



COVID-19, Alcohol and Cannabis Use

This backgrounder to the infographic, [COVID-19, Alcohol and Cannabis Use](#), describes some of the evidence-based associations between COVID-19, alcohol and cannabis use. It is intended for a broad audience, including health professionals, policy makers and researchers.

There are increased risks related to alcohol and cannabis use during the COVID-19 pandemic. With the ongoing threat, Canadians may experience emotions and face situations that could influence their alcohol and cannabis consumption. Changes in alcohol and cannabis consumption can lead to unintended and undesirable consequences. Furthermore, alcohol and cannabis use is associated with a range of diseases that can make a person more vulnerable to COVID-19 and influence the outcome of a COVID-19 infection. These two mechanisms are explained below.

COVID-19: A Risk Factor for Increased Alcohol and Cannabis Use



Stress and Anxiety

With the continuing COVID-19 pandemic, many of us are feeling stressed and anxious for our own and our loved ones' health and safety. Organizations across the country have reported that the pandemic has caused the mental well-being of Canadians to deteriorate (Miller, 2020; Morneau Shepell, 2020).

Consuming alcohol or cannabis or both on occasion can provide temporary relief of stress and anxiety (Eckardt et al., 1998; Lowe, Sasiadek, Coles, & George, 2019). However, studies show that using these substances on a regular basis can increase the risk of developing alcohol use disorder (AUD) or cannabis use disorder (CUD), especially when alcohol and cannabis are used to deal with symptoms of anxiety and depression, or with life challenges (Sinha, 2008).

In the face of stressful experiences, individuals with a history of mental health disorders or problematic substance use are at an elevated risk of developing AUD and CUD. In fact, research has shown that stress, including the emotional and biological response to it, is one of the strongest predictors of addiction and relapse (Andersen, 2019).



Social Isolation and Loneliness

As the pandemic unfolds, it is important that we maintain habits of physical distancing. Long periods of social isolation, however, can make us feel disconnected and lonely.

Research points to a bidirectional relationship between loneliness, alcohol and cannabis use. For some individuals, loneliness can lead to more frequent and heavier consumption, which can then intensify feelings of loneliness (Leigh-Hunt et al., 2017). While this association has been reported among all age groups and mental health status (Hosseini, Ardekani, Bakhshani, & Bakhshani, 2014; Laudet, Magura, Vogel, & Knight, 2004; Mushtaq, Shoib, Shah, & Mushtaq, 2014; Page & Cole 1991; Page, Dennis, Lindsay, & Merrill, 2011; Stickley, Koyanagi, Kuposov, Schwab-Stone, & Ruchkin, 2014), older adults, particularly single older adults, may be more prone to use alcohol and cannabis when lonely (Flint, Merali, & Vaccarino, 2018).

Physical isolation and loneliness have been suggested as risk factors for alcohol relapse among high-risk older adults (Barrick & Conners, 2002), particularly women (Levy, 2008). Loneliness has also been suggested as a contributing, maintaining and poor prognostic factor in the development of alcohol abuse (term used by author; Mushtaq et al., 2014).

Coronavirus disease 2019 (COVID-19) is a novel infectious respiratory illness first identified in humans in December 2019 in Wuhan, Hubei, China. It is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infecting the human respiratory tract. SARS-CoV-2 originates from mammals other than humans. SARS-CoV-2 causes mild to moderate respiratory illness in the majority of people. However, there is an increased risk of more severe symptoms and deaths in vulnerable people, such as older adults (aged 65 and older), people with compromised immune systems and people who have underlying health issues, such as diabetes, cancer, cardiovascular disease and respiratory conditions (Health Canada, 2020; National Institute on Drug Abuse, 2020).

Daily Routines, Access and Availability of Alcohol and Cannabis

Canadians' shopping habits have changed during the pandemic. Although governments have decided to keep liquor and cannabis stores open, fear of running out of alcohol and cannabis has led consumers to stockpile them (George-Cosh, 2020; Seglins & Ivany, 2020; Siag, 2020).

The drinking culture in Canada is one where alcohol use serves as a boundary between weekday and weekend, work and leisure; it marks a "time out" (Paradis, Demers, Picard, & Graham, 2009). With the public health advice to practice physical distancing and isolation, and work from home to avoid spreading COVID-19, these boundaries have become blurred. People might find it difficult to gauge when work ends and leisure time begins, much like during the holidays. With more alcohol in the home than usual, this blurring could lead some Canadians to drink more than they typically do.

Alcohol and Cannabis Use: A Possible Risk Factor for COVID-19 Infection



Immune System

Studies show that alcohol consumption weakens the body's immune defences, predisposing those who consume alcohol in a chronic manner to a wide range of health problems, including infections



and systemic inflammation (Simet & Sisson, 2015; Szabo & Saha, 2015). Those who use alcohol in excess are more likely to develop infections, including severe respiratory illnesses (Szabo & Mandrekar, 2009). Even moderate consumption is associated with a poorer prognosis among critically ill patients admitted to an intensive care unit with an infection (Gacouin et al., 2020).

The effects of cannabis use and cannabinoids, such as tetrahydrocannabinol (THC) and cannabidiol (CBD), on immune functioning are complex and not yet well understood. However, a growing body of preclinical studies and several studies involving humans suggest that THC and CBD can affect the immune system, including suppressing its ability to mount a response to fight off infections (Cabral, Rogers, & Lichtman, 2015; Greineisen & Turner, 2010).

What You Can Do to Reduce Your Risks

1. What you can do to cope with stress and anxiety:
 - a) Stay active and keep yourself busy with activities you enjoy.
 - b) Stay connected with friends and family, while still practicing physical distancing.
 - c) Find balance by staying informed but knowing when to take a break from COVID-19 news.
 - d) Be kind to yourself. This is a difficult time and you're doing your best to manage a challenging situation.
 - e) Take care of your body by eating and sleeping well, exercising and meditating.
 - f) Reach out for help! Talk to a family member or friend, and seek professional support if needed.
2. Follow the steps in [Coping with Loneliness](#) (Canadian Mental Health Association, British Columbia).
3. Reduce or avoid consuming alcohol, cannabis and other substances.
4. Follow [Canada's Low-Risk Alcohol Drinking Guidelines](#) (Canadian Centre on Substance Use and Addiction). These guidelines are for lowering risks associated with the use of alcohol.
5. Follow [Canada's Lower Risk Cannabis Use Guidelines](#) (Centre for Addiction and Mental Health). These guidelines suggest limiting cannabis use to once a week or only on weekends and to avoid smoking cannabis.
6. Avoid stockpiling alcohol and cannabis. Purchase cannabis only from a legal source.

Additional Resources

- [Impacts of COVID-19 on Substance Use](#), Canadian Centre on Substance Use and Addiction (CCSA)
- [Physical Distancing \(Fact Sheet\)](#), Government of Canada
- [Coronavirus 2019 \(COVID-19\): Stress and Coping](#), Centers for Disease Control and Prevention
- [Coping with Stress, Anxiety and Substance Use during COVID-19](#), CCSA and Mental Health Commission of Canada
- [COVID-19 and Cannabis Smoking: 4 Things You Should Know](#), CCSA
- [COVID-19 and Cannabis: How to Reduce Your Risk](#), CCSA
- [Canada's Low-Risk Alcohol Drinking Guidelines Quiz](#), CCSA
- [Knowing Your Limits with Alcohol: A Practical Guide to Assessing Your Drinking](#), CCSA



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