### What is cannabis?

Cannabis, also known as marijuana, is a product of the plant Cannabis sativa.

After alcohol, cannabis is the most commonly used psychoactive substance (a drug that affects your mind) in Canada.<sup>1</sup>

The main active chemical in marijuana, also present in other forms of cannabis, is THC (delta-9-tetrahydrocannabinol). Of the roughly 400 chemicals found in the cannabis plant, THC affects the brain the most. It is a mind-altering chemical that gives those who use cannabis a high. Another active chemical in cannabis is CBD (cannabidiol), which is presently being studied and used for medical purposes.

### What does it look like?

Cannabis consists of the dried flowers, fruiting tops and leaves from the marijuana plant. It is most commonly a greenish or brownish colour. Cannabis resin (or hashish) is a brown or black secretion from the marijuana plant that can be further processed to produce hash oil, wax or "shatter," a relatively recent by-product of cannabis. Shatter is a concentrated extract with very high levels of THC.<sup>2</sup>

### What are some terms for cannabis?

Marijuana, bud, blunt, chronic, dab, dope, ganja, grass, green, hash, herb, joint, loud, mary jane, mj, pot, reefer, skunk, smoke, trees, wax, weed.

# Why some teens use



Teens use cannabis for different reasons, which may include:

- to relax
- to have fun
- to alter their perspective
- to fit in
- to experiment
- to try something new

Some teens see it as natural and easy to get—maybe even easier than alcohol.

### How is it used?

Cannabis is commonly rolled into a cigarette (called a "joint") or in a cigar (called a "blunt") or it's smoked in a pipe or water pipe (called a "bong"). A single intake of smoke is called a "hit."

Cannabis resin can be vaporized and/or smoked in a pipe or bong (where the smoke is drawn through water before inhaling it).

In addition, there are cannabis concentrates such as hash, wax, shatter, tinctures and oil, most of which are ingested by heating and then inhaling the smoke.

Cannabis can also be brewed as tea or mixed into food and ingested as edible candies, cookies and brownies.3

Cannabis can also be laced with other substances (e.g. cocaine). Available evidence suggests that cannabis can also be contaminated with pesticides and harmful chemicals.<sup>4</sup>

### Who is using it?

The rate of cannabis use is two times higher among Canadian youth aged 15–24 as it is for adults.<sup>5</sup> One in five teens aged between 15 and 19 have used cannabis in the past year.<sup>6</sup> In Ontario, cannabis use increases with high school grade level to a high of 37.2% among 12<sup>th</sup> grade students.<sup>7</sup> Cannabis use is more prevalent among males than females, although the rate of use among females is on the rise.<sup>8</sup>

## What are the potential long-term effects of cannabis use?

There is no single reason that teens might use cannabis. They may try cannabis for social reasons, as a way to fit in or socialize with their peers, or because they think "everyone is doing it." They may also use cannabis as a coping mechanism to deal with life stresses.<sup>10</sup>

If a teen is using cannabis as a coping method for anxiety, depression or stress, he is more likely to continue this behaviour, if it works for him, and for some, it works immediately. He gains instant relief and gratification. He may think, "When I feel stressed out, I smoke pot and it relaxes me." Instead of taking time to process and deal with the feeling, he alters it by getting high, which in turn stunts the emotional coping process. The teen's stress tolerance is lowered, because he has not experienced the natural passing of the feeling, and he hasn't found and used a healthy behaviour—like sports, hanging out with a friend, playing music, talking to someone about how he feels or reading a book—to aid in coping with the pressure and stress he feels.

### What are the short-term effects of cannabis use?

Short-term effects of cannabis include feeling happy, relaxation, increased sociability and heightened sensation, problems with memory and learning, distorted perception (sights, sounds, time, touch), trouble with thinking and problem solving, body tremors, loss of motor coordination, increased heart rate and anxiety. These effects may be even greater when other drugs are mixed with cannabis.<sup>9</sup>

With the notable exception of drug-impaired driving, using cannabis is unlikely to result in permanent disability or death, but too much of the drug in a person's system can have harmful effects, and isn't as benign as some teens believe. Early and frequent cannabis use can increase risk of chronic cough, bronchitis and psychosis in vulnerable individuals.

Cannabis is an addictive substance. The risk of developing addiction is one in six among those who start using cannabis during adolescence.<sup>11</sup>

Regular cannabis use among adolescents is associated with an increased risk of experiencing psychotic symptoms (changes in thoughts, feelings and behaviours), especially when there is a family or personal history of psychotic disorders. Some studies have suggested that cannabis may also increase risk of anxiety and depression.<sup>12</sup>

Early and frequent cannabis use is linked with poor performance in school, lower grades and increased risk of dropping out. The evidence is still unclear as to whether regular use affects an adolescent's IQ.<sup>13</sup> However, research suggests that early, regular, heavy and long-term use of cannabis by teens may impair their cognitive abilities and may not be fully reversible.<sup>14</sup>

Youth might be particularly vulnerable to these negative outcomes due to the extensive changes that are taking place in the brain during adolescence, especially the ongoing development and maturation of the prefrontal cortex, which is critical to higher-order cognitive processes such as impulse control, working memory, planning, problem solving and emotional regulation.<sup>15</sup>

### Cannabis, just like any other drug, can lead to addiction.

It affects the brain's reward system in the same way as all other drugs of addiction—and the likelihood of developing problem use or addiction increases considerably for those who start young.<sup>16</sup>

### Cannabis and the teen brain

The parts of the adolescent brain that develop first are those that control physical coordination, emotion and motivation. The pre-frontal cortex, the part of the brain that controls reasoning and impulses, does not fully mature until around the age of 25.19

It's as if, while the other parts of the teen brain are shouting, the prefrontal cortex is not quite ready to play referee. This can have noticeable effects on teen behaviour, such as:

- difficulty holding back or controlling emotions
- a preference for high-excitement and low-effort activities
- poor planning and judgement (rarely thinking of negative consequences)
- · more risky, impulsive behaviours, including experimenting with drugs and alcohol

During the adolescent years, your teen is especially susceptible to the negative effects of any and all drug use, including cannabis. Scientific evidence shows that the use of cannabis during the teen years can interfere with school performance and well-being.

Teens are more likely to engage in risky behaviours than any other age group.<sup>20</sup> Risk-taking by teens can include drug use, binge drinking, dangerous driving (e.g. texting, driving while high or being a passenger with a high driver) and engaging in unsafe sex.<sup>21</sup>

### Cannabis and alcohol

While some teens may argue that cannabis is safer than alcohol, research shows that teens don't typically use alcohol OR cannabis; they use both, often at the same time<sup>25</sup>—a dangerous combination.

The use of cannabis alone is enough to impair judgement. The biggest impact of mixing cannabis and alcohol is the significant increase in impairment of judgement. The level of intoxication and side effects experienced can be unpredictable. When cannabis and alcohol are used at the same time, there is a greater likelihood of negative side effects occurring either physically or psychologically (panic, anxiety and paranoia).<sup>26</sup>

The use of both alcohol and cannabis before driving can greatly increase the risk of getting into a car accident.

This is similarly the case when mixing cannabis and other drugs.<sup>27</sup>