

# Health Risks of Cannabis Consumption



The Cannabis Control Authority (CCA) does not endorse the consumption of recreational marijuana. The external links and references used in this document are provided as examples of resources for the public to consider in making informed decisions, and they are not endorsed by the CCA.

Research shows that cannabis consumption may have health implications, either through the inhalation of smoke, product contamination, the psychoactive properties of delta-9-tetrahydrocannabinol (THC), THC concentration, and amount of cannabis product consumed. The age of first use of cannabis, the frequency of cannabis use, and whether other substances are used at the same time are also factors that may impact health. Health risks associated with cannabis use include the following:

## Mental Health

### BRAIN FUNCTION & MOOD

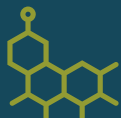
Cannabis use can immediately affect brain functions. Those who use cannabis may experience impaired motor coordination, euphoria, anxiety and panic attacks, impaired judgment, and the sensation of slowed time. Although these symptoms can be acute, those who use cannabis often may begin to see chronic adverse effects. A study found that chronic cannabis users tend to have increased depressive episodes, increased anxiety, and decreased motivation. In addition to negative effects on mood, THC can increase paranoia and reduce working memory capacity. One study suggests that those who use cannabis more often and begin use at an earlier age are also more likely to develop mental disorders over time, including schizophrenia.



### CANNABIS USE DISORDER (CUD)

Evidence suggests that frequent exposure to cannabis increases the risk of developing CUD over time. The following are signs of cannabis use disorder:

- Using more cannabis than intended
- Trying to quit cannabis use but being unable to do so
- Craving cannabis
- Using cannabis even though it causes problems at home, school, or work
- Giving up important activities with friends or family to use cannabis
- Continuing to use cannabis despite physical or psychological problems apparently triggered by its use
- Experiencing withdrawal symptoms when stopping cannabis use



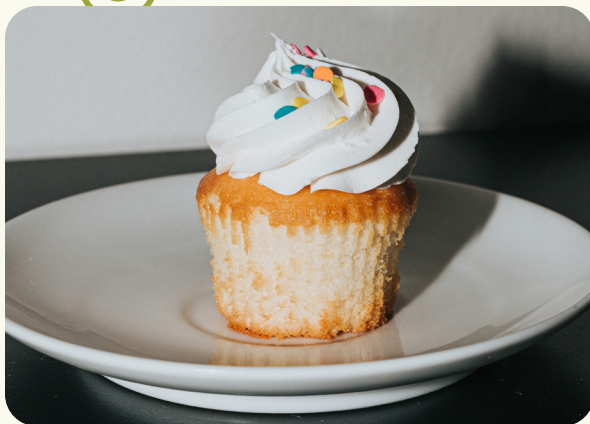
Studies show that the increased potency of cannabis over recent decades may be responsible for the rise in CUD diagnoses. Although the rate of CUD has increased over recent decades, CUD remains widely untreated. Talk to a doctor to learn about diagnosis and treatment options if any signs of CUD apply to you.

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## Physical Health

### LUNG & HEART HEALTH

Cannabis use poses several risks to lung and heart functions. Multiple studies found that those who smoke cannabis are more likely to experience acute or chronic respiratory symptoms, including bronchitis, wheezing, and cough. Cannabis smoke can also lead to serious lung diseases and airway obstruction if cannabis is inhaled heavily over several years. Cannabis consumption is associated with several heart health issues, including tachycardia, premature ventricular contractions, atrial fibrillation, and ventricular arrhythmia. Reducing or eliminating cannabis use often allows the body to recover from physical health ailments. Individuals should consult their doctors if they show signs of lung or heart issues after cannabis use.



### FOODBORNE ILLNESS OR FOOD POISONING

Edibles are food- or beverage-based products containing cannabis. When consuming edibles, individuals should be aware of the potential for foodborne illness and food safety risks of non-cannabis ingredients. One study showed unregulated or illicit THC-concentrated cannabis oils could potentially have concentrated amounts of contaminants if the cannabis plant is exposed to harms such as metals, pesticides, molds, fungi, mites, or microbial pathogens. Storage at the production facility or consumer's home can affect the potency, quality, and safety of an edible product. Because the onset of an edible's effects is later than when cannabis is inhaled, people may consume more than they should. This can lead to food poisoning from consuming too much product too quickly.

### PREGNANCY AND EARLY CHILDHOOD DEVELOPMENT

Cannabis use has the potential to adversely affect maternal, fetal, and childhood development. One study found that cannabis use during pregnancy can increase a person's risk of anemia. Other studies suggest exposure to cannabis in utero is associated with restricted fetal growth, smaller weight and head circumference and greater stress in newborns, and impulsivity in infants and children. It is best to avoid cannabis use if you are pregnant, planning to become pregnant, or breastfeeding.



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## Populations at Greater Risk

### YOUTH

Studies suggest youth who use cannabis are at risk of negatively affecting their brain development. Those who use cannabis during adolescence may experience adverse effects on intelligence and cognitive function. Cannabis use during adolescence can impair the development of the prefrontal cortex, leading to negative effects on decision making, planning, and impulse control. Multiple studies suggest that early cannabis use can also impact the areas of the brain responsible for coordination, regulating memory, and coping with stress and anxiety. Another study found that adolescents who begin using cannabis from an early age and continue to regularly use cannabis are also at risk of several behavioral issues, including problematic cannabis use in the future, delinquency, lower educational achievement, and risky sexual behavior.

### OLDER ADULTS

Age and declines in organ functions may make older adults more susceptible to experiencing adverse effects after cannabis use. Researchers have linked cannabis consumption among older adults with greater risk for cognitive impairment, falls related to low blood pressure, arrhythmia, and drug interactions.

## Operating Motorized Vehicles and Machinery

Driving or operating machinery under the influence of cannabis is illegal and unsafe. Cannabis can affect a person's ability to drive or use machinery safely by slowing reaction time, altering decision making, impairing coordination, and disrupting perception. More research is needed to discover the association between THC concentration and driving impairment. However, studies show an association between cannabis use and car crashes and an association between the use of multiple substances and increased impairment.



## Know Your Personal Risks

This document is an illustrative, not an exhaustive list of all potential health risks associated with cannabis use. Cannabis use can affect everyone differently. Talk to a doctor to learn more about the personal health risks of cannabis use. Please consider these health risks when making an informed decision about cannabis use.