Old-school marijuana (before you were born) contained 2-5%\* THC. Today's marijuana has been cultivated to be much stronger, 15–30%\* THC and sometimes more (it's like smoking several old-school joints at one time).

Old-school marijuana used to contain equal amounts of CBD and THC, which was a protective factor. Today's marijuana contains almost no CBD, just THC.

Today's chemists invented new marijuana projects that didn't exist in the past. Raw THC is extracted from marijuana using a machine and turned into concentrates. These products, such as wax, shatter, and crystal (called dabs), can be 60-99%\* pure THC.

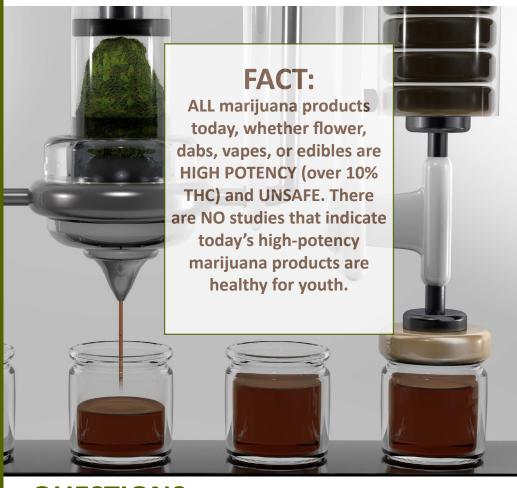
Extracted THC can be further distilled into oils, which can be 80-99%\* pure. These oils can be vaped or put into edibles. Marijuana might start as a plant, but these products are created in a lab, and there's nothing natural about them!

Marijuana is a very different drug than it used to be—it's like comparing apples to oranges. Many plants, such as poison ivy, arsenic, hemlock, and marijuana, aren't safe and can hurt you, which is why we don't mess with them!

\*THC percentages are based on samples seized by the DEA and current marijuana products available in dispensaries.

### III Potency

Many people think marijuana is safe, but there are real risks.



**QUESTIONS:** All the research done on youth marijuana use has proven it's harmful and no studies of today's high-potency marijuana have shown any benefit for youth. Does this worry you? Are you willing to roll the dice with your brain and your future?

#### REFLECT



# Teen Brain Development

It's illegal for youth under 21 years old to use marijuana because your brain is still forming. The human brain continues to grow until age 25 for females and up to age 30 for males. Anything that interferes with brain programming can lead to cognitive, emotional, and mental health problems.

Some teens believe regular cannabis use isn't harmful to their mental health or think, "It won't happen to me." Nothing could be further from the truth!

> performed MRI scans on ages 14 and 19. The more these teens used marijuana, the thinner their prefrontal cortex became. Without all your brainpower available, your impacted.

Researchers also found heavy marijuana use as an adolescent predicts an 8-point drop in IQ! that is an F.

**QUESTION:** How comfortable are you knowing that using marijuana is literally causing damage to your brain?

REFLECT

When your brain doesn't form correctly, you won't have all the brainpower you would have had to make good decisions as an adult, and your career opportunities could be limited.

jamanetwork.com/journals/jamapsychiatry/ www.pnas.org/content/109/40/E2657





# MARIJUANA Addiction & Dependence

"I would never get addicted to marijuana." Contrary to common belief, you CAN become addicted to marijuana, which medical professionals call Cannabis Use Disorder (CUD). One out of six teens who start using marijuana at a young age will become addicted to it, and one in three teens who use marijuana daily will become addicted.

If you are using marijuana, how do you know if you are addicted?

Ask yourself these questions. Do you:

- 1. Use marijuana longer than you meant to?
- 2. Try to cut back but can't?
- 3. Spend a lot of time getting, using, and recovering from marijuana?
- 4. Crave marijuana and want to use it all the time?
- 5. Skip school or miss work because you're high?
- 6. Keep using marijuana, even when it causes problems in your life?
- 7. Stop doing activities you used to enioy?
- 8. Use marijuana, even when you feel sick?
- 9. Keep using, even when you have physical or mental problems from it?
- 10. Have to use more marijuana to feel as high as you used to?
- 11. Feel bad when you attempt to stop?

W. Hall and L. Degenhardt, "Adverse Health Effects of Non-Medical Cannabis Use," Lancet 374 (2019): 1383-1391.

According to the American Psychiatric Association (APA), as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), if you answered YES:

- To two or three of these questions, you have a mild addiction.
- To four or five questions, you have a moderate addiction.
- To six or more questions, you have a severe addiction.

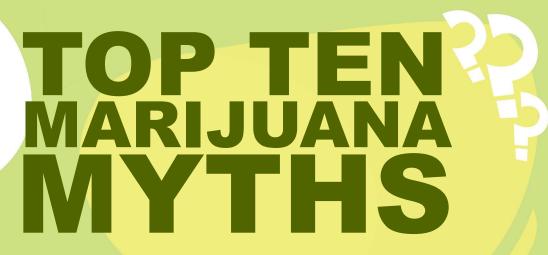
The good news is it's never too late to get AMERICAN PSYCHIATRIC ASSOCIATION help! Talk with a parent, counselor, teacher, or trusted adult and tell them you are having problems with your marijuana use and wish to stop!

QUESTIONS: When you feel uncomfortable, what could you do to feel better instead of using a chemical? What do you usually do when you're happy? How can doing things that make you happy help you feel better when you're sad?

#### REFLECT



AGNOSTIC AND STATISTICAI MANUAL OF MENTAL DISORDERS



- 1. You can't get addicted to marijuana. Studies show 17% of adolescents who use marijuana become addicted, and 50% of daily users become addicted. www.ncbi.nlm.nih.gov/pmc/articles/PMC4827335/pdf/nihms762992.pdf
- 2. Marijuana can't lower your intelligence. Heavy marijuana exposure starting in adolescence predicts an 8-point drop in IQ. doi.org/10.1073/pnas.1206820109
- 3. Marijuana won't increase the odds of you using other drugs. Adolescent marijuana users are 2.5 times more likely to abuse prescription opioids. www.ncbi.nlm.nih.qov/pmc/articles/PMC3552239/pdf/nihms388189.pdf
- 4. Marijuana makes you a better driver. Marijuana decreases your reaction time, motor coordination, and driving skills. www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf
- 5. Students who use marijuana are less likely to drop out of school. Young people who use cannabis are at an increased risk of poor academic performance and dropping out of school. pubmed.ncbi.nlm.nih.gov/11219366
- 6. Marijuana can't cause mental illness. Marijuana use can increase your risk of psychosis and schizophrenia four-fold. www.ncbi.nlm.nih.gov/pmc/articles/PMC4988731
- 7. Your fertility rates can't drop if you use marijuana. Marijuana can reduce fertility due to decreased sperm counts and delayed ovulation. pubmed.ncbi.nlm.nih.gov/26283092
- 8. You'll feel more motivated to do things if you use marijuana. Long-term marijuana users have lower levels of dopamine and are less ambitious and motivated. www.sciencedaily.com/releases/2016/09/160901211303.htm
- 9. Smoking marijuana is not harmful to your health. Marijuana smoke can cause symptoms of chronic bronchitis, a heavy cough, and lung irritation. www.druqabuse.gov/publications/research-reports/marijuana/what-are-marijuanas-effects-lung-health
- 10. Marijuana can't kill you. People have died from cannabinoid hyperemesis syndrome (CHS), characterized by uncontrollable vomiting. pubmed.ncbi.nlm.nih.gov/29768651

#### **OUESTION:**

Which one of your beliefs about marijuana was changed by this information?

#### REFLECT



### rty Dozen Negative Impacts of Teen Marijuana Use



**Creates** Marijuana Dependence



**Decreases** Your IQ



Causes **Anxiety and Depression** 



Increases the Odds You'll Use Other Drugs



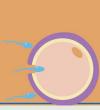
Causes controllable Vomiting



**Makes You** More Likely to Drop Out of School



Results in **Psychosis** and **Schizophrenia** 



8 **Decreases** Fertility Rates



Lowers Your Motivation to Do **Things** 



**Increases** Suicidal Thoughts and Behavior



**Damages** Your Health



- 1 www.ncbi.nlm.nih.gov/pmc/articles/PMC4827335/pdf/ nihms762992.pdf
- 2 sci-hub.se/10.1073/pnas.1206820109
- 3 www.ncbi.nlm.nih.gov/pmc/articles/PMC6991277
- 4 www.ncbi.nlm.nih.gov/pmc/articles/PMC3552239/pdf/ nihms388189.pdf
- 5 pubmed.ncbi.nlm.nih.gov/29768651
- 6 sci-hub.se/10.1046/j.1360-0443.2000.951116213.x
- 7 www.ncbi.nlm.nih.gov/pmc/articles/PMC4988731
- 8 pubmed.ncbi.nlm.nih.gov/26283092
- 9 www.sciencedaily.com/releases/2016/09/ 160901211303.htm
- 10 www.nih.gov/news-events/news-releases/cannabis-use-may-beassociated-suicidality-young-adults
- 11 www.drugabuse.gov/publications/research-reports/marijuana/ what-are-marijuanas-effects-lung-health
- 12 www.nhtsa.gov/sites/nhtsa.gov/files/documents/812440marijuana-impaired-driving-report-to-congress.pdf

**QUESTION:** Which one of the dirty dozen would worry you the most if it happened to you?

#### REFLECT

