

Cannabis and Older Adults: Know the Facts!



Behavioural Supports Ontario
Soutien en cas de troubles du comportement en Ontario

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Are there different types of cannabis? Do they each work differently?

The three most common cannabinoids (chemicals found in/derived from cannabis) are:

- 1) **THC (Tetrahydrocannabinol):** THC has ingredients that results in a 'high' or euphoria. When smoked or vaped, cannabis with THC will reach the brain within 2 to 20 minutes and peaks within 4 to 6 hours in older adults.¹ THC can often result in people feeling relaxed, giddy, nervous, suspicious and have heightened sensations. THC is a natural cannabinoid.
- 2) **CBD (cannabidiol):** CBD does not have any ingredients that appear to result in a 'high'. Although there isn't any clinical evidence to support its use, CBD is commonly used for pain and inflammation, multiple sclerosis, seizures and difficulties sleeping. When CBD is ingested, it will take effect in 2 to 4 hours (or longer) in older adults.¹ CBD is a natural cannabinoid.
- 3) **Nabilone:** A medicine that has structural similarities to cannabis that can only be obtained by a prescription from your physician. Nabilone is a synthetic (i.e., man-made) cannabinoid. It is very important that you do not share your prescribed cannabis with anyone or take someone else's prescribed cannabis.



What are the risks of using cannabis?

Anyone who is considering using cannabis should speak with their doctor and/or their pharmacists about the risks and side-effects of cannabis. There are studies that have proven that there is a risk of the following conditions and experiences when using cannabis: ²⁻⁵

- Increased heart rate
- Impaired coordination, reaction time and increase risk of falls and dizziness
- Impaired memory and attention
- Drowsiness
- Developing or worsening breathing problems, including an increased risk of developing long-term problems such as chronic bronchitis and shortness of breath
- Cardiovascular risks
- Increased risk of stroke
- Risk for unintentional poisoning
- Risk of nervousness, feeling suspicious, disturbed thinking, panic attacks and can lead to a mental illness
- Risk of severe vomiting
- Risk of worsening a psychotic disorder or schizophrenia



Has cannabis strength changed over the years? What dose should I use?

The potency of THC in cannabis has changed a great deal over the years. THC potency in dried cannabis has increased from an average of less than 2% in the 1980s to around 20% or more in 2015.⁶ Some strains can have an average as high as 30% THC.⁷ Due to changes in our bodies as we age, an older adult needs less cannabis to achieve the same effect as a younger person.



The higher the dose of THC you take, the greater the chance of having side effects and the greater the chance of those side effects being more intense. If you plan to use cannabis, it is recommended that you be aware of the amount of THC that is in the cannabis product you plan on using; start at the lowest possible level and slowly increase the dose until the desired effect is reached.⁸ If you aren't sure where to begin, ask your doctor or pharmacist to review the Canadian Guidelines on Cannabis Use Disorder Among Older Adults with you.²

Is vaping cannabis a better option than smoking cannabis

It has long been established that smoking anything is harmful to your lungs and can increase your chance of developing a number of lung conditions. Smoking cannabis brings the same risk of cigarettes, cigars, pipes etc. Vaping (the inhaling of a vapor created by an electronic device) is thought to be less harmful than smoking, but it is not completely without harm.



In September 2019, Health Canada issued a statement warning Canadians of the "potential risk of pulmonary illness associated with vaping products" which included vaping cannabis.⁹

How long should I wait to drive after using cannabis?

There is a significant increased risk of a motor vehicle accident if you drive while under the influence of cannabis.¹⁰

As we age our metabolism slows down by as much as 50%.¹¹ This means it will not only take longer for the cannabis to take effect, but also for your body to eliminate it. If you smoke, vape or consume cannabis, it will be in your system for at least 24 hours and it is recommended that you not drive for at least 12 hours after using cannabis.⁵

Driving a vehicle while you're impaired by cannabis is illegal and dangerous. Driving after consuming cannabis increases your risk of having an accident.¹² If you are found to be impaired by any drug or alcohol, you will face serious penalties, including an immediate licence suspension, financial penalties, and possible vehicle impoundment, criminal record and / or jail time.



Are edibles (food that contains cannabis) safer to consume than smoked cannabis?

All methods of cannabis carry their own risk. While it seems that it would be a safer option, research indicates that eating foods that contain cannabis carry their own risk, largely because it is less predictable as to when you will feel its effects.¹³



When you eat cannabis, whether it is in a brownie, a gummy bear or another means, you may not feel the effects of the cannabis right away. It may take up to 2 hours to feel the effects. This delay may result in people taking more cannabis than they intend to, which could result in an overdose. It is important to start with a small amount of the edible and wait to see how you feel, for a minimum of 2 hours. You may experience an unwanted reaction, so it is best to go slow. If you are using an edible form of cannabis to treat a condition, it is important that you don't share with others.

It is important to remember that you should not drive for at least 12 hours after eating a cannabis product. If you are not at home, make sure you plan for a ride home with a designated driver, taxi etc, or stay overnight.

Remember: keep cannabis edibles (and all other forms) out of a child's and/or pet's reach as they may think it is a dessert, treat or candy. Edibles are toxic to both children and pets.

My friend says cannabis helped with her knee pain. Should I try it?

We live in a society where we rely on each other for guidance around where to shop, eat, etc. So it makes some sense that we would lean on one another for guidance around medical decisions. However, because everyone is different in terms of how they react to medications / substances it is important to determine what information you can trust and act upon.

There is no conclusive clinical evidence to suggest that cannabis is helpful for the treatment of pain, however there is some anecdotal evidence. There are also some organizations (for example the Multiple Sclerosis Society of Canada) that endorse the use of Nabilone (a medicine with structural similarity to cannabis that can only be prescribed by your physician) to treat pain.

***Anecdotal information:** Information obtained through "anecdotes", basically one person sharing their experience.

***More reliable information:** Comes from experts working in the field, who use scientific methods to study a drug's impact and usefulness with many people.



Will cannabis help with some of the anxiety and depression I've been experiencing?

There is no conclusive clinical evidence to suggest that cannabis is helpful for the treatment of anxiety and depression. In fact, the opposite may be true. Cannabis use may worsen an individual's depression and anxiety, due to the mood-altering ingredients of THC.

I've had a hard time sleeping? Will cannabis help?

CBD may have a sedating effect. If you choose to try cannabis / cannabidiol (CBD) to aid your sleep, make sure you have someone close by if you need to get up in the middle of the night, as the risk of falls is heightened with its use.

I've heard that using cannabis can help manage behavioural symptoms of people with dementia. Is this true?

According to the Alzheimer Society of Canada, a few clinical trials have identified that cannabis can help limit behavioural symptoms in people with dementia, including agitation and physical responsive behaviours / personal expressions, but only in some cases.¹⁴ In fact, some studies have shown that long-term cannabis use may be harmful and is associated with cognitive difficulties.¹⁵

How do I know if I have taken too much cannabis? What are the signs of overdose I should be aware of?

Individuals who have consumed too much cannabis will often report feeling really sleepy, anxious, fearful, nervous and/or having visions. People will often feel nauseous and may have vomiting that won't stop. If you experience any of these symptoms, please contact your doctor, go to urgent care or to the nearest Emergency Department.

It is important to note that different forms of cannabis may impact you differently and can react with other medication you are taking. It is not a good idea to mix cannabis with other medications or alcohol.

If I decide to try cannabis, where do I get it from?

The Cannabis Act came into effect in October 2018. Provinces and territories are responsible for determining how cannabis is distributed and sold within their jurisdictions.

You are responsible for knowing what is legal in the province or territory in which you live or visit. Go to the Health Canada website or your provincial or territorial website for more details: <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/laws-regulations/provinces-territories.html>



Safety Tips

- Keep your cannabis in a locked box or container.
- Just like all prescription medication, if you are prescribed cannabis - don't share it. Also, if your name is not on the bottle/container - don't use it.
- Don't store your edibles in see-through containers where it is easy to see the contents.
- Keep cannabis out of reach and out of view from others, especially children.
- Different forms of cannabis may impact you differently and can react with medication you are taking. Avoid mixing cannabis with other medications or alcohol.
- CBD can make you drowsy, which may increase your risk of falling. Take precautions and ensure you have someone with you when consuming cannabis.
- It is recommended to not drive for at least 12 hours after using cannabis.
- It is not safe to use any veterinary forms of CBD / THC oils or creams.

For more information about cannabis use and its risks and benefits, the following websites are recommended:

- **7 Things You Need to Know about Edible Cannabis, Canadian Centre on Substance Use and Addiction:** <https://www.ccsa.ca/sites/default/files/2019-06/CCSA-7-Things-About-Edible-Cannabis-2019-en.pdf>
- **10 Ways to Reduce Risks to Your Health When Using Cannabis:** <https://www.camh.ca/-/media/files/pdfs---reports-and-books---research/canadas-lower-risk-guidelines-cannabis-pdf.pdf>
- **Cannabis and Multiple Sclerosis:** <https://mssociety.ca/hot-topics/cannabis>
- **Cannabis and the treatment of dementia, Alzheimer Society of Canada:** <https://alzheimer.ca/en/Home/About-dementia/Treatment-options/cannabis-and-treatment-dementia>
- **Cannabis and your Health, Government of Canada:** <https://www.canada.ca/en/services/health/campaigns/cannabis/health-effects.html>
- **Cannabis and your health: 10 ways to reduce risks when using:** <https://www.canada.ca/en/public-health/services/publications/drugs-health-products/cannabis-10-ways-reduce-risks.html>
- **Cannabis: Inhaling versus Ingesting, Canadian Centre on Substance Use and Addiction:** https://www.ccsa.ca/sites/default/files/2019-06/CCSA-Cannabis-Inhaling-Ingesting-Risks-Infographic-2019-en_1.pdf
- **Edible Cannabis: Always Read the Label, Canadian Centre on Substance Use and Addiction:** <https://www.ccsa.ca/sites/default/files/2019-10/CCSA-Edible-Cannabis-Read-Label-Infographic-2019-en.pdf>
- **How to reduce the harms of non-medical cannabis use, Canadian Nurses Association:** https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/how-to-reduce-the-harms-of-non-medical-cannabis-use_e.pdf?la=en&hash=19EFFF917EB743EF49C6E6181345346205B6A9E1
- **Medical Cannabis: A Guide to Access, Arthritis Society of Canada:** <https://arthritis.ca/getmedia/1148862d-d223-4a78-9b06-483532041d2c/Medical-Cannabis-Brochure-2018-EN-WR.pdf>
- **The Straight Dope on Cannabis and Older People:** <https://www.ryerson.ca/content/dam/crncc/knowledge/infocus/factsheets/InFocus-Marijuana.pdf>



References

1. Canadian Centre on Substance Use and Addiction. (2019a). *Cannabis: Inhaling vs ingesting*. [Infographic]. Retrieved from <https://www.ccsa.ca/sites/default/files/2019-10/CCSA-Cannabis-Inhaling-Ingesting-Risks-Infographic-2019-en.pdf>
2. Canadian Coalition for Senior's Mental Health. (2019). *Canadian guidelines on cannabis use disorder among older adults*. Retrieved December 19, 2019 from https://ccsmh.ca/wp-content/uploads/2020/01/New_Cannabis_Use_Disorder_ENG_WEB.pdf
3. Health Canada. (2018, Spring). *Information for health care professionals: Cannabis (marihuana, marijuana) and the cannabinoids*. (Catalogue no. H129-19/2018E-PDF). Retrieved from <https://www.canada.ca/content/dam/hc-sc/documents/services/drugs-medication/cannabis/information-medical-practitioners/information-health-care-professionals-cannabis-cannabinoids-eng.pdf>
4. Mittleman, M. A., Lewis, R. A., Maclure, M., Sherwood, J. B., & Muller, J. E. (2001). Triggering myocardial infarction by marijuana. *Circulation*, 103(23), 2805-2809
5. Health Canada. (2019, June 14). Cannabis and your health. Retrieved January 22, 2020 from <https://www.canada.ca/en/services/health/campaigns/cannabis/health-effects.html#a8>
6. World Health Organization, Department of Mental Health and Substance Abuse, Management of Substance Abuse Unit. (2016). *The health and social effects of nonmedical cannabis use*. Retrieved from https://www.who.int/substance_abuse/publications/msbcannabis.pdf
7. Health Canada. (2019a, August 13). *About cannabis*. Retrieved December 20, 2019 from <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/about.html>
8. Carter, G. T., Weydt, P., Kyashna-Tocha, M., & Abrams, D. I. (2004). Medicinal cannabis: Rational guidelines for dosing. *IDrugs*, 7(5), 464-470
9. Health Canada. (2019b, October 17). *Information update – Health Canada warns of potential risk of pulmonary illness associated with vaping products*. Retrieved December 20, 2019 from <https://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2019/70919a-eng.php>
10. Centre for Effective Practise. (2018, October). *Non-medical cannabis resource: Ontario*. Retrieved from <https://cep.health/media/uploaded/20181015-Non-Medical-Cannabis-Rev-6.3.pdf>
11. Kalant, H. (1971). Absorption, diffusion, distribution, and elimination of ethanol: Effects on biological membranes. In B. Kissin & H. Begleiter (Eds.), *The biology of alcoholism* (pp. 1-62). Boston, MA: Springer. https://doi.org/10.1007/978-1-4615-6525-3_1
12. Asbridge, M., Hayden, J. A., & Cartwright, J. L. (2012). Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ*, 344, e536. <https://doi.org/10.1136/bmj.e536>
13. Monte, A. A., Shelton, S. K., Mills, E., Saben, J., Hopkinson, A., Sonn, B., Devivo, M., Chang, T., Fox, J., Brevik, C., Williamson, K., & Abbot, D. (2019). Acute illness associated with cannabis use, by route of exposure: An observational study. *Annals of internal medicine*. 170, 531-537. <https://doi.org/10.7326/M18-2809>
14. Alzheimer Society Canada. (2019, October 17). Cannabis and the treatment of dementia. Retrieved December 15, 2019 from <https://alzheimer.ca/en/Home/About-dementia/Treatment-options/cannabis-and-treatment-dementia>
15. Canadian Centre on Substance Use and Addiction. (2019b, April 5). *Early and regular cannabis use is a strong predictor of cognitive impairment*. [Press Release]. Retrieved December 17, 2019 from <https://www.ccsa.ca/early-and-regular-cannabis-use-strong-predictor-cognitive-impairment>



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