

ALCOHOL POLICY AND CANCER IN CANADA: BACKGROUND AND KEY STATISTICS



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Alcohol Policy and Cancer in Canada: Background and Key Statistics

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Introduction



Reducing consumption of alcohol requires a multi-sectoral approach including implementation of evidence-informed policies across several domains. A comprehensive and coordinated response to alcohol consumption trends and harms could have a substantial and positive impact in reducing the risk and incidence of alcohol-related cancers in Canada.

This resource provides an overview of the relationship between alcohol and cancer, Canada's Low-Risk Alcohol Drinking Guidelines, consumption rates in Canada, the alcohol policy regulatory environment, public perceptions, and the influence of COVID-19. Specific populations overrepresented in consumption data and harms, including alcohol-related cancers, are also highlighted.

This report was informed by two systematic scoping searches reviewing Canadian epidemiological and policy research. The searches were geographically (Canada data only) and temporally limited (January 2016-November 2020). Policy scans were conducted at the federal, provincial/territorial, and municipal levels. Thirty-one municipalities were aligned with the Partnership's [Prevention Policies Directory \(PPD\)](#) and include Canada's largest cities plus additional municipalities ensuring an equitable sample across the country. All referenced websites and policies are current up to January 31, 2021. A detailed methodology can be found in Appendix A.



This resource is complemented by *Alcohol Policy and Cancer in Canada: Policy Actions* which provides an in-depth exploration of alcohol policy domains deemed most effective in reducing consumption and alcohol-related cancers along with a review of federal, provincial/territorial, and municipal policy actions.

Additionally, this resource supports Priority 1 of the Canadian Strategy for Cancer Control which is to decrease the risk of people getting cancer.



Background

Key Takeaways

Approximately 80% of Canadians 15 years and over have consumed alcohol in the past year making it the most used psychoactive substance in Canada.

Alcohol is directly linked to cancers in at least seven sites of the body: oropharynx, larynx, esophagus, liver, breast, colon, and rectum.

In 2016, approximately 3,300 Canadians were diagnosed with alcohol-related cancers.

The risk for cancer is greatest among heavy drinkers (4 drinks or more per day) and moderate drinkers (1-4 drinks per day); however, light drinkers (no more than 1 drink per day) are also at an increased risk.

Studies largely suggest less alcohol consumption is better, and previously perceived positive health effects of alcohol may have been overestimated.

Prevalence and Harms of Alcohol

Alcohol is the most used psychoactive substance in Canada. In 2017, nearly 80% of Canadians 15 years and over reported consumption of at least one alcoholic beverage in the previous year.¹ Moreover, alcohol is the leading risk factor for premature disability in Canada accounting for 10% of all deaths among individuals 15 to 49 years old, with higher rates among marginalized populations.² In 2016, 14,800 Canadian deaths were estimated to be alcohol-related.³ In 2017, the rate of hospitalizations fully attributable to alcohol in Canada was 249 per 100,000.⁴ Globally, alcohol consumption contributes to 3 million deaths each year and is responsible for 5.1% of the global burden of disease.⁵



Alcohol is estimated to be **one of the top three** causes of cancer deaths worldwide.

Alcohol and Cancer

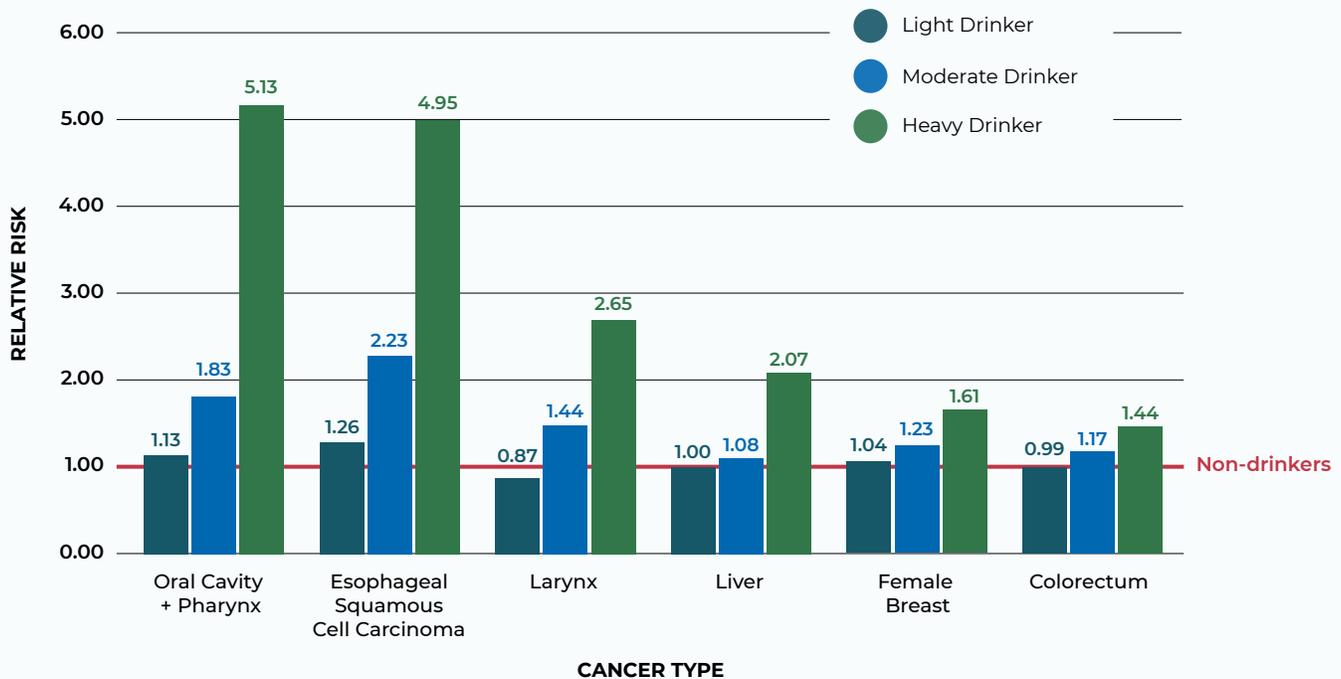
Alcohol is classified as a Group 1 carcinogen⁶ and is estimated to be one of the top three causes of cancer deaths worldwide.⁷ Evidence indicates chronic use or regular alcohol consumption over time – even at low levels – increases the risk of developing alcohol-associated cancer.⁸ Research supports a causal link between alcohol consumption and cancer at seven sites in the body: oropharynx, larynx, esophagus, liver, breast, colon and rectum (Figure 1).⁹

Emerging evidence suggests alcohol consumption might increase risk for other cancers as well including cancers of the pancreas, lung, and prostate.¹⁰ A 19% (RR=1.19) and 15% (RR=1.15) increase in pancreatic and lung cancer risk, respectively, has been observed in heavy drinkers compared to light or non-drinkers,¹¹ recognizing the risk of lung

cancer may be confounded by other factors such as commercial tobacco use. Research suggests heavy drinkers experience a statistically significant increase in cancer risk compared to light or non-drinkers.¹² Heavy drinkers have a relative risk of 1.20 for prostate cancer compared to 1.09 for moderate drinkers, and 1.05 for light drinkers.¹³

In 2016, it was estimated that 3,300 Canadians were diagnosed with cancer linked to alcohol.¹⁴ While cancer risk is greatest among heavy (4+ drinks a day) and moderate drinkers (1-4 drinks a day); light drinkers (no more than 1 drink a day) and those that binge drink on occasion (more than 4 drinks in one sitting) are also at higher risk for oral, pharynx, esophageal, and breast cancers.^{15,16} Risk increases when alcohol is combined with other factors, including tobacco use, unhealthy eating, and/or lack of physical activity.¹⁷

FIGURE 1: RELATIVE RISKS BY CANCER TYPE AND ALCOHOL INTAKE¹⁸



Health Benefits of Alcohol

There is conflicting evidence in relation to the health benefits of alcohol. A recent review found more than 100 prospective studies that suggested an inverse association between light to moderate drinking and risk of heart attack, ischemic (clot-caused) stroke, peripheral vascular disease, sudden cardiac death, and death from all cardiovascular causes.¹⁹ The review found the effect to be consistent, corresponding to a 25-40% reduction in risk.²⁰ The same review showed moderate drinking may also benefit conditions such as gallstones and type 2 diabetes. Moreover, light alcohol use has been shown to provide modest protection against non-Hodgkin's lymphoma, Hodgkin's lymphoma, and kidney cancer.²¹ Further, an 8% decrease of kidney cancer has been shown for every 10 grams of alcohol consumed.²² However, this protective factor is unclear for consumption above 30 grams (3 standard drinks) per day.²³

Some researchers suggest positive health effects of alcohol consumption have been overestimated. For example, a 2015 paper which reviewed case-

control studies and meta-analyses, cast doubt on the beneficial factors associated with alcohol, advising protective benefits should be weighed against the detrimental effects of alcohol.²⁴ Similarly, a separate 2015 study based on pooled analyses of 10 population-based cohorts found that although protective benefits were identified in unadjusted models in age-sex groups, adjusting for a range of personal, socioeconomic, and lifestyle factors, and excluding former drinkers actually resulted in those protective benefits being diminished.²⁵ As such, the study concluded protective associations may have been the result of selection biases across the age-sex strata. Further, the 2019 Global Burden of Disease Report concluded there is no safe amount of alcohol use, particularly for cancer risk.²⁶ Despite the variation across studies, it should be noted that all potential benefits of alcohol are associated with light or moderate consumption levels; heavy consumption has only been associated with an increased risk of chronic and acute harms.

Social and Economic Costs of Alcohol

In addition to the health burden, alcohol imposes significant social and economic costs (Figure 2) – above those of tobacco, opioids, and cannabis (Figure 3). In 2017, the cost of alcohol use in Canada – including health care, lost productivity, criminal justice, and other costs – was estimated to be \$14.6B.²⁷ Reports suggest alcohol generated a revenue of \$10.9B for the Canadian government in 2017, indicating a national alcohol deficit of \$3.7B.²⁸

FIGURE 2: ALCOHOL-ATTRIBUTABLE TOTAL HEALTHCARE COSTS - 2017²⁹

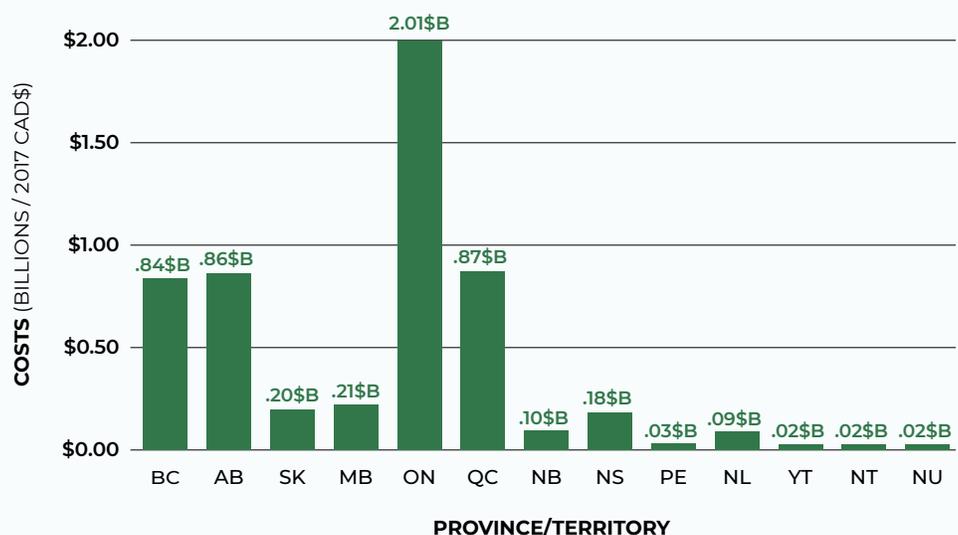
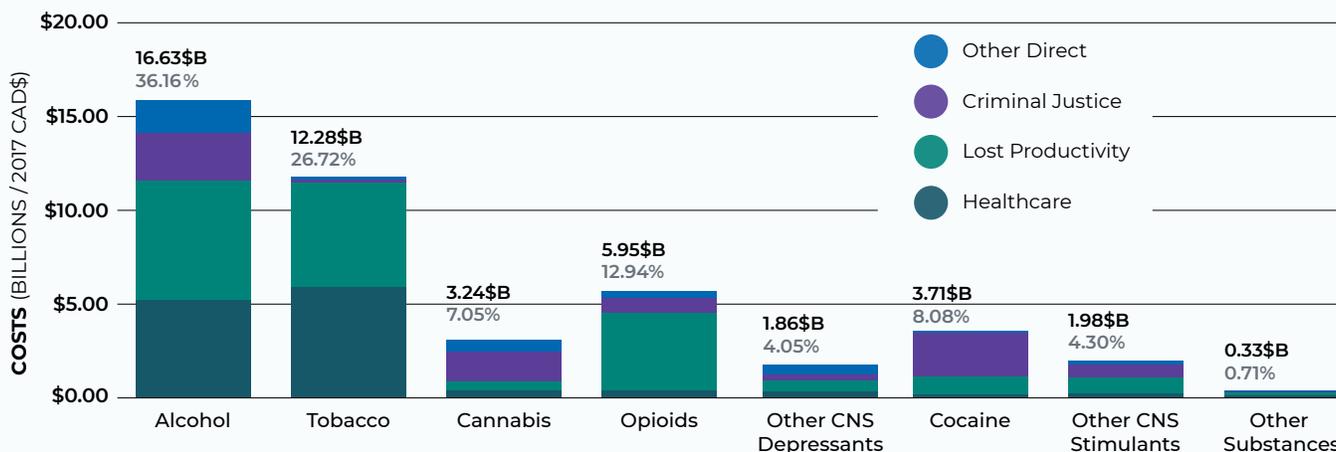


FIGURE 3: COSTS ATTRIBUTABLE TO SUBSTANCE USE IN CANADA - 2017³⁰



Overall costs (in billions) and percentage of total overall costs attributable to substance use by substance and cost type, 2017.

Global Response to Alcohol

Given the harms associated with alcohol use, the World Health Organization (WHO) released the *Global strategy to reduce the harmful use of alcohol in 2010*.³¹ The Strategy identified ten national policy options and interventions and four priority areas for global action (Table 1).

In 2018, The WHO launched SAFER, an alcohol control initiative that identified five strategies governments can use to reduce alcohol-related health and social harms: (1) strengthening alcohol availability restrictions; (2) advance and enforce alcohol-impaired driving measures; (3) facilitate access to screening, brief interventions, and treatments; (4) enforce bans or restrictions on alcohol advertising, sponsorship, and promotion; and, (5) increase alcohol pricing through excise taxes and pricing policies.³² In 2022, in consultation with member states, the WHO will develop a Global Action Plan for 2022-2030 to reduce the harmful use of alcohol.

The World Cancer Research Fund (WCRF) was established in 1982 to provide research and health information on the prevention of cancer. Through the National Prevention Research Initiative and other similar programs, WCRF researches behaviours associated with poor diet, lack of physical activity, and alcohol consumption, to improve health and prevent cancers.

TABLE 1: WHO GLOBAL STRATEGY TO REDUCE THE HARMFUL USE OF ALCOHOL³³

Ten national policy options and interventions	Four global action priority areas
1. Leadership, awareness and commitment	1. Public health advocacy and partnership 2. Technical support and capacity building 3. Production and dissemination of knowledge 4. Resource mobilization
2. Health services' response	
3. Community action	
4. Drink-driving policies and countermeasures	
5. Availability of alcohol	
6. Marketing of alcoholic beverages	
7. Pricing policies	
8. Reducing the negative consequences of drinking and alcohol intoxication	
9. Reducing the public health impact of illicit alcohol and informally produced alcohol	
10. Monitoring and surveillance	



Alcohol Consumption in Canada

Key Takeaways

Canada's Low-Risk Alcohol Drinking Guidelines provide guidance for low-risk alcohol consumption.

Up to 20% of Canadians consume more than LRADG recommended levels.

Alcohol consumption varies across a variety of factors including sex, age, sexual orientation, socio-economic status, and Indigeneity.

Differing low-risk alcohol drinking guidelines exist with the World Cancer Research Fund recommending abstinence and the Canadian Cancer Society recommending no more than 2 drinks a day for men and 1 for women.

Jurisdictional variances exist across Canada including per capita sales and consumption rates.

Canada's Low-Risk Alcohol Drinking Guidelines (LRADG)

The LRADG were developed in 2011 based on population-data to reduce alcohol-related harms (Table 2). To reduce risks for specific chronic diseases, such as cancer, other guidelines may need to be considered. For example, the World Cancer Research Fund recommends that it is best not to consume any alcohol to prevent cancer.³⁴ If an individual chooses to drink, the Canadian Cancer Society recommends that women and men drink no more than 1 and 2 drinks daily, respectively, to reduce cancer risk.³⁵

In 2011, the Canadian Centre on Substance Use and Addiction developed Canada's LRADG, which provides guidance for alcohol consumption aimed at reducing harms. To reduce long-term health risks, the LRADG recommend females should consume a maximum of 10 drinks a week, with no more than 2 drinks a day most days. Males should consume a maximum of 15 drinks a week, with no more than 3 drinks a day on most days.* To avoid a drinking addiction or habit, the guidelines recommend a minimum of 2 non-drinking days every week. It is estimated that if these guidelines are followed, 13,612 cancer cases could be prevented by 2042.** The LRADG are currently being updated, with an anticipated release date of March 2022.

* All types of alcoholic beverages, including beer, wine, and spirits, increase risk of cancer.

** Cancer data - ComPARE [Internet]. Data.prevent.cancer.ca. [cited 28 January 2021]. Available from: <https://data.prevent.cancer.ca/future/risk-reduction>.

TABLE 2: WHAT IS A DRINK ACCORDING TO THE LRADG³⁶

<p>According to the LRADGs, a drink means:</p>				
	<p>Beer 341 ml (12 oz) 5% alcohol content</p>	<p>Cider/Cooler 341 ml (12 oz) 5% alcohol content</p>	<p>Wine 142 ml (5 oz) 12% alcohol content</p>	<p>Distilled Alcohol (rum, gin, etc.) 43 ml (1.5 oz) 40% alcohol content</p>

Consumption Patterns in Populations of Interest¹



Adult

Canadian adult males consume alcohol at a higher rate than females and are therefore at an increased risk of developing alcohol-related cancers. In 2017, 83% of males and 76.5% of females reported drinking in the past year.³⁷ Nearly 40% of males and 25% of females reported drinking at least twice a week (Figure 4). Of the respondents who drink, 26% of males and 17% of females reported heavy drinking, with heavy drinking defined as 5 or more drinks for men, 4 or more drinks for women on one occasion at least once a month (Figure 5). Of Canadians 15 years and

older, 17.6% of males and 14.6% of females exceeded chronic low-risk drinking guidelines limits recommended in the LRADG.³⁸

Compared to females who do not drink, those that consume one drink per day have a 5-9% greater risk of developing breast cancer.^{39,40,41} Further, four drinks per week put females at a slightly higher risk of developing alcohol-related cancers compared to males (1.4% and 1.0%).⁴² Generally, for females, the risk of breast cancer increases for every additional drink consumed per day.⁴³

¹ **NOTE:** As select datasets do not differentiate between 'never' and 'former drinkers' when presenting abstinence rates nor distinguish between proportion and per capita levels of consumption; actual consumption rates are likely higher than data suggests. Consumption data is typically self-reported and therefore should be interpreted with caution.

FIGURE 4: FREQUENCY OF ALCOHOL CONSUMPTION (AGED 18+), BY SEX — 2017-2018⁴⁴

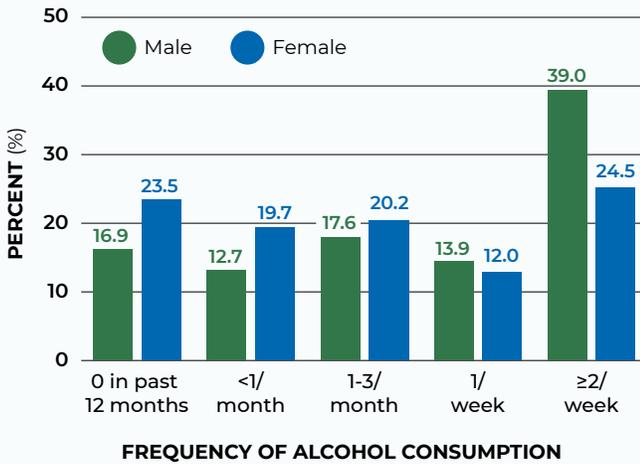
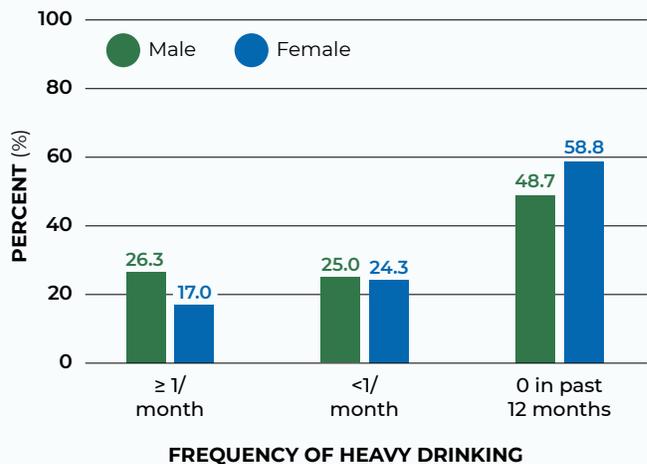


FIGURE 5: FREQUENCY OF DRINKING 5+DRINKS FOR MEN/4+DRINKS FOR WOMEN, BY SEX - 2017-2018⁴⁵



† Heavy drinking is defined as 5 or more drinks for men and 4 or more drinks for women on one occasion at least once a month.



Youth

In 2017, students in grades 7-12 reported past year alcohol use at 44%⁴⁶ with males slightly higher (44.2%) than females (43.8%) (Figure 6). Alcohol use within the past month for students in grades 7-12 was reported at 27%.⁴⁷ Of these students, 16% reported binge-drinking (5 or more drinks on one occasion) in the past month,⁴⁸ with annual rates of binge drinking at 24.2% (Figure 7).

The average age of alcohol initiation among Canadians is 13.4 years old (13.2 years for boys and 13.6 for girls).⁴⁹ Alcohol use increases with each grade level, with approximately 23% of students in grade 7-9 consuming alcohol climbing to 65% in grades 10-12.⁵⁰ Research shows that when people start drinking at an early age, they are at a higher risk for developing

alcohol use disorder later in life.⁵¹ Substance use disorders involve the inability to limit the amount of alcohol consumed putting individuals at an increased risk for developing alcohol-related cancers.

An average of 69.3% of post-secondary students (70.2% of females and 68.1% males) reported drinking alcohol within the last 30 days preceding administration of a survey. Amongst these students who drink, 35% reported drinking 5 or more alcoholic beverages in one sitting over the last two weeks. The average reported number of drinks consumed was 5.96 for males and 4.67 for females. Risky drinking was higher among males (38.9%) than females (33.5%).⁵²

FIGURE 6: PREVALENCE OF SELF-REPORTED PAST-YEAR ALCOHOL USE AMONG GRADES 7-12 IN CANADA – 2012-2017⁵³

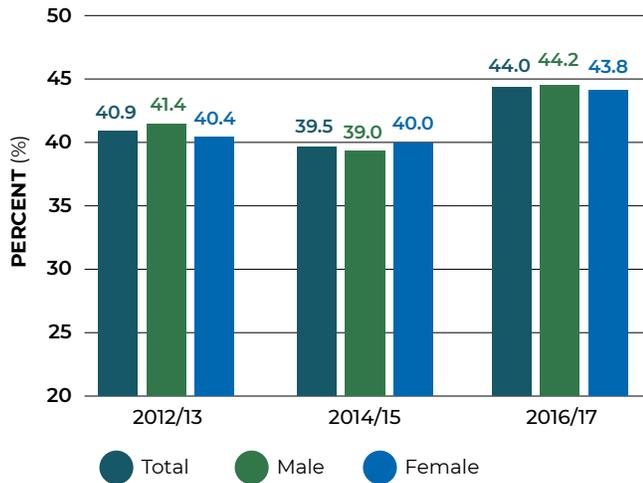
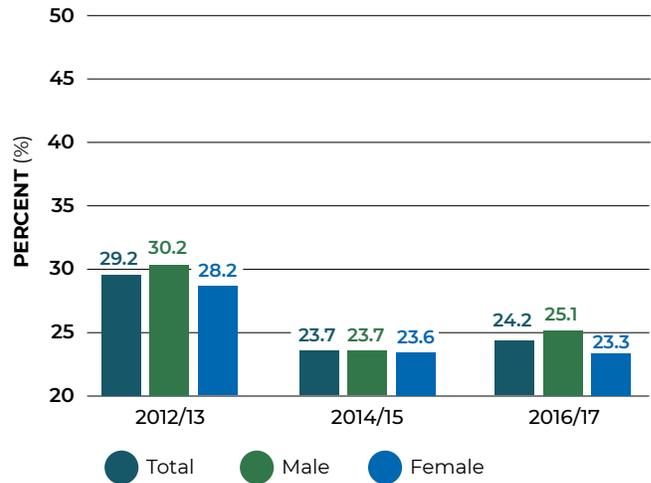


FIGURE 7: PREVALENCE OF SELF-REPORTED PAST-YEAR DRINKING 5+ DRINKS ON ONE OCCASION AMONG GRADES 7-12 IN CANADA – 2012-2017⁵⁴

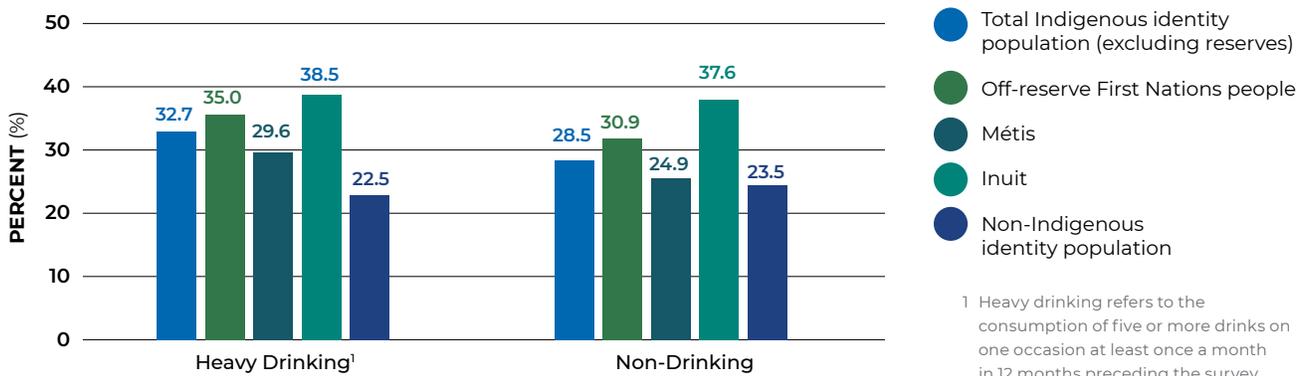


First Nations, Inuit, and Métis

Citing 2012 data, Statistics Canada reported that fewer First Nations, Inuit and Métis people consume alcohol than several other groups in Canada. For example, among off-reserve First Nations in Ontario, approximately 29% identified as non-drinkers, defined as consuming no alcohol in the 12 months preceding a health survey, compared to 26% of Ontario's non-Indigenous population.⁵⁵

Among off-reserve First Nations, Inuit and Métis in Canada who do drink alcohol, the prevalence of heavy drinking is higher than non-Indigenous populations. For non-Indigenous peoples, 2012 Canadian data suggest 22.5% are heavy drinkers while 38.5% of Inuit, 29.6% of Métis, and 35% of off-reserve First Nations people are considered heavy drinkers (Figure 8).⁵⁶ Across Canada, Inuit have the highest proportion of non-drinkers at nearly 38%, with off-reserve First Nations people at 31%. This is compared to only 23.5% of non-Indigenous people that report as non-drinker.⁵⁷

FIGURE 8: ALCOHOL USE AMONG OFF-RESERVE FIRST NATIONS, INUIT AND MÉTIS VS NON-INDIGENOUS PEOPLE AGED 12 AND OVER IN CANADA – 2012⁵⁸



¹ Heavy drinking refers to the consumption of five or more drinks on one occasion at least once a month in 12 months preceding the survey.

Citing data from 2014/15, Indigenous youth in grades 9-12 have higher odds of past-year drinking, binge drinking, and initiate drinking at a younger age, compared to non-Indigenous youth (Table 3). However, these rates are declining. When compared with data from 2008/09, researchers found rates of both past year alcohol use and binge drinking decreased in 2014/15 among both Indigenous and non-Indigenous youth, with binge drinking decreasing up to 30% in both populations.⁵⁹



Binge drinking
rates are **declining**
among Indigenous youth.

TABLE 3: ALCOHOL USE AMONG INDIGENOUS* VS NON-INDIGENOUS YOUTH IN GRADES 9-12 – 2014-2015⁶⁰

Variable	Estimate	95% CI, lower bound	95% CI, upper bound	P-value
Mean age of first drink that was more than sip (years)				
Indigenous youth*	13.3	13.0	13.5	< 0.001
Non-Indigenous youth	13.8	13.7	13.8	–
Indigenous males	13.0	12.4	13.5	0.003
Non-Indigenous males	13.6	13.5	13.7	–
Indigenous females	13.5	13.3	13.8	0.006
Non-Indigenous females	13.9	13.8	14.1	–
Past-year alcohol use (odds ratio)				
Indigenous vs. Non-Indigenous youth	1.43	1.16	1.75	0.001
Indigenous males vs. females	0.74	0.54	1.00	0.05
Non-Indigenous males vs. females	0.88	0.83	0.94	< 0.001
Past-year binge drinking** (odds ratio)				
Indigenous vs. Non-Indigenous youth	1.04	0.83	1.28	0.75
Indigenous males vs. females	1.00	0.69	1.46	0.99
Non-Indigenous males vs. females	1.06	0.89	1.27	0.50

* The term 'Indigenous youth' refers to self-reported First Nations, Inuit and Metis youth who are attending off-reserve schools in Canada. Schools in New Brunswick, Yukon, Nunavut, and the Northwest Territories were excluded.

** Binge drinking is defined as having five or more drinks on one occasion.



LGBTQ2S+

Among the LGBTQ2S+ (lesbian, gay, bisexual, transgender, queer, and two-spirit) community, up to 25% reported problematic consumption patterns (i.e. moderate to high drinking levels), compared to 12.7% of the general Canadian population.⁶¹ For example, when compared to heterosexual women,

lesbian and bisexual women are 1.64 times more likely to report higher levels of alcohol consumption.⁶² 24% of LGBTQ2S+ members use alcohol or drugs to cope with emotional abuse and/or physical violence compared to 10% of the general Canadian population.⁶³

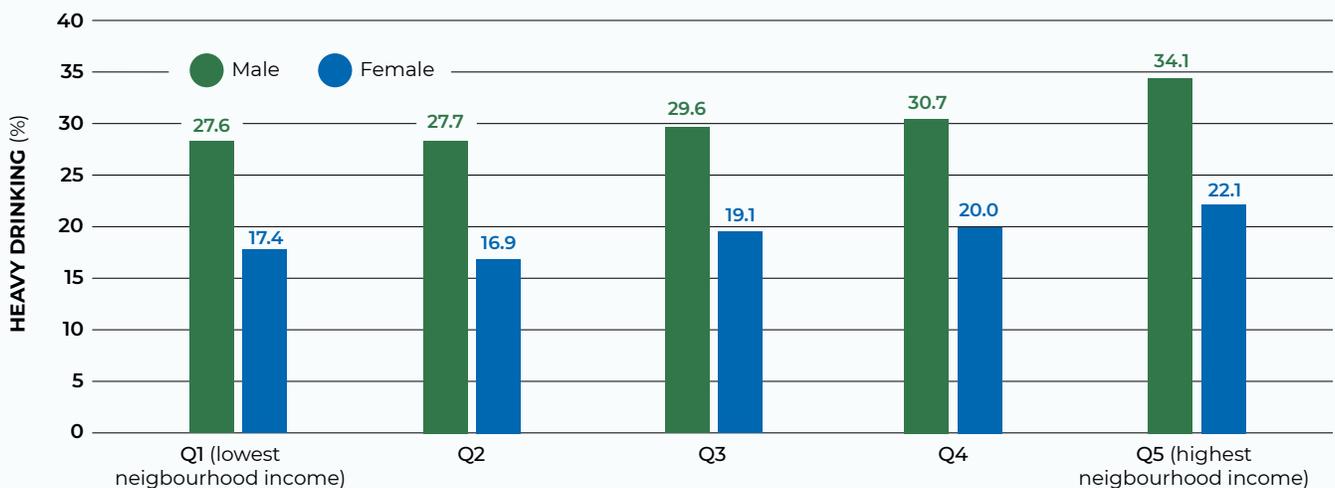


Socio-Economic Status (SES)

People in Canada with higher incomes and SES are more likely to consume alcohol and engage in risky drinking compared to those of lower incomes and SES (Figure 9).⁶⁴ Compared to people of higher SES, those of lower SES experience a disproportionate number of alcohol-related harms⁶⁵ along with higher rates of hospitalizations.⁶⁶ This is attributed to several risk factors including age of drinking initiation, drinking patterns, social and drinking environments, and risky behaviours, among other factors.^{67,68}

Individuals who have precarious housing have also been found to have higher rates of alcohol use and a mortality rate six-times higher for alcohol-related causes than other populations.^{69,70} Evidence has shown that low-income individuals experience a greater amount and increased severity of alcohol-related harms and consequences.⁷¹ Finally, communities of lower SES tend to have a higher density of alcohol outlets, thus increased access to alcohol and higher rates of alcohol use and harms.⁷²

FIGURE 9: PERCENTAGE OF HEAVY DRINKING BY INCOME QUINTILE AND GENDER – 2018⁷³



Notes:

Income quintiles are based on self-reported adjusted household income from 2018 CCHS.

Heavy drinking is defined as 5 or more drinks for men and 4 or more drinks for women on one occasion at least once a month.

People with **higher incomes** are **more likely** to consume alcohol and engage in **risky drinking** compared to those of lower incomes.



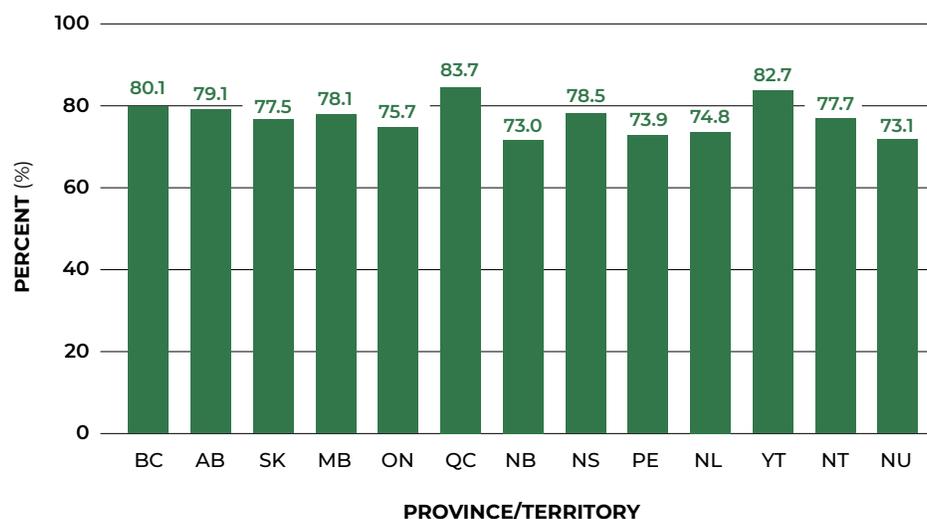
Jurisdictional Variances

Jurisdictional variances of alcohol consumption exist with Quebec reporting the highest number of drinkers (83.7%) and New Brunswick reporting the lowest number of drinkers (73.0%) (Figure 10). Further, the jurisdiction with the highest rates of

exceeding low-risk drinking guidelines is BC with 18.8%; the lowest is SK at 11.1% (Figure 11). Reasons for jurisdictional differences may include varying jurisdictional alcohol policies as well as cultural norms and unique social environments.^{74,75,76}

Variations in per capita sales and consumption have been observed across urban, rural and remote areas with rural individuals more likely to report heavy drinking (22.4%) than urban counterparts (18.4%).⁷⁷ Across Canada, municipal rates of consumption are frequently above Canada's LRADG, ranging from 5% in Toronto, Ontario to 15% in Sherbrooke, Québec.⁷⁸

FIGURE 10: PERCENTAGE OF CANADIANS (AGED 18+) WHO REPORTED DRINKING IN THE PAST YEAR, BY JURISDICTION† — 2019⁷⁹

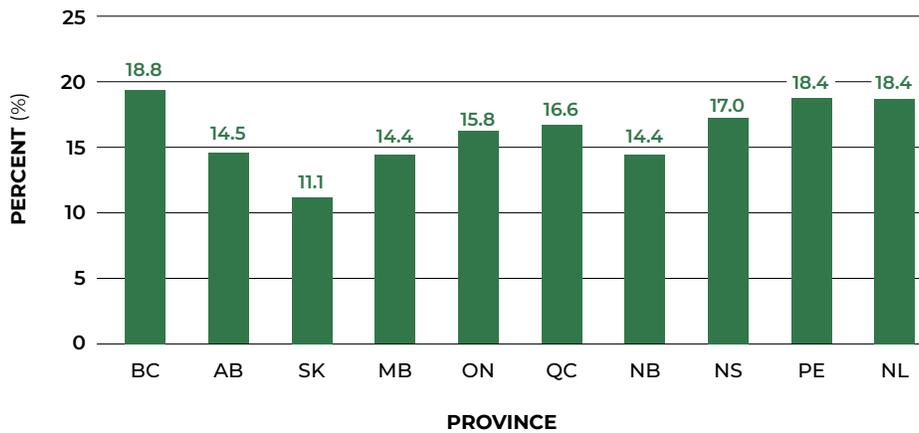


† For territories, 2017-18 combined reporting years were used due to data availability.

National average: 77.5%

Alcohol Consumption in Canada

FIGURE 11: PERCENTAGE OF CANADIANS (AGED 15+) WHO EXCEEDED LOW-RISK ALCOHOL DRINKING GUIDELINES, BY JURISDICTION† — 2017⁸⁰



† No data available for the territories

National average: 16.1%

Calculated based on alcohol consumption in the previous 7 days. Canada's Low-Risk Alcohol Drinking Guidelines recommends "no more than 10 drinks a week for women, with no more than 2 drinks a day most days and 15 drinks a week for men, with no more than 3 drinks a day most days."

Provincial and territorial rates vary for volume of total per capita sales which directly influences regional consumption patterns. Yukon and Northwest Territories have the highest alcohol volume for total per capita sales at 13 L and 11.9 L, respectively, whereas Nunavut has the lowest at 3.6 L followed by New Brunswick at 6.8 L (Figure 12).⁸¹ Moreover, the annual and per-capita sales of alcohol have a direct effect on the percentage of adults exceeding cancer drinking guidelines with the highest rates in the Northwest Territories at 16.2% and the lowest rates experienced in New Brunswick and Prince Edward Island at 6% and 7.3%, respectively (Table 4).

Alcohol sales directly affect adults exceeding cancer drinking guidelines.

FIGURE 12: ALCOHOL VOLUME FOR TOTAL PER CAPITA SALES, BY JURISDICTION – 2018-2019⁸²

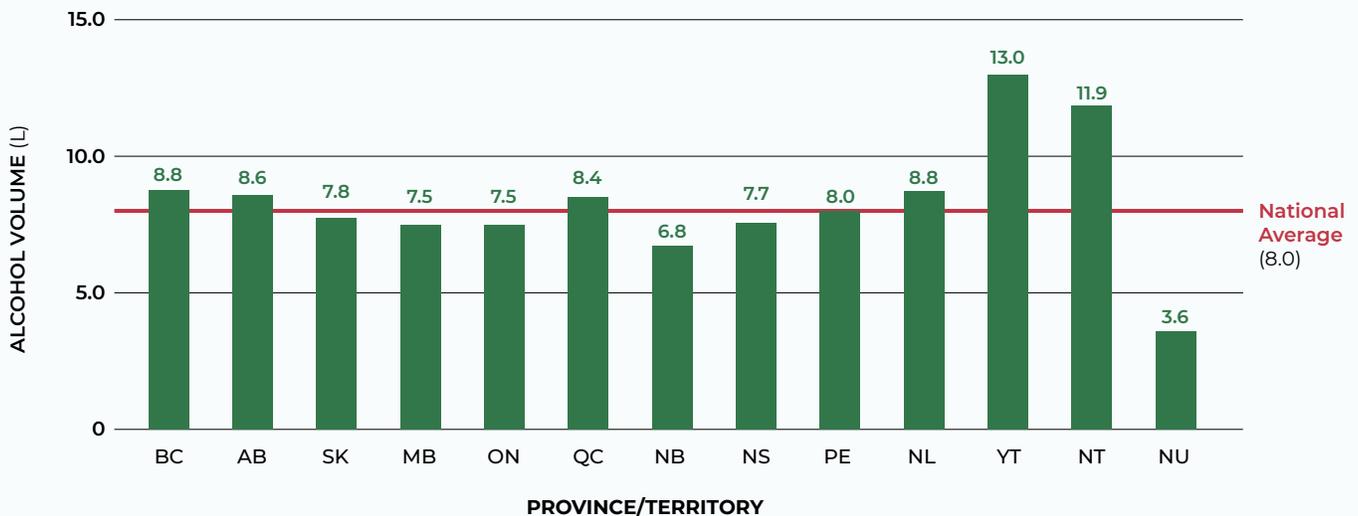


TABLE 4: ANNUAL AND PER-CAPITA SALES OF ALCOHOL, AND THE PERCENTAGE OF ADULTS EXCEEDING CANCER GUIDELINES – 2018-2019⁸³

Jurisdiction	Dollar value for total sales	Dollar value for total per capita sales	Percentage of adults, 18 years and older who reported exceeding cancer guidelines for alcohol consumption*
Canada	\$23,624,326	\$759.8	—
BC	\$3,573,122	\$833.0	8.1
AB	\$2,595,190	\$743.6	8.6
SK	\$638,017	\$682.1	7.7
MB	\$792,334	\$722.1	8.5
ON	\$8,791,427	\$729.3	7.4
QC	\$5,526,923	\$782.4	9.8
NB	\$432,986	\$656.5	6.0 ^E
NS	\$628,798	\$763.1	7.9
PE	\$80,026	\$618.2	7.3 ^E
NL	\$457,206	\$1,009.7	8.6
YT	\$40,038	\$1,185.0	11.7
NT	\$52,822	\$1,473.7	16.2
NU	\$15,437	\$595.2	8.0 ^E

^E Interpret with caution due to large variability in the estimates.

* Canada's Low-Risk Alcohol Drinking Guidelines for cancer recommends no more than 2 drinks per day for men and no more than 1 drink per day for women. Interpret data with caution as the results were based on alcohol consumption in the past week.



Alcohol Policy Regulatory Environment

Key Takeaways

Alcohol is regulated under the *Food and Drugs Act* (FDA) and the *Food and Drug Regulations* (FDR).

The federal government recently included alcohol in [Canada's Food Guide](#).

Provincial/territorial governments have the greatest authority over alcohol legislation in Canada including setting the minimum legal drinking age, licensing and distribution, restrictions on marketing and advertising, among others.

Nova Scotia, Manitoba, Alberta, Nunavut, and British Columbia have implemented alcohol strategies to reduce alcohol-related harms.

A minority of municipal governments have effectively regulated alcohol through the implementation of Municipal Alcohol Policies (MAPs).

Federal Government²

Unlike cannabis, tobacco, and other illicit substances, the federal government does not currently have legislation explicitly regulating alcohol.⁸⁴ Instead, alcohol policy falls under numerous legislative areas, including [regulation of food and drugs](#), [criminal sanctions](#), and [taxation](#), among others. The result is a complex policy landscape, with numerous federal ministries involved.

Health Canada regulates alcohol under the regulations for food, through the FDA and the FDR. All sales of alcoholic beverages are subject

to the FDA as well as a need to be compliant with relevant sections of the FDR. The FDR establishes rules for specific products (e.g., maximum alcohol content, rules around naming and/or labelling, details about ingredients, etc.), along with specific rules about the sales of alcoholic beverages.

Alcoholic beverages are also subject to the federal *Excise Act* and *Excise Act, 2001*. The [Canadian Revenue Agency](#) (CRA), with the support of the [Canadian Border Services Agency](#) (CBSA), is responsible for its enforcement.⁸⁵

² For a more detail analysis of government policies, please see *Alcohol Policy and Cancer in Canada: Policy Actions*.

In 2007, a National Alcohol Strategy, *Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation – Recommendations for a National Alcohol Strategy*, was developed.⁸⁶ Used as a framework to guide the development of alcohol policies across jurisdictions, the effort was instrumental in the development of Canada’s LRADG. The national strategy is being revised, with an anticipated launch in 2022.

In 2019, the federal government included alcohol in the updated *Canada’s Food Guide* stating health risks are associated with alcohol consumption including many types of cancers and other health conditions. The Guide recommends adhering to Canada’s LRADG, and people who do not consume alcohol should not be encouraged to start.

Provincial/Territorial Government

Provincial legislation regulates various aspects of alcohol consumption including setting the legal drinking age; enforcing age requirements for serving alcohol; implementing rules about licensing and distribution; placing restrictions on advertising and marketing; among other regulations. These policies are set and enforced by provincial/

territorial liquor control or license boards (Table 5).⁸⁷ The majority of these boards also promote social responsibility programs to educate the public about the harms of alcohol.⁸⁸ In all jurisdictions – with the exception of Alberta, which works within a privatized system – boards are responsible for the sale of alcohol through retail stores.

TABLE 5: PROVINCIAL/TERRITORIAL ALCOHOL LEGISLATION AND BOARD

Province/territory	Legislation	Board
BC	<u>Liquor Control and Licensing Act</u>	<u>British Columbia Liquor Distribution Branch</u>
AB	<u>Gaming, Liquor and Cannabis Regulation</u>	<u>Alberta Gaming and Liquor Commission</u>
SK	<u>The Alcohol Gaming and Regulation Act</u>	<u>Saskatchewan Liquor and Gaming Authority</u>
MB	<u>Liquor, Gaming and Cannabis Control Act</u>	<u>Manitoba Liquor & Lotteries Corporation</u>
ON	<u>Liquor Control Act</u>	<u>Liquor Control Board of Ontario</u>
QC	<u>An Act Respecting Offences Relating to Alcoholic Beverages</u>	<u>Le Régie des alcools, des courses et des jeux;</u>
NB	<u>Liquor Control Act</u>	<u>New Brunswick Liquor Corporation</u>
NS	<u>Liquor Control Act</u>	<u>Nova Scotia Liquor Corporation</u>
PE	<u>Liquor Control Act</u>	<u>Prince Edward Island Liquor Control Commission</u>
NL	<u>Liquor Control Act</u>	<u>Newfoundland Labrador Liquor Corporation</u>
YT	<u>Liquor Act</u>	<u>Yukon Liquor Corporation</u>
NT	<u>Liquor Act</u>	<u>Northwest Territories Liquor Commission</u>
NU	<u>Liquor Act</u>	<u>Nunavut Liquor Commission</u>

Of the 13 provinces and territories, five have established alcohol strategies to prevent alcohol-related harm: Nova Scotia, Manitoba, Alberta, Nunavut, and British Columbia. These strategies employ a harm-reduction approach to promote

moderate alcohol consumption to families and communities, with some strategies directly referencing consumption effects on cancer (Table 6).

TABLE 6: CANCER PREVENTION IN PROVINCIAL/TERRITORIAL ALCOHOL STRATEGIES

Province/ territory	Alcohol Strategy	Effect on cancer prevention
BC	<i><u>Public Health Approach to Alcohol Policy: A Report of the Provincial Health Officer</u></i>	Cancer mentioned in discussion of vital statistics data.
AB	<i><u>Alberta Alcohol Strategy</u></i>	No mention of cancer in strategy.
MB	<i><u>A Culture of Shared Responsibility: Manitoba's Strategy to Reduce Alcohol-related Harms</u></i>	Cancer mentioned as one of several long-term health conditions resulting from alcohol consumption.
NS	<i><u>An Alcohol Strategy to Prevent and Reduce the Burden of Alcohol-Related Harm in Nova Scotia</u></i>	Alcohol consumption, including light consumption, is identified as a risk factor for developing different cancers.
NU	<i><u>Taking Steps to Reduce Alcohol-Related Harm in Nunavut</u></i>	No mention of cancer in strategy.

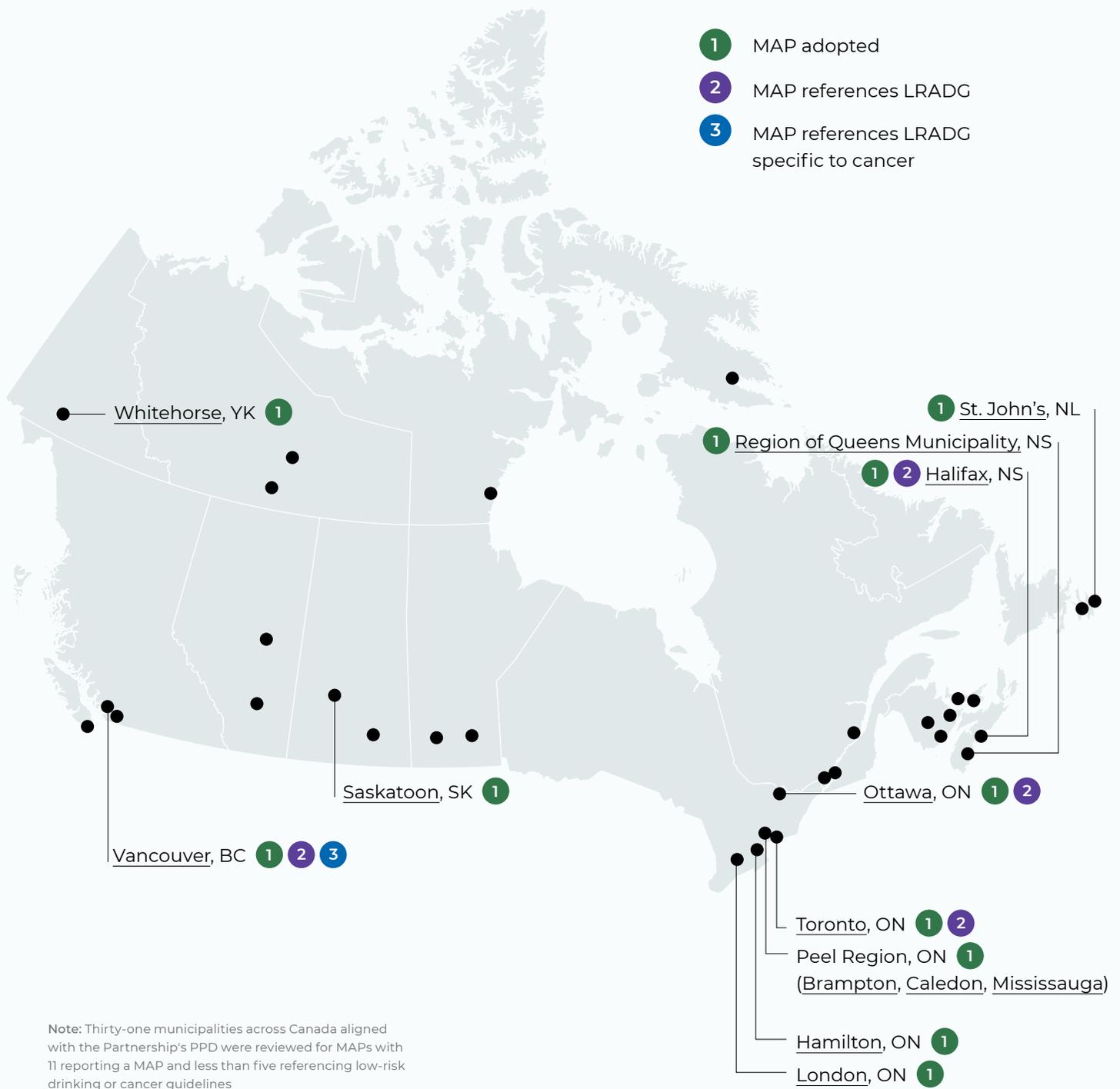
Municipal Government

Municipalities must follow the liquor control boards and acts set by the provincial/territorial government. As such, the 3,700 municipalities in Canada have varying degrees of authority to regulate alcohol. To illustrate, some municipalities are granted power over a variety of issues, including: liquor license approvals (e.g., [Toronto](#)), alcohol consumption in parks (e.g., [Surrey](#)), zoning bylaws (e.g., [Moncton](#)), hours of sale (e.g., [Toronto](#)), and serving alcohol at events (e.g., [Hamilton](#)).

While the power of municipalities may be limited, municipal governments are still recognized as playing a critical role in reducing alcohol consumption. Municipal governments have a strong sense of community need and are in a strong position to influence societal drinking culture, drinking norms, and assist in the reduction of alcohol-related harms.⁸⁹

One way that municipal governments have effectively regulated alcohol and reduced consumption is through Municipal Alcohol Policies (MAPs), which are recognized as part of a multi-faceted approach to alcohol policy.⁹⁰ MAPs aim to align with, or strengthen, existing federal and provincial/territorial alcohol policies and related strategies to create a set of rules for alcohol use in their respective communities.⁹¹ MAPs promote moderate alcohol consumption at municipally owned and managed events and properties.^{92,93,94,95} Thirty-one municipalities across Canada aligned with the Partnership's PPD were reviewed for MAPs with 11 reporting a MAP and less than five referencing low-risk drinking or cancer guidelines (Figure 13). See [Public Health Ontario](#) for more about the role and effectiveness of MAPs.

FIGURE 13: MUNICIPAL ALCOHOL POLICIES (MAP) ACROSS SELECT CANADIAN MUNICIPALITIES



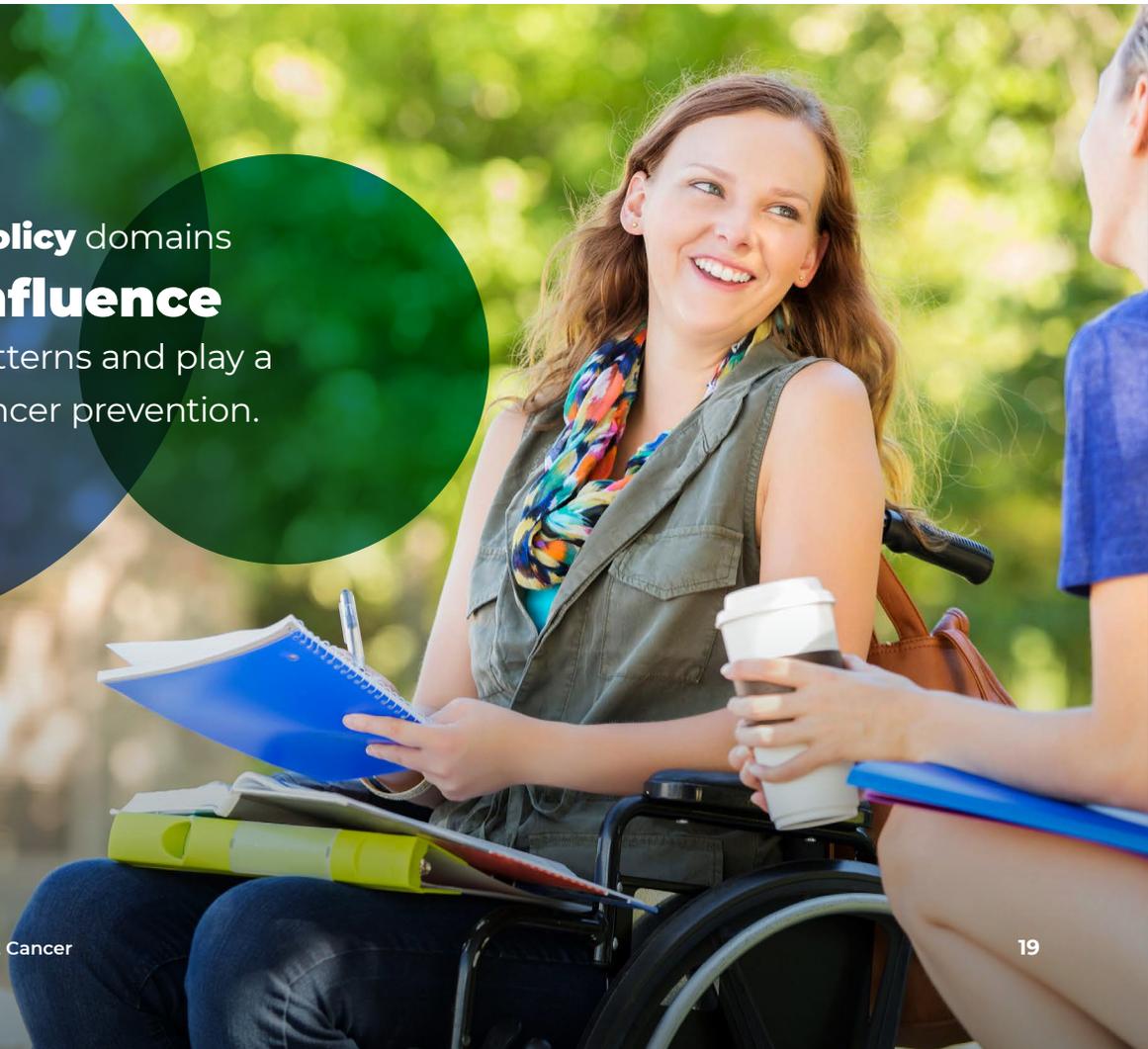
Policy Domains

The Canadian Alcohol Policy Evaluation (CAPE) Project identifies 11 policy domains for which there is direct evidence of reducing population-level alcohol consumption and related harms. Eight of the 11 domains have been determined by the Partnership to directly influence consumption, and therefore play a stronger role in cancer prevention. The remaining three domains, although critical for specific contexts, have been determined by the Partnership to play an indirect role in influencing consumption and cancer rates (Table 7). A detailed review of these policy domains, including their influence at the federal, provincial/territorial and municipal levels, can be found in the Partnership's *Alcohol Policy and Cancer in Canada: Policy Actions*.

TABLE 7: CANADIAN ALCOHOL POLICY EVALUATION (CAPE) POLICY DOMAINS

Direct Effect on Consumption and Cancer Risk	
1.	Pricing and taxation
2.	Physical availability
3.	Marketing and advertising
4.	Minimum legal drinking age
5.	Alcohol control system
6.	National alcohol strategy
7.	Monitoring and reporting
8.	Health and safety messaging
Indirect Effect on Consumption and Cancer Risk	
9.	Impaired driving countermeasures
10.	Liquor law enforcement
11.	Brief intervention

Many **alcohol policy** domains **directly influence** consumption patterns and play a strong role in cancer prevention.





Public Perceptions

Key Takeaways

Canadians are generally unaware that alcohol increases the risk of cancer.

Heavy drinkers are more likely to oppose alcohol control policies, such as those that limit access and availability.

The more the public is informed of the consumption-to-cancer causal relationship, the more supportive they are of alcohol control policies.

Canadians are generally unaware that alcohol is a carcinogen.⁹⁶ A 2015 national survey found that 69% of participants would reduce their alcohol consumption if they learned that alcohol increases cancer risk.⁹⁷ Similarly, a 2016 public opinion survey done throughout Ontario and Quebec found two-thirds of respondents would reduce their consumption if they found out that alcohol increased their risk of cancer.⁹⁸ However, only 28%-30% of respondents were actually aware that increased consumption is associated with alcohol-related cancers.⁹⁹

In a Whitehorse and Yellowknife baseline survey measuring knowledge of alcohol-related harms, less than 25% of respondents reported being aware of the link between alcohol and cancer.¹⁰⁰ Further, participants that gained knowledge of alcohol-related cancer risks were approximately twice as likely to support alcohol pricing policies than those who were not aware of the risks.¹⁰¹

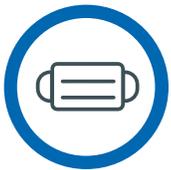
There is much speculation as to why this lack of awareness exists. It has been noted that alcohol and tobacco use “appear to receive relatively little media coverage in comparison to opioid overdoses, despite both substances causing considerably more harm to society.”¹⁰² Additionally, media portrayals of alcohol use in television and movies are often positive or neutral, and rarely show the negative side of consumption.¹⁰³ Finally, alcohol can be perceived as dangerous, but only

at high levels; which has led to confusion related to low-level consumption and risk of cancers.¹⁰⁴

Research has demonstrated that when the public is informed about the consumption-to-cancer causal relationship, their attitudes towards evidence-informed alcohol policies shift. For example, one study found that if participants were aware that alcohol caused cancer, they were more likely to support policies controlling marketing, availability of alcohol, and price, such as standard minimum unit pricing.¹⁰⁵

Strengthening health messages on alcohol, including warning labels, has been shown to shift alcohol drinking behaviours.¹⁰⁶ However, heavy drinkers have been shown to be less aware and less favorable towards effective alcohol policies, with such strategies potentially seen as a threat to personal consumption, access, and availability.¹⁰⁷

Research indicates that information-based interventions, such as public health media campaigns, show promise to increase knowledge of the harmful health impacts of alcohol while encouraging positive public opinion of harm reduction policies.¹⁰⁸ Increased public health education regarding alcohol risks is therefore needed to support implementation of effective alcohol policies.¹⁰⁹



COVID-19 and Alcohol Consumption³

Key Takeaways

Alcohol consumption and sales have increased among some Canadian demographics during the COVID-19 pandemic.

Causes of increased consumption include disruptions to regular schedule, stress, and boredom.

Alcohol consumption and sales have risen in Canada since the onset of COVID-19. For example, alcohol sales increased by as much as 40% in British Columbia government-run liquor retailers in the early months of the pandemic.¹¹⁰ Data suggests 18% of people in Canada aged 18 and older increased consumption during the pandemic, whereas 70% of respondents reported consumption remained the same (Figure 14).

People in Canada 55 years and older were less likely to report changes to their alcohol consumption, with only 10% reporting an increase in consumption compared to over 20% among other age categories.¹¹¹

All Canadian provinces (except PEI) and territories have categorized alcohol as essential.

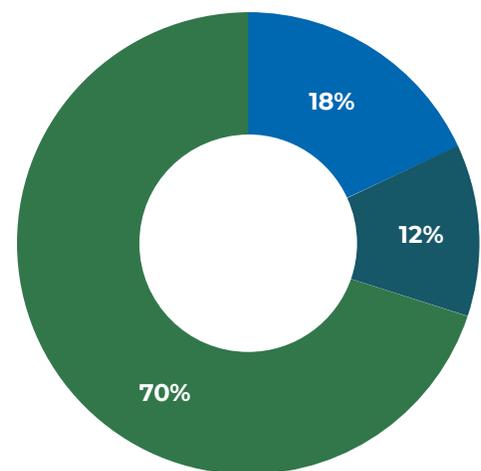
Implementing stricter alcohol policies may support reductions in alcohol consumption during and following the pandemic.

Increased consumption may be in response to several factors. People in Canada aged 35-45 admitted to drinking more during the pandemic due to disruptions in regular schedules, stress and boredom (Figure 15).¹¹² In addition to individual reasons, policy decisions have influenced alcohol consumption. For example, during the pandemic, most provincial/territorial governments – with the exception of PEI – deemed alcohol essential ensuring it remained accessible.¹¹³

FIGURE 14: CHANGE IN CONSUMPTION OF ALCOHOL FOR AGE 18+ DURING COVID-19 PANDEMIC¹¹⁴

Question: (If staying home more due to Coronavirus/COVID-19) Since you have been home more, has your alcohol consumption increased, decreased or stayed the same?

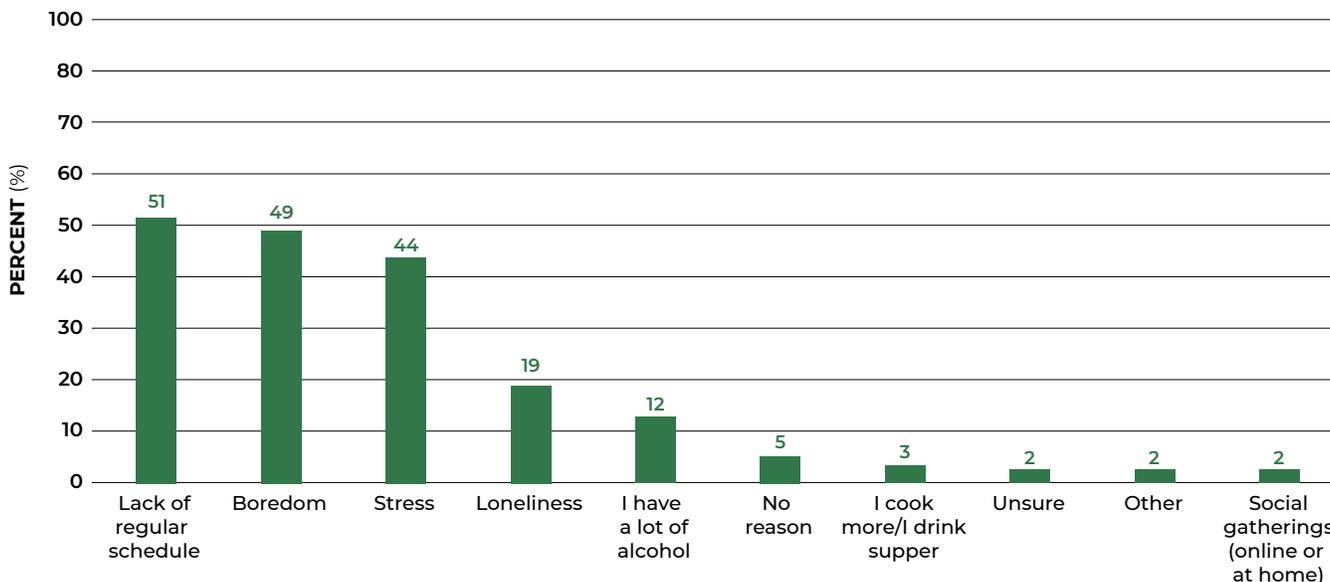
- Increased
- Decreased
- Remained the same



³ The data presented within this section is current as of Jan. 31, 2021. It is recommended to refer to organizations monitoring pandemic-related alcohol consumption and policies for the most up-to-date information.

FIGURE 15: REASONS FOR INCREASED ALCOHOL CONSUMPTION AMONG AGES 35-45 DURING COVID-19 PANDEMIC¹¹⁵

Question: (If staying home more due to Coronavirus/COVID-19 and alcohol consumption has increased)
 Why has your alcohol consumption increased? (Select all that apply)



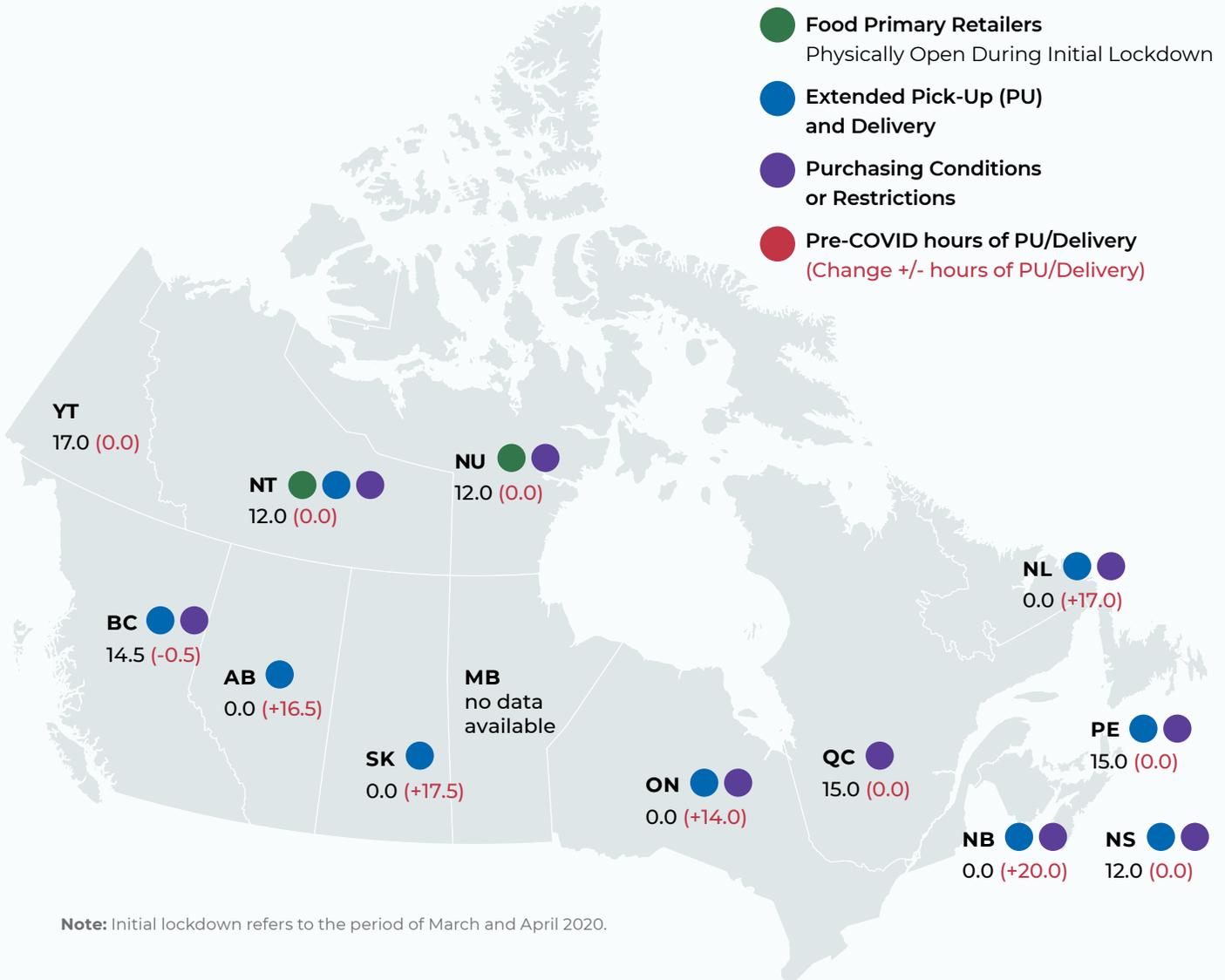
There have been amendments made to many alcohol policies across Canada during the pandemic. For example, Ontario has expanded the hours of sale that alcohol can be purchased in restaurants and bars and has permitted the delivery of alcoholic beverages.¹¹⁶ Curbside pickup of alcohol has been permitted in Ontario, Saskatchewan, Quebec and New Brunswick at government-owned liquor stores.¹¹⁷ North Vancouver in British Columbia has permitted drinking of alcohol in certain parks.¹¹⁸

At the same time, efforts to reduce transmission of COVID-19 has brought changes that may have a positive impact by reducing alcohol consumption. For example, provinces have limited the hours of service at restaurants and bars (e.g., Ontario has prohibited alcohol to be sold after 11:00 p.m. in restaurants and bars) or imposed limits to overall capacity (e.g., Manitoba limits bar capacity to 50%) (Figure 16).

Some of these changes may ultimately influence higher rates of consumption patterns and harms in the long-term.¹¹⁹ It is unclear whether such policy changes will revert to pre-pandemic models or remain in place. Data is rapidly evolving in this area and time will dictate the true influence on long-term consumption and harms.

Nearly **1 in 5** Canadians 18+ **increased alcohol consumption** during the pandemic.

FIGURE 16: ON-PREMISE ALCOHOL SALES DURING INITIAL LOCKDOWN¹²⁰



Maintaining, strengthening and/or implementing stricter alcohol policies during and following the pandemic will minimize alcohol-related harms. Such policies can include increased excise taxes, minimum liquor pricing, placing health warnings on alcohol containers, introducing limits on home deliveries, and limiting density and hours of operations for on-premise locations.¹²¹

Given the evolving nature of COVID-19 data, it is recommended to refer to organizations monitoring pandemic-related alcohol consumption and policies for the most up-to-date information. The Canadian Centre on Substance Use and Addiction has compiled a suite of evidence-based resources on the influence of COVID-19 on substance use, including alcohol. Visit: <https://ccsa.ca/Impacts-COVID-19-Substance-Use> for details.

Appendix A: Methodology⁴

Academic Literature Review

Two systematic scoping searches were performed to capture Canadian epidemiological and policy research. The searches were both geographically (Canada) and temporally limited (January 2016-November 2020). Both searches were done using three online databases: PubMed, Web of Science, and Scopus. The first search yielded 47 results and the second search yielded three results, after title scan and duplicate removal.

Policy Scan

Policy scans were conducted at the federal, provincial / territorial, and municipal levels to capture all legislation related to the regulation of alcohol in Canada. Electronic searches were performed on CanLII and included federal along with provincial / territorial legislation. The same search strategy was used to search 31 municipal websites for bylaws and municipal policies.

Grey Literature

The results from the policy scan and scoping review were supplemented by the 2019 [Canadian Alcohol Policy Evaluation 2019 Report](#). Further, a variety of government websites were accessed to locate relevant alcohol policies, legislation, programs, policies, and statistics. Moreover, a Google Scholar search and general Google searches were completed to find supplementary information regarding alcohol consumption rates and patterns such as provincial liquor store hours during the COVID-19 pandemic, private and public alcohol sales, marketing campaigns, Responsible Liquor Service Training Programs, and other topic areas.

Lastly, a media search was conducted using Google and News website searches to identify jurisdictions that have implemented innovative approaches to alcohol policies.

Limitations

The scoping review strategy was used to evaluate research pertaining to alcohol in Canada. However, the nature of scoping reviews does not allow for quality assessment of the identified literature. Additionally, the search strategy did not include a systematic review of literature related to policy domains. Thus, reporting of policy domains did not rely on a comprehensive review of alcohol-related academic and grey literature. Moreover, the scoping review and policy scans were limited to Canada. International data supplemented the scoping review and policy scan only when needed. Accordingly, the policy suggestions may not be applicable in other countries. Lastly, the research and policies related to alcohol is ever-changing, particularly in the time of the COVID-19 pandemic. New data may appear after publication, or existing data may become outdated as the policy landscape continues to shift.

⁴ All referenced websites and policies are current up to January 31, 2021. Please contact the Partnership for a detailed methodology

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