



Smoke-Free Ontario Act, 2017

Get the Facts: Health Harms of Cannabis Use

The Basics

Cannabis (also called marijuana, weed and pot) is a drug that comes from a plant, and is made of dried flowers and leaves that are greenish or brownish. There are different ways to use cannabis, which can include:

- Smoking as a cigarette (sometimes called a ‘joint’ or ‘blunt’);
- Vaping (through an e-cigarette, vaporizer, bong, and/or pipe);
- Mixed in with food and/or drink; and
- Heated and used as oil, wax, or in a form called shatter, which is made from cannabis resin or hash.

Cannabis contains THC, a chemical that causes psychoactive effects — known as feeling ‘high’ — which can affect someone’s mood and behaviour. Using cannabis can have health risks, especially for youth, people with a family history of mental illness, and women who are pregnant and/or breastfeeding.

Health Risks

The short-term and long-term health effects of cannabis can include:

Short-Term Health Effects ²	Long-Term Health Effects ³
<ul style="list-style-type: none"> • Anxiety, fear or panic • Confusion • Dizziness or fainting • Lower ability to concentrate or remember things • Higher heart rate (higher risk of heart attack for those with heart conditions) • Paranoia and/or delusional thoughts • Lower ability to react quickly • Sleepiness 	<ul style="list-style-type: none"> • Bronchitis • Chronic (long-term) cough • Lung infection • Risk of addiction • Risk of harm to: <ul style="list-style-type: none"> ○ Concentration ○ Decision making ability ○ Intelligence ○ Memory • Higher risk of chronic psychosis disorders like schizophrenia⁴

Cannabis Smoke:

- Contains similar levels of tar and chemicals as tobacco smoke
 - Can raise the risk of cancer and lung disease¹

Youth and Addiction

The health harms and addiction risk of using cannabis can be especially high for youth:

- Cannabis use can affect brain functioning up to the age of 25, and the effects on the brain can be permanent⁶
- Up to one in six (1 in 6) people who start using cannabis as a teenager will become addicted to it

The safest way for youth to protect their health is to not use cannabis⁵

Mental Health Risks

In some people, cannabis use can raise the risk of developing mental illness. This includes:

- Mild or temporary symptoms of anxiety, paranoia, and delusional beliefs;⁸
- Higher risk of suicide, depression, and anxiety;⁹ and
- Potential permanent brain damage
- Any amount of cannabis use is linked to a 40% higher risk of developing psychosis. The risk gets higher the more often you use cannabis.¹¹⁻¹²

These risks go up if cannabis use begins before 16 years of age.

Health Effects during Pregnancy and Breastfeeding

No amount of cannabis use during pregnancy and breastfeeding is safe:¹³

- Cannabis use during pregnancy can affect the brain development of the baby.¹⁴
- Cannabis use during pregnancy cause the baby to have a lower birth weight¹⁴
- Children of mothers who used cannabis while pregnant can have problems understanding and learning, and are at higher risk of depression¹⁵

Driving

- Cannabis is the drug most linked to car accidents, after alcohol¹⁶
- Cannabis makes it harder to concentrate, react and tell how far away things are. This affects the ability to drive safely¹⁷

Reducing Risk if Using Cannabis

Cannabis use has health risks that are best avoided by not using it. However, there are steps that can be taken that will reduce the health risks associated with use:¹⁸

- Delay cannabis use until later in life

- Identify and choose safer cannabis products, like edibles (e.g. baked goods, candies or beverages that are made with cannabis)
- Avoid using synthetic cannabis (e.g. K2, Spice)
- Avoid use before operating a vehicle and wait at least six hours after using cannabis before operating a vehicle
- Avoid smoking cannabis – choose safer ways of using, such as edibles – but be aware that it takes longer to feel the effects of cannabis when using edibles. This delay can result in consuming too much
- Limit and reduce how often you use cannabis

Additional Resources

There are several additional resources that are available to learn more about the health harms of cannabis and how to lower the risk of use.

- **Lower-risk Cannabis Use Guidelines:** Provides Advice on how to lower the health risks associated with recreational cannabis use: <https://www.camh.ca/-/media/files/pdfs---reports-and-books---research/canadas-lower-risk-guidelines-cannabis-pdf.pdf>
- **Best Start – Risks of Cannabis on Fertility, Pregnancy, Breastfeeding and Parenting:** Provides information on how cannabis use can cause harms to during pregnancy and breastfeeding. https://www.beststart.org/resources/alc_reduction/RisksOfCannabis_A30-E.pdf
- **Health Canada – Health Effects of Cannabis:** Provides Information on the health impacts of recreational cannabis use. <https://www.canada.ca/content/dam/hc-sc/documents/services/campaigns/27-16-1808-Factsheet-Health-Effects-eng-web.pdf>
- **Ontario Ministry of Transportation - Impaired Driving Facts:** Provides information on how drugs such as cannabis can impair driving ability. <http://www.mto.gov.on.ca/english/safety/impaired-driving.shtml>
- **Health Canada. Mental Health Effects of Cannabis:** Provides Information on potential mental health harms of cannabis use. <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/health-effects/mental-health.html>

References

1. Bryson, Ethan O. MD; Frost, Elizabeth A.M. MD. The Perioperative Implications of Tobacco, Marijuana, and Other Inhaled Toxins. *International Anesthesiology Clinics*. 49(1):103-118, Winter 2011.
2. Health Canada Fact Sheet on Cannabis Health Harms. <https://www.canada.ca/content/dam/hc-sc/documents/services/campaigns/27-16-1808-Factsheet-Health-Effects-eng-web.pdf>
3. Ibid
4. Radhakrishnan R, Wilkinson ST, D'Souza DC. Gone to pot - A review of the association between cannabis and psychosis. *Front Psychiatry* 2014 May 22;5:54.
5. Fischer, B., Jeffries, V., Hall, W., Room, R., Goldner, E., & Rehm, J. (2011). Lower Risk Cannabis Use Guidelines for Canada (LRCUG): A Narrative Review of Evidence and Recommendations. *Canadian Journal of Public Health*, 102(5), 324-327
6. Canadian Centre on Substance Abuse: The Effects of Cannabis Use during Adolescence. Retrieved from: <http://www.ccdus.ca/Resource%20Library/CCSA-Effects-of-Cannabis-Use-during-Adolescence-Report-2015-en.pdf>
7. Lichtman, A. H. and Martin, B. R. (2005). Cannabinoid tolerance and dependence. *Handb.Exp.Pharmacol.* 691-717
8. Bourque J, Afzali MH, Conrod PJ. Association of Cannabis Use With Adolescent Psychotic Symptoms. *JAMA Psychiatry*. Published online June 06, 2018. doi:10.1001/jamapsychiatry.2018.1330
9. Health Canada. Mental Health Effects of Cannabis. Retrieved from: <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/health-effects/mental-health.html>
10. Di Forti M, Sallis H, Allegri F, Trotta A, Ferraro L, Stilo SA, Marconi A, La Cascia C, Reis Marques T, Pariante C, et al. Daily use, especially of high-potency cannabis, drives the earlier onset of psychosis in cannabis users. *Schizophr Bull* 2014 Nov;40(6):1509-17.
11. Radhakrishnan R, Wilkinson ST, D'Souza DC. Gone to pot - A review of the association between cannabis and psychosis. *Front Psychiatry* 2014 May 22;5:54.
12. Moore TH, Zammit S, Lingford-Hughes A, Barnes TR, Jones PB, Burke M, Lewis G. Cannabis use and risk of psychotic or affective mental health outcomes: A systematic review. *Lancet* 2007 07/28;370(1474-547; 9584):319-28.
13. Committee opinion summary NO. 722: Marijuana use during pregnancy and lactation. *Obstet Gynecol* 2017 Oct;130(4):931-2.
14. National Academies of Sciences, Engineering, and Medicine. The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. Washington, D.C.:
15. Porath-Waller AJ. Clearing the smoke on cannabis. maternal cannabis use during pregnancy - an update. Canadian Centre on Substance Abuse; 2015.
16. Legrand SA, Isalberti C, der Linden TV, Bernhoft IM, Hels T, Simonsen KW, Favretto D, Ferrara SD, Caplinskiene M, Minkuviene Z, et al. Alcohol and drugs in seriously injured drivers in six european countries. *Drug Test Anal* 2013 Mar;5(3):156-65.
17. Fischer, B., Jeffries, V., Hall, W., Room, R., Goldner, E., & Rehm, J. (2011). Lower Risk Cannabis Use Guidelines for Canada (LRCUG): A Narrative Review of Evidence and Recommendations. *Canadian Journal of Public Health*, 102(5), 324-327
18. Centre for Addiction and Mental Health. Lower-risk Cannabis Use Guidelines. https://www.camh.ca/-/media/files/lrcug_professional-pdf.pdf