

Myths about marijuana

Myth 1: Marijuana is medicine

There is some scientific evidence that suggest the active chemicals in marijuana (delta-9-tetra-hydro-cannabinol and other cannabinoids) can help certain conditions such as muscle spasm associated with multiple sclerosis, treatment of the nausea associated with cancer treatment, and to improve appetite in patients with weight loss due to AIDS. The FDA has approved certain medications developed from marijuana that can be prescribed for these symptoms. However, it is important to know that there are currently no FDA-approved indications for “medical marijuana” (marijuana used by itself as a medical treatment). Scientific studies on marijuana use for anxiety and depression actually show that the use of marijuana worsens anxiety and depression, as well as other mental health conditions ^(1,2).

Myth 2: Marijuana is safe

There is evidence that marijuana use during youth (teens and 20’s) causes a number of serious and permanent effects on the growing brain. One study showed that youth who use marijuana regularly before age 18 had reduced brain growth and decreased intelligence. These negative changes were not reversed if they stopped using marijuana³. Another study showed that even for teens who are light smokers (1-2 times weekly), with no evidence of marijuana dependence, certain areas of the brain did not develop normally. They have problems with motivation, decision-making, attention, memory, and emotions. These abnormalities increase with frequency of use⁴. Additionally, teen marijuana use is associated with many different psychiatric illnesses — depression, anxiety, psychosis, and schizophrenia.

Myth 3: Marijuana has no effect on driving

Marijuana use affects coordination, reaction time, and judgment. Multiple studies have shown a direct relationship between levels of marijuana in the body and reduced ability to drive safely. A recent study demonstrated that the risk of being in a car accident doubled after marijuana use⁵. Beyond the increased risks of accidents, we all must remember that driving while intoxicated with any substance — even legally purchased marijuana — is illegal.

Myth 4: Marijuana has no effect on schoolwork

In addition to reducing brain growth and increasing mental illness, marijuana can affect school performance both during use and after use. The “high” from marijuana typically lasts from 1–3 hours and causes decreased motivation, attention, learning, and memory which do not fully return to normal for several days. As an example, a teenager who uses marijuana on Saturday night will have problems with key brain functions during school on Monday, making studying and test-taking much harder.

Myth 5: Marijuana is not addictive

Marijuana can be addictive, with studies showing that 1 out of 6 people who use marijuana before age 18 will become addicted to marijuana. And, in people who use marijuana regularly (3 or more times per week), up to 50% become addicted to marijuana⁶. Doctors can not predict who will become addicted, however studies show that the more frequently and heavily you use marijuana, the more likely you are to become addicted to it. Remember that addiction describes a pattern of continued use despite significant legal problems, social issues, or problems at school and work. Suddenly stopping marijuana can cause withdrawal, which causes as irritability, restlessness, insomnia, and appetite changes. These symptoms can last as long as two weeks.

While in the past marijuana was thought to be non-addictive, current available forms of marijuana are much stronger than those that were studied and used in prior decades. On average, the strength of marijuana has tripled, and there are now new and even more concentrated forms (oils or wax, for example). Stronger marijuana increases the high, even from a small dose and increases the chance of addiction and mental health problems. It also means that parents who think they know what marijuana does to teenagers based on their own experiences as teenagers, don’t realize the current risks.



¹ Bahji A et al. JAMA Network Open 2020. “Prevalence of Cannabis Withdrawal Symptoms Among People with Regular or Dependent Use of Cannabinoids”

² Livne O et al. Drug and Alcohol Dependence 2019. “DSM-5 Cannabis Withdrawal Syndrome: Demographic and clinical correlates in US Adults”

³ Meier MH et al, Persistent cannabis users show neuropsychological decline from childhood to midlife PNAS 2012 109: E2657-E2664

⁴ Gilman J et al, Cannabis Use Is Quantitatively Associated with Nucleus Accumbens and Amygdala Abnormalities in Young Adult Recreational Users The Journal of Neuroscience, 16 April 2014, 34(16): 5529-5538

⁵ Ramaekers JG, et al. Dose related risk of motor vehicle crashes after cannabis use. Drug Alcohol Depend. 2004; 73:109-119

⁶ Lopez-Quintero C, Pérez de los Cobos J, Hasin DS, et al. Probability and predictors of transition from first use to dependence on nicotine, alcohol, cannabis, and cocaine: results of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). Drug Alcohol Depend. 2011;115(1-2):120-130