Cannabis Use During Pregnancy & Lactation

Practice Resource for Health Care Providers

Updated February 2020

Perinatal Services BC
Provincial Health Services Authority

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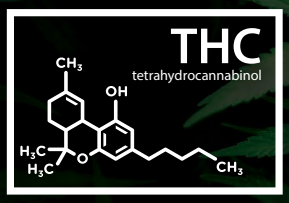
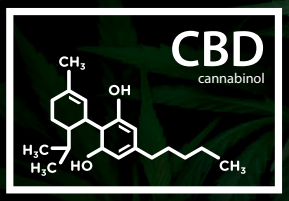
A note on gender inclusion and the language of this document: Breastfeeding is traditionally understood to involve an individual of the female sex and gender identity (cisgender) who also identifies as a woman and mother. However, it is important to recognize that there are individuals in a parenting and human-milk-feeding relationship with a child who may not self-identify as such. Health care providers may prefer to use the term "chestfeeding" rather than breastfeeding in these cases.

This practice resource is intended for the use of health care providers providing clinical care and/or counselling to women and pregnant individuals in the perinatal period. The purpose of this practice resource is to help health care providers facilitate conversations on cannabis use during pregnancy and lactation using a harm reduction approach that is women and person-centered, trauma informed and culturally safe. This practice resource was developed in collaboration with a variety of different stakeholders, including midwives, family physicians, nurses, lactation consultants, and substance use experts.

Key Messages

- There is no known amount of cannabis that is safe to consume during pregnancy and lactation.
- It is not recommended to use cannabis to improve conditions that may occur during pregnancy, such as nausea, vomiting, depression, and anxiety.
- Avoid smoking cannabis during pregnancy and postpartum as second-hand and third-hand smoke may be harmful to your baby.
- Cannabis use during pregnancy may be associated with adverse birth outcomes as well as long-term effects on children's neurological development.
- Cannabis use during lactation may not be safe as tetrahydrocannabinol (THC) may be present in human milk up to 30 days after cannabis is consumed.
- It is recommended to avoid or reduce using any forms of cannabis during pregnancy and lactation due to the lack of information on the short- and long-term effects on women and pregnant individuals' health and children's growth and development.





What is Cannabis?

Cannabis refers to substances derived from the plant *Cannabis sativa* and is composed of two main compounds: delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD). [1]
The principal psychoactive component of cannabis, THC, acts on two main cannabinoid receptors in the brain (CB1 and CB2) and has effects on cognition, perceptions of pain, and motor function.[2]
CBD is a non-psychoactive component of cannabis; however it may affect several brain functions such as neuronal activation and seizure incidence as well as social interaction.[3][4]

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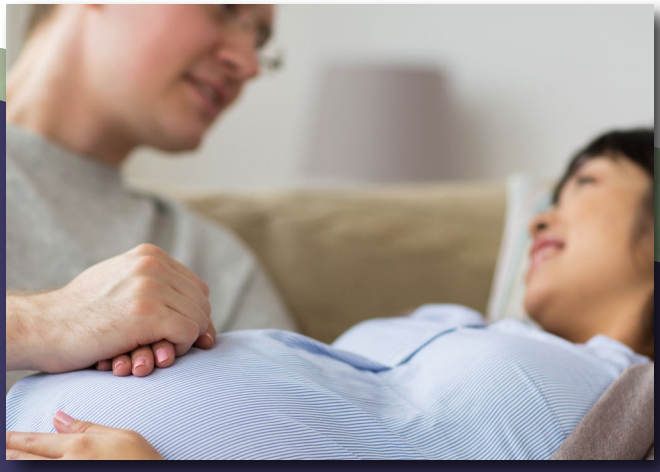
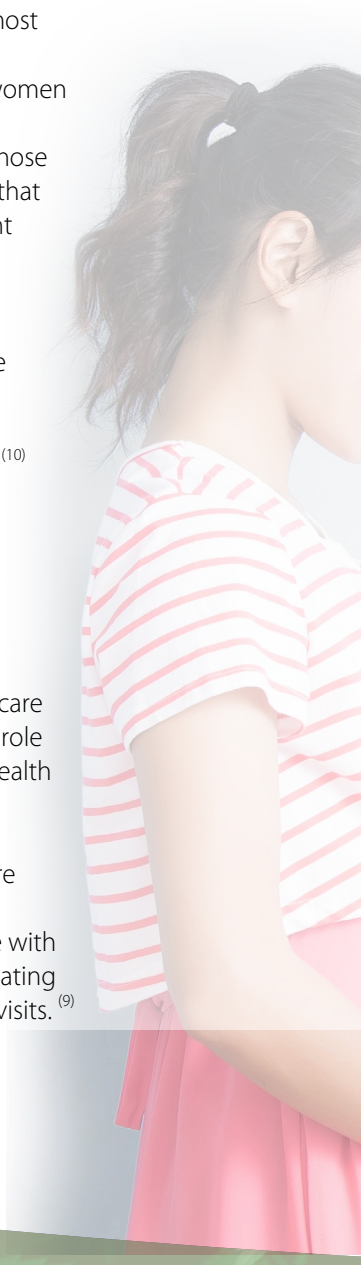
Maternal Cannabis Use in Canada

On October 17, 2018 the Cannabis Act (Bill C-45) was enacted, establishing a framework for the possession, distribution, sale and production of cannabis in Canada. [5] Cannabis is defined in the Act to include marijuana, hashish, hash oil or any other preparation of the cannabis plant. [5]

In 2016, 16.9% of Canadian women between the ages of 15-44 reported past year use of cannabis which was an increase from the self reported 12.6% in 2015. [6] In British Columbia (BC), approximately 3.5% of pregnant women and individuals reported cannabis use to their health care provider in 2016. This means that over 1,500 women in BC reported cannabis use. [7] Yet, as cannabis use was not legal at the time, this number is likely an underestimate of actual usage among pregnant women and individuals. [8] There is currently only limited evidence on the prevalence of cannabis use during lactation among Canadian women and individuals. However, due to the high rates of cannabis use during pregnancy, it is likely that cannabis use during lactation may also be high among Canadian women and individuals.

Cannabis is currently one of the most commonly used drugs during pregnancy and may be used by women and pregnant individuals of all socioeconomic backgrounds; of those who use cannabis, it is estimated that approximately 34-60% of pregnant individuals continue to use cannabis during pregnancy. [9] Recent US data suggest that self-reported cannabis use tends to be higher during the first trimester (10.4%) compared to the second (2.5%) and third (2.3%) trimesters. [10] The legalization of cannabis may generate an increase in self-reported cannabis use during prenatal visits [11] due to increased access to cannabis and reduced stigma associated with recreational cannabis use. Health care providers therefore have a critical role in providing information on the health effects of cannabis use during pregnancy and lactation. It is recommended that health care providers start having regular conversations about cannabis use with women and individuals contemplating pregnancy during routine health visits. [9]





Cannabis Use During Pregnancy

Short-term and Long-term Effects of Cannabis Use

The short- and long-term effects of cannabis use vary based on the individual and are dependent on a number of factors, including the route of administration, dosage, and previous experience with the drug. [12] However, the independent effects of cannabis use are still unknown as cannabis is commonly used in combination with other substances and/or drugs.[13] Depending on the route of administration, the effects of cannabis may be felt within seconds after consumption and can last up to 24 hours (see Table 1). [12]

Possible Short-term Effects[14] [15]

- Euphoria
- Heightened senses
- Relaxation
- Fatigue
- Altered cognitive function

Possible Long-term Effects[14]

- Impairments to decision making
- Increased risk for long-term addiction
- Cannabinoid hyperemesis syndrome[16]

Table 1: Cannabis Consumption Methods, from Ontario Medical Association, 2019 [17]

Method	Definition	How Long Until User Feels Effects?
Smoking	Dried flower from the cannabis plant is rolled to make a joint, or used in a pipe or bong.	Felt within seconds of inhalation.
Vaping	Vaporizers heat rather than combust cannabis plant matter or its oil, cannabis vapour is inhaled rather than smoked.	Felt within seconds of inhalation.
Cannabis Oil	Highly concentrated cannabis extract where a solvent has been used to separate essential oils of the cannabis plant.	Felt within 15 minutes to 1 hour.
Edibles	Cannabis that is ingested through food or drinks effects can be dependent on users metabolism and if cannabis has been ingested with other food or on an empty stomach.	Felt within 15 minutes to 2 hours of ingestion.
Tinctures	Small amount of this alcohol-based cannabis extract is incorporated into food or drink, or placed under tongue.	Felt within 20-30 minutes.
Dabbing or Shattering	Concentrated doses of cannabis made from extracting cannabinoids, users heat the concentrate on a hot surface and inhale.	Felt immediately after inhalation.

Short-term and Long-term Effects of Cannabis Use in Newborns

Cannabinoids readily cross the human placenta which may cause both immediate, and delayed effects on the health outcomes of newborns exposed to cannabis. [18] [19] Although the evidence regarding prenatal cannabis use is mixed, fetuses exposed to cannabis have been found to have greater likelihood of adverse birth outcomes. [20] [21] There is currently limited research on whether using CBD only is safe during pregnancy and lactation. [22]

Studies indicate cannabis use during pregnancy may be associated with the following effects in newborns:

- Low birthweight [23] [24] [25] [26] [27] [28] [29]
- Small for gestational age [20] [23] [24] [25] [27] [28] [29] [30] [31]
- Stillbirth [20] [23] [27] [33] [34] [35]
- Preterm birth [20] [23] [27] [32] [33] [34] [35]

Studies indicate cannabis use during pregnancy may affect children's neurological development, [27] [36] [37] [38] [39] [40] specifically the following:

- Memory [36] [38] [40] [41]
- Attention [28] [37] [40]
- Sleep [40]
- Mood [36]
- Decision-making [42]
- Increased hyperactive behaviour [42]
- Increased likelihood of future substance use [42]

Cannabis Use During Lactation

Cannabis use during lactation is not advised as THC is stored in body fat as well as human milk. [19] [43] [44] [45]
The psychoactive component, THC, crosses the placenta into fetal tissue [46] and may accumulate in the human milk in moderate amounts; estimates are that an infant may be exposed to approximately 0.8% of what the individual consumes.[47] Over the last two decades, the concentration of THC in cannabis has increased from 4% to 12%, and is documented as reaching levels as high as 30%. [48] For people with heavy use, THC may be present in human milk up to 30 days after consuming cannabis. [49]

Pumping and dumping involves expressing human milk and discarding it; it is not recommended to eliminate levels of THC from human milk as there is a lack of evidence on the length of time required for THC levels to decrease in human milk. [50] It is not yet known whether CBD is transferred into human milk or its potential effects on human milk. [51]

There is minimal evidence on the potential long-term effects of cannabis use during lactation on the quality and quantity of human milk [52] and infant health outcomes. [53] Animal studies, however, have shown that cannabis use may inhibit the production of prolactin and reduce the rate of milk production. [52] There is also mixed evidence to suggest that infants exposed to THC through human milk may have impaired motor development. [54]

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Reducing Harm: How to Discuss Cannabis Use

Evidence suggests that it is best practice to adopt a harm reduction, trauma-informed, culturally safe approach that is woman and person-centered when discussing cannabis use during pregnancy and lactation to ensure that the care provided is equity-oriented. [55] This approach enables health care providers to build a trusting, long-term relationship with a woman or pregnant individual, and makes them well-positioned to support decisions about cannabis use during pregnancy and lactation.

Substance use experts advise obstetrical care providers to approach cannabis use with a harm reduction perspective. This includes asking non-judgmental, open-ended questions regarding cannabis use [56] and conducting brief interventions if substance use is identified.[57] [58] The Substance Abuse and Mental Health Services Administration (SAMHSA) in the US suggests that health care providers do the following if a client discloses substance use: [58]

- Provide information on potential and actual health effects associated with substance use.
- Inform clients on safe consumption and provide advice on how to change behavior.
- Assess client's readiness for change.
- Negotiate goals and strategies for change.
- Arrange follow-up appointments.

It is also advised to discuss and consider each individual's unique socio-demographic and socioeconomic factors that may be affecting the use of and exposure to cannabis during pregnancy and lactation such as housing and income. Does the client live with someone else who smokes cannabis, for example, or is the client living in an environment where recreational cannabis use is prevalent?

It is important to discuss such broader social factors affecting cannabis use before discussing ways to abstain or reduce cannabis use as it is not likely to change if the broader issues affecting usage/exposure are not addressed. [59] [60] For example, some women may not be in control of their living circumstances and may live in a household that is exposed to cannabis. [61] Furthermore, women may live in low income neighborhoods where they are exposed to second-hand cannabis smoke. It is suggested that health care providers should consider these factors and determine the barriers and facilitators to reducing cannabis use during the pregnancy and lactation period in order to help empower women and pregnant individuals to create goals and plans that are tailored around these barriers in order to reduce use. [62]

A trauma-informed approach is also suggested when discussing cannabis use. As trauma has been linked to illicit drug use and smoking, adopting this approach serves to promote empowerment and healing among women and pregnant individuals with this experience.[59] In order to achieve this, it is suggested that health care providers are self-reflective of their position of power and privilege as a health professional when asking questions regarding cannabis use. This involves approaching the conversation from a culturally safe perspective considering the social, political, historical context of each woman and pregnant individual. The Trauma-Informed Practice Guide recommends the following strategies to establish safety: [63]

- Emphasize the patient and client's autonomy throughout the conversation and ask whether or not they want to answer questions or if they need to take a break.
- Provide a rationale for asking questions about cannabis use while normalizing the process by indicating that trauma reactions are expected and normal.
- Keep the conversation open.
- Discuss strengths such as their goals and coping skills.
- Limit the number of questions asked in a row to reduce power dynamics.
- Engage in reflective listening.

Discussion Guide

There is a general consensus among relevant clinical guidelines [8] [26] [54] [64] [65] that counselling women and pregnant individuals on cannabis use during pregnancy and lactation includes:

- Informing individuals of the current lack of literature on the safety and effects of cannabis use during pregnancy and lactation, and discussing the potential risks of continuing use. Recommend that women and pregnant individuals abstain if possible or reduce cannabis use. [19] [65]
- If an individual discloses cannabis use during pregnancy and/or lactation, discuss the following in order to understand their usage patterns and to identify potential strategies to reduce their use and/or the harms that may arise from it. Consider discussing:
  - ❑ Frequency of use.
  - ❑ Quantity.
  - ❑ Method of use.
  - ❑ Concurrent substance use.
  - ❑ Partner's use and second-hand and third-hand exposure.
- Routinely discuss cannabis use with individuals during pregnancy and lactation and collaborate on strategies to reduce harm. [13] [19] [54] [66]
- If an individual chooses to continue cannabis use during pregnancy and/or lactation, include their partner in the conversation on how they can reduce use and consider the following: [54] [67] [68] [69] [70]
  - ❑ Partner's use and second-hand and third-hand exposure.
  - ❑ Encourage use of cannabis in moderation and offer information regarding the benefits of reducing quantity and frequency of cannabis usage.
  - ❑ Inform clients that they can reduce harm by checking the concentration of THC and CBD on the label of cannabis products and choose low potency cannabis products that have higher levels of CBD and lower levels of THC.
  - ❑ Discourage the use of cannabis in combination with other substances and/or medications, and avoid smoking or using cannabis with tobacco.
  - ❑ Ask if they are using any other medications.[17]
  - ❑ Provide lactation support to women and individuals using cannabis but urge them to use caution and reduce use if possible.

Additional Resources

To identify resources in your local community, please refer to your local hospital or public health unit.

You can also access the Find Services database on HealthLink BC (https://www.healthlinkbc.ca/services-and-resources/find-services) or by calling 8-1-1 to identify health services provided by the provincial government, provincial health authorities, and non-profit agencies across the province.

- Society of Obstetricians and Gynecologists of Canada (SOGC). Are you pregnant, considering pregnancy, or breastfeeding? Supplied://www.pregnancyinfo.ca/learn-more/
- The American College of Obstetricians and Gynecologists (ACOG) Committee Opinion. Marijuana Use During Pregnancy and Lactation. https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Marijuana-Use-During-Pregnancy-and-Lactation?IsMobileSet=false
- Midwives Association of British Columbia. Is it safe to use weed during pregnancy? https://www.bcmidwives.com/cgi/page.cgi/_zine.html/News_Announcements/Is_it_safe_to_use_weed_during_pregnancy_
- Canadian Association of Midwives. Cannabis Use during Pregnancy. https://canadianmidwives.org/2018/10/15/cannabis-use-during-pregnancy/
- Champlain Maternal Newborn Regional Program (CMNRP). Cannabis and Lactation Discussion Guide. http://www.cmnrp.ca/uploads/documents/CMNRP_Cannabis_and_Lactation_Discussion_Guide_2019_11_06_FINAL.pdf

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Health care providers have a critical role in providing information to their clients on the health effects of cannabis use during pregnancy and lactation.

There is no known amount of cannabis that is safe to consume during pregnancy and lactation.

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