

RISING RISKS OF HIGH-POTENCY MARIJUANA: IMPACTS ON MENTAL HEALTH

This overview explores the relationship between high-potency marijuana and mental health, highlighting key findings and concerns from research studies.

RISING POTENCY

The legalization of marijuana has led to a commercialized industry producing diverse marijuana products containing high concentrations of THC, the chemical that gets you high.¹ Before legalization, the average concentration of THC was low, only about 2-4%. Today, the average marijuana joint is ~600% stronger, containing 15-20% THC, while concentrated products like shatter, oil, dab, and edibles are extremely potent at over 90% THC.² Most research evaluating the impact of marijuana has been based on low-potency marijuana (containing less than 10% THC).³

PSYCHOSIS AND SCHIZOPHRENIA

THC binds to areas in the brain involved in emotion, planning, problem-solving, memory, perception, and thought patterns, which significantly impacts mental health. Marijuana use can cause cannabis-induced psychosis with symptoms such as paranoia, hallucinations, and delusions. High potency marijuana can prolong these symptoms and lead to lasting mental health issues, increasing the risk of self-harm or harm to others.³

Hospitalizations for psychosis and marijuana use are more common in areas where marijuana is legalized.⁴ A study done in various locations throughout Europe found that in places where high potency marijuana (10% THC or higher) is common, such as Amsterdam and London, 30% to 50% of new cases of psychosis could be prevented if high potency marijuana were not available.⁵

Psychotic disorders, like schizophrenia, make it hard to distinguish reality from inner thoughts, causing hallucinations, loss of motivation, trouble thinking clearly, strange or lack of feelings, trouble with communication, and sudden drop in grades or job performance among other behavioral signs.⁶ Using marijuana every day triples the odds of developing a psychotic disorder, and using high-potency marijuana daily increases the odds nearly fivefold, compared to those who have never used it.⁵

For people with psychotic disorders, marijuana use can worsen outcomes, including longer hospitalizations, and increasing the risk of accidents, death, and psychotic symptoms.³

In individuals at risk of schizophrenia, heavy use of high-potency marijuana at a young age can worsen the illness by advancing the onset of the first psychotic break, by 2 to 6 years. This can significantly impact quality of life, leading to poor academic and social functioning.³

There is increasing evidence that having a cannabis use disorder (CUD), also known as marijuana addiction, is linked to schizophrenia, with this link potentially stronger for males. A huge study analyzing nearly 7 million people in Denmark found that 25 to 30% of schizophrenia cases in young males aged 21 to 30, could have been prevented if they did not have a cannabis use disorder.⁷

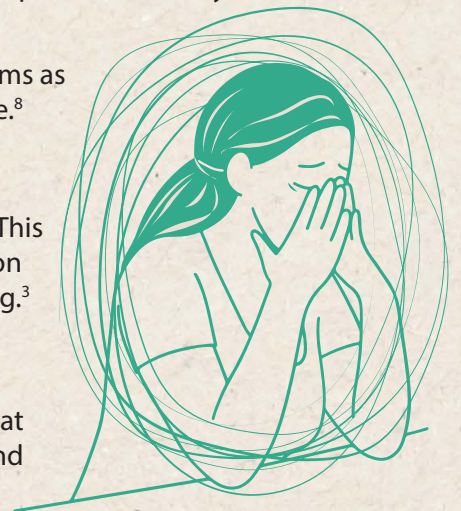
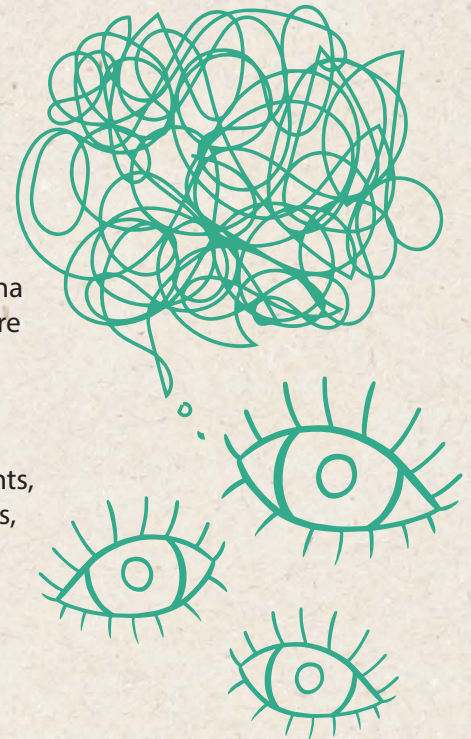
Using marijuana before the age of 15 is linked to experiencing more schizophrenia symptoms as a young adult, even after controlling for childhood psychotic symptoms and other drug use.⁸

DEPRESSION AND ANXIETY

Numerous studies link marijuana use with increased levels of anxiety and mood disorders. This risk is higher for people who use at least weekly. A study examining patients with depression found that marijuana use worsened their depression, anxiety and mental health functioning.³

PTSD & VETERANS

A study on over 2,000 veterans examining marijuana and PTSD symptom severity, found that marijuana use was associated with significantly worse PTSD symptoms, violent behavior, and increased alcohol and drug use.³



SUICIDE

A large study including over 280,000 adults aged 18 to 34 found that marijuana use was linked with higher risks of having suicidal thoughts (suicidal ideation), making suicide plans, and attempting suicide, even if they didn't have depression.⁹

Regular marijuana use in people diagnosed with major depression, bipolar disorder, or schizophrenia increases the risk for suicide ideation, suicide attempts, and completed suicides.³

A study on over 3,300 Iraq/Afghanistan veterans found that cannabis use disorder was significantly associated with current suicide ideation and history of suicide attempts even after accounting for PTSD, depression, alcohol and other drug use disorder, history of childhood sexual abuse, and combat exposure.¹⁰

ADDICTION

The number of adults with substance use disorders is on the rise, and the increasing access and availability of high potency products is likely to worsen this crisis.³

Frequent marijuana use can lead to dependency and cannabis use disorder (addiction).³

About 30% of people who use marijuana may have some form of cannabis use disorder and for those who use it daily, about 25 to 50% will become addicted.³



IMPLICATIONS FOR TEENS AND YOUNG ADULTS

Teenagers and young adults are more likely to be negatively affected by marijuana use because their brains are rapidly developing and THC binds to areas in the brain undergoing development.^{1,3} If marijuana is used during pregnancy, THC can travel through the placenta and bind to areas in the baby's brain which can cause structural and functional brain changes, leading to behavioral and mental health issues later in childhood.^{1,11}

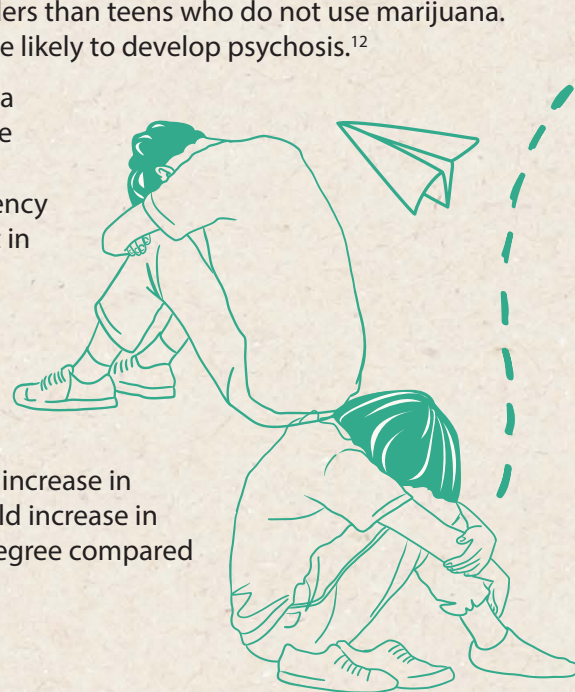
Teens who use marijuana are 2 to 4 times more likely to develop psychotic disorders than teens who do not use marijuana. Teens with a cannabis use disorder (marijuana addiction) are 3.5 to 4.5 times more likely to develop psychosis.¹²

A study analyzing health data found that teens aged 12 to 19 who used marijuana in the past year were 11 times more likely to develop a psychotic disorder at some point during their teenage years compared to teens who did not use marijuana. They also found that 5 in 6 teenagers who were hospitalized or visited an emergency department for a psychotic disorder had reported using marijuana at some point in their life.⁶

Using marijuana regularly during adolescence significantly increases the risk of developing generalized anxiety disorder and/or major depressive disorder as a young adult. Daily marijuana use by teens has been linked to nearly tripling the odds of developing an anxiety disorder in their late 20s.¹³

A large study found that daily marijuana use by age 17 linked to nearly an 18 fold increase in becoming dependent on marijuana, an 8 fold increase in using illicit drugs, a 7 fold increase in suicide attempts, and reduced odds of completing high school and attaining a degree compared to teens who never used marijuana.¹⁴

Data from Colorado finds marijuana the most detected substance in toxicology reports of youth ages 10 to 19 who died by suicide.¹⁵



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