

2024 Community Alcohol Survey

To: Chair and Members of the Board of Health

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Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- In 2024, Wellington-Dufferin-Guelph (WDG) Public Health conducted a community survey to explore alcohol-related knowledge, attitudes and behaviours among residents 16 and older.
- WDG Public Health has identified several key knowledge gaps. A significant number of respondents were unaware that:
 - Alcohol increases the risk of cardiovascular disease
 - Alcohol can cause cancer
 - There is no known safe amount of alcohol to consume during pregnancy
- Many respondents reported high-risk drinking behaviours:
 - More than one-quarter (29 per cent) of survey respondents reported regularly drinking at a moderate or high-risk level
 - Thirty-nine per cent of survey respondents reported binge drinking within the past year

- Youth and young adults (ages 16 to 29) and men were identified as priority populations for future health promotion campaigns based on overall lower levels of knowledge about alcohol's impact on health and higher rates of high-risk drinking.
- Alcohol is widely available in WDG. More than half of survey respondents (55 per cent) live within one kilometre of an alcohol retailer.
- WDG Public Health will use local data and current evidence to inform programs and services and will share survey results with community partners to help inform community policy and program development related to alcohol use.

Background

Alcohol is a legal, regulated substance that is widely available and consumed in Canada. Access to alcohol is controlled through laws and bylaws such as minimum age requirements and retail restrictions. Although 77 per cent of Canadian adults reported drinking alcohol in the past year, the majority report drinking at a low-risk level (i.e., two or fewer drinks per week).¹

Alcohol is a central nervous system depressant that slows down parts of the brain and causes impairment.² In January of 2023, the Canadian Centre on Substance Use and Addiction released *Canada's Guidance on Alcohol and Health*³ to help Canadians make informed decisions about their health. This guidance replaced *Canada's Low-Risk Alcohol Drinking Guidelines* and provides accurate and current information on alcohol and health. The biggest change to the guidance is that fewer drinks are now linked to a risk of cancer, heart disease and stroke. Three standard drinks per week are now linked to an increased risk of several types of cancers, including breast and colon cancer, and seven standard drinks or more per week are linked to an increased risk of heart disease and stroke.³ A standard drink is defined as 0.6 oz of pure alcohol, which is equivalent to:

- a bottle of beer (12 oz, 341 ml, 5 per cent alcohol)
- a bottle of cider (12 oz, 341 ml, 5 per cent alcohol)
- a glass of wine (5 oz., 142 ml, 12 per cent alcohol)
- a shot glass of spirits (1.5 oz, 43 ml, 40 per cent alcohol)

The costs attributed to alcohol use in Ontario are higher than those of any other substance, including tobacco and opioids. In an average year in Ontario, alcohol contributed to an estimated 4,330 deaths, 22,009 hospitalizations and 194,693 emergency department visits.⁴ In Ontario, the total burden from alcohol in 2020 was calculated as \$7.1 billion. Directly attributable healthcare costs related to alcohol use were estimated at \$2.3 billion.⁵

Policies impacting the physical accessibility of alcohol in Ontario have been reshaping the alcohol landscape. In 2014, the province of Ontario first announced an expansion of retailers to allow Liquor Control Board of Ontario (LCBO) convenience outlets in select grocery stores. Prior to this change, alcohol was primarily sold through the LCBO, Beer Store, wine outlets and breweries. Access was further expanded in 2015 with the licensing of up to 450 grocery stores for alcohol sales.

Most recently, on September 5, 2024, the Province of Ontario expanded the sale of alcohol to an estimated 8,500 convenience stores. This is an increase of more than 400 per cent when compared to the existing 1,910 retailers of LCBO stores and outlets, beer stores and grocery stores. As of October 31, 2024, all grocery and big box stores are now able to sell alcoholic beverages, including larger-pack sizes.

Given the changing alcohol landscape, WDG Public Health launched a voluntary online survey in August 2024 to gather information about WDG residents' knowledge, attitudes, behaviours and access to alcohol. The timing was important to collect baseline data prior to the expansion of alcohol retail in 2024. A follow-up survey is intended to monitor any changes or trends in alcohol use.

Alcohol use impacts many components of WDG Public Health's work including mental health promotion, school health promotion, pregnancy and parenting and harm reduction. WDG Public Health will use the survey data to inform programs and services and will share this data with community partners to inform their work related to alcohol use. Local survey data complements the provincial and national data available through the Canadian Community Health Survey, Canadian Alcohol and Drugs Survey, Ontario Student Drug Use and Health Survey and other sources.

Survey Methods

An anonymous, voluntary survey was conducted online from August 1 to September 18, 2024. Residents of WDG who were 16 years of age or older were eligible to participate, along with students attending post-secondary schools and temporarily living in WDG.

Recruitment was conducted through a comprehensive plan using WDG Public Health media release, multiple news interviews, website and social media promotion, digital advertisements on community screens, in-person recruitment and community partner support.

Survey results were analyzed using Microsoft Excel and Power BI. Responses were included from individuals who met eligibility criteria and completed at least one section of the survey. Comparisons were made between individuals who engaged in high-risk or moderate-risk drinking and those who exhibited low-risk or no-risk drinking. Additional comparisons were conducted across age groups and genders. The chi-squared test was used to assess the significance of these comparisons.

Survey Results:

A total of 2,828 survey responses were received, of which 2,565 were validated for inclusion in the analysis, exceeding the target sample size of 1,902. Most respondents were aged 50 and older (43.4 per cent) or between 30 and 49 years old (41.2 per cent), with the remaining responses from respondents 16 to 29 (15.5 per cent). Forty-six per cent of respondents lived in the City of Guelph, 38 per cent in Wellington County, and 16 per cent in Dufferin County. The

proportion of survey respondents from each region was comparable with the proportions identified in the 2021 Census data. When compared to the population of WDG, the survey sample contained a higher proportion of females (73.5 per cent in sample vs. 51 per cent in WDG) and individuals who had completed a university or college degree, diploma or certificate (67 per cent in the sample vs. 48 per cent in WDG). For more detailed information about the survey participants, refer to Appendix A.

The survey did not use random sampling. As a result, estimates generated from the survey results may not be representative of the entire WDG population. Recruitment methods were more likely to reach residents who already engage with WDG Public Health and its affiliates. Due to the sampling method, the accuracy of statistical tests and analyses may be somewhat limited. Despite these limitations, the survey results provide valuable insights about knowledge gaps, attitudes and behaviour trends in WDG.

Locally, 79.6 per cent of survey respondents reported consuming alcohol within the past 12 months. This is comparable to national rates of 77 per cent reported for 2023,¹ suggesting that the survey likely captured a representative proportion of people who consume alcohol.

Discussion

With the recent changes to Canada's Guidance on Alcohol and Health, a key focus of the survey was to assess WDG residents' knowledge of the relationship between alcohol and health. Survey respondents were asked about their familiarity with the guidance and completed a series of knowledge-based questions on the health risks of alcohol. For a summary of knowledge statements, refer to Appendix B.

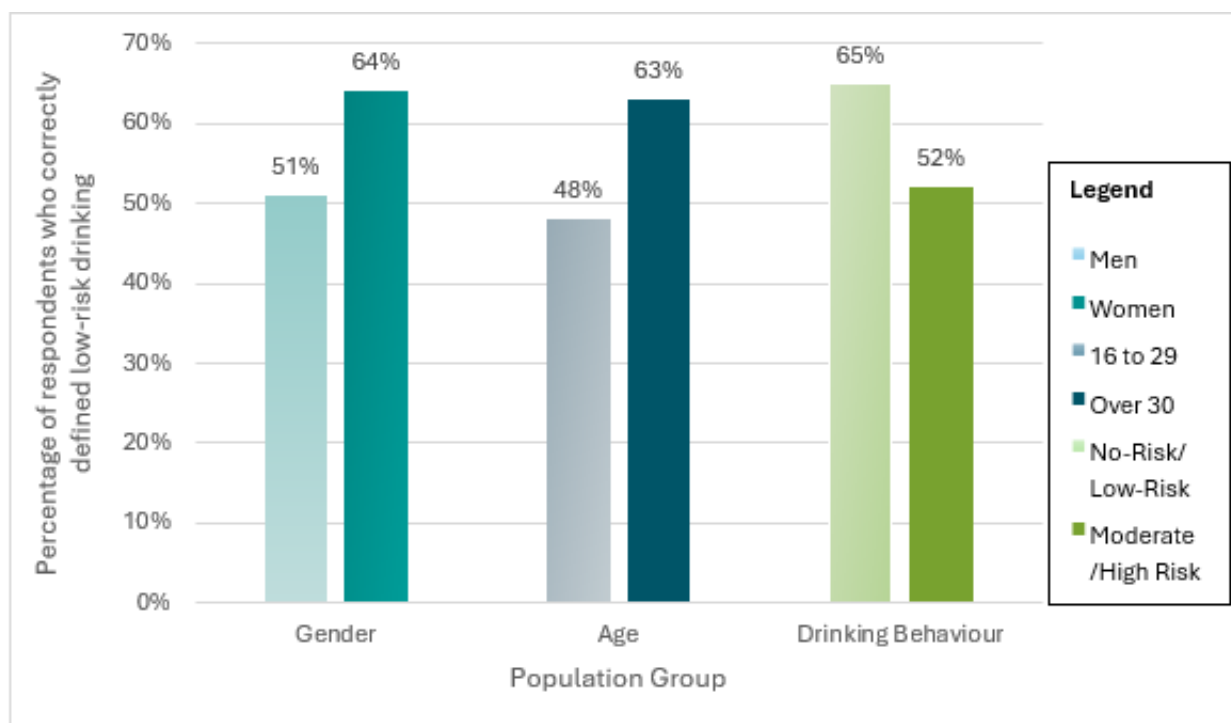
Overall, awareness of Canada's Guidance on Alcohol and Health was relatively low with only 36 per cent of survey respondents reporting familiarity with the resource. The primary sources that respondents reported using for information on alcohol and health varied by age group. For example, respondents under 30 were most likely to access information through social media (45 per cent) whereas people aged 30 or older were more likely to rely on professional organizations such as the Canadian Cancer Society (55 per cent) or through medical professionals (43 per cent).

Regardless of where respondents accessed information, the majority (55 per cent) stated that being informed about the harms and risks of alcohol use was "very important" to them, followed by 31 per cent who stated it was "a little important". Only 11 per cent of respondents said it was "not that important" or "not important at all".

Knowledge Gaps

Only 60 per cent of survey respondents were able to correctly identify that 1-2 drinks per week is considered low-risk, while 38 per cent thought a higher number of drinks is considered low-risk or were unsure. However, knowledge did vary by age, gender and level of alcohol use. Younger respondents (under 30), men (compared to women) and those who drink more alcohol (at a high or moderate-risk level compared to no or low-risk) were less likely to know how many drinks are considered low-risk (**Figure 1**). These differences were statistically significant.

Figure 1: Percentage of respondents who correctly defined low-risk drinking as two drinks or less per week compared across gender, age and drinking behaviour



Respondents were asked a series of 10 knowledge questions. Even though there was some uncertainty about how much alcohol is linked to risk, most survey respondents had a good overall understanding of how alcohol can affect health. Approximately 80 per cent of survey respondents got at least 8 questions correct.

Younger respondents (under 30), men (compared to women) and those who drink more alcohol (at a high or moderate-risk level compared to no or low-risk) were less likely to answer 8 or more knowledge questions correctly. Each difference was found to be statistically significant. Please refer to Appendix C for more information.

Initial data analysis has identified three key knowledge gaps that WDG Public Health plans to address in 2025:

- Alcohol increases the risk of cardiovascular disease
- Alcohol can cause cancer
- There is no known safe amount of alcohol to consume during pregnancy

Alcohol increases the risk of cardiovascular disease.

Almost half (42 per cent) of survey respondents incorrectly thought that alcohol can have benefits for cardiovascular health or were unsure. Sixteen per cent of survey respondents answered incorrectly or were unsure when asked if alcohol can increase the risk of cardiovascular disease. This may be related to outdated research suggesting that drinking small amounts of alcohol can have protective effects. Drinking a little alcohol neither decreases nor increases the risk of ischemic heart disease, but it is a risk factor for most other types of cardiovascular disease including hypertension, high blood pressure, atrial fibrillation and heart failure.^{3,6}

Alcohol can cause cancer

Fourteen percent of survey respondents were incorrect or unsure about alcohol contributing to cancer development. This number rose to almost one-quarter (22 per cent) among those under 30.

Alcohol is a carcinogen that can cause at least seven types of cancer and causes nearly 7,000 cancer deaths each year in Canada. Most cases are breast or colon cancer, followed by cancers of the rectum, mouth and throat, liver, esophagus and larynx.³ The Canadian Cancer society lists drinking less alcohol as one of the top 10 behaviours to reduce cancer risk.³

There is no known safe amount of alcohol to consume during pregnancy

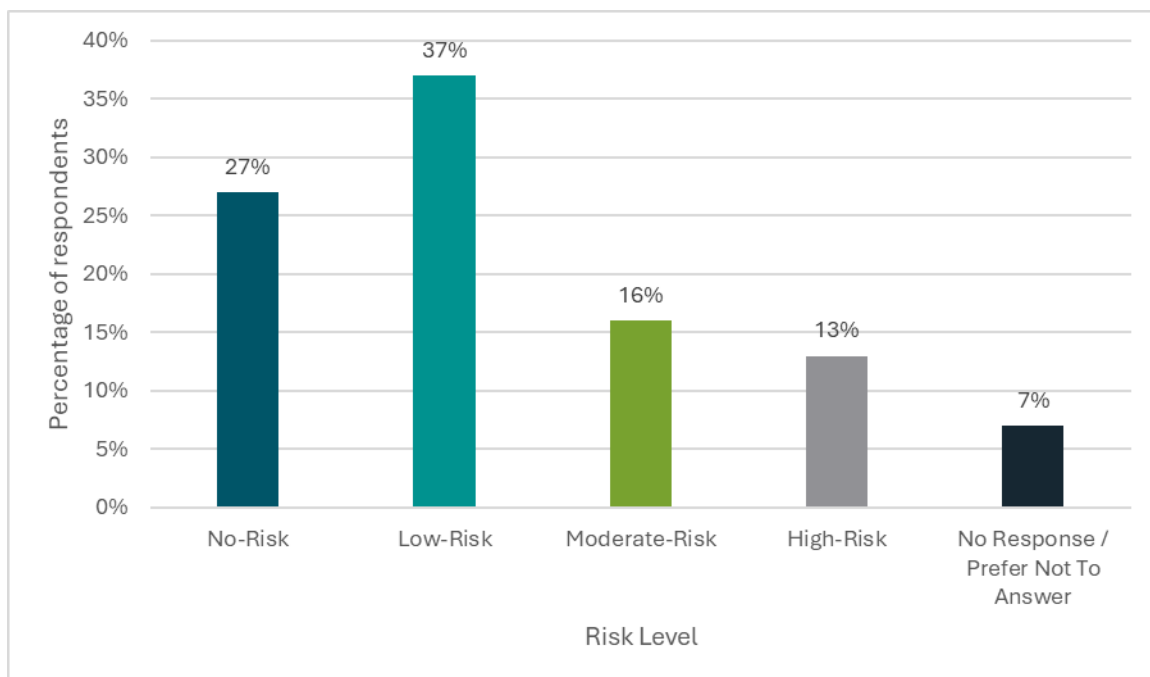
Fourteen percent of survey respondents were incorrect or uncertain when asked if there is a known safe amount of alcohol someone can have while pregnant. This number rose to more than one in four (27 per cent) among those under 30 years.

Alcohol use during pregnancy interferes with fetal growth and development. Alcohol can also lead to fetal alcohol spectrum disorder (FASD). FASD is a lifelong disability that affects the brain and body, and results in physical, mental, behavioural and/or learning problems. These effects are observed at low levels of regular alcohol exposure and short-term exposure to high levels of consumption. Alcohol can disrupt development at any stage, even before a woman knows that she is pregnant. For these reasons, there is no known safe amount or type of alcoholic beverage, and no safe time to drink alcohol during pregnancy.⁷ Binge drinking and heavy drinking during pregnancy contribute to the greatest risk of severe problems.³

Alcohol Behaviours:

Canada's Guidance on Alcohol and Health outlines a continuum of risk associated with weekly alcohol consumption and defines low-risk of harm as consuming two standard drinks or less per week, moderate-risk as consuming between three and six standard drinks per week and high-risk as consuming seven standard drinks or more per week.³ Any reduction in alcohol consumption is beneficial to health and lowers the risk of illness or injury. Among survey respondents, 13 per cent reported high-risk drinking behaviour and 16 per cent reported moderate-risk drinking behaviour (see **Figure 2**).

Figure 2. Percentage of respondents by alcohol consumption risk level (using Canada's Guidance on Alcohol and Health risk levels)



A higher proportion of youth and young adults (under 30) engage in high or moderate-risk drinking (47 per cent) compared with respondents 30 and older (29 per cent). A higher proportion of men also engage in high or moderate-risk drinking (49 per cent) compared with women (27 per cent). These differences were statistically significant (see Appendix D for more information).

Respondents' reasons for drinking alcohol depended on how often they drank. Respondents reporting high-risk drinking behaviours were more likely to report drinking to relieve stress or relax than low-risk drinkers. The top three reasons respondents had for drinking in the high-risk category were to relieve stress or relax (49 per cent), because they like alcohol (45 per cent), and to have fun or party (28 per cent).

Among low and moderate-risk drinkers the top three reasons provided were for a special occasion/event (36 per cent), to relieve stress or relax (35 per cent) and to have fun or party (31 per cent).

Binge drinking is considered another high-risk behaviour and is defined as consuming four or more drinks on a single occasion for women and five or more drinks on a single occasion for men.³ Heavy drinking is often defined as binge drinking at least once a month in the past year.^{3,4} Among survey respondents, 39 per cent reported binge drinking within the past year, while 18 per cent stated they binge drank at least once per month during that period. Past year binge drinking rates were higher among adults under 30 (64 per cent) and among men (51 per cent). These differences were statistically significant (see Appendix E for more information).

While youth and young adults have higher rates of high-risk alcohol behaviours relative to people 30 years or older, youth drinking rates have been decreasing over the past 10 years.⁸ Despite this overall encouraging trend, local data from the Well-being and Health Youth Survey reported that more youth binge drank in WDG compared to provincial averages (15 per cent and 10 per cent respectively).⁸

Alcohol Access

Alcohol is widely available in WDG. More than half of survey respondents (55 per cent) live within one kilometre of an alcohol retailer (see Appendix F for more information). The most frequent locations respondents bought alcohol from in the past 12 months were the LCBO (67 per cent), restaurants or bars (40 per cent), and grocery stores (38 per cent).

A report by the Canadian Centre on Substance Use and Addiction found that the heaviest 20 per cent of drinkers in Canada consume the majority of all alcohol sold.⁹ Increasing alcohol access through hours of operation and number of alcohol outlets has been associated with higher rates of alcohol-attributable emergency department visits.¹⁰ Between 2013-2014 and 2016-17, there was a 6 per cent increase in emergency department visits attributable to alcohol when comparing areas in Ontario that introduced sale in grocery stores with areas that did not.¹¹ With the recent expansion of alcohol retail to convenience stores, monitoring any local changes to alcohol harms will be important.

Next Steps

This survey will be repeated at regular intervals in order to continue to monitor alcohol-related trends over time. WDG Public Health will use the 2024 survey results to tailor programs and services and increase awareness of alcohol harms while promoting safer use. This will include promoting Canada's Guidance on Alcohol and Health to ensure that residents have the information they need to make informed decisions about their health

WDG Public Health has identified young adults as a priority population for health promotion initiatives in 2025. Analysis of the survey responses revealed young adults are less likely to be aware of the impact alcohol can have on their health and consume alcohol in higher-risk ways. WDG Public Health plans to develop resources that can be shared in schools and more broadly in the community. In addition, WDG Public Health will continue to support the *Before the Floor Campaign*, which is a collaboration with several Ontario health units aimed at promoting safer alcohol use to young adults ages 19-24. This campaign utilizes video stories on social media to reach young adults, as well as focus-tested messaging specific to male and female audiences.

WDG Public Health will be connecting with local community partners to share survey results and explore opportunities for how the survey data can be used to inform community policy and program development. A more comprehensive report about alcohol in WDG is planned. This report will combine data from the survey and other sources (e.g., hospital data, Well-being and Health Youth survey data, retail density data) to develop a more comprehensive understanding of the alcohol landscape in WDG.

Health Equity Implications

There are important sex and gender differences in how alcohol use impacts health. The survey identified that men were less likely to be aware of how alcohol can affect their health and were more likely to engage in higher risk drinking when compared to women. Research also highlights that men are more likely to engage in higher-risk drinking behaviours. As a result, men are more likely to experience acute harms such as injury or death, be involved in alcohol-related collisions and act violently towards others.^{3,12}

Women also face unique risks from alcohol. For example, health risks increase more rapidly when drinking at a moderate or high-risk level (six or more drinks per week). Biological factors in alcohol metabolism contribute to this, causing faster intoxication, more risk for disease (including breast cancer), liver damage and injury.² There are also disproportionate harms from alcohol use that impact pregnant people as described in this report. Women also face unique challenges related to alcohol marketing. Alcohol is often marketed as a coping strategy to mothers to help with their mental health and the expectations of motherhood.¹³ Using alcohol to cope has been shown to increase the risk of problematic drinking.¹⁴ These sex and gender differences are important to consider when developing programs and sharing health promotion messaging.

Lastly, research has shown that alcohol retail stores tend to aggregate in neighborhoods with lower socioeconomic status, contributing to disproportionately higher rates of alcohol-related harms, such as emergency department visits.¹¹ With the recent alcohol expansion, this will be important to monitor, along with other potential unintended consequences.

Conclusion

The 2024 Community Alcohol Survey collected 2,565 valid responses that provided insight into alcohol-related knowledge, attitudes, and behaviours among WDG residents ages 16 and older. Key knowledge gaps related to alcohol's impact on cardiovascular disease, cancer and alcohol use during pregnancy were identified and will be addressed through messaging to the public. Trends related to high-risk drinking were also identified. Nearly 30 per cent of respondents reported regularly drinking at a moderate or high-risk level, and 39 per cent of respondents reported binge drinking in the past year.

Young adults and men were found to have lower overall knowledge on how alcohol impacts health and report higher risk drinking behaviours. These groups will be a priority population for health promotion initiatives in 2025. WDG Public Health will continue to work with community partners to raise awareness of the health impacts of alcohol use and support the development of strategies for alcohol use prevention and harm reduction.

Ontario Public Health Standards

Foundational Standards

- ☒ Population Health Assessment
- ☒ Health Equity
- ☐ Effective Public Health Practice
- ☐ Emergency Management

Program Standards

- ☒ Chronic Disease Prevention and Well-Being
- ☐ Food Safety
- ☐ Healthy Environments
- ☐ Healthy Growth and Development
- ☐ Immunization
- ☐ Infectious and Communicable Diseases Prevention and Control
- ☐ Safe Water
- ☒ School Health
- ☒ Substance Use and Injury Prevention

2024-2028 WDGPH Strategic Goals

More details about these strategic goals can be found in [WDGPH's 2024-2028 Strategic Plan](#).

- ☒ Improve health outcomes
- ☒ Focus on children's health
- ☒ Build strong partnerships
- ☒ Innovate our programs and services
- ☐ Lead the way toward a sustainable Public Health system

References

1. Statistics Canada. A snapshot of alcohol consumption levels in Canada: Half of Canadian adults reported not drinking any alcohol in the past seven days, 2023. [Internet] 2024. [cited 2025 Jan 8]. Available from: <https://www150.statcan.gc.ca/n1/daily-quotidien/241002/dq241002a-eng.htm>
2. Government of Canada. Health risks of alcohol. [Internet]. 2021. [cited 2025 Jan 19]. Available from: <https://www.canada.ca/en/health-canada/services/substance-use/alcohol/health-risks.html>
3. Paradis, C., Butt, P., Shield, K., Poole, N., Wells, S., Naimi, T., Sherk, A., & the Low-Risk Alcohol Drinking Guidelines Scientific Expert Panels. Canada's Guidance on Alcohol and Health: Final Report. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. [Internet]. 2023. [cited 2025 Jan 8]. Available from: <https://www.ccsa.ca/canadas-guidance-alcohol-and-health>
4. Ontario Health and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Burden of Health Conditions Attributable to Smoking and Alcohol by Public Health Unit in Ontario. Toronto: King's Printer for Ontario; [Internet] 2023. [cited 2025 Jan 9]. Available from: <https://www.publichealthontario.ca/-/media/Documents/B/2023/burden-health-smoking-alcohol-report.pdf>
5. Canadian Substance Use Costs and Harms. Substance Use Costs in Canada in 2020. Ottawa, Ont.: [Internet]. 2023. [cited 2025 Jan 10]. Available from: <https://csuch.ca/substance-use-costs/current-costs/>
6. Arora, M., ElSayed, A., Beger, B., Naidoo, P., Shilton, T., Jain, N., ... Champagne, B.M. The impact of alcohol consumption on cardiovascular health: Myths and measures. Global Heart, 17(1), Article 45. [Internet]. 2022. [cited 2025 Jan 21]. Available from: <https://doi.org/10.1111/add.15646>

7. Moore K. Balancing Act An All-of-Society Approach to Substance Use and Harms. 2023 annual report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario. Toronto, ON: King's Printer for Ontario; [Internet]. 2024. [cited 2025 Jan 8]. Available from: https://cdn.ymaws.com/www.alphaweb.org/resource/collection/822EC60D-0D03-413E-B590-AFE1AA8620A9/CMOH_2023_Annual_Report_280324.pdf
8. Boak, A., & Hamilton, H. A. (2024). Drug use among Ontario students, 1977–2023: Findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health [Internet]. 2024. [Cited 2025 Feb 20] Available from: https://www.camh.ca/-/media/research-files/osduhs-drug-use-report_2023.pdf
9. Thomas, G. (2012). Levels and patterns of alcohol use in Canada. (Alcohol Price Policy Series: Report 1) Ottawa, ON: Canadian Centre on Substance Abuse. [Internet]. 2012. [Cited 2025 Feb 20] Available from: <https://www.ccsa.ca/sites/default/files/2019-05/CCSA-Patterns-Alcohol-Use-Policy-Canada-2012-en.pdf>
10. Myran, D. T., Chen, J. T., Giesbrecht, N., and Rees, V. W. (2019) The association between alcohol access and alcohol-attributable emergency department visits in Ontario, Canada. *Addiction*, 114: 1183–1191. [Internet]. 2019. [cited 2025 Jan 20]. Available from: <https://doi.org/10.1111/add.14597>
11. Myran DT, Chen JT, Bearnot B, Ip M, Giesbrecht N, Rees VW. Alcohol Availability Across Neighborhoods in Ontario Following Alcohol Sales Deregulation, 2013–2017. *Am J Public Health*. 2019 Jun;109(6):899-905. [Internet]. 2019. [Cited 2025 Jan 20] Available from: <https://doi.org/10.2105/AJPH.2019.305014>
12. Smith BT, Schoer N, Sherk A, Thielman J, McKnight A, Hobin E. Trends in alcohol-attributable hospitalisations and emergency department visits by age, sex, drinking group and health condition in Ontario, Canada. *Drug Alcohol Rev*. [Internet]. 2023. [Cited 2025 Jan 20] Available from: <https://doi.org/10.1111/dar.13629>
13. Reisdorer E, Nesari M, Krell K, Johnston S, Dunlop RZ, Chute A, de Goes FDSN, Singh I. The Influence of Social Media on Alcohol Consumption of Mothers of Children and Adolescents: A Scoping Review of the Literature. *Nurs Rep*. [Internet]. 2023. [Cited 2025 Feb 20] Apr 13;13(2):682-696. Available from: <https://doi.org/10.3390/nursrep13020061>
14. Merrill JE, Thomas SE. Interactions between adaptive coping and drinking to cope in predicting naturalistic drinking and drinking following a lab-based psychosocial stressor. *Addict Behav*. Mar;38(3):1672-8. [Internet]/ 2013. [Cited 2025 Feb 25]. Available from: <https://doi.org/10.1016/j.addbeh.2012.10.003>

Appendices

Appendix A – 2024 Survey Respondent Demographics

Appendix B – Knowledge Questions on Alcohol and Health

Appendix C – Scoring on Knowledge Questions by Group

Appendix D – Drinking Patterns: Risk Level by Age, Gender

Appendix E – Prevalence of Binge Drinking in the Past Year by Age, Gender

Appendix F – Alcohol Access in WDG

Appendix A:

2024 WDG Alcohol Survey Respondent Demographics:

Demographic Category	Variable	Survey Sample	2021 Census Population*
Geography	Wellington County	38%	32%
	Dufferin County	16%	22%
	City of Guelph	46%	47%
Gender	Man	17%	49%
	Woman	74%	51%
	Another gender*	1%	Not available
	Unknown/prefer not to answer/no response	8%	Not available
Sex at birth	Male	17%	Not available
	Female	74%	Not available
Age Group	16-18	2%	n/a**
	19-24	7%	n/a
	25-29	6%	6%
	30-39	21%	14%
	40-49	20%	12%
	50-59	16%	14%
	60+	27%	24%
	Grade school (Grade 1-8)	<1%	Not available
Highest Level of Education	High school or high school equivalency certificate (grade 9-12)	13%	30%
	Registered apprenticeship/Trade certificate or diploma (or ongoing)	9%	6%
	College diploma/certificate (or ongoing)	16%	21%
	University certificate, diploma, degree (or ongoing)	33%	27%
	Post-graduate degree or professional designation	18%	Not available

	Prefer not to answer/no response	9%	Not available
Currently attending school (high school, college, university)	Yes	11%	Not available
	No	80%	Not available
	Prefer not to answer/no response	4%	Not available
	Employed full time permanent	48%	Not available
Current Employment Status	Employed part time	9%	Not available
	Employed – Casual, on call, temporary or seasonal	4%	Not available
	Stay at home caregiver	4%	Not available
	Not currently employed	4%	Not available
	Retired	20%	Not available
	Unable to work	2%	Not Available
	Prefer not to answer/No response	8%	Not available

*Census comparisons use the population ages 15 years and older

Source: Statistics Canada. Census profile, 2021 Census of population. Catalogue no. 98-316-X2021001 (table). [Internet]. 2023. [cited 23 Jan 2025]. Available from:

<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

**not applicable due to age range differences

Appendix B:

Knowledge Questions on Alcohol and Health

Knowledge Statement	Percent of Correct Responses			
	*Low / No-Risk	Moderate-Risk	High-Risk	Total Sample
Drinking alcohol can be harmful to my physical health (TRUE)	89%	95%	90%	92%
Drinking alcohol can have benefits for cardiovascular and heart health (FALSE)	51%	55%	47%	54%
Drinking alcohol can increase risk of cardiovascular disease (TRUE)	76%	84%	78%	80%
Using alcohol daily or almost daily can cause problems with liver health (TRUE)	88%	93%	85%	91%
Drinking alcohol can increase risk of developing some types of cancer (TRUE)	86%	80%	80%	81%
Drinking alcohol may result in dependence or addiction (TRUE)	97%	94%	89%	92%
Drinking alcohol while pregnant can cause harm to the fetus/child (TRUE)	98%	94%	91%	93%
There is no known safe amount of alcohol to drink during pregnancy (TRUE)	88%	81%	76%	82%
After one drink, it can take up to 2 hours or more for alcohol to be clear from breast milk (TRUE)	63%	65%	62%	64%

Note: No-risk, low-risk, moderate-risk, high-risk are filtered based on respondents self-reporting the average number of drinks per week they consumed.

*The no-risk and low-risk groups are collapsed together within the table.

Appendix C:

Scoring on Knowledge Questions by Age, Gender and Drinking Behaviour

Population Group	8/10 or more questions correct	7 or fewer questions correct
Under 30	67%	33%
Over 30	84%	16%
Men	71%	29%
Women	84%	16%
High-Moderate Risk	74%	26%
Low-No Risk	85%	15%

Note: 'No response' and 'Prefer not to answer' values were excluded in chi-square calculations, resulting in different denominators between comparison groups. The age group (Under 30 and Over 30) included 2465 responses, the gender group (men and women) included 2310 responses, and the drinking risk group (high-moderate risk and low-no risk) included 2380 responses.

People who selected "Another gender" were excluded in gender-based chi-square calculations due to low response rates.

Appendix D:

Drinking Patterns: Risk Level by Age, Gender

Population Group	No / Low-Risk	Moderate / High-Risk
Under 30	53%	47%
Over 30	71%	29%
Men	51%	49%
Women	73%	27%

Note: 'No response' and 'Prefer not to answer' values were excluded in chi-square calculations, resulting in different denominators between comparison groups. The age group (Under 30 and Over 30) included 2037 responses, and the gender group (men and women) included 1858 responses. Drinking rates by gender are comparable to rates based on sex at birth.

People who selected "Another gender" were excluded in gender-based chi-square calculations due to low response rates.

Appendix E:

Prevalence of Binge Drinking in the Past Year by Age, Gender

Population Group	Binge drinking reported (% of people that are binge drinking)
Under 30	64%
Over 30	38%
Men	51%
Women	39%

Note: 'No response' and 'Prefer not to answer' values were excluded in chi-square calculations, resulting in different denominators between comparison groups. The age group (Under 30 and Over 30) included 2044 responses, and the gender group (men and women) included 1865 responses. Binge drinking rates by gender are comparable to rates based on sex at birth.

People who selected "Another gender" were excluded in gender-based chi-square calculations due to low response rates.

Appendix F:

Alcohol Access in WDG

Retailer Proximity	Per cent of Respondents
Under 500 Meters	20%
1 Kilometer	35%
2.5 Kilometers	24%
More than 2.5 Kilometers	14%
No Response	7%

Note: Respondents were asked “How Close Is the Nearest Alcohol Retailer to Your Primary Residence? (e.g. LCBO, bar/pub, beer, grocery, or wine store)?”