

## People At Risk for Problems with Cannabis



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Attitudes towards cannabis are becoming more favorable. Support for cannabis legalization in the U.S. is at an all-time high. More than 60% of Americans say that cannabis should be legalized,<sup>1-2</sup> double the support for legalization found in 2000.<sup>1,3</sup> Recent National polls indicate 65% of Americans consider cannabis use morally acceptable and 42% not too harmful or not at all harmful.<sup>4-5</sup>

Despite more favorable attitudes towards cannabis, cannabis is not harmless. Cannabis can interact with other drugs and medications. In the short term, it has the potential and to cause adverse effects, such as anxiety and panic attacks, temporary psychosis, and severe nausea and vomiting. It can make people more prone to accidents and injuries. In the long-term, it has been associated with negative consequences, low motivation, and substance dependence.

Certainly, not everyone develops problems when using cannabis, but everyone who uses cannabis should be aware of the potential for problems. Certain groups of people may be at elevated risk of developing problems from cannabis use. Members of these groups should consider the risks of cannabis use.

### People at risk of schizophrenia and related disorders

There is much debate over whether cannabis can cause schizophrenia or related disorders, like schizoaffective disorder or bipolar disorder. As a group, these disorders are called schizophrenia spectrum disorders (SSDs). The vast majority of people who use cannabis do not develop SSDs. However, an unusually high number of people who have SSDs used cannabis before they first experienced psychosis. One study showed that people who have more genetic risk for SSDs also tend to use cannabis more frequently.<sup>6</sup> People at risk of SSDs might use cannabis to self-medicate early symptoms of their disorders.

We don't know if cannabis can cause SSDs in just anyone, but it looks like cannabis use might bring about SSDs earlier than they otherwise would have occurred in susceptible people. In many cases, cannabis also appears to make existing SSDs worse.<sup>7</sup> Therefore, people who have SSDs or who have a family history of SSDs would be well advised to avoid using cannabis. If they do use cannabis, it would be wise to talk to their health care providers about their cannabis use.

### People with social anxiety

Social anxiety disorder is more strongly associated with cannabis dependence than any other anxiety disorder.<sup>8</sup> Even after taking other factors into consideration, having social anxiety disorder appears to be a risk factor for developing a cannabis use disorder as well as other substance use disorders. Cannabis use may alleviate anxiety in the short-term but also present increased risk of harm in the long term from substance use disorders.<sup>9</sup>

## People with certain cannabis use motives

People report using cannabis for a variety of reasons. Some use cannabis to address state-sanctioned medical conditions. Non-medical users may use cannabis to socialize (for social motives), to enhance their experience (for enhancement motives), to forget their worries (for coping motives), or for other reasons. Research shows that those who use for coping motives are more likely than those who use for other reasons to have cannabis-related problems related to relationships, work, health, finances, legal issues, and emotional well-being.<sup>10</sup> For example, veterans with PTSD who used cannabis to cope with negative affect or sleep difficulties were more likely to have cannabis problems and cannabis use disorders.

## Adolescents

During adolescence, the brain is still developing in important ways. Animal research suggests the brain is vulnerable to cannabis use in adolescence. Using cannabis during this critical time could disrupt normal brain development.<sup>11</sup> People who start smoking cannabis regularly in adolescence are at elevated risk of developing problems with thinking and memory, mental health disorders, and drug dependence in adulthood.<sup>(12)</sup> Certain groups of adolescents may be more vulnerable to developing problems from cannabis use.<sup>13</sup> These include:

- Younger adolescents. The younger in adolescence a person begins using cannabis regularly, the more likely he or she is to develop problems.
- Male adolescents. Compared to girls, boys tend to develop more severe addictions and adverse consequences.
- Heavy using adolescents. Those who use before school on most days or spend a lot of time under the influence of cannabis tend to have worse impairments.
- Chronically using adolescents. Using cannabis over a long period of time increases the likelihood that long-term disabilities develop from short-term impairments.
- Polysubstance abusing adolescents. While the notion of cannabis as a gateway drug remains controversial, it is clear that adolescents who use multiple drugs are at higher risk of developing problems.
- Neurodevelopmentally challenged adolescents. Persons with autism spectrum disorders, fetal alcohol spectrum disorders, intellectual disabilities, or attention deficit/hyperactivity

disorder (ADHD) may be more compromised with cannabis use.

- Genetically predisposed adolescents. Individuals with family histories of mental illness appear to be more likely to develop cannabis-related problems compared to those without family histories.
- Indigenous adolescents. Cannabis use can compound the effects of historical trauma and social marginalization and other health and healthcare disparities facing indigenous youth.
- Traumatized adolescents. Adolescents who have experienced adverse childhood experiences such as abuse or neglect may be predisposed to use cannabis to cope, which can increase the likelihood of dependency.
- Adolescent offenders. Cannabis use can exacerbate problems associated with being involved in the juvenile justice system.

## Older adults

As people age, their bodies change. They may develop hearing impairment, vision changes, slowed reactions, risk of falls, and cognitive decline. Older adults often develop health problems, such as cardiovascular disease, diabetes, arthritis, osteoporosis, and cancer. They often take multiple prescription medications. Cannabis can interact with prescription medications, increasing the risk of adverse effects.<sup>14</sup> Cannabis can cause people to feel dizzy upon standing and affects vision in ways that could further increase older adults' risk of falls and accidents.<sup>15-16</sup>

## Pregnant and parenting women

Although it does not appear that pregnant or parenting women are themselves at higher risk of cannabis problems, there is clearly a risk to their children.<sup>17</sup> Using cannabis during pregnancy can disrupt fetal growth, increase the likelihood of premature delivery, and affect neurophysiological function in newborns. In utero cannabis exposure may impair long-term growth and neurodevelopment. Individuals exposed to cannabis in the womb may have an increased likelihood of problems with tasks requiring visual memory, analysis and integration. Cannabis can be passed to nursing infants through breast milk and have ongoing effects on their development.

**Citation:** Stoner SA. People At Risk for Problems from Cannabis Use. Addictions, Drug & Alcohol Institute (ADAI), University of Washington, June 2019. URL: <https://adai.uw.edu/pubs/infobriefs/stoner-2019atrisk.pdf>

This report was produced with support from the Washington State Dedicated Marijuana Fund.