conducted in SAS 9.4 [35]. Any schools that at least partially completed the ranking question were included and any blank priorities were assumed to be a rank of 10 (non-priority). School demographics (income and urbanicity) are shown in [Table II](#) by schools who reported AODU within their top three priorities. Additionally, students with complete data on cannabis use and other

covariates at T1 [ $N = 29\,870$ ], T2 [ $N = 32\,136$ ], T3 [ $N = 29\,523$ ] and T4 [ $N = 28\,219$ ] were included in this study. School demographics (income and urbanicity) were examined among schools reporting AODU within top three priorities in 2015–2018. For student-level analyses, only students with complete data on cannabis use and other covariates at T1 [ $N = 29\,870$ ], T2 [ $N = 32\,136$ ], T3 [ $N = 29\,523$ ] and T4 [ $N = 28\,219$ ] were included in this study.

Chi-square tests were performed to examine the significance of changing priorities among schools participating in two years prior to legalization (T2, T3) and the two years pre–post legalization (T3, T4). Next, school-level prevalence of cannabis or alcohol (T3) use between schools that AODU as a top priority and those who did not in the follow-up year (T4) was examined. Considering the objective to examine AODU priority of secondary schools in response to cannabis legalization in Canada, pre (T3) and post (T4) legalization years were explored. Ordinal mixed model regression analyses were conducted for T1, T2, T3 and T4 to examine whether student cannabis use and binge drinking were associated with school top three priority ranking of AODU.

## Results

**Table I** shows results on the health-related issues ranked by schools as a first priority. Across all time points, the majority of schools indicated mental health as their first priority (70.0–81.5%), followed by AODU (5.9–16.4%) and bullying (6.6–14.7%). Priority ranking for AODU was fairly stable over time; the percentage of schools ranking AODU as a first priority fluctuated by <5% over time (5.9–9.2%), with a small increase in T3 (16.4%), the year preceding cannabis legalization in Canada. **Table II** shows the school neighbour demographics. Across all years, the majority of schools who reported AODU in their top three priorities were medium urban schools and were in a neighbourhood where the median household income was \$50 001–\$75 000.

Among schools at T3 and T4 (pre–post cannabis legalization), 27 schools consistently reported AODU with their top three prioritized health-related issues and five schools maintained AODU as a non-priority. Meanwhile, 12 school prioritized AODU before cannabis legalization but did not include it with their top three priorities post-legalization and 10 schools did not prioritize AODU before cannabis legalization, but reported

**Table I.** Summary of identified first priority areas among Ontario secondary schools' participating in the COMPASS study (2015–2018)

Priority area	School indicated first priority % (n) <sup>a</sup>			
	2015/16 [T1] $N = 65^c$	2016/17 [T2] $N = 68$	2017/18 [T3] $N = 61$	2018/19 [T4] $N = 60$
Alcohol and other drug use (AODU) <sup>b</sup>	9.2 (6)	5.9 (4)	16.4 (10)	8.3 (5)
Mental health	81.5 (53)	73.5 (50)	72.1 (44)	70.0 (42)
Bullying	7.7 (5)	14.7 (10)	6.6 (4)	8.3 (5)
Other <sup>d</sup>	3.1 (2)	5.9 (4)	4.9 (3)	13.3 (8)

<sup>a</sup>Percentages for T1 add to >100% due to one school reporting both mental health and AODU as their first priority. All other schools correctly indicated only one item for each priority level.

<sup>b</sup>Alcohol and other drug use (AODU).

<sup>c</sup>Total  $N$  does not add to 65 as one school reported both mental health and AODU as a first priority.

<sup>d</sup>Other priority areas available to rank included: tobacco use, healthy eating, physical activity, sexual health, sun safety/tanning beds, obesity/overweight and sedentary behaviours.

**Table II.** Characteristics of COMPASS Ontario secondary schools indicating alcohol or other drug use among their top three priorities (2015–2018)

	AODU <sup>a</sup> among top 3 priorities % (n)			
	2015/16 [T1] N = 65	2016/17 [T2] N = 68	2017/18 [T3] N = 61	2018/19 [T4] N = 60
Urbanicity				
Rural	31.3 (15)	30.6 (15)	27.3 (12)	41.0 (16)
Small Urban	18.8 (9)	20.4 (10)	27.3 (12)	20.5 (8)
Medium Urban	47.9 (23)	46.9 (23)	43.2 (19)	38.5 (15)
Large Urban	2.1 (1)	2.0 (1)	2.3 (1)	0.0 (0)
Median school neighbourhood income				
25 000–50 000	4.2 (2)	6.1 (3)	4.5 (2)	7.7 (3)
50 001–75 000	66.7 (32)	61.2 (30)	70.5 (31)	59.0 (23)
75 001–100 000	25.0 (12)	26.5 (13)	22.7 (10)	30.8 (12)
>100 000	4.2 (2)	6.1 (3)	2.3 (1)	2.6 (1)
Total schools	73.8 (48)	72.1 (49)	72.1 (44)	65.0 (39)

<sup>a</sup>Alcohol and other drug use (AODU).

**Table III.** Shifts in alcohol and other drug use as a school priority over time among Ontario secondary schools’ participating in the COMPASS study pre–post cannabis legalization (2016–2019)

	% (n)	
	2016/17–2017/18 [T2–T3] N = 57	2017/18–2018/19 [T3–T4] N = 54
Shifts in AODU <sup>a</sup> among top 3 priorities <sup>b</sup>		
Remained a top priority	52.6 (30)	50.0 (27)
Remained a non- priority	8.8 (5)	9.3 (5)
Introduced as a top priority	21.1 (12)	18.5 (10)
Removed as a top priority	17.5 (10)	22.2 (12)
McNemar test	$P = 0.6698$	$P = 0.8348$

<sup>a</sup>Alcohol and other drug use (AODU).

<sup>b</sup>Schools were classified as having considered AODU a top priority if this health behaviour was ranked within their top three (i.e. 1, 2 or 3) identified priorities out of the 10 options listed.

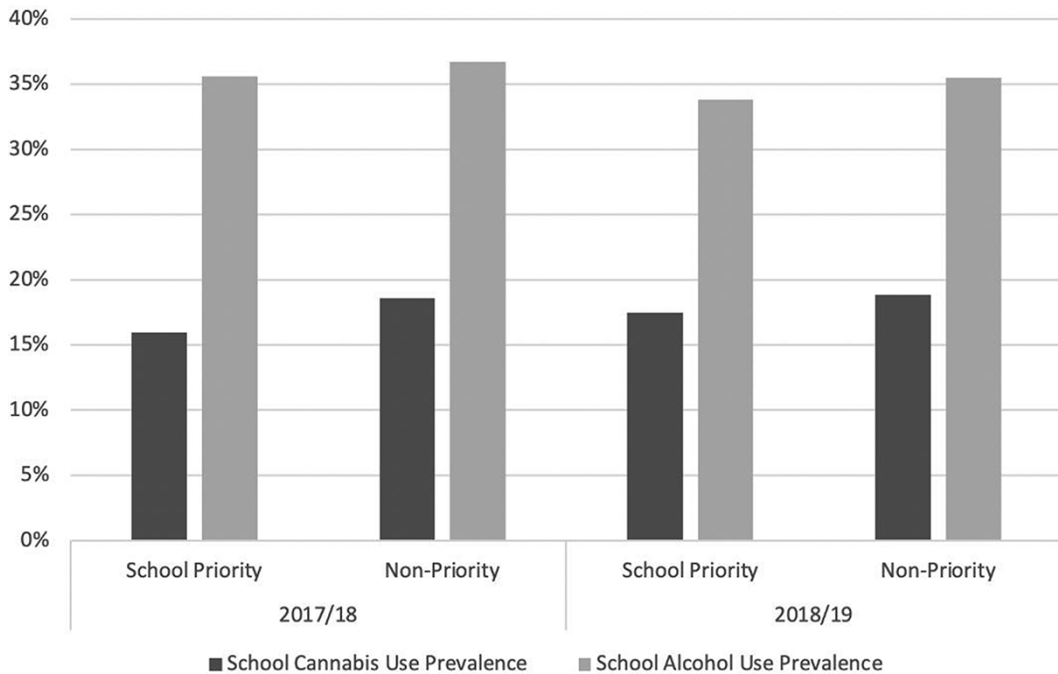
it within their top three priorities post-legalization (Table III). Similar patterns were observed across the 2 years prior to legalization (T2 and T3). Although many schools added AODU as a priority over time, many schools similarly removed it as a priority and the McNemar’s test indicated

**Table IV.** Differences in mean school-level cannabis and alcohol use prevalence by AODU top priority in 2018

	School-level prevalence mean (SD)	
	AODU <sup>a</sup> a top priority in T4	AODU a non- priority in T4
School cannabis use prevalence		
2017/18 [T3]	0.16 (0.06)	0.19 (0.06)
2018/19 [T4]	0.17 (0.05)	0.19 (0.06)
School binge drinking prevalence		
2017/18 [T3]	0.36 (0.11)	0.37 (0.08)
2018/19 [T4]	0.34 (0.10)	0.36 (0.09)

<sup>a</sup>Alcohol and other drug use (AODU).

no significant differences between the groups (T2–T3 [ $P = 0.6698$ ] and T3–T4 [ $P = 0.8348$ ]). In Table IV, the average school cannabis use and binge drinking prevalence among students are reported by whether AODU was indicated as a leading priority in T4 by schools. For example, in T3 the average school cannabis use prevalence at schools where AODU was a top priority was 16% whereas it was 19% at non-priority schools. Figure 1 demonstrates school cannabis use and binge drinking prevalence by school priority for 2017/18 and 2018/19. There were no significant differences in school prevalence of cannabis or



**Fig. 1.** Mean school-level cannabis and alcohol use prevalence by AODU top priority in 2017/18–2018/19 among schools and students participating in the COMPASS Study. AODU = Alcohol and other drug use.

alcohol use in T3 or T4 between schools that indicated AODU as a leading priority in T4 compared to schools that did not.

Lastly, [Table V](#) examines the association between student cannabis use or binge drinking and rank of AODU as a health-related school priority over time. In general, neither student cannabis use nor binge drinking were significantly associated with AODU being a leading priority at a school across the repeat cross-sectional waves of data examined; the only exception was observed in T2 whereby students were more likely to use cannabis (OR: 1.19, 95% CI: 1.01–1.39) if they attended a school that indicated AODU was a leading priority, however, this association was modest. The Intraclass Correlation Coefficient (ICC) for student cannabis and alcohol use ranged between 2.01% and 5.03%, suggesting that in this sample, the school a student attended accounted for 2–5% of the variation in cannabis use/binge drinking

**Table V.** Adjusted odds ratio estimates from ordinal mixed models examining association between student-level substance use (ordinal) and AODU priority status (binary)

	AODU <sup>a</sup> top priority status Adjusted odds ratio <sup>b</sup> (95% CI)	
	Student cannabis use	Student binge drinking
2015/16 [T1]	0.97 (0.82, 1.14)	0.98 (0.81, 1.20)
2016/17 [T2]	1.19 (1.01, 1.39)*	1.04 (0.87, 1.24)
2017/18 [T3]	0.99 (0.82, 1.19)	1.05 (0.87, 1.27)
2018/19 [T4]	1.09 (0.90, 1.31)	1.09 (0.89, 1.33)

<sup>a</sup>Alcohol and other drug use (AODU).

<sup>b</sup>Models adjusted for: sex, grade, ethnicity, truancy, urbanicity of school location and median income of school location. Cannabis use models controlled for binge drinking behaviour and binge drinking models controlled for cannabis use behaviours. All values were round to the nearest two decimal places.

\*Significance at  $P < 0.05$ .

behaviours observed above and beyond variation in individual student characteristics.

## Discussion

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This study examined how Ontario secondary schools prioritized student health concerns, with a focus on drug and alcohol use, including whether priorities have changed over the period surrounding cannabis legalization in Canada, and if school prioritization of substance use was associated with student-reported cannabis or alcohol use. Mental health remains the leading priority in the most Ontario schools, followed by substance use and bullying. Overall, no significant changes in school prioritization of substance use pre–post cannabis legalization were found. Also, school prioritization of substance use was not significantly associated with student-reported cannabis or alcohol use in the prior or same school year. These findings suggest that while AODU is a school health priority, it is not a first priority among many schools.

While AODU was ranked as a first priority by relatively few schools in comparison to mental health, prioritization of AODU nearly tripled (16.4% in T3 compared to 5.9% in T2) in the school year preceding legalization, and then dropped off again after cannabis was legalized (8.3% of schools in T4). However, our findings did not demonstrate statistically significant differences across shifting school priorities for AODU before and after cannabis legalization. It is possible that schools and administrators were hopeful that the cannabis legalization would address many of the health-related concerns surrounding AODU, considering the federal legalization of cannabis in Canada was enacted to protect youth by reducing access to cannabis (via the illegal market) and minimizing associated harms [36]. Alternatively, school administrators may be less concerned about substance use, given that other behaviours more frequently occur within the school context and hours (e.g. bullying).

While AODU was commonly ranked within a school's top three most important health-related issues, the large majority of schools consistently ranked mental health as their first priority over time. This priority rank likely corresponds to the

imperative needs of the student population, considering that poor mental health is both prevalent and increasing among Canadian youth while the same trends in substance use have not been observed over time [37]. It is also possible that school administrators consider mental health and substance use as interconnected health issues and recognize that the mental health policies, programs and other strategies implemented at their school may incorporate or indirectly address student AODU. Additionally, schools may naturally defer to student mental health as a priority as it impacts all youth and is positively associated with health behaviours, including lower levels of substance use [38–40], psychosocial and physical health and improved academic outcomes [41–44]. Therefore, schools might prioritize mental health as an inclusive and comprehensive approach to supporting student health overall. Lastly, mental health has been a universally acknowledged health priority by school boards in Ontario and across Canada [45, 46] and individual school-reported priorities may be an indication of what is recommended within the annual school board improvement plans administered by school boards to schools [19]. Prioritizing mental health may reflect the true needs of schools' student populations or be seen as an effective upstream approach to improving overall student health; these findings suggest that school-specific priorities did not significantly shift in the midst of major drug reform in Canada.

It might be expected that either schools with higher levels of substance use would be more likely to have AODU within their top priorities, or substance use may be higher among students in schools where AODU is not a priority. However, in this study, school prevalence of student cannabis use or binge drinking was not significantly different between schools that indicated AODU within their top three priorities and schools that did not. There are several plausible explanations for why AODU priority within a school may not have been associated with student substance use behaviours. First, schools are typically required to link with board priorities that are described in school improvement plans, and as such, reported health concerns



may be more reflective of board-level concerns rather than school specific health concerns. In cases where school boards indicate mental health as a priority, schools who also perceive substance use as a concern among their students may take the approach of addressing AODU through a mental health lens or upstream approaches [47]. Additionally, school priority ranking may be an inaccurate portrayal of true health concerns within their student population and it is possible that some schools' administrators may not be aware of the health behaviours of their students. In Ontario, the Ministry of Education requires schools to participate in a School Climate Survey at least every two years [48], where data on student health and wellbeing and the school environment is collected. Schools can use any existing surveys as long it meets the requirements of a School Climate Survey [48]. It is critical to make these data not only available to schools, but also provide schools with the tools and support to identify and implement appropriate changes based on survey results. To promote evidence-based decision-making by schools, researchers responsible for implementing School Climate Surveys connect with school administrators to identify issues within their student population and facilitate strategic planning and translation of research evidence into actionable items (e.g. implementing current evidence-informed and context-appropriate policy, practice and program changes). Schools may consider partnering with surveillance research groups that meet the Ministry of Education requirement of a School Climate Survey, but also provide access to knowledge brokers to implement meaningful change (e.g. The COMPASS Study).

Regardless of whether school administrators are aware of health-related issues among their students, implementation of successful programming to manage risk behaviours is notoriously difficult. Schools face many barriers trying to meet scholastic demands, as well as health promotion and preventative actions, including a lack of resources [21–23] time and inadequate understanding of evidence-informed programming [49]. Public health units and external

organizations (e.g. Ophea ([www.ophea.net/](http://www.ophea.net/)) and PHE Canada ([www.phecanada.ca/](http://www.phecanada.ca/))) can support schools in delivering comprehensive and coordinated health initiatives tailored to individual school needs. Further to this, future efforts may also consider building capacity around data literacy among school administrators and enable evidence-informed decision-making towards setting priorities and resource allocation. Comprehensive school health engages the entire school community (e.g. students, teachers, administrators, parents and public health authorities) to identify priorities and context-appropriate actions. As well, this approach encourages student leadership and school autonomy as key change agents in improving school health and climate [17]. Programs such as Healthy Schools Certification [50] can enable schools to implement a comprehensive school health approach and is in alignment with the Ministry of Education's Foundations for a Healthy School [51].

### **Strengths and limitations**

This study is strengthened by measures of both student- and school-level data and data across four waves, surrounding cannabis legalization in Canada. This study, however, has important limitations. Notably, data collected examined alcohol and other drug as a single/grouped priority, and it is possible that administrators may view and rank these behaviours distinctively. This study does not examine whether schools prioritizing AODU implemented any programs, resources, or policies to mitigate student alcohol and cannabis use, and as such, may contribute to our null findings. While school contacts are encouraged to consult other school staff and/or complete the survey as a group to support the validity and reliability, the elected contact to complete the survey may not be aware of the health concerns among their student population. Ideally, data from additional follow-up years would have been examined to evaluate the impact of cannabis legalization on school decision-making, however, data collected during the 2019–20 school year and later are impacted by COVID-19 and

resulting school closures; as such, additional waves were not considered. This study was unable to examine or adjust for mental health measures given that data were available starting in 2017/18 (T3). Lastly, the small sample size of schools who participated in all data collection years made it challenging to conduct trend analyses. Future COMPASS research may consider using data from schools in other provinces to obtain a sample size that allows for trend analyses to be explored.

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### Conclusion

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Mental health was consistently identified as the leading priority among various student health concerns by most participating Ontario secondary schools across the four years of the study. Bullying and AODU represented the next most frequently identified priorities. No significant changes to school AODU priorities were observed pre–post cannabis legalization nor was school prioritization of AODU associated with student cannabis and alcohol use behaviours. Results do not support our hypothesized changes in school priorities in relation to the heightened awareness and discourse regarding cannabis and the expectations of changes in cannabis use behaviours following legalization. The lack of association between student substance use and school prioritization suggests that schools are facing many health priorities and may benefit from leveraging research data and external organizations and consistent process steps to help schools identify and address health concerns among their student population.

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### Funding

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The COMPASS study has been supported by a bridge grant from the CIHR Institute of Nutrition, Metabolism and Diabetes (INMD) through the “Obesity – Interventions to Prevent or Treat” priority funding awards (OOP-110788; awarded to SL), an operating grant from the CIHR Institute

of Population and Public Health (IPPH) (MOP-114875; awarded to SL), a CIHR project grant (PJT-148562; awarded to SL), a CIHR bridge grant (PJT-149092; awarded to KP/SL), a CIHR project grant (PJT-159693; awarded to KP), and by a research funding arrangement with Health Canada (#1617-HQ-000012; contract awarded to SL), a CIHR-Canadian Centre on Substance Use and Addiction (CCSA) team grant (OF7 B1-PCPEGT 410-10-9633; awarded to SL), a project grant from the CIHR Institute of Population and Public Health (IPPH) (PJT-180262; awarded to SL and KP). A SickKids Foundation New Investigator Grant, in partnership with CIHR Institute of Human Development, Child and Youth Health (IHDCYH) (Grant No. NI21-1193; awarded to KAP) funds a mixed methods study examining the impact of the COVID-19 pandemic on youth mental health, leveraging COMPASS study data. The COMPASS-Quebec project additionally benefits from funding from the Ministère de la Santé et des Services sociaux of the province of Québec, and the Direction régionale de santé publique du CIUSSS de la Capitale-Nationale.

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### Conflict of interest statement

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None declared.

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