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OUTLINE

Cannabis and Reproduction

Knowledge Topic references are located in a separate section of the Baby Steps Help Guide e-resource.

Participant handout references are not included, but are available upon request by contacting the tru@ahs.ca.

Goal	To increase knowledge and support critical thinking about the effects of using cannabis when conceiving, during pregnancy, while breastfeeding and when caring for a child.
Objectives	<p>By the end of the learning session, participants will:</p> <ol style="list-style-type: none"> 1. be able to identify at least one consequence of cannabis use on maternal health 2. identify at least one consequence of cannabis use on fetal, child and adolescent health 3. discuss steps parents can take to reduce the harms of cannabis use 4. discuss the rationale for recommending that women not use cannabis during pregnancy or while breastfeeding, based on the current evidence about potential harms
Presentation approach	<p>As a one-to-one service provider or a group facilitator, decide how you will share information with, and support reflection by, participants. You may wish to:</p> <ul style="list-style-type: none"> • print and hand out participant resources • share participant resources using a laptop, tablet or cell phone • visit the websites and links to show participants where they can find additional information • engage in one large, or several small, discussion groups (if in a group setting) • have participants answer questions by writing down what they have learned on the handout sheets provided, or share their learning verbally
Facilitator/ service provider backgrounders	<p>There are two facilitator background documents and two participant resources for you to review as preparation on this topic:</p> <ol style="list-style-type: none"> 1. Cannabis Use During the Reproductive Years 2. How to Approach Women About Cannabis <p>Additional information can be found at the Canadian Centre on Substance Use and Addiction website including the Clearing the Smoke on Cannabis publication.</p> <p>The appendices on “Girls, Women, Health and Tobacco Use” and “Using a Principle-Based Approach” may also be helpful to review.</p>
Participant handout	<ol style="list-style-type: none"> 1. Recommendations about Cannabis Use in Pregnancy (handout) 2. Cannabis Use, Maternal Health and Parenting (handout) 3. Cannabis, Pregnancy and Parenting (activity sheet)

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FACILITATOR BACKGROUND

Cannabis Use During the Reproductive Years

What Is Cannabis?

The cannabis plant grows wild, or is specially cultivated outdoors or indoors, all around the world. *Marijuana* is a common term for cannabis. Other common slang terms include weed, pot and grass.

There are more than 700 chemical compounds produced by the cannabis plant. Tetrahydrocannabinol (THC) is the most well-known chemical in cannabis, and is the one that makes users feel “high.”^[1] Cannabidiol (CBD) is another chemical in cannabis that is linked to the plant's medicinal effects treating pain, inflammation and anxiety.^[2] In contrast to THC, CBD does not produce the euphoria effect.^[1]



There are different types, or strains, of cannabis, and their effects depend on the amount of THC, CBD and other chemical compounds they contain, as well as the interactions these compounds have.^[2] For example, the THC content in **edible** cannabis products varies widely, and is often potent. The THC content in cannabis that is **smoked** has increased over the past several decades.^[3] **Oils**, however, usually contain the highest percentage of THC.^[3]

Smoking is the most common way to consume cannabis, either as a cigarette, or in a pipe or bong.^[4] Cannabis is often mixed with tobacco. Using these products together—smoking blunts and “chasing” cannabis with tobacco—can be especially harmful to a person's health, including contributing to their dependence on cannabis.^[4] American studies report a high prevalence of users combining e-cigarette or tobacco use with cannabis.^[5] One co-use study reported that two thirds of young adults who use cannabis combine it with tobacco.^[6]

There are many types of cannabis products and nobody knows all of their potential harms or benefits.

How Is a Person's Health Affected by Cannabis Use?



Medical cannabis is used by individuals who are suffering from serious and debilitating illnesses. The guiding principle in considering the use of cannabis for medicinal purposes is that the usual interventions have been ineffective to relieve suffering. For example, Health Canada has allowed the use of medical cannabis for those who are suffering from symptoms of a serious condition where previous interventions have been ineffective. These conditions include severe pain, muscle spasms from a spine injury or illness, multiple sclerosis, severe pain, severe nausea, malnutrition, anorexia, and weight loss from HIV/AIDS infection and cancer, severe pain from arthritis and epilepsy.^[7]

The psychological effects of cannabis include euphoria (feeling high), relaxation, slowed thinking and reaction time, altered perception, impaired coordination and motor performance, poor short-term memory, impaired attention and judgment, panic attacks, anxiety, dizziness and difficulty expressing one's thoughts in words.^[8] Those individuals whose brains are still developing (i.e., youth and adults under the age of 25) may be at greater risk of harmful effects from cannabis use.^[9]

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Cannabis Use During the Reproductive Years

Cannabis smoke has been shown to contain high concentrations of carcinogens that are also found in tobacco smoke, and cannabis users generally take larger puffs and hold their inhalations for longer than tobacco users. This difference in smoking style may increase the carcinogenic properties of cannabis smoke.^[10,11]

Research is emerging on the physical health impacts of cannabis on lung and heart health,^[12,13] as well as on mental health for adult men and women.^[14,15]

For more information about the effects of cannabis on the brain, see

- <https://www.drugabuse.gov/publications/research-reports/marijuana/how-does-marijuana-produce-its-effects>

For more information about the overall health effects of cannabis, see

- http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/cannabis/Pages/default.aspx
- <https://www.ccsa.ca/cannabis>

For more information about reducing harms associated with health and other effects of cannabis, see

- <https://www.drugabuse.gov/publications/research-reports/marijuana/how-does-marijuana-produce-its-effects>

The Effects of Cannabis on Maternal and Child Health

Cannabis is one of the most commonly used substances during pregnancy and lactation.^[16] However, it is difficult to be certain about the effects of cannabis use on pregnancy. The potential harms of using cannabis during pregnancy are not well known. What is recognized is that there is no known safe level of cannabis use in pregnancy and when breastfeeding. All jurisdictions that have legalized cannabis are careful to warn parents about not using when planning a pregnancy, when pregnant and while breastfeeding. The American College of Obstetricians and Gynecologists released a medical committee opinion in 2015 to discourage the use of cannabis during preconception, pregnancy and lactation.^[17]



Effects on fertility: Cannabis use may affect the ability to conceive. For example, heavy cannabis use has been linked to difficulties with the menstrual cycle for women, and lower sperm count in men.^[18-21]

Effects on maternal health during pregnancy: Some studies have shown that cannabis may have some negative effects on the pregnancy such as increasing the risk of maternal asthma and anemia^[22, 23]. Cannabis may increase risk of preterm birth, particularly for heavy users and women who also use tobacco.^[24-26]

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Cannabis Use During the Reproductive Years



Cannabis use is associated with low birth weight among frequent users and high birth weight among those using cannabis once or less than once per week,^[25,27] lower alertness and slower growth of the new baby,^[22,25,28] complications during birth,^[25] physical anomalies, gastroschisis (abdominal organs outside the body) and ventricular septal defect (heart defects).^[29] Being exposed to substances such as cannabis during pregnancy and as a newborn may have effects on later learning, behaviour and mental health,^[30-34] such as inattention and impulsivity during childhood.^[29,35]

Some women report benefits from using cannabis to treat morning sickness^[36,37], but no research has yet been done on forms of cannabis (e.g., lotions, edibles, tinctures) other than smoking used during pregnancy. Given the potential risks of cannabis use during pregnancy and to the fetus, safer, medically approved medication for nausea and vomiting should be discussed with a health-care provider.

Effects on newborns and infants during breastfeeding: When a breastfeeding mother uses cannabis, THC passes into her breast milk and is then transmitted into the baby's fat cells and brain, where it can be stored for weeks.^[38] Some limited research shows that infants exposed to THC through breast milk can have slow motor development.^[39] Other research, however, does not confirm this finding.^[40] A mother's ability to nurse and care for her child may be compromised because marijuana can affect her mood and judgment.

Until more information about the potential harms is available, it is recommended that women stop using cannabis while they are pregnant or breastfeeding.



Longer-term effects on children and teens:

Cannabis use during pregnancy may have negative effects on children's attention, memory, reasoning, problem solving and motor coordination. Studies have shown that many children whose mothers used cannabis in pregnancy find challenges in their learning and behaviour as early as school age, and continuing into young adulthood.^[30-34,41-43] The brain is still growing and optimizing well into young adulthood and cannabis exposure prenatally has been shown to impact this development.^[44]

We need to know much more about the long-term effects of cannabis use on children and youth who were exposed to cannabis prior to birth. Caution is advised.

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Cannabis Use During the Reproductive Years

Parenting and Cannabis

If a parent chooses to use cannabis, it is important to

- avoid exposing the child to second- and third-hand smoke. For more information, visit: www.pregnets.org/mothers/SecondHand.aspx
- store cannabis safely, as it can be very dangerous if eaten by children or pets
- be attentive to the child's needs, and be sure that there is always someone available to take care of the child if a caregiver becomes impaired by cannabis
- never drive while impaired



For more information, visit: www.colorado.gov/pacific/sites/default/files/MJ_RMEP_Factsheet-Tips-for-Parents.pdf

You may also wish to review an information sheet prepared by the Centre of Excellence for Women's Health. Visit: <http://bccewh.bc.ca/wp-content/uploads/2016/08/Information-Sheet-Women-Marijuana030716.pdf>

Clients concerned about their own or someone else's use of cannabis or other drugs can call the free, confidential Alberta Health Services addictions helpline at [1-866-332-2322](tel:1-866-332-2322).

1. **What do we know about women who use cannabis in pregnancy?** According to the Canadian Centre on Substance Abuse, cannabis has recently been the most commonly used illicit drug in Canada, and is much more likely to be used by young people (15 to 24 years) than by adults (25+ years).^[94,95] In 2013, Canadian women reported two thirds of the cannabis use of Canadian men (10% versus 15%).^[45] In a study of over 12,000 pregnant women in England, 5% of mothers reported smoking cannabis before and/or during pregnancy; these individuals tended to be younger, of lower parity (fewer pregnancies), better educated and more likely to use alcohol, cigarettes, coffee, tea and hard drugs. Professionals must remember that self-reported use, particularly of illicit substances, may under-represent the actual rates of use due to stigma and fear of consequences from law enforcement.^[46]

We all need to help reduce stigma directed to women who use substances.

2. **Women need to feel safe to tell health providers that they use cannabis.** Pregnant women who use cannabis or other illicit drugs may fear and experience being judged harshly, and may be uncomfortable telling others about their use. To reduce judgment, remember to incorporate the four principle-based approaches: woman centred, trauma informed, harm reducing and equity informed. For more information, refer to chapter two, as well as the appendix "Girls, Women and Tobacco Using a Principle-Based Approach."

Make it safe to discuss cannabis use, so that women can get the information and support they need from health providers. It may be important to reassure women that they will not be reported to child welfare simply for using cannabis. Substance use only becomes a child-welfare issue when it affects the person's parenting in a way that is unsafe for their children.

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Cannabis Use During the Reproductive Years

- 3. Pregnant women may not know that cannabis can be harmful.** Many women are not well-informed about the health effects of cannabis. For example, some women claim that cannabis is helpful for issues like morning sickness, even though that has not been proven and is not advised. Women may also mistakenly think that because cannabis use will be legalized in Canada, that it is therefore safe to use in all situations.

Ask women to share with you what they understand about the health effects of cannabis and if they are interested in hearing more.

- 4. There are many reasons for stopping cannabis use when planning a pregnancy, when pregnant and when parenting.** It is important to know, and have the opportunity to discuss, the benefits of reducing or stopping cannabis use for the woman's health, the child's health and for parenting reasons like second-hand smoke exposure, ensuring someone is there to help care for a child if cannabis is used, and preventing child access to substances like tobacco and cannabis. How does the client see drug use fitting into her life? Is she interested in stopping her use of cannabis? If not, what can she identify to reduce harm and promote safety for herself and her family? Harm-reduction approaches could include making her home, child care and vehicles cannabis- and tobacco-free, ensuring drugs and paraphernalia are kept and disposed of safely, out of reach of children and pets.

Help women discuss what reasons for reducing/stopping might be important to them, bringing out their ideas and values. If the client is receptive to this, it can also be helpful to provide general information about staying healthy, such as nutrition, physical activity and finding mother/baby groups.

- 5. A support network can be helpful.** Women may or may not have a partner or other supports in their life, and, if they are present, the partner/peers/family may not be supportive about her pregnancy or about her interest in reducing or stopping her cannabis use. It may be something they share together.

Help women identify people who can support their decisions about cannabis use. If they are willing to change, support them to make a change plan and consider referrals to other professionals, as needed.



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Cannabis Use During the Reproductive Years

#1: We don't know how much cannabis is safe

Your health and your role as a parent are important to consider when making decisions about using cannabis.

More evidence about the risks of cannabis is needed, but enough evidence exists to recommend not using it during pregnancy and while breastfeeding. Even one or two joints per week may have lifelong health consequences for you and your family. The good news is that, if you only use a small amount, you may not find it as hard to stop.

#2: Health effects on the child may not show up until adolescence

Cannabis use exposes your fetus to the risk of future health problems. The consequences of using cannabis while pregnant may not show up until your child is a teenager, and people may not make the connection between using cannabis during pregnancy and these learning and behaviour problems. As a parent, you need to consider if using cannabis during pregnancy is a risk you want to take, as it may mean later, lifelong problems for your child.



#3: Pregnancy (or when planning a pregnancy) is a great time to reduce/stop using cannabis

It is not too stressful to stop using cannabis while pregnant. While you may feel relaxed while having a joint (or other cannabis product), you are also raising your heart rate and blood pressure. There are other ways to manage stress effectively. The benefits of not using cannabis while pregnant, for you and your baby, far outweigh any possible drawbacks (e.g., temporary cravings).

#4: Cannabis is not recommended to treat morning sickness

Some women report that cannabis helps relieve their morning sickness. However, this has not been confirmed by research, and thus there is no guidance about what type of cannabis (e.g., food, vaping, lotion) and in what quantity might be safe, if any. Experts warn that using cannabis during pregnancy is not safe and should be avoided even as a medical treatment. Physicians advise against using any nonessential medications and chemicals during pregnancy and while breastfeeding. The key concern about marijuana use during pregnancy is its effect on fetal and young-adult (i.e., mothers under the age of 25) brain development, and how this will affect the mother and child's short- and long-term learning, mental health and behaviour.

What can you do moving forward

How does cannabis fit into your life? Are you willing and able to stop, or to take action to reduce harm from your cannabis use? Consider things that you can do to limit the risks of using cannabis. Harm-reduction approaches include not using cannabis when driving; making your home and vehicles cannabis- and tobacco-free; ensuring these drugs and their paraphernalia are kept and disposed of safely, out of reach of children and pets; and planning for childcare if you choose to become intoxicated.

If you are concerned about your own or someone else's use of cannabis or other drugs, call the free, confidential Alberta Health Services Addictions helpline at [1-866-332-2322](tel:1-866-332-2322).

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PARTICIPANT HANDOUT

Cannabis Use, Maternal Health and Parenting

What Is Cannabis?

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There are more than 700 chemical compounds produced by the cannabis plant. Tetrahydrocannabinol (THC) is the most well-known chemical in cannabis, and is the one that makes users feel “high.” Cannabidiol (CBD) is another chemical in cannabis that is linked to the plant’s medicinal effects treating pain, inflammation and anxiety. In contrast to THC, CBD does not produce the euphoria effect.



There are different types, or strains, of cannabis, and their effects depend on the amount of THC, CBD and other chemical compounds they contain, as well as the interactions these compounds have. For example, the THC content in **edible** cannabis products varies widely, and is often potent. The THC content in cannabis that is **smoked** has increased over the past several decades. Oils, however, usually contain the highest percentage of THC.

There are many types of cannabis products and nobody knows all of their potential harms or benefits.

How Does Using Cannabis Affect a Person’s Health?

The psychological effects of cannabis include euphoria (feeling high), relaxation, slowed thinking and reaction time, altered perception, impaired coordination and motor performance, poor short-term memory, impaired attention and judgment, panic attacks, anxiety, dizziness, and difficulty expressing one’s thoughts in words. Cannabis use affects the developing brain. Girls, boys, young women and men under the age of 25 who use cannabis may be at greater risk of harmful effects, because their brains are still developing.

Research is still emerging on the general physical health impacts of cannabis on lung and heart health, as well as on mental health for adult men and women.

For more information on the overall health effects of cannabis, see

- http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/cannabis/Pages/default.aspx
- <https://www.ccsa.ca/cannabis>

For more information on the effects of cannabis on the brain, see

- <https://www.drugabuse.gov/publications/research-reports/marijuana/how-does-marijuana-produce-its-effects>

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Cannabis Use, Maternal Health and Parenting

For more information on reducing the harms associated with the effects of cannabis, see

- <https://www.uvic.ca/research/centres/cisur/assets/docs/take-care-with-cannabis>

Cannabis is often mixed with tobacco. Using tobacco with cannabis—smoking blunts and “chasing” cannabis with tobacco—can be especially harmful to a person’s health, including contributing to their dependence on cannabis.

The Effects of Cannabis on Conception, Pregnancy and Fetal and Child Health

Cannabis is one of the most commonly used substances during pregnancy and lactation. It is difficult to be certain about the effects of cannabis use on pregnancy due to limited research to date. **From what we know now, there is no safe level of cannabis use in pregnancy and when breastfeeding.** All jurisdictions that have legalized cannabis are careful to warn parents about not using while planning a pregnancy, when pregnant and while breastfeeding.

Effects on fertility: Cannabis use may affect a couple’s ability to conceive. For example, heavy cannabis use has been linked to difficulties with the menstrual cycle for women, and lower sperm count in men.

Effects on maternal health during pregnancy: Some studies have shown that cannabis may have negative effects on a pregnant woman’s health, such as increasing the risk of maternal asthma and anemia. Cannabis may increase the risk of preterm birth, particularly for heavy users and for women who also use tobacco.

Some studies also show the effects of using cannabis during pregnancy on newborns, such as low birth weight, lower alertness and slower growth of the new baby. Being exposed to substances such as cannabis during pregnancy, may have effects on the child’s later learning, behaviour and mental health, including increased inattention and impulsivity during childhood.

The potential harms of cannabis use during pregnancy are not well studied. No research has been done on forms of use other than smoking (e.g., lotions, edibles, tinctures) when pregnant. Although some women report benefits from using cannabis to treat morning sickness, this has not been confirmed by science. Given the potential risks during pregnancy and to the fetus, safer, medically approved medication for nausea and vomiting should be discussed with your health-care provider.

Effects on newborn/infant when breastfeeding: When a breastfeeding mother uses cannabis, THC passes into her breast milk and is then transferred into the baby’s fat cells and brain, where it can be stored for weeks. Some limited research shows that infants exposed to THC through breast milk can have slow motor development. A mother’s ability to breastfeed, bond with and care for her child might be compromised because marijuana can affect her mood and judgment. Cannabis use can also affect how well parents supervise and parent their baby. Second-hand smoke from marijuana can increase a baby’s exposure to the drug.



Until more information about the potential harms is available, it is recommended that women stop using cannabis while they are pregnant, or while breastfeeding.

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PARTICIPANT HANDOUT

Cannabis Use, Maternal Health and Parenting

Longer-term effects on children and teens: Cannabis use during pregnancy may have negative effects on children's attention, memory, reasoning, problem solving and motor coordination. Studies that followed children whose mothers used cannabis in pregnancy found challenges in those children's learning and behaviour as early as school age, and continuing well into young adulthood. A person's brain is still growing and optimizing well into young adulthood and being exposed to cannabis prenatally and during childhood has been shown to affect this development.

We need to know much more about the long-term effects of cannabis use on children and youth who were exposed to cannabis prior to birth. Caution is advised.

Parenting and Cannabis

If a parent chooses to use cannabis, it is important to:

- prevent their child's second-hand exposure to cannabis smoke

For more information, see www.pregnets.org/mothers/SecondHand.aspx

- store cannabis safely, as it very dangerous if eaten by children
- be attentive to their child's needs
- be sure that there is always someone available to take care of their child if they plan to use cannabis and cannot supervise their child themselves
- never drive while impaired

For more information, see www.colorado.gov/pacific/sites/default/files/MJ_RMEP_Factsheet-Tips-for-Parents.pdf.

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PARTICIPANT ACTIVITY SHEET

Cannabis, Pregnancy and Parenting

Topic: Cannabis, pregnancy and parenting

Task:

After reviewing the participant handout sheets:

1. Review each question on this activity sheet.
2. Talk about the answers with your health provider and/or group.
3. Write your answers to the questions in the space provided.

Questions:

1. What is one effect of cannabis use on a pregnant woman's health that stands out for you?

2. What is one effect that cannabis use can have on your child in the short or long term that stands out for you?

3. Why might pregnant women be afraid to tell people that they use cannabis? What can be done to change this?

4. What is one action that you might want to take as a parent, if you use cannabis?
