



# This year, a variety of cannabis products for recreational use\* will be entering the retail market.

Cannabis edibles, cannabis topicals and cannabis concentrates will be legally produced for recreational use and sold to adults in Canada as of October 17, 2019.

Only licensed cannabis producers will be able to develop these products for legal sale. These products will be available for purchase in stores and online.

Chances are that your kids may have already heard about cannabis edibles, topicals and concentrates on the news, social media or from their friends or other adults.

Cannabis and a variety of cannabis products like edibles and oils have been around for decades, most of them homemade. It's normal that young people may be curious about the legalisation of these new cannabis products, and it's important to keep in mind that curiosity doesn't necessarily lead to experimentation.

Being informed about these cannabis products will help you understand exactly what they are, how they are consumed and the potential impact their use could have on youth.

As parents, you are one of the most powerful influences in your child's life, and having thoughtful and well-informed conversations about cannabis with your pre-teen or teen can help them make informed and healthy choices. **We are here to help.** 

### Youth and Cannabis Use in Canada:

A recent study in Canada shows that 17% or nearly one in five students in grades 7 through 12 reported using cannabis products between October 2016 and June 2017.

Of those students who have used these products:1

- 80% reported having inhaled or smoked them;
- 34% reported having ingested, or eaten them;
- 30% said they vaped cannabis products;
- 22% 'dabbed' them (heating a small amount of cannabis concentrate on a hot surface in order to vaporize an extremely potent dose of cannabinoids);
- 14% have ingested them in alcoholic products infused with cannabis.





#### **CANNABIS EDIBLES**

Cannabis edibles are products such as candies, baked goods and beverages that contain the chemical compounds that are found in the cannabis sativa plant. Homemade cannabis edibles have always existed as an alternative to smoking cannabis. As legalization arrives, there are many new edible products emerging, such as cannabis infused water, coffee, tea and chocolate bars.

Cannabis contains several chemical compounds, including THC, (delta-9-tetrahydrocannabinol) that provide users with that euphoric or 'high' experience. CBD, (cannabidiol) the other well-known active chemical in cannabis, is being studied for potential medical applications such as pain relief and is known for its ability to moderate (or reduce) the effects of THC. Depending on the amount that's present in a cannabis product, THC can have an impact on the brain and the body, and for young people whose brains are still developing; it raises some serious concerns for their health, now and in the future.

When they are legal for retail sale, the THC and CBD levels they contain will have to be indicated on the packaging.

#### **CANNABIS TOPICALS**

Cannabis topicals are lotions, balms, sprays and oils that are infused with cannabis. People seeking relief from aches, pains and inflammation mostly use these topicals medicinally. Although they may contain THC as well as CBD and other cannabinoids, most cannabis topicals do not produce the euphoria that exists with cannabis that is smoked, vaped or inhaled, as they don't reach the bloodstream in significant concentrations, unless applied over a large area.

The exceptions are products labelled 'transdermal', which have the potential (depending on the dosage of THC) of penetrating the bloodstream and producing psychoactive effects.





#### CANNABIS EXTRACTS

Cannabis concentrates, also called extracts, is the name given to a wide variety of products that are made from extracting the cannabinoids from either the whole cannabis plant, the flower or from just the buds.

The most common types of extracts include oils, tinctures, hash, resins, waxes or shatter.

They are extracted into a more concentrated form either by using a solvent like butane or CO2 or by pressing the resins out of the plant with machines. Tinctures can be ingested as drops that go under the tongue. Oils can be ingested as capsules, or oil filled cartridges that can be vaped, hash can be vaped or smoked as well, while shatter, wax or resin are usually ingested orally.

THC levels in extracts and concentrates are generally much higher than what is usually found in dried cannabis, such that even a small quantity of these extracts may have a strong and even an unexpected dramatic effect.





### **VAPING AND CANNABIS**

It is concerning to note the growing popularity of vaping among youth, who may have the perception that it is a safer alternative to smoking.

A recent study conducted by Dr. David Hammond of the University of Waterloo finds that among young people aged 16-19; vaping has increased by 74% from 2017 to 2018, from 8.4% to 14.6%.2

This increase in vaping is very significant, and may have some serious implications with regards to vaping cannabis. There is some concern that many young people may think that vaping cannabis extracts such as oils and hash is a safer way to use cannabis when compared to inhaling a joint, for example.

When cannabis is vaped, it produces a much less noticeable tell-tale smell of smoking cannabis through a joint, a blunt or a bong. Youth vaping of cannabis extracts and consuming cannabis edibles are concerning patterns, as they are considered relatively more covert ways to use cannabis products. They are almost odour free, and can easily be hidden.

Although vaping had been generally considered as a safer alternative to smoking, many recent cases of serious acute lung injuries due to vaping have put this assumption into doubt. The origin of these ailments has not yet been identified with certainty. One possible cause may reside in carrier liquids such as Propylene Glycol (PG) or Polyethylene Glycol (PEG), used to thin out thicker cannabis oil, or possibly added vitamin E or other contaminants.

### **Effects of Cannabis use:**

Starting to use cannabis earlier in life - before 16 or 17 - is one of the strongest predictors of noticeable cognitive difficulties.3

Individual responses to cannabis use vary according to sex, age, pre-existing medical conditions and frequency of use, as well as the THC and CBD content. They may also vary from one person's experience to the next. Reactions to cannabis can be impacted by consumption of food, alcohol, other drugs and health products.

Cannabis use by youth is closely tied to the consumption of other substances, particularly alcohol and tobacco.<sup>4</sup> Some youth may roll a joint with tobacco, or have a drink and then consume cannabis. This means that sometimes young people are dealing with the effects of more than one drug at a time.

Cannabis is an addictive drug, although it is important to note that not everyone who uses cannabis will become dependent. Generally speaking, the younger a person is when they begin to use cannabis, and the more often they use it over time, the greater the chance of dependency.<sup>5</sup>

#### Short-term effects of cannabis may include:6

- Confusion
- Sleepiness (fatigue)
- Anxiety, fear or panic
- Impaired ability to: remember, concentrate, pay attention, react quickly



#### Long-term cannabis use can also harm:

- Memory
- Concentration
- Intelligence (IQ)
- Ability to think and make decisions

The long-term effects of cannabis on your brain can include an increased risk of developing Cannabis Use Disorder (CUD). Cannabis use disorder is a medical term that refers to a spectrum of cannabis use patterns where someone has become dependent on the drug. Individuals who have CUD may feel they need to use cannabis just to make it through the day, even though they may be aware of the harm it is causing to their physical and mental health.

In some people, cannabis use increases the risk of developing mental illnesses such as psychosis or schizophrenia, especially for those who start using cannabis early, and have a personal or family history of these disorders. Frequent cannabis use has also been associated with an increased risk of suicide, depression and anxiety disorders.<sup>7</sup>

#### Regular use of cannabis products during adolescence can:8

- o Cause functional and structural changes to the developing brain, leading to damage.
- o Be linked to cannabis dependence and other substance use disorders
- o Promote the initiation and maintenance of tobacco smoking;
- o Be linked to an increased presence of mental illness, including depression, anxiety and psychosis; impaired neurological development and cognitive decline
- o Lead to diminished school performance and lifetime achievement.
- Regular use of high-strength cannabis extracts is also associated with tolerance, withdrawal and cannabis use disorder.9

What is Regular use? Regular use of cannabis refers to the recreational use of cannabis over time- every day, almost every day, or every weekend over a period of several months or years.





# **Ingestion versus Inhalation**

The ingestion of cannabis edibles can be a very different experience when compared to the inhalation of cannabis. The 'high' people expect from recreational cannabis takes longer to experience with edibles, because the THC goes to the stomach first, then the liver and finally to the brain through the bloodstream. 10

While cannabis that is smoked or vaped may produce euphoric results within seconds or minutes, cannabis that is ingested in food or drink can take up to two hours for users to begin to feel the psychoactive effects and as long as four hours for those effects to peak.

Orally administered cannabis products taken with or without food will also have a significant effect on absorption of THC and CBD in some individuals.<sup>11</sup> These effects can last from twelve to twenty four hours.<sup>12</sup>

Young people who are used to the rapid effects of inhaled cannabis or other intoxicants such as alcohol might not understand that the effects of edible cannabis and cannabis extracts produce delayed and unpredictable responses. In order to achieve the desired euphoric effects, a teen may be tempted to take a second or third portion before the peak effect occurs, risking over-intoxication, and producing dramatic symptoms of which include severe anxiety, vomiting and psychosis. 13

Ingesting any form of cannabis as a child can have negative implications such as poor academic performance, and deficits in attention, information processing and memory. These deficits have been shown to persist after an individual stops using cannabis however, the exact duration of impairment is still unknown. 14

# **Cannabis Poisoning**

Although it is not known to be fatal, accidentally consuming or consuming too much cannabis at one time can lead to temporary adverse effects, also known as cannabis poisoning. It can be very unpleasant and potentially dangerous, sometimes requiring emergency medical attention and, in some cases, hospitalization.

Children and pets are at greater risk of cannabis poisoning. 15 Here are some of the symptoms that may be present if someone is experiencing cannabis poisoning:

- chest pain
- rapid heartbeat
- nausea/vomiting
- psychotic episode
- respiratory depression
- severe anxiety and/or panic attack

The higher the THC content in a product, the higher the likelihood of experiencing adverse effects and or poisoning, especially for first-time users. Higher-strength concentrates and extracts (e.g. "skunk", dabs, waxes, shatter) can have high levels of THC of up to 99%, and can lead to intense intoxication very quickly.



<sup>10</sup> Cannabis Training University, 2019, 'Cannabis Edible Consumption'
11 Stott CG1, White L, Wright S, Wilbraham D, Guy GW., National Center for Biotechnology Information, 2013
12 Health Canada, 'New cannabis products: What Canadians need to know,' 2019
13 Canadian Centre on Substance Use and Addiction, '7 Things You Need to Know About Cannabis Extracts', 2019
14 Canadian Centre on Substance Use and Addiction, The Effects of Cannabis Use during Adolescence, 2015
15 Health Canada, 'Cannabis in Canada – Get the Facts

# Cannabis and Alcohol — Never a good mix

Some young people mix cannabis while using alcohol or other drugs. It's important to understand what happens when these substances are combined.<sup>16</sup>

- The liver always metabolizes alcohol first. This means that other drugs, like the THC in recreational cannabis will remain in the system longer and the effects would continue to accrue until it can be metabolized properly.
- Combining cannabis with alcohol can increase the potential to overdose on either drug. This may result in drugrelated blackouts, alcohol poisoning, allergic reactions, memory issues, and long-term cognitive problems that are associated with the use of either drug.



#### **CANNABIS IMPAIRED DRIVING**

Your teen may be old enough to drive a vehicle or operate farm machinery, lawn mowers, boats, dirt bikes or other moving vehicles. Cannabis in any form, including edibles, can seriously impair the ability to operate machinery or vehicles of any kind.

- Almost one third (32%) of teens did not consider driving under the influence of cannabis to be as bad as alcohol.<sup>17</sup> This belief is partly related to the fact that youth don't associate the feelings of being high (calm, happy, relaxed) with risky behaviours that could impair their driving skills.18
- Nearly 25% of parents of teenagers did not consider driving while high on cannabis to be as bad as drinking and driving. 19

Since edible cannabis products take longer to process in the body, there is an increased risk of a person 'feeling fine' and suddenly becoming intoxicated. There is no standard waiting time to drive after using cannabis.<sup>20</sup>

#### Cannabis impairs drivers differently than alcohol but it still impairs driving.<sup>21</sup>

Cannabis use impairs judgment, cognition, reaction time, control and attention - all skills that are critical for driving or operating machinery. Numerous studies have shown that the risk of being involved in a collision and experiencing driving-related injuries, both non-fatal and fatal, is two to three times higher among cannabis-impaired drivers compared with non-impaired drivers.<sup>22</sup>

It is not only the operators of the vehicle or machinery that are at risk, but others who are walking, cycling or driving in their pathway, and any passengers who may be 'along for the ride'. Furthermore, residual signs of impairment have been demonstrated 24 hours after cannabis use. So, even though the individual does not perceive any effects of intoxication, safety sensitive tasks like driving or operating machinery may be potentially hazardous.

It is important for young people to know that they must never get into a car with a driver who has consumed recreational drugs of any kind. Remind your teen that you are there for them if something goes wrong and will help them figure out a safe way for them to get home after a night out where alcohol or cannabis is involved.



16 Alcohol.org - Taking marijuana and alcohol together August, 2019
17 Drug Free Kids Canada Tracking Study, 2017
18 McKiernan, A., & Fleming, K. (2017). Canadian Youth Perceptions on Cannabis.
19 Drug Free Kids Canada Tracking Study, 2017
20 Health Canada - Cannabis Impairment - Get the facts, 2019
21 Health Canada, May 2019
22 Health Canada - Canada's Lower Risk Cannabis Use Guidelines 2019

# The legal landscape of new cannabis products

As of October 17, 2019, Health Canada's amendments to the Cannabis Regulations will establish the rules governing the legal production and sale of edible cannabis, cannabis extracts and cannabis topicals. These amended regulations seek to reduce the health risks of these cannabis products.<sup>23</sup>

The federal government has set the legal age for the recreational use of new cannabis products at 18, but most provinces have set it at 19 years. The provinces will also have jurisdiction over the sale and distribution of cannabis products.



Federal guidelines are being put into place in an attempt to protect children and youth; for example, packaging edibles in plain, child resistant wrappers with prescribed amounts of THC on the labels and ensuring that the use of the standardized cannabis symbol appears on all products.

You can find out more about these federal guidelines on the Health Canada website.

With our children in mind, we want to reduce any risks that may accompany recreational cannabis use. While we hope that young people will not choose to use recreational drugs until they reach adulthood, if they do, it is important that they do so with the lowest possible risks.

Delaying first use, avoiding experimentation and taking steps to reduce the potential harm (like using a lower amount of THC) are all important considerations, in order to prevent problematic use and cannabis use disorder in youth.

#### **KEEP CANNABIS SECURE:**

It is also important to note that cannabis edibles may be prepared in the home, meaning that there are no strict rules and regulations that are imposed for retail sales. Rather than having to package cannabis edibles in plain wrapping, with a standardized cannabis symbol and THC content clearly labeled, home made cannabis may contain various amounts of THC and may also be masked in appealing food or drink products.

<u>The Canadian Paediatric Surveillance Program</u> collected 16 reported cases of serious adverse events involving recreational cannabis between September and December 2018, six of which were accidental ingestions.<sup>24</sup>

#### THE ILLEGAL DRUG MARKET

Only licensed producers can grow cannabis products that can be purchased legally by an adult in Canada. The illegal drug market continues to produce and sell cannabis products of all kinds on the street. It's important for kids to understand that cannabis products of any kind that are purchased on the street may not be what they appear to be.

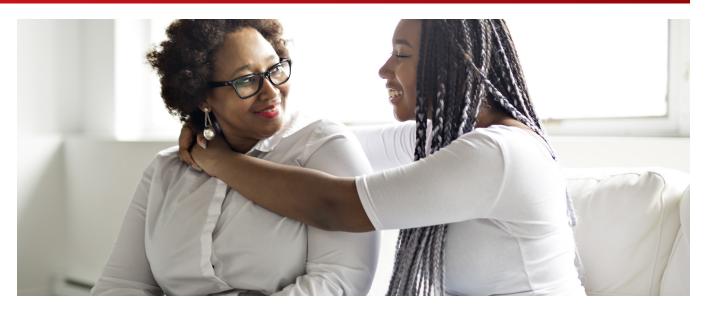
They may be contaminated with pesticides and harmful chemicals or laced with other toxic products. In addition, the levels of THC may be much higher, particularly in cannabis concentrates, and can pose increased risks for youth using illegally produced cannabis products.

Although cannabis products are illegal for sale to underage youth, it is fairly easy to order any form of cannabis on line. There is no shortage of cannabis websites that are easily accessible as long as someone types in a birthdate that is over 18 or 19 years and makes a purchase. Recipes for homemade pot brownies and extraction techniques for concentrates abound on You Tube. **The bottom line is that if they are looking, cannabis products are not that difficult for underage youth and kids to obtain.** 

The most effective way for us to reach our kids with balanced information and encourage them to make smart choices is to talk with them - early, often and honestly.



# It's time to talk! How to talk with your kids about cannabis products



Your child may express a curiosity about cannabis – that does not mean they intend to use it – it's natural for youth to be curious about a substance that is frequently in the media and they may have questions about using cannabis.

Talking about recreational cannabis edibles, extracts and topicals may seem challenging, for both you and your child, but it is important.

Here are some suggestions that may help you begin a conversation about the legalisation of cannabis edibles, cannabis extracts and cannabis topicals.

- **Pick the right time:** You know your child best. If you try to have a serious discussion on any topic and you see rolling eyes, or other 'disinterested' behaviour, put it away. If they aren't listening, you are wasting your time. Wait for a better time to bring it up or try asking your child if it is a good time to have a chat about something that is bothering you.
- Remove your child from a direct confrontation: Ask questions such as
  - o "Do you know anybody who has eaten a brownie, muffin, candy etc. that contains cannabis?"
  - o "Do you think cannabis edibles or vaping cannabis concentrates might be harmful?"
- Talk about impaired driving: Ask your children if they would ever get into a car with someone who is vaping or eating cannabis. If not, why not?
- Ask them what they may have heard about edibles: Ask your teen or tween if they think eating cannabis could make someone impaired. Tell them about delayed 'high', how long the effects last and the risk of over-consumption and impairment by eating or drinking products containing cannabis.
- Consider the "cool" factor: You may hear from your tween or teen that vaping cannabis or eating
  cannabis are considered 'cool' in their crowd. Remind your child that there are lots of ways to be 'cool'
  without the risk to their health.
- Learn together: Invite your child to help you explore trusted sites that explain what cannabis edibles, extracts and topicals are and discuss why you are concerned about their use.



# What to Say



# Here are some neutral, open - ended questions you can try that will help to take the focus away from blame or doubt:

- "Have you ever heard of someone needing medical attention after eating cannabis brownies?" "Why do you think this might happen?"
- o "I read that some kids think that eating or drinking cannabis is less dangerous than smoking it. Do you think that is true?" "Do you think kids your age know about THC levels?"
- o "Do you think that some kids your age might get into a car with a driver who is high or impaired by alcohol or any other drug?" "Why do you think they would do that?" "Do you know that I will always help you plan to get home safely even if you've used cannabis in any way no questions asked?"
- o "Which do you think is more dangerous? Driving after drinking alcohol or driving after using pot?"
- "Where do kids your age learn about cannabis and other drugs? "Do you think it is reliable information?" "Why do you think that?"
- "Did you know there are ways to reduce the harm that cannabis use can cause to young people like taking things slowly and only consuming products with low THC levels?"
- "Have you ever felt pressured to smoke or eat cannabis?"
- o "Have you ever felt pressured to try cannabis after you've had a beer?"

Sharing your time with your pre-teen or teen and searching for relevant information about cannabis products and their different effects, mixing alcohol with cannabis use, high driving and other issues surrounding cannabis use at a young age together, can help to create and maintain a mutual bond of trust and respect.



## **Harm Reduction**

Your child may have already experimented with cannabis products (including edibles) or is using them occasionally or more frequently on a regular basis. If your teen is already using cannabis, having balanced and open conversations with them can help to reduce the impact of cannabis use on their mental and physical health.<sup>25</sup>

Also, keep in mind the following information during these conversations, since there are things your kids can do to reduce the potential harm:

- Delay regular use until brain is fully developed around age 25 years old.
- Avoid regular or frequent (daily or near daily) use
- Avoid using large amounts, or high potency THC cannabis products

If they continue to use cannabis, ensure they only use cannabis products that are purchased legally to ensure they are free from contaminants and pesticides and other potentially hazardous chemicals.

- Check the dosage. Ask your child if they are always aware of the THC dosage on the cannabis they are ingesting.
   If your child is using recreational cannabis, it is recommended that the THC level be 2.5 mg. The proposed legal THC limit for edible cannabis products is 10 mg, but for young people, this amount could present more risk.<sup>26</sup>
- A single dose above 15 mg of THC in a cannabis naive person can trigger a psychotic reaction or provoke a panic attack. Always know how many mg of THC they are ingesting and keep it under 10 mg. Never take a second dose.
- Encourage your teen to consider tracking or monitoring their use in order to understand their use pattern, when it may be affecting their daily life, or becomes hard to control.
- Regular use of higher and higher doses will build a tolerance to the effects of THC. Some can eventually ingest 100 mg of THC or more and not experience serious side effects. This is a sign that it may be time to take a break.
- Remind your child to stay away from synthetic cannabis products such as K-2 and Spice. Although these products may be found in cannabis joints or vaped, they may also be found added to food and drinks.
- These synthetic cannabinoids may contain chemical cocktails that can be up to one hundred times the potency of THC found in legally sold recreational cannabis. Because the drug is not regulated, each product might have a different level of THC, adding to the risk levels for potential users.



# Stigma



### HERE ARE SOME ADDITIONAL RESOURCES THAT CAN HELP

- The Cannabis Talk Kit Know how to talk with your teen
- Cannabis Edibles Low Risk Guidelines CAMH
- New Cannabis Products Health Canada Regulations





Whenever you decide to talk about drugs with your pre-teen or teen, it's important to remind your child that their body and their future belong to them - and that you are always there to talk with them about any issues or concerns they might have.

# Have questions about kids and drug use? Get answers quickly.

The **DFK FastFinder** makes it easy to find the information and resources you're looking for.

For more information on drugs, their effects on youth, how to intervene if your child is using, and how you, as the parent can protect your child from harm, please go to our website:

drugfreekidscanada.org