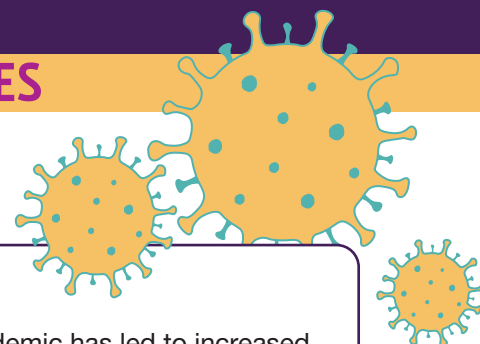


Problematic Alcohol Use

EXAMINING THE SOCIETAL CONSEQUENCES OF THE COVID-19 PANDEMIC



Key Findings:

- Population survey and alcohol sales suggest that the COVID-19 pandemic has led to increased alcohol consumption among youth and adults in BC.
- Since the start of the pandemic, the self-reported consumption and alcohol sales across BC have increased, but support systems and treatment programs for alcohol use disorders became more difficult to access during COVID-19 due to public health measures to prevent transmission.
- The BC COVID-19 SPEAK Survey results show alcohol consumption during COVID-19 in BC is much higher than what has been reported nationally. The increase in alcohol consumption in BC shows high rates among those aged 18 to 49 years, and those with higher levels of education and household income.

Situation

Public health and other response measures introduced to reduce the spread of COVID-19 have impacted the general population, including increased stress, increased social isolation, less income and/or economic stability, disruptions to daily routines, and boredom. These factors may contribute to increased use of alcohol and other substances, and a potential corresponding decline in mental health.

Background

There is a continuum of alcohol use, from low-risk drinking where consumption is safer (though not risk-free),¹ to at-risk drinking, problematic use, and finally to dependence.² *Alcohol use disorders* (AUD) are clinically diagnosed conditions related to high-risk alcohol consumption (e.g., dependence) that are often underreported but can cause considerable harm to the individual and those around them (e.g., health outcomes like cancer

and injuries; premature death and disability; economic, health, and social costs; and intimate partner violence).^{3,4} There are additional risks for women in their childbearing years, as well as those who are pregnant (e.g., fetal alcohol spectrum disorder (FASD), stillbirth).⁵

In the years leading up to the COVID-19 pandemic, alcohol consumption was increasing more in BC than in the rest of Canada: it has continued to increase since 2013, whereas other Canadian jurisdictions report stable or declining rates. In BC in 2017/2018, the volume of pure ethanol consumed per person on a yearly basis among those 15 years and over rose to 9.44L. This is the highest rate of consumption in 16 years and is higher than the national average of 8.2L.⁶ Additionally, in 2017, revised liquor legislation came into effect in BC, expanding alcohol availability.⁷

Youth in BC reported high levels of alcohol use before COVID-19. According to the 2018 BC Adolescent Health Survey (BCAHS), among youth age 12-17 who drank alcohol the Saturday prior



to the survey, 61% reported binge drinking.^a The 2018 BCAHS also found that females were more likely to binge drink than males (63% compared to 59%, respectively).⁸

The World Health Organization reports that alcohol use may increase susceptibility to COVID-19 because it is associated with risk-taking behaviours and can weaken the immune system.⁹ If someone with AUD contracts COVID-19, they may be at a higher risk for infection, severe illness, and worse health outcomes.^{10,11,12}

During COVID-19, new changes in the Liquor Control and Licensing Regulations were introduced. These changes were expected to ease financial burdens in the hospitality sector, as well as to ensure an available supply of alcohol to minimize withdrawal risks for those with AUD. Some examples have included:

- Allowing licensed establishments (e.g., restaurants) to sell and deliver packaged liquor for off-site consumption with a purchased meal;
- Extending store hours and delivery services for buying alcohol from 7 a.m. to 7 p.m.; and
- Approving a temporary wholesale pricing model that allows liquor licensees to buy beer, wine, and spirits at lower cost.

Some COVID-19 response measures (e.g., limiting availability of in-person community services) have reduced or discouraged access to related health care and addiction services (including clinical treatment and social supports) for those with AUD, which may lead to worsened AUD and/or harmful effects on health.¹³ However, some support services continued to be available through explicit exemptions in the public health orders to allow support groups (e.g., Alcoholics and Narcotics Anonymous) to continue in-person meetings where safe to do so.¹⁴ Additionally, some community-based services transitioned to holding online meetings.^{15,16}

An increase in problematic alcohol use in BC will likely lead to increased health concerns during and after the pandemic, if trends continue. This could include: increased mental health concerns;¹⁷

increased intentional and unintentional injury including self-harm, suicide¹⁸ and gender-based violence or intimate partner violence;^{12,19} perinatal health impacts for pregnant/new parents and infants;²⁰ more children and youth experiencing or witnessing alcohol/substance use; child abuse or neglect;²¹ and poor long-term physical health outcomes (e.g., cancers, damage to liver, heart, pancreas).²²

Findings

Alcohol consumption may be associated with declining mental health during COVID-19. During the pandemic, several sources show deteriorating mental health (e.g., increased anxiety, stress, depression, loneliness²³) as well as an increase in alcohol consumption.^{24,25,26} Those experiencing increased mental distress and overall stress during the pandemic (see UniCon report – Mental Health) may increase their consumption and/or reliance on substances, including alcohol, to cope. For example, in the Canadian Perspectives Survey Series conducted March 29 to April 3, 2020, nearly 30% of respondents reported having “fair” or “poor” mental health and having increased their alcohol consumption, while only 10% of those reporting better mental health reported increased alcohol consumption.²⁷ The subsequent survey conducted January 25-31 found similar results.²⁸ It is important to note that there are also other factors that are related to increased alcohol use during the pandemic that are not necessarily directly linked to mental health. The Canadian Centre on Substance Use and Addiction reported that survey respondents cited stress (38%), boredom (44%), lack of regular schedule (48%), and loneliness (17%) as the top four reasons for increased alcohol use since the start of May 2020 compared to pre-pandemic times.²⁹

In 2020, alcohol sales (a measure for alcohol consumption) were higher than recorded in 2019. Table 1 shows the comparison of sales in 2019 and 2020. It shows the percentage change were particularly high in March (10.2%), July (9.1%), and September (12.9%). Sales slightly decreased

a “Binge drinking” is when males consume four or more alcoholic drinks within a couple of hours and females consume three or more.

for the months of April (-1.1%), May (-2.0%) and August (-0.6%) as compared to the same months in 2019.³⁰ The increases seen in February and March may be partially due to panic-buying and stocking up in fear that stores would run out or close. Alcohol sales were highest at private liquor

stores and government stores from February to April, while sales at bars and restaurants were significantly lower during the same time period in comparison to 2019 sales.³¹ The increases in July and September may be related to the easing of public health measures.

Table 1

Comparison of Annual Alcohol Sales (\$ million) and Average per cent Increase in BC during the First Ten Months of 2019 and 2020				
	2019 (\$ million)	2020 (\$ million)	\$ Change (\$ million)	% Change
January	228.04	228.99	0.94	+0.4%
February	232.51	247.66	15.14	+6.5%
March	274.45	302.40	27.96	+10.2%
April	291.90	288.67	-3.23	-1.1%
May	325.18	318.67	-6.51	-2.0%
June	343.98	348.92	4.94	+1.4%
July	357.36	390.05	32.69	+9.1%
August	358.43	356.41	-2.02	-0.6%
September	291.83	329.45	37.62	+12.9%
October	306.85	319.26	12.41	+4.0%

FIGURE 1

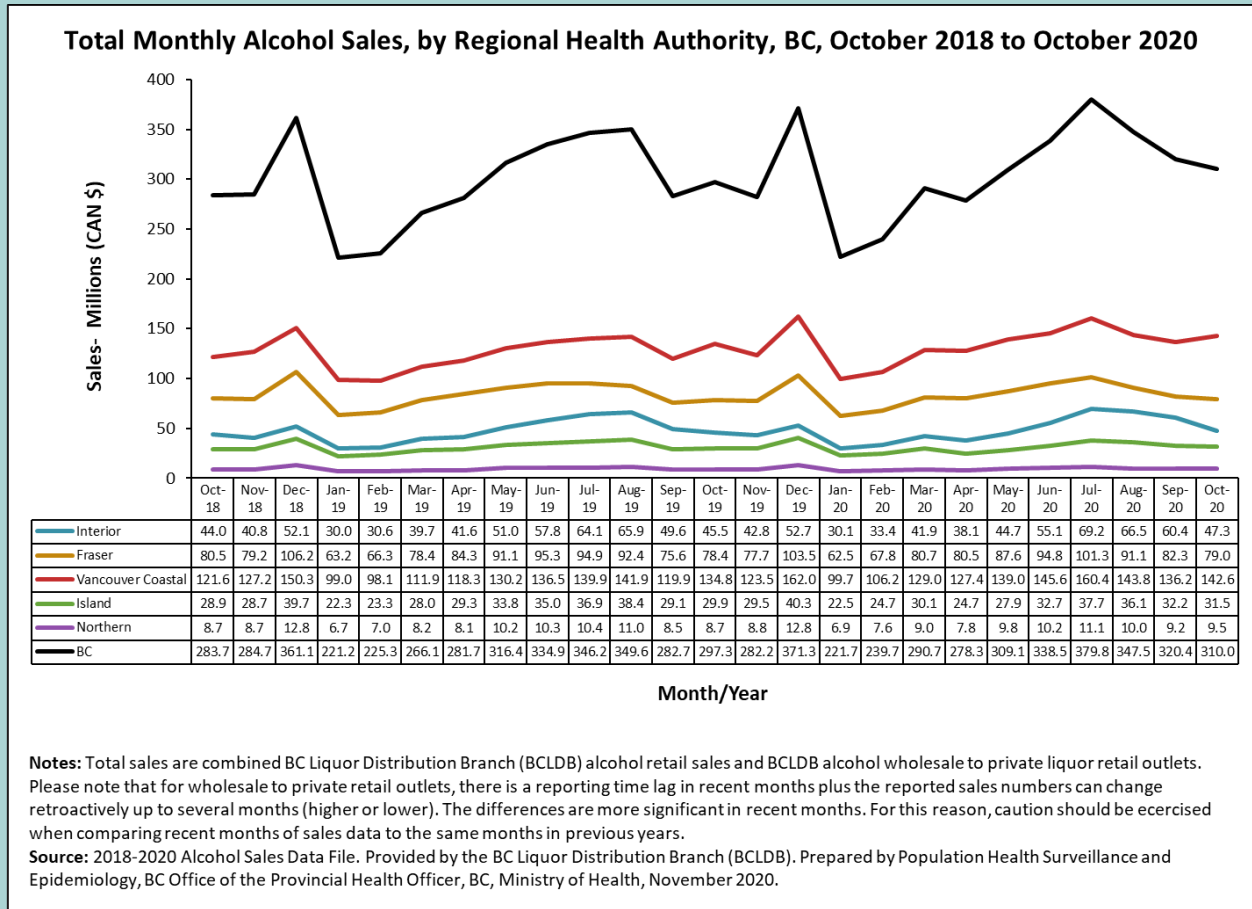


Figure 1 shows alcohol sales by health authority in millions of Canadian dollars (\$Millions) and shows similar patterns across the regions of BC. All health authority regions saw an overall increase in sales from January 2020 to July 2020, followed by slight declines afterwards; this is consistent with the pattern seen in 2019. Sales were highest across Vancouver Coastal health region with lowest sales in the Northern and Island regions.

FIGURE 2

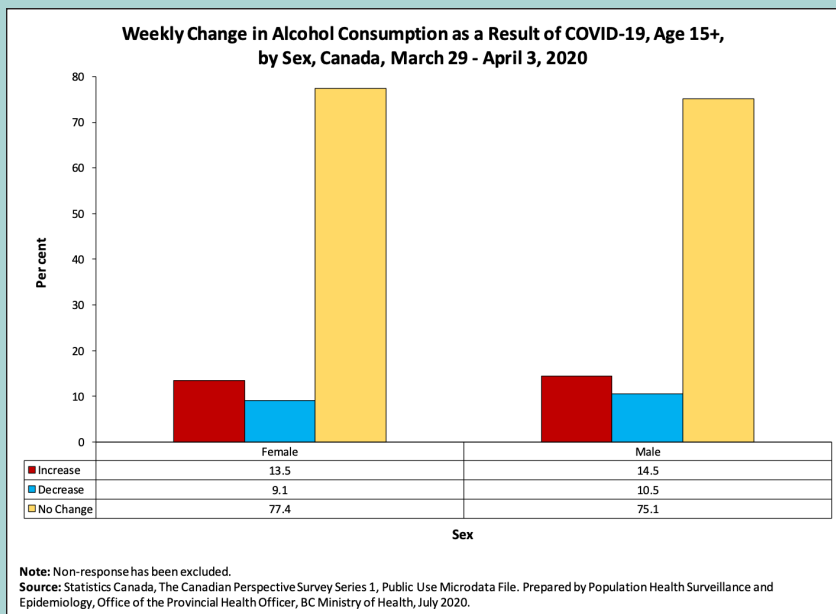
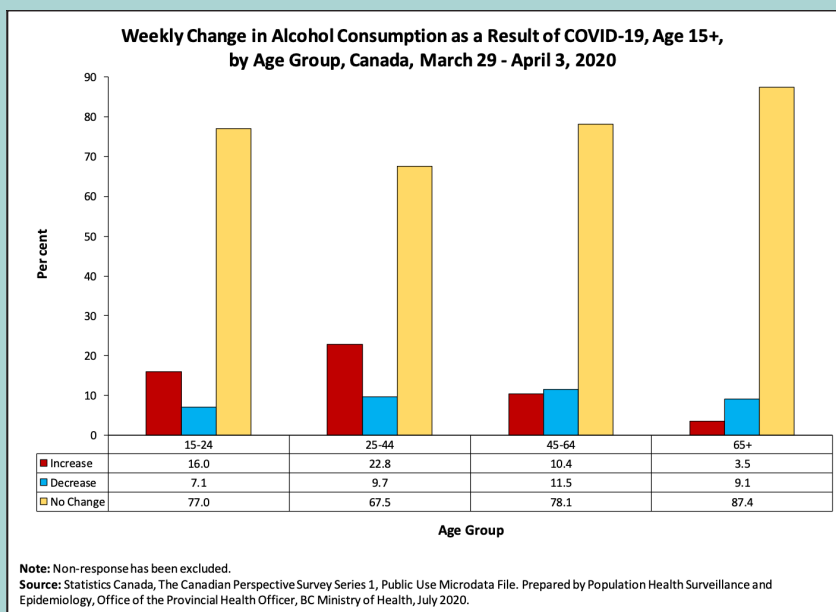


FIGURE 3

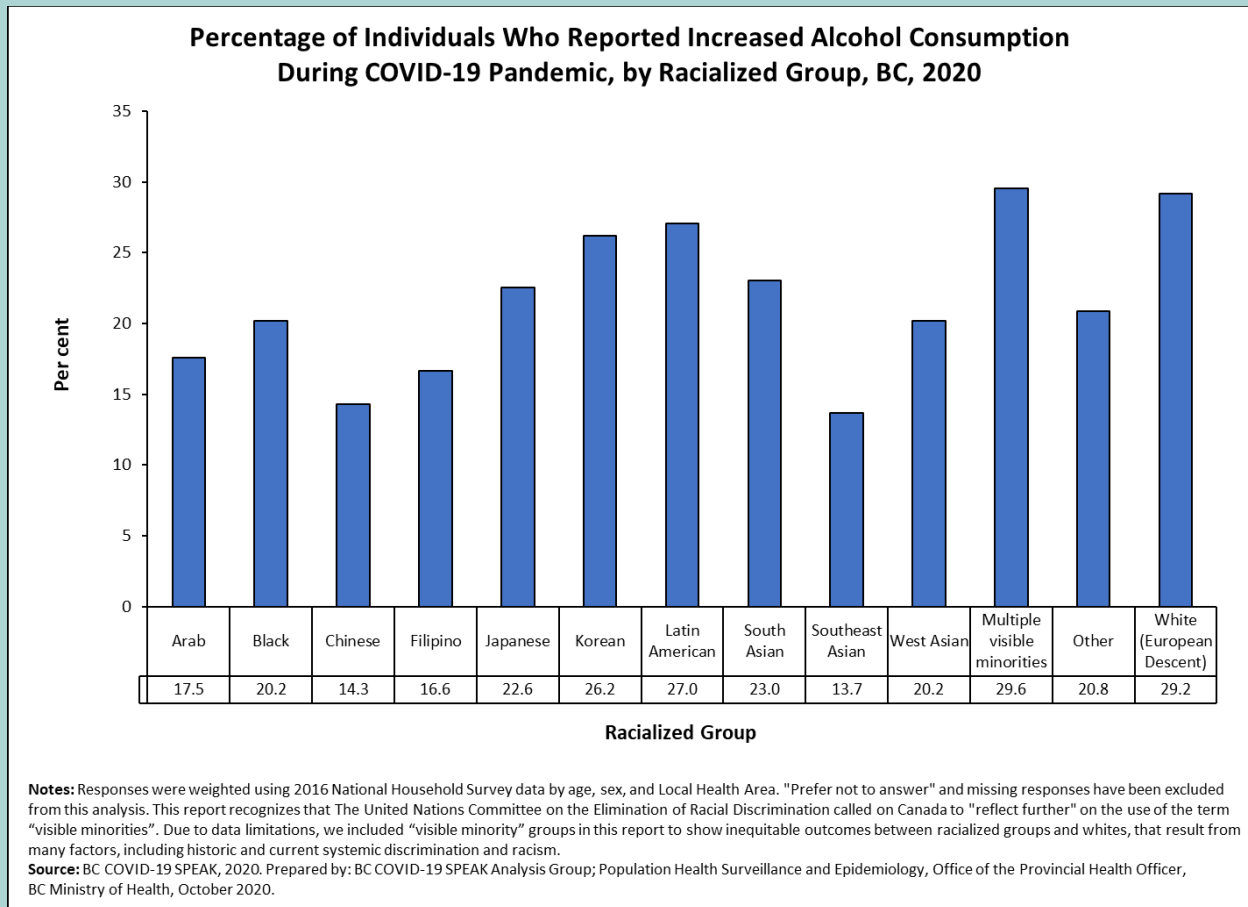


In a Statistics Canada survey at the end of March 2020, 14.0% of Canadians 15 years and older increased their weekly alcohol consumption during the initial weeks of COVID-19 public health measures.²⁷ The same survey found that Canadians reporting poorer mental health are more likely to have increased their use of alcohol during COVID-19, compared to those reporting “excellent”, “very good” or “good” self-perceived mental health.²⁷

Figures 2 and 3 show the percentage of respondents of the same national survey who reported their alcohol consumption increased, decreased, or did not change. Figure 2 shows that Canadian males and females reported similar patterns. Analyses by age (Figure 3) shows that the highest increases in alcohol consumption were reported by those age 15-24 years (16.0%) and 25-44 years (22.8%).

FIGURE 4

NOTE TO READER: Revisions to this chart are forthcoming, to revisit categorization of racialized groups in analyses.



Figures 4 to 7 show results from the BC COVID-19 SPEAK Survey, including analyses of alcohol consumption by racialized group (Figure 4), household income (Figure 5), education level (Figure 6), and population density (Figure 7). SPEAK Survey analyses by sex and gender are forthcoming and will be included in future reports.

Figure 4 shows differences in self-reported alcohol use across racialized groups in BC. The highest increases in alcohol consumption were reported among those who identify as multiple visible minorities (29.6%), White (29.2%), Latin American (27.0%), and Korean (26.2%). The lowest increases were reported among Southeast Asian (13.7%), Chinese (14.3%), Filipino (16.6%), and Arab (17.5%) populations.

FIGURE 5

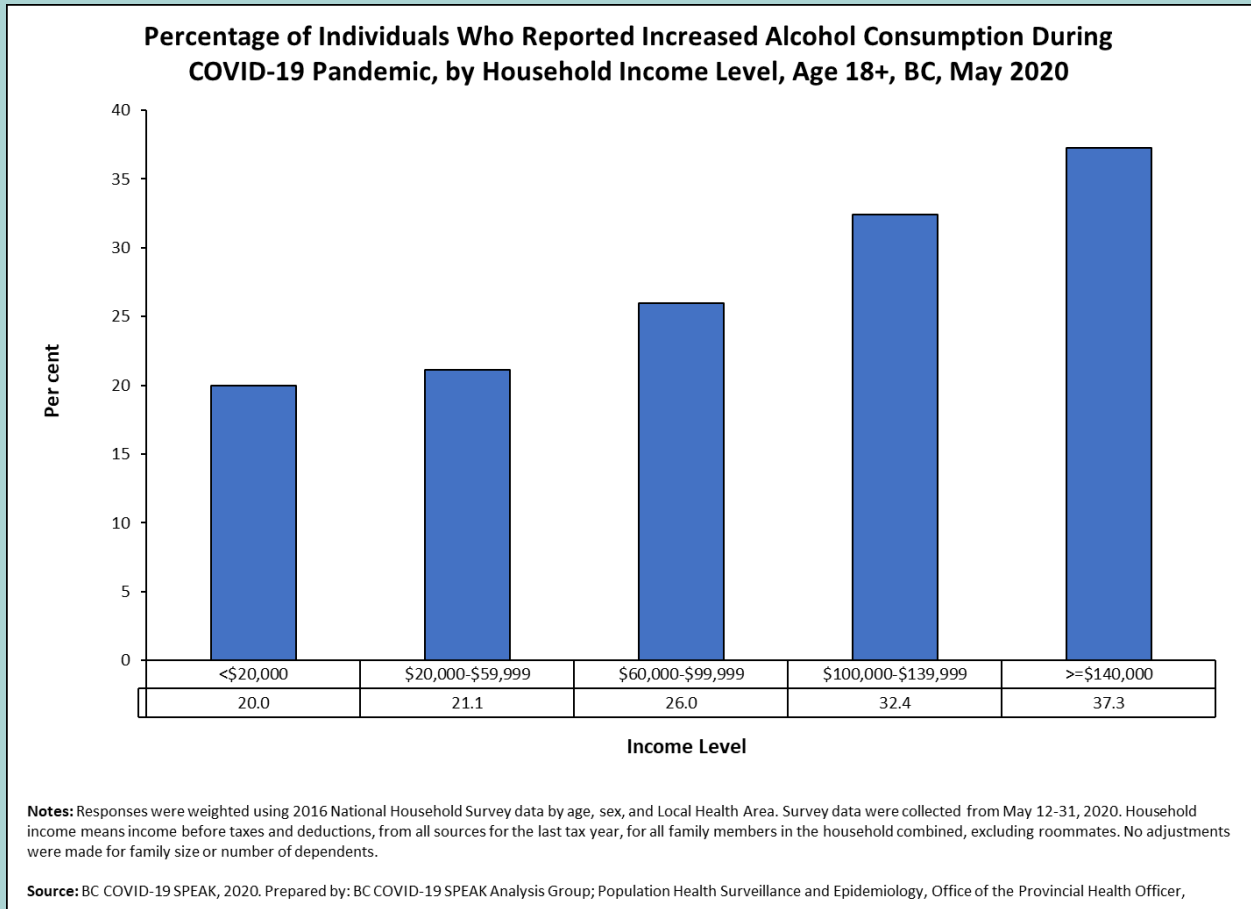


Figure 5 shows BC COVID-19 SPEAK Survey respondents who reported increased alcohol consumption, with analyses by household income level. It illustrates that a higher proportion of households who reported higher household incomes reported increased alcohol consumption. This ranged from 20% in the lowest household income group (reporting <\$20,000) to 37.3%, in the highest income group (\geq \$140,000).

FIGURE 6

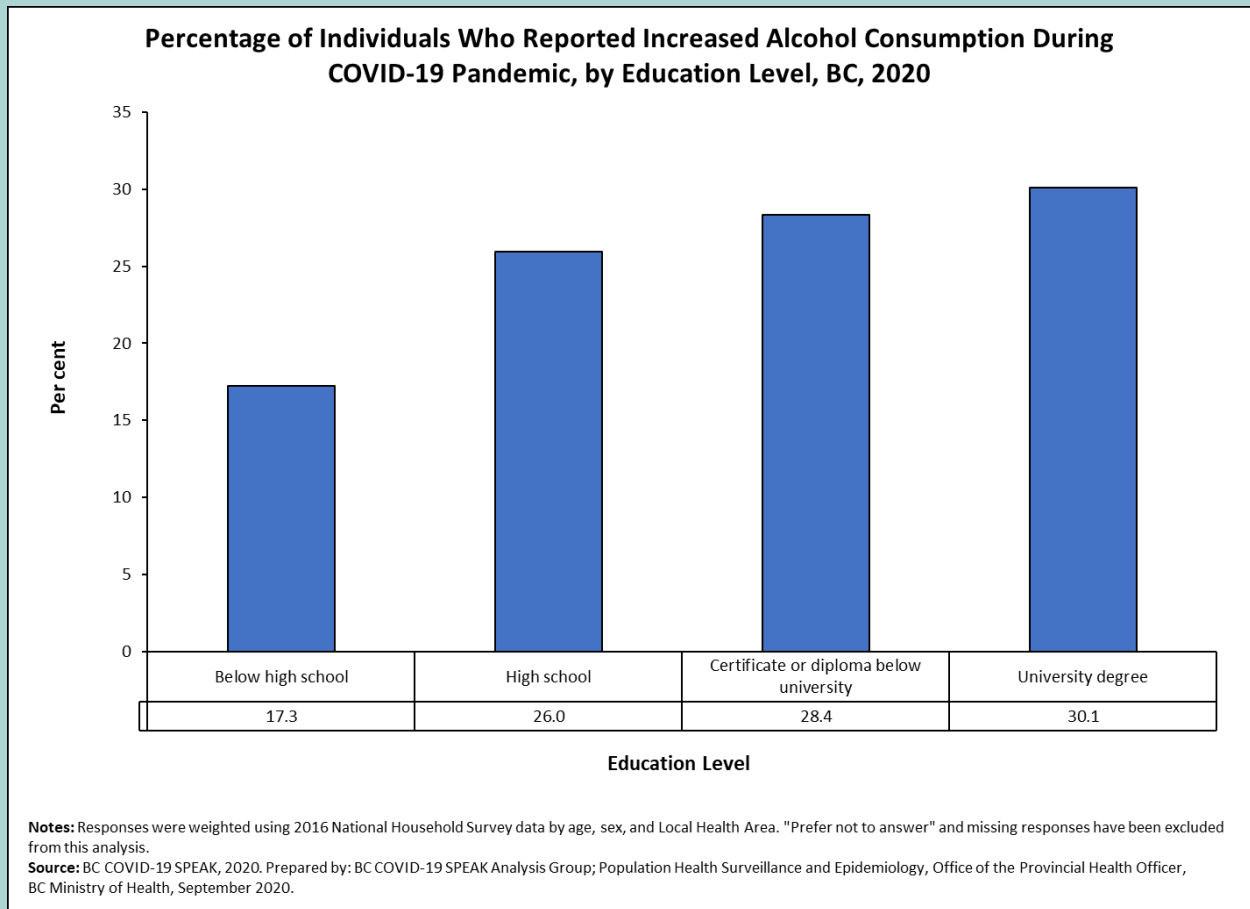


Figure 6 shows BC COVID-19 SPEAK Survey respondents who reported increased alcohol consumption, with analyses by education level. It reveals a pattern of increasing self-reported alcohol use as level of education increased: 30.1% of those with university degrees reported increased alcohol consumption, whereas only 17.3% of those not having completed high school reported an increase in consumption.

FIGURE 7

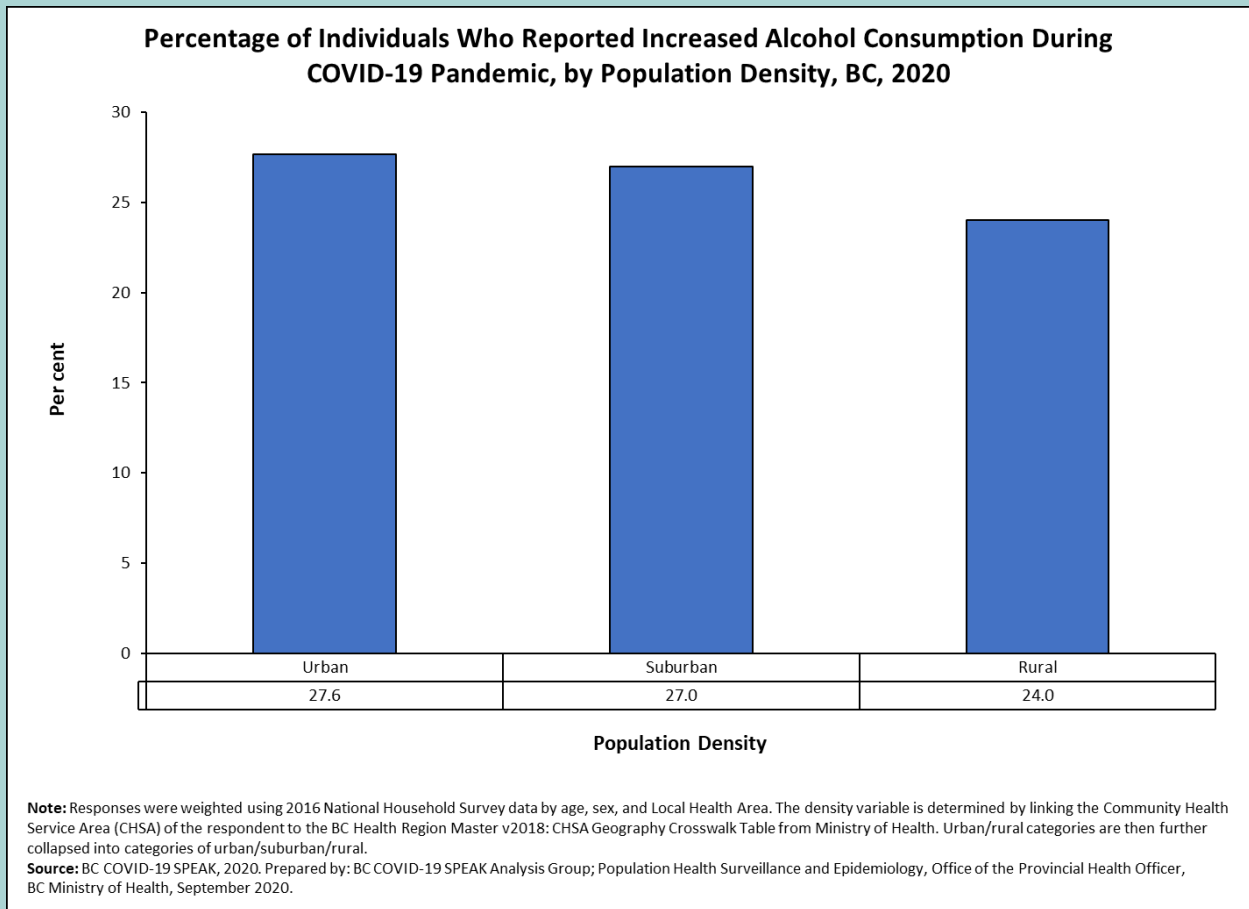


Figure 7 shows BC COVID-19 SPEAK Survey respondents who reported increased alcohol consumption, with analyses by population density. It shows almost no difference in self-reported alcohol consumption between those living in urban and suburban areas (27.6% and 27.0%, respectively), during the first months of the pandemic. Slightly fewer respondents in rural areas reported increased alcohol consumption (24%).

A national survey found that 20.5 % of Canadians who drink alcohol and have been staying home more due to COVID-19, drink alcohol *more often* than before the pandemic.²⁹ This suggests that (when combined with results and sales data discussed above), the issue of alcohol consumption during the pandemic reflects the population drinking both more frequently and in greater amounts.

Equity Considerations

As described above, youth, females, and those with poorer mental health or with AUD may be especially vulnerable for alcohol-related risks during COVID-19.^{32,33,34} People with AUD are vulnerable both to increased alcohol consumption as well as increased risk of poor health outcomes due to COVID-19.¹² Many of the clinical and social supports for those with AUD have been closed or have moved to a virtual care model, which creates inequitable barriers for those without access to related technologies (e.g., financial barriers to technology, rural and remote with no access to in-person or virtual care).¹²

Indigenous Peoples and Reconciliation

Due to deeply rooted ideologies of settler supremacy, and historical and contemporary colonial practices, many Indigenous peoples did not enter the COVID-19 pandemic on equal footing to the impacts of COVID-19 and associated public health measures. Indigenous peoples and communities faced a sudden increase in pre-existing stigma, racism, and systemic barriers, which can influence patterns of alcohol consumption. In rural or remote areas, or on reserve, there may be a sudden or unexpected shortage of safe alcohol supply, as well as a reduction in available treatment options; consequently, those who regularly consume alcohol face the potential risk of withdrawal. Meanwhile, more people may use alcohol and other substances to cope with the compounding stressors of living during the COVID-19 pandemic.

Within the Examining the Societal Consequences Project, the stories of Indigenous peoples' experiences with alcohol use during the COVID-19 pandemic are being told in accordance with Indigenous data governance principles, including self-determination; therefore, more information is available on this topic in the reports prepared in collaboration with Indigenous partner organizations (see the "Indigenous Health and Wellness" tab on the Examining the Societal Consequences Project website to access this report).

Actions Initiated or Planned to Address Unintended Consequence

Initiated actions:

- Ministry of Mental Health and Addictions (MMHA): MMHA has made new funding available for substance use treatment and supportive recovery services which have experienced financial hardship due to COVID-19 "*Substance Use: Treatment and Recovery COVID-19 Support Grant Program*".³⁵
- BC Centre on Substance Use (BCCSU): in April 2020, the BCCSU released new guidance on AUD management during COVID-19, "*COVID-19: Information for Health Care Providers Regarding Alcohol Use Disorder and Withdrawal Management*".³⁶
- Canadian Institute for Substance Use Research (CISUR): The CISUR has released new guidelines "*Safer Drinking Tips during COVID-19*".³⁷
- In January 2021, the federal government announced an investment of \$1.5 million over three years awarded to the BCCSU to develop the "*National Guideline for the Clinical Management of High-Risk Drinking and Alcohol Use Disorder*".³⁸
- Recent and currently ongoing research related to alcohol consumption during COVID-19 is listed in Appendix B.

Considerations for Action

More work is needed to understand the short- and long-term impacts of increased alcohol consumption in BC, including the impacts on mental and physical health, links to other unintended consequences (e.g., violence, injuries), and the altered or increased need for support services.

1. British Columbians will continue to be vulnerable, now and into the future, to the impacts of policy changes that have increased access to and availability of alcohol.
2. Re-assess alcohol policy and legislation changes, and revise changes introduced in 2017-2020 to support less hazardous drinking. Understanding the full impact of ongoing policy changes on access to and availability of alcohol will be critical in building BC back better.
3. Consider other health care actions including: health education and other prevention campaigns; broadening screening and brief intervention in primary care for the population for at-risk drinking, with additional supports for people living with AUD; improving access to virtual supports for those requiring alcohol treatment services.³⁹
4. Conduct ongoing comprehensive monitoring of COVID-19 impacts on alcohol consumption in BC, including longer term effects resulting from increased consumption.
5. Pursue action to implement the pricing policies of alcohol and its economic availability as recommended in the 2008 BC Provincial Health Officer report “*Public Health Approach to Alcohol Policy*”.⁴⁰ These recommendations can help to reduce the already high rates of alcohol use in BC and curb the increases seen since March 2020.

Appendix A: Data methodology notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Statistics Canada The Canadian Perspective Survey Series 1

The frame for surveys of the Canadian Perspective Survey Series (CPSS) is Statistics Canada's pilot probability panel. The counts represent population estimates of the number of people within each age group/sex. The probability panel was created by randomly selecting a subset of the Labour Force Survey (LFS) respondents. Therefore, the survey population is that of the LFS, with the exception that full-time members of the Canadian Armed Forces are included. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; the institutionalized population, and households in extremely remote areas with very low population density. Data collection occurred between March 29, 2020 and April 3, 2020.

The LFS is a household survey carried out monthly by Statistics Canada. The survey is conducted in 54,000 households across Canada. Information is obtained from all members of the selected household who are 15 years old and older, whether they work or not.

3. BC COVID-19 SPEAK Survey

Survey administration details: The BC COVID-19 SPEAK Survey was primarily an online survey administered from May 12, 2020 to May 31, 2020 across British Columbia. A call centre was also created to support individuals who wished to take the survey with assistance. The survey was available in English and Simplified Chinese (online), with language guides in downloadable electronic format available for 9 other languages (Arabic, American Sign Language, Farsi, French, Korean, Punjabi, Spanish, Traditional Chinese and Vietnamese). All other languages were available through the call centre from PHSA Provincial Language Services.

Sampling details: The target population for the survey was residents of British Columbia who were 18 years of age or older. In order to achieve a large and representative sample, a response target of 2% of the urban population and 4% for rural/remote communities were set as determined by the Community Health Service Area (CHSA) density designation. Targets were also established for age, gender, income, education and ethnicity by each geographic area. Progress towards these targets was monitored daily and purposeful promotion and stakeholder outreach was done in order to better reach certain geographies and population demographics. Population targets were surpassed for each Regional Health Authority. However, not all sub-regions or demographic groups by geography did reach their target. Specifically, rural communities, populations with lower education, lower incomes, and some visible minorities were less reached and were prioritized for outreach. The final analytical dataset, which only included surveys where a Health Service Delivery Area geography, age, and gender were assigned and where the respondent must have completed at least 33% of the survey, contained 394,382 responses.

Weighting details: Statistical weighting is often used in large surveys to ensure that the sample of collected responses reflects the overall target population. This type of weighting compensates for the fact that certain demographics are less likely to respond to a survey. By establishing detailed socio-demographic targets at the outset for each geographic area of interest within the survey area, it allowed for more focussed participant recruitment with the ultimate benefit of applying smaller weights. The final BC COVID-19 SPEAK Survey sample was weighted using 2016 Canadian Census data by geography (HSDA, LHA, and CHSA) for age, sex, education level, and ethnicity to account for residual differences in sample demographics and to ensure that the sample is as representative as possible of the overall geographic population that is being reported on.

Limitations: BC COVID-19 SPEAK Survey is a non-randomized voluntary survey subject to self selection bias among those who choose to respond to the survey. To adjust the sample to the population and enhance representativeness, quota-based sampling by geography and post collection weighting are used. Correction for unknown population characteristics is not possible. This limitation is not unique to non-randomized surveys as self selection bias is apparent in voluntary randomized surveys as well where a significant proportion of those offered to take a survey choose not to participate. Despite attempts for outreach to underrepresented communities and statistical weighting and the creation of multiple points of access, this survey may be limited in its ability to fully reflect the experiences of members of communities unable to complete the survey due to language or access barriers.

Appendix B: Research initiated to examine alcohol use and COVID-19

Study	Lead	Funder
Youth mental health and substance use in the context of COVID-19: A rapid response multi-component	Skye Barbic, University of BC (UBC)	Canadian Institutes of Health Research (CIHR)
Confidential Virtual Addiction Treatment for Healthcare Workers	Lesley Lutes, Zach Walsh, UBC-Okanagan	Canada's Digital Technology Supercluster COVID-19 program
Pandemic experiences and impacts of COVID-19 on the mental health of Indigenous communities	Alanaise Goodwill, Simon Fraser University (SFU)	CIHR Operating Grant: Knowledge Synthesis Grant: COVID-19 Rapid Research Funding Opportunity in Mental Health
Youth Health and COVID-19 Survey; Assessing the impact of the COVID-19 pandemic on social and health	Rodney Knight, Providence Health Care Institute	CIHR
Service provider perspectives on tools to improve access to mental health supports for sexual and gender	Travis Salway, SFU	BC SUPPORT Unit Fraser Centre, CIHR Strategy for Patient-Oriented Research (SPOR)'s Knowledge Translation Award for Patient Oriented Research
Evaluating risk mitigation measures to address the dual public health crisis of COVID-19	Amanda Kathleen Slaunwhite, UBC	CIHR

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Suggested Citation: Office of the Provincial Health Officer and BC Centre for Disease Control. Examining the Societal Consequences of the COVID-19 Pandemic: Problematic Alcohol Use. June, 2021.