

#### Canadian Institute for Substance Use Research

# ALCOHOL HARM REDUCTION & CANNABIS

# BASIC INFORMATION FOR HARM REDUCTION WORKERS AND OTHER SERVICE PROVIDERS

In Canada, alcohol use contributes to 36% of total costs attributable to substance use, including healthcare costs, lost productivity costs, criminal justice costs, and other costs (e.g., motor vehicle damage) [1] . Alcohol use can also contribute to the experience of health and social harms. Some of the physical health risks associated with alcohol consumption include poisoning, injury, cancer, depression, suicidality, and liver disease [2,3] . Moreover, as the typical amount of daily alcohol consumption increases, so does the risk of health harms [4]

These health risks are also greater in people with severe alcohol use disorders (AUDs) who are experiencing unstable housing [5,6]. The consumption of non-beverage alcohol (NBA: e.g., mouthwash, rubbing alcohol) can also contribute to the potential of harms in people with severe AUD experiencing unstable housing [7].

While cannabis use is not without harm, the scale of harm of cannabis is substantially lower than that of alcohol [8,9]. In fact, a review of cannabis substitution for alcohol research [10] shows that cannabis meets or partially meets 6 of the following criteria for substitution therapy [11] :

- 1. It should reduce alcohol use and related harms.
- 2. It should ideally be free of harms, or at least less harmful than alcohol.
- 3. Misuse should be less than that of alcohol.

4. It should be shown that it can substitute for alcohol and not be used along with alcohol.

5. It should be safer in overdose than alcohol.

6. It should ideally not potentiate the effects of alcohol especially if either drug is taken in overdose.

7. It should offer significant health economic benefits.

There are several potential therapeutic benefits of cannabis as well. Some research has indicated that cannabis use is related to reductions in self-reported use of alcohol, opioids, tobacco, prescription drugs, and other illicit substances [12, 13]. Other research shows that cannabis contributes to reductions in pain, anxiety, appetite loss, and insomnia [12,14,15] as well as to reductions in alcohol cravings and withdrawal symptoms [16-18].



#### THE BENEFITS OF CANNABIS SUBSTITUTION

Drinker's themselves have reported several benefits from using cannabis that relate to their alcohol use. At the same time, researchers are starting to document these benefits. We have heard that cannabis can help with the following:

#### • Cutting down on the number of drinks you need or want each day

- Some people use cannabis in place of alcohol. When they would normally have another drink, they
  substitute a joint or an edible. This allows them to drink less throughout the day without adverse effects.
- Coming off or cutting down on other drugs, like opioids and stimulants
  - Other people report using cannabis to cut down on other drugs while keeping their alcohol use steady or reducing it. This includes depressants like down (fentanyl), or stimulants like side (meth) and rock (crack).
- Self-management of symptoms as your blood alcohol content drops, together with other supports
  - Cannabis can also help to reduce or manage the uncomfortable symptoms of withdrawing from alcohol or other drugs, at home or in a detox setting.
  - Cannabis can also help you to want to drink more water and improve your appetite when you're hungover.
- Maintaining your appetite and soothing your digestive system
  - Alcohol irritates the digestive system and can reduce your appetite, putting many drinkers at risk of weight loss and nutrition problems. Cannabis can calm digestive problems and bring back your appetite.

#### • Sleep, relaxation, and pain relief

 Many people live with chronic pain, anxiety, and can have trouble sleeping. Many forms of cannabis can help, and may replace alcohol has a means of self-treatment.

If a client is interested in substituting cannabis for alcohol or using it to help with acute withdrawal, support them to go slowly and ensure that they do not do it alone. Advise them to taper their drinks carefully, access a daytox or other withdrawal management service, talk to program staff, or call a friend, especially if they have a history of alcohol withdrawal seizure.

## METHODS OF CANNABIS INGESTION, ONSET OF EFFECTS, AND HARM

	Smoking	VAPING	EDIBLES AND GUMMIES	BEVERAGES
ONSET OF EFFECTS	Seconds to minutes after inhaling	Seconds to minutes after inhaling	30 minutes to 2 hours after ingestion	30 minutes to 2 hours after ingestion
PEAK EFFECTS	30 minutes	30 minutes	4 hours	4 hours
LENGTH Of Effect	Up to 6 hours*	Up to 6 hours*	Up to 12 hours*	Up to 12 hours*
HARMS	Smoking cannabis can have negative effects on the respiratory system (e.g. cough, lung cancer, infection).	Vaping may prevent some of the negative effects on the respiratory system associated with smoking [25]	Less respiratory risks than smoking	Less respiratory risks than smoking

\*Some residual effects can last up to 24 hours

For more detailed information including bioavailability and dosing ranges, please visit the Government of Canada website "Information for Health Care Professionals: Cannabis (Marihuana, Marijuana) and the Cannabinoids".



## **CONSIDERATIONS FOR SUBSTITUTING ALCOHOL WITH CANNABIS PRODUCTS**

It is recommended to follow the established protocols for adjusting clients' alcohol dosages. Overall, reductions of 1 standard drink per day each week are reasonable, up to 2 standard drinks per day each week. For example, if someone is drinking 10 drinks per day, they could reduce to 8-9 drinks per day in Week 1 and to 6-7 drinks per day in Week 2. Slower reductions are best to minimize withdrawal symptoms and to decrease the risk of seizure. A standard drink is equal to a 350mL of 5% beer, 5oz of 12% wine, or 1.5oz of 40% distilled alcohol.

- The Prediction of Alcohol Withdrawal Severity Scale (PAWSS) can be used to estimate the risk of severe alcohol withdrawal [28].
- If the client is new to cannabis, begin with a low dose: for example, an edible product with 2.5mg THC or less, or dried flower with 10% THC or less [26].
- Liver function tests are recommended to monitor liver health: alanine aminotransferase (ALT), aspartate transaminase (AST), gamma-glutamyl transferase (GGT), serum bilirubin, serum albumin
- The alcohol taper schedule and cannabis substitution plan should be determined by each client's individual goals and responses to the alcohol taper. Frequent contact with clients who are substitution alcohol for cannabis is recommended to reassess their goals.
- Motivational interviewing can help clients make the changes needed to reach their goals [29, 30] The principles of motivational interviewing are:
  - 1. Resist the "righting reflex": do not tell clients the "solution" or the "right way."
  - 2. Empower the client.
  - 3. Understand the client's motivations and explore the discrepancy between their goals and current behaviours.
  - 4. Express empathy though reflective listening.

#### **RECOMMENDATIONS FOR LOWER RISK USE**

- Know the THC and CBD content of the product being consumed [26].
- Products containing high CBD:THC ratios may attenuate some of the negative THC- related outcomes [27].
- Avoid synthetic cannabinoid products [27].
- Intended doses may be exceeded due to the delayed onset of edibles and beverages, which may result in increased impairment [27].
- Driving should be avoided for at least 6 hours after using cannabis of any form [27].

## **RISK PROFILE OF CANNABIS**

There are also some risks associated with cannabis use and contraindications to participation in a cannabis substitution program.

- Cannabis use is associated with impaired cognition, memory, and psychomotor skills, respiratory harms, cancer, and motor vehicle collisions.
- Cannabis use is also associated with mental health harms, such as psychosis, affective disorder, depression, schizophrenia, and anxiety [21-25].
- Individuals who are pregnant, breastfeeding, or who have a predisposition or family history of psychosis are at a higher risk of harms related to cannabis use.
- Cannabis substitution for alcohol is contraindicated for individuals with a history of alcohol-related withdrawal seizures and psychosis.



## **REMEMBER: START LOW AND GO SLOW**

Everyone responds to cannabis in a unique way, and different cannabis products will produce different effects. Consider what types and strengths of cannabis will work best for you. When in doubt, try a small amount of cannabis and slowly increase the dose until you reach a desired effect.

#### Regular joint / Dried cannabis flower

- Smoked cannabis will produce a less intense effect than an edible cannabis product containing the same amount of THC.
- You should feel an effect shortly after inhaling. Take 1 or 2 puffs, and wait a few minutes to see how you feel. Take more if necessary.
- Participants with histories of lung or breathing problems should exercise caution and consider consulting a health care provider before use.



- The same amount of THC in a cannabis edible will be felt more strongly and differently than the same amount in a joint.
- It can take up 2 hours for cannabis edibles to work, and their effects will last for a longer period of time.
- If you are trying edibles, start with a small amount (i.e 2.5mg or 5mg), and wait to take more until you feel something. Try not to consume too much, too quickly.

Source: https://www.ccsa.ca/sites/default/files/2019-06-CCSA-7-Things-About-Edible-Cannabis-2019-en.pdf



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## WHERE CAN I LEARN MORE?

#### THE CANADIAN MANAGED ALCOHOL PROGRAM (CMAPS) STUDY



CMAPS is a national study of Managed Alcohol Programs in Canada based out of the Canadian Institute for Substance Use Research at the University of Victoria. The CMaPS project rigorously evaluates MAPs in Canada and generate insights into their implementation and effectiveness.

FOR MORE INFORMATION, VISIT: WWW.CMAPS.CA

CONTACT THE CMAPS TEAM:

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#### THE CANADIAN INSTITUTE FOR SUBSTANCE USE RESEARCH (CISUR)

University of Victoria Canadian Institute for Substance Use Research CISUR is a network of individuals and groups based at the University of Victoria who conduct research about substance use and work with organizations of people who use alcohol and other drugs to develop projects and resources like this one. Check out the following online resources to learn more about cannabis and alcohol harm reduction:

#### Cannabis substitution for drinkers:



#### Cannabis harm reduction:

- https://www.uvic.ca/research/centres/cisur/assets/docs/take-care-withcannabis.pdf
- https://www.heretohelp.bc.ca/infosheet/safer-cannabis-use-marijuana-hashhash-oil