

ALCOHOL USE AND SUICIDE: Fact Sheet

Suicide is an important public health issue in Canada. While alcohol use^{1,2,3} is one of the many risk factors,^{4,5} its relationship to increased suicide risk is still not well understood, despite a growing body of evidence.⁶ This fact sheet describes what is currently known about that relationship and provides strategies to help reduce these risks.

Alcohol Use in Canada

Alcohol use has become a common social practice. Significant milestones like weddings, birthdays, and holidays are often celebrated with a toast. Close to **80 per cent** of people in Canada (aged 15+) consume alcohol,^{7,8} and about **15 per cent** of those exceed what is recommended in [Canada's Low-Risk Alcohol Drinking Guidelines](#) (LRDGs).⁹ Since the start of the COVID-19 pandemic, people have reported increases in both the frequency and quantity of their consumption.¹⁰ Since the fall of 2020, about **30 per cent** of those who consume alcohol said they were drinking more compared to March 2020.¹¹



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The LRDGs were designed to help people moderate their consumption and reduce immediate and long-term alcohol-related harms. It recommends no more than 10 drinks per week (two, most days) for women and no more than 15 drinks per week (three, most days) for men.⁹

The LRDGs define a drink as a

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

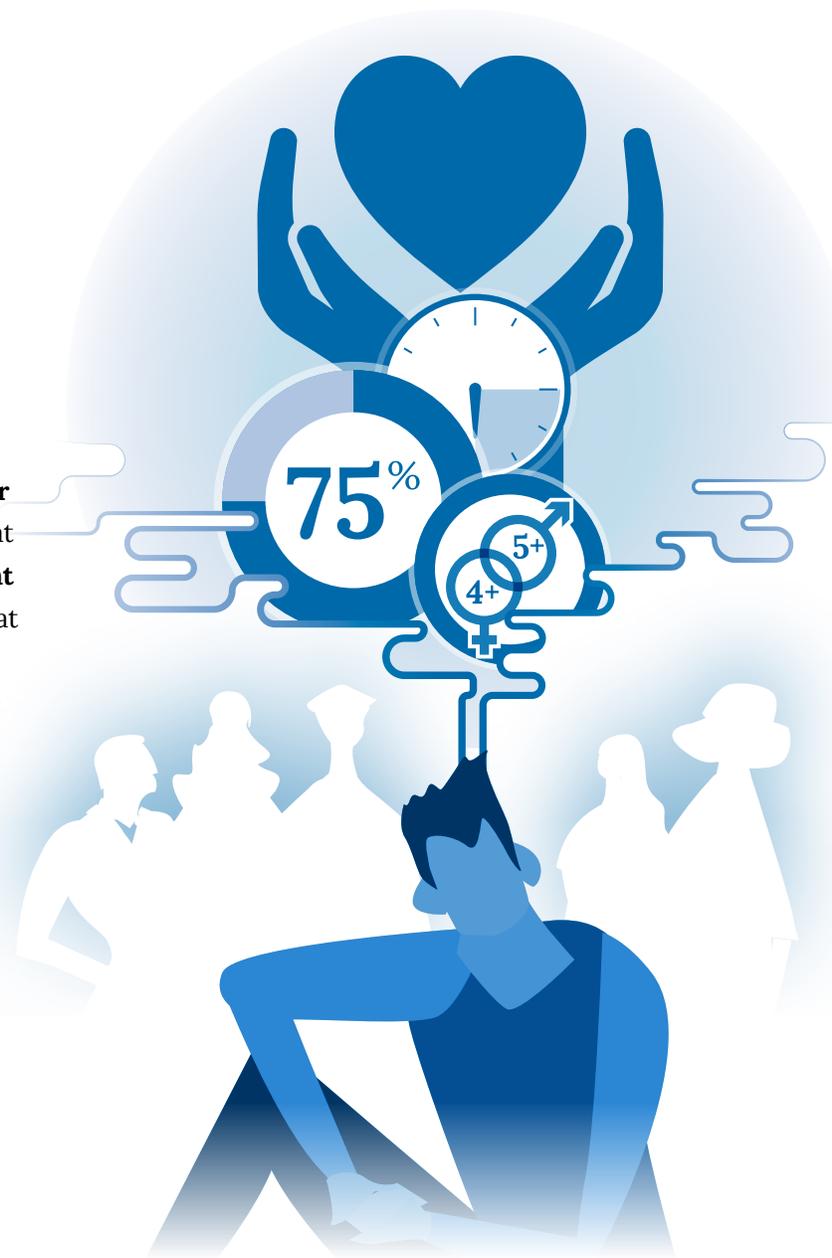
Defining different types of alcohol consumption

Low-risk drinking. Consumption that adheres to the LRDGs recommendations. About **75 per cent** of those who consume alcohol follow those limits.⁹

Acute use of alcohol. Consumption that occurs about **three to six hours before suicidal behaviour**.¹²

Heavy drinking. Consumption of **five or more drinks for men, four or more drinks for women**, on one occasion at least once a month in the past year.⁸ In 2018, **19.1 per cent** of people in Canada (aged 12+) reported consumption that classified them as heavy drinkers.¹³ In 2020, one in four reported having engaged in heavy drinking at least once a month.¹⁴

Alcohol use disorder. Characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences.¹⁵ It is also referred to as alcohol abuse, problematic alcohol use, alcohol dependence, alcohol addiction, and alcoholism.¹⁶ An estimated **18.1 per cent** of people in Canada meet these criteria during their lifetime.¹⁷ Since the start of the pandemic, 20 per cent of those who use alcohol have reported increased problematic use.¹¹



Alcohol Use and Suicide

In Canada, about 4,000 people die by suicide each year.¹⁸ Almost one in four of these deaths involve alcohol.⁶

Suicide is the ninth leading cause of death in Canada and the second leading cause among people between **15 and 34**.¹⁸

In 2019, **37 per cent** of suicides involved people between the ages of **45 and 64**.¹⁸

Three out of four people who die by suicide are men.¹⁸

One in four deaths by suicide involve alcohol, either as the primary cause (e.g., intentional alcohol poisoning) or as present in the person's body at the time of death.⁶

- **Alcohol intoxication increases** the lethality of suicide attempt methods, making fatalities more likely.¹⁹
- The risk of engaging in suicidal behaviours is **three times greater** for people with alcohol use disorder than for those without it.²⁰ Such behaviours can range from thoughts of suicide to suicide attempts to death by suicide.⁵
- Alcohol use disorder is the **second-most common** mental health disorder in people who have died by suicide.^{20,21}

Note: Alcohol use disorder has been shown to predict and often co-occur with major depression,^{27,22} the most common mental health disorder among individuals who die by suicide.^{20,21}



How does alcohol increase the risk of suicide?

The different ways alcohol use may increase the risk of suicide range from short-term risks associated with acute alcohol use to long-term risks associated with heavy drinking and alcohol use disorder.

Acute use of alcohol.

Acute intoxication increases the risk for suicidal behaviour as much as seven-fold and is responsible for an estimated **35 per cent** of all suicide attempts.¹²

Acute use may increase the risk of suicide by²¹

- reducing fear and inhibition
- impairing judgment and decision making
- increasing impulsivity and aggression
- changing mood states (e.g., sadness, despair).

Alcohol use disorder.

This disorder may further elevate the risk of suicide by

- increasing social isolation and the corrosion of relationships and support systems²⁹
- triggering psychosocial stressors (e.g., homelessness, financial insecurity)²⁹
- co-occurring with major depression

Heavy drinking.

People experiencing suicidal ideation are seven times as likely to attempt suicide when drinking heavily.²³ Such drinking may increase the risk of suicide through

- impaired cognitive functioning (e.g., inhibition)²⁴
- difficulties in emotion and self-regulation²⁵
- the onset of alcohol use disorder²⁶ and/or major depression²⁷
- stressful or traumatic life events (e.g., intimate partner violence, economic hardship, job loss)²⁸

Intentional self-poisoning.

Alcohol can also be used as a means of suicide, either alone or in combination with other substances.³⁰



Factors associated with alcohol use and suicide

While most people who use alcohol will not experience suicidal behaviours, several factors can interact with alcohol use to increase the risk of suicide or alcohol use disorder:

Socio-demographic factors. In terms of **age**, young adults (ages 18-34) report higher levels of drinking.^{31,8} Regarding factors related to **gender**, men are more likely to die by suicide, whereas women are more likely to attempt it.⁵ Men are also more likely experience heavy drinking and/or alcohol use disorder.^{8,14,17} Since the start of the pandemic, women in households with kids are more likely to report increased alcohol consumption, while men in single households are more likely to report problematic use.³²

Early-life adversity and trauma. Both of these factors are strong predictors of mental health and substance use disorders, including alcohol use disorder and suicidal behaviours.³³ Of the different types of early-life trauma, childhood maltreatment appears to be the strongest predictor of suicidal behaviours.³⁴ Exposure to a parent's or family member's death by suicide may also increase the risk of suicide.³⁵

History of suicide and suicidal ideation. Acute and/or heavy alcohol use can significantly increase the risk of suicidal behaviours in people with a history of suicide.²¹

History of mental health and substance use disorders.

Individuals with a history of mental health disorders (e.g., anxiety and depression) and alcohol use disorders have an increased risk for thoughts of suicide, suicide attempts, and suicide.⁵ From the cases of suicide deaths among young people (ages 15-29), 40 per cent involved a diagnosed substance use disorder.³⁶

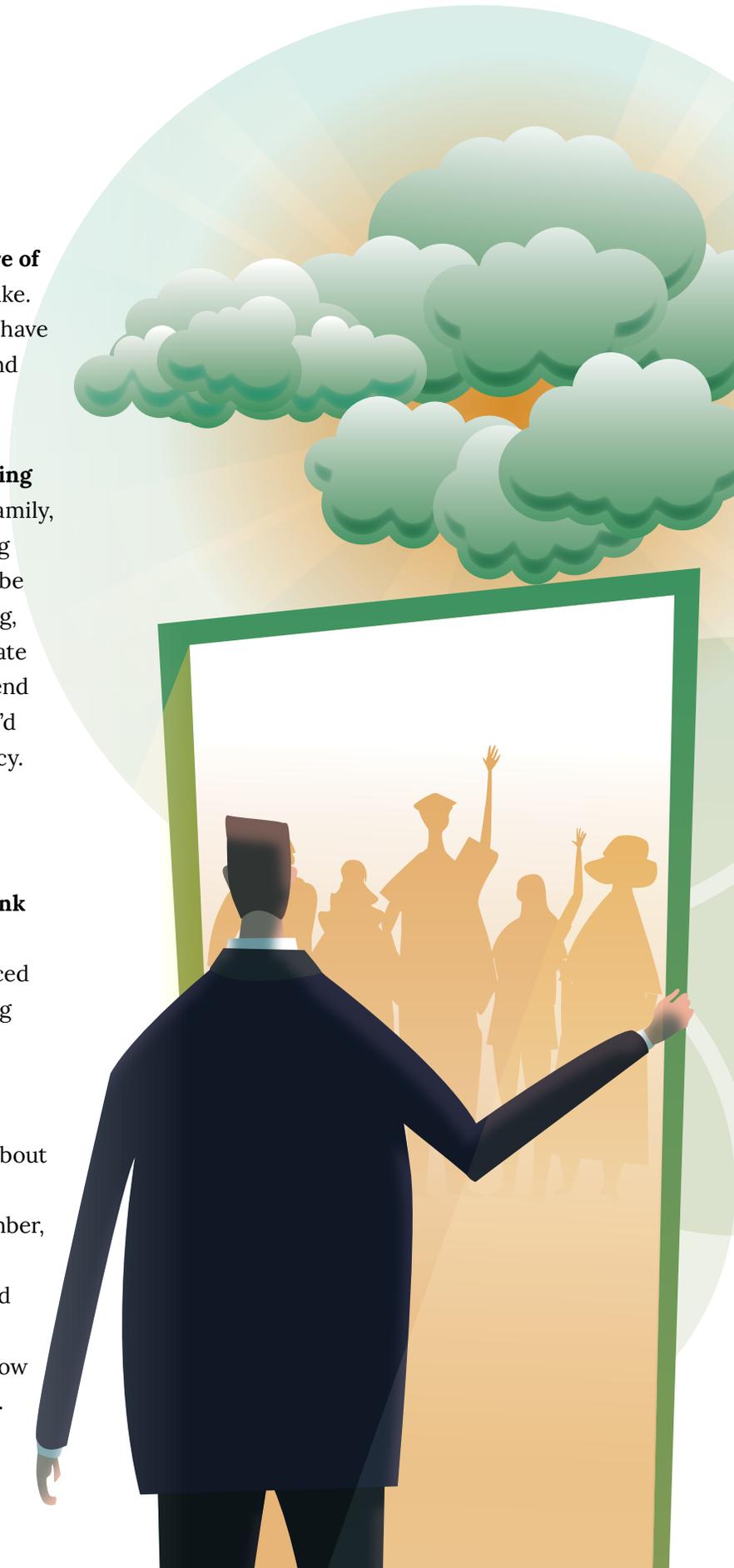
Recent exposure to a stressful life event. Stressful life events, especially if they are interpersonal in nature (e.g., a breakup or family conflict), can precipitate suicidal behaviour for individuals with alcohol use disorder.³⁷ Higher rates of suicide exist among people who have experienced a divorce, especially for middle-aged and older males.⁵ An increased risk for mental health problems and death by suicide has been linked to a stressful life event such as general socio-economic insecurity or a job loss (especially in the first five years of unemployment).³⁸



Ways to reduce risk

At the individual level

- 1** Reflect on the **risk factors associated with alcohol use and suicide** and consider how they may affect you.
- 2** Once you understand the risk factors, **be aware of your own limits** and monitor your alcohol intake. Adhere to the LRDGs. If you consume alcohol, have a substantial meal beforehand, drink slowly, and drink water before, during, and after.
- 3** Consider your **social network and their drinking habits**. Whether spending time with friends, family, or colleagues, be aware of how others' drinking habits may affect your own. If you know you'll be attending an event that involves heavy drinking, consider formulating a plan on ways to moderate your own intake. Tell someone you trust (a friend or family member) the drinking guidelines you'd like to follow in terms of quantity and frequency. Encourage your friend to check in with you throughout the event.
- 4** **Consider your emotional state before you drink alcohol**. Are you currently working through early-life trauma? Have you recently experienced a stressful life event? If so, consider postponing alcohol consumption or closely monitoring your intake.
- 5** **Find alternatives to drinking alcohol**. Think about your reasons for drinking. If you're looking to spend quality time with a friend or family member, meeting for a coffee or tea or going for a walk could be ways to achieve the same goal. If you'd like to de-stress, consider going for a run or a long walk. When drinking alcohol, reflect on how you're feeling and the thoughts you are having.



Ways to reduce risk

At the community level

- 1 Improve awareness and access to treatment** for mental health and alcohol use disorders.^{39,40,41}
- 2 Encourage conversations about alcohol use between health-care professionals and patients.** In a 2020 survey, only nine per cent of people in Canada said that their doctor or other health-care professional had talked with them about their alcohol use.¹⁴
- 3 Increase public awareness campaigns** about the impacts of alcohol consumption on suicidal thoughts, behaviours, and deaths.^{39,40}
- 4 Implement gatekeeper training** to increase awareness about the negative impacts of alcohol on suicide and reduce the risk of suicide in the community.^{39,40}
- 5 Monitor the consumption of alcohol in the community,** especially in light of the increases in drinking during the COVID-19 pandemic.³⁹
- 6 Place limits and restrictions on alcohol marketing techniques,** particularly those directed toward youth.^{39,41,42}
- 7 Maintain or increase the price** of alcohol to limit access.⁴¹
- 8 Enforce the minimum legal drinking age.**⁸



Where to seek help



[Talk to Your Health-Care Professional](#)



[Preventing Suicide: Warning Signs and How to Help | Health Canada](#)



[Local Resources and Support | Crisis Services Canada](#)



[Toolkit for People Who Have Been Impacted by a Suicide Attempt](#)



[Suicide | Centre for Addiction and Mental Health \(CAMH\)](#)



[Thinking About Suicide? | Crisis Services Canada](#)



[Finding Quality Addiction Care in Canada](#)



[Alcoholics Anonymous](#)



[SMART Recovery](#)



[CAMH Emergency Department](#)



[Canada Suicide Prevention Service | Crisis Services Canada](#)



[Wellness Together Canada](#)



[Substance Use Disorder and Suicide Prevention: Centre for Suicide Prevention Resource Toolkit](#)



References

1. World Health Organization. (2014). Preventing suicide: A global imperative. <https://www.who.int/publications/i/item/9789241564779>
2. Health Canada. (2021). Alcohol use among Canadians. <https://health-infobase.canada.ca/alcohol/ctads/>
3. Statistics Canada. (2019). Canadian Community Health Survey. https://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&Item_id=1207185
4. Centre for Addiction and Mental Health. (2020). Suicide prevention: A review and policy recommendations. <https://www.camh.ca/en/driving-change/influencing-public-policy>
5. Mental Health Commission of Canada. (2018). Research on suicide and its prevention: What the current evidence reveals and topics for future research. https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/2018-12/Research_on_suicide_prevention_dec_2018_eng.pdf
6. Orpana, H. M., Giesbrecht, N. A., Hajee, A., & Kaplan, M. S. (2020). Alcohol and other drugs in suicide in Canada: Opportunities to support prevention through enhanced monitoring. *Injury Prevention*, 27(2), 194-200. <https://doi.org/10.1136/injuryprev-2019-043504>
7. Public Health Agency of Canada. (2016). Chief public health officer's report on the state of public health in Canada, 2015. Alcohol consumption in Canada. <https://www.canada.ca/en/public-health/services/publications/chief-public-health-officer-reports-state-public-health-canada/2015-alcohol-consumption-canada.html>
8. Canadian Centre on Substance Use and Addiction. (2019). Alcohol (Canadian Drug Summary). <https://www.ccsa.ca/alcohol-canadian-drug-summary>
9. Canadian Centre on Substance Use and Addiction. (2018). Canada low-risk alcohol drinking guidelines [Brochure]. https://www.ccsa.ca/sites/default/files/2020-07/2012-Canada-Low-Risk-Alcohol-Drinking-Guidelines-Brochure-en_0.pdf
10. Canadian Centre on Substance Use and Addiction. (2020). COVID-19 and increased alcohol consumption: Nanos poll summary report. <https://www.ccsa.ca/covid-19-and-increased-alcohol-consumption-nanos-poll-summary-report>
11. Canadian Centre on Substance Use and Addiction, & Mental Health Commission of Canada. (2020). Mental health and substance use during COVID-19. <https://mentalhealthcommission.ca/resource/mental-health-and-substance-use-during-covid-19-summary-report/>
12. Borges, G., Bagge, C. L., Cherpitel, C. J., Conner, K. R., Orozco, R., & Rossow, I. (2017). A meta-analysis of acute alcohol use and the risk of suicide attempt [Review]. *Psychological Medicine*, 47(5), 949-957. <https://doi.org/10.1017/S0033291716002841>
13. Statistics Canada. (2019). Heavy drinking, 2018. <https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00007-eng.htm>
14. Canadian Institute for Health Information. (2021). How Canada compares: Results from the Commonwealth Fund's 2020 International Health Policy Survey of the General Population in 11 Countries. <https://www.cihi.ca/sites/default/files/document/how-canada-compares-cmf-survey-2020-chartbook-en.pdf>
15. National Institute on Alcohol Abuse and Alcoholism. (2021). Understanding alcohol use disorder. <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-alcohol-use-disorder>
16. Health Canada. (2021). About problematic substance use. <https://www.canada.ca/en/health-canada/services/substance-use/about-problematic-substance-use.html>
17. Pearson, C., Janz, T., & Ali, J. (2015). Mental and substance use disorders in Canada (Catalogue No. 82-624-X). Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/82-624-x/2013001/article/11855-eng.htm>
18. Statistics Canada. (2020). Leading causes of death, total population, by age group (Table 13-10-0394-01). <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039401>
19. Sher, L. (2006). Alcohol consumption and suicide. *Quarterly Journal of Medicine*, 99(1), 57-61. <https://doi.org/10.1093/qjmed/hci146>
20. Conner, K. R., & Bagge, C. L. (2019). Suicidal behavior: Links between alcohol use disorder and acute use of alcohol. *Alcohol Research: Current Reviews*, 40(1), e1-e4. <https://doi.org/10.35946/arcr.v40.1.02>
21. Cavanagh, J. T. O., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, 33(3), 395-405. <https://doi.org/10.1017/S0033291702006943>
22. McHugh, R. K., & Weiss, R. D. (2019). Alcohol use disorder and depressive disorders. *Alcohol Research Current Reviews*, 40(1), e1-e8. <https://doi.org/10.35946/arcr.v40.1.01>
23. Richards, J. E., Shortreed, S. M., Simon, G. E., Penfold, R. B., Glass, J. E., Ziebell, R., & Williams, E. C. (2020). Short-term risk of suicide attempt associated with patterns of patient-reported alcohol use determined by routine AUDIT-C among adults receiving mental healthcare. *General Hospital Psychiatry*, 62, 79-86. <https://doi.org/10.1016/j.genhosppsych.2019.12.002>
24. Houston, R. J., Derrick, J. L., Leonard, K. E., Testa, M., Quigley, B. M., & Kubiak, A. (2014). Effects of heavy drinking on executive cognitive functioning in a community sample. *Addictive Behaviors*, 39(1), 345-349. <https://doi.org/10.1016/j.addbeh.2013.09.032>
25. Dvorak, R. D., Kuvaas, N. J., Lamis, D. A., Pearson, M. R., & Stevenson, B. L. (2015). Emotionally up and down, behaviorally to and fro: Drinking motives mediate the synergistic effects of urgency and emotional instability on alcohol outcomes. *Journal of Drug Education*, 45(3-4), 156-184. <https://doi.org/10.1177/0047237916639030>
26. Knox, J., Hasin, D. S., Larson, F. R. R., & Kranzler, H. R. (2019). Prevention, screening, and treatment for heavy drinking and alcohol use disorder. *Lancet Psychiatry*, 6(12), 1054-1067. [https://doi.org/10.1016/S2215-0366\(19\)30213-5](https://doi.org/10.1016/S2215-0366(19)30213-5)
27. Li, X., Fu, Q., Scherrer, J. G., Humphrey, D., & Leigh, I. (2020). A temporal relationship between nonmedical opioid use and major depression in the U.S.: A prospective study from the National Epidemiological Survey on Alcohol and Related Conditions. *Journal of Affective Disorders*, 273(1), 298-303. <https://doi.org/10.1016/j.jad.2020.04.047>
28. Rizk, M. M., Herzog, S., Dugad, S., & Stanley, B. (2021). Suicide risk and addiction: The impact of alcohol and opioid use disorders. *Current Addiction Reports*, 8, 194-207. <https://doi.org/10.1007/s40429-021-00361-z>
29. Pompili, M., Serafini, G., Innamorati, M., Dominici, G., Ferracuti, S., Kotzalidis, G. D., Serra, G., Girardi, P., Janiri, L., Tatarelli, R., Sher, L., & Lester, D. (2010). Suicidal behavior and alcohol abuse. *International Journal of Environmental Research and Public Health*, 7(4), 1392-1431. <https://doi.org/10.3390/ijerph7041392>
30. Orpana, H., Giesbrecht, N., Hajee, A., & Kaplan, M. S. (2020). Alcohol and other drugs in suicide in Canada: Opportunities to support prevention through enhanced monitoring. *Injury Prevention*, 27, 194-200. <https://doi.org/10.1136/injuryprev-2019-043504>
31. Statistics Canada. (2021). Heavy drinking, by age group (Table 13-10-0096-11). <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009611>
32. Canadian Centre on Substance Use and Addiction, & Mental Health Commission of Canada. (2020). Mental health and substance use during COVID-19 – Spotlight on gender and household size. <https://mentalhealthcommission.ca/resource/mental-health-and-substance-use-during-covid-19-spotlight-on-gender-and-household-size/>
33. Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *Lancet Public Health*, 2(8), E356-E366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
34. Angelakis, I., Austin, J. L., & Gooding, P. (2020). Association of childhood maltreatment with suicide behaviors among young people: A systematic review and meta-analysis. *JAMA Network Open*, 3(8), Article 2012563. <https://doi.org/10.1001/jamanetworkopen.2020.12563>
35. Andriessen, K., Rahman, B., Draper, B., Dudley, M., & Mitchell, P. B. (2017). Prevalence of exposure to suicide: A meta-analysis of population-based studies. *Journal of Psychiatric Research*, 88, 113-120. <https://doi.org/10.1016/j.jpsychires.2017.01.017>
36. Fleischmann, A., Bertolote, J. M., Belfer, M., & Beautrais, A. (2005). Completed suicide and psychiatric diagnoses in young people: A critical examination of the evidence. *American Journal of Orthopsychiatry*, 75(4), 676-683. <https://doi.org/10.1037/0002-9432.75.4.676>
37. Kolves, K., Draper, B. M., Snowden, J., & De Leo, D. (2017). Alcohol-use disorders and suicide: Results from a psychological autopsy study in Australia. *Alcohol*, 64, 29-35. <https://doi.org/10.1016/j.alcohol.2017.05.005>
38. Milner, A., Page, A., & LaMontagne, A. D. (2014). Cause and effect in studies on unemployment, mental health and suicide: A meta-analytic and conceptual review. *Psychological Medicine*, 44(5), 909-917. <https://doi.org/10.1017/S0033291713001621>
39. Wasserman, D., Iosue, M., Wuestefeld, A., & Carli, V. (2020). Adaptation of evidence-based suicide prevention strategies during and after the COVID-19 pandemic. *World Psychiatry*, 19(3), 294-306. <https://doi.org/10.1002/wps.20801>
40. Olson, R. (2012). Alcohol dependence and suicide. Centre for Suicide Prevention. <https://www.suicideinfo.ca/resource/alcoholandsuicide/>
41. Centre for Addiction and Mental Health. (2019). Alcohol policy framework. <https://www.camh.ca/-/media/files/pdfs---public-policy-submissions/camh-alcoholpolicyframework-2019-pdf.pdf>
42. Swanson, S. A., & Colman, I. (2013). Association between exposure to suicide and suicidality outcomes in youth. *CMAJ*, 185(10), 870-877. <https://doi.org/10.1503/cmaj.121377>

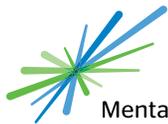
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