

# PREVENTING MARIJUANA USE AMONG YOUTH & YOUNG ADULTS





# PREVENTING MARIJUANA USE AMONG YOUTH & YOUNG ADULTS

The Drug Enforcement Administration's (DEA) primary mission and responsibility is to enforce the nation's federal drug laws. But the DEA also has a responsibility to educate the public about the dangers and consequences of drug abuse based on facts and scientific evidence.

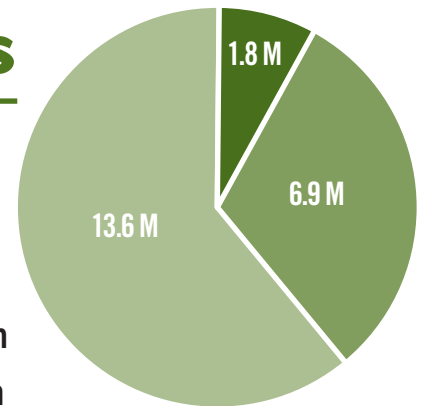
The DEA is especially concerned about marijuana use and its negative consequences among youth and young adults. This publication provides an overview of the prevalence of marijuana use among this population; the physical, academic, and social consequences; tips for how to get involved to prevent marijuana use among youth and young adults; and federal resources to assist in your efforts.

## SCOPE OF THE ISSUE

### Marijuana Use in the United States

In 2015, more than 22 million Americans aged 12 or older were current users of marijuana.<sup>1</sup>

- Adolescents aged 12-17: **1.8 million**
- Young adults aged 18-25: **6.9 million**
- Adults aged 26 or older: **13.6 million**



### Marijuana Use among Youth

- In 2015, 7.0 percent of adolescents aged 12 to 17 were current users of marijuana, which means approximately 1.8 million adolescents used marijuana in the past month.<sup>1</sup>
- The percentage of adolescents in 2015 who were current marijuana users was similar to the percentages in most years between 2004 and 2014.<sup>1</sup>

### Marijuana Use among College Students

- Daily or near-daily marijuana use has increased in recent years for college students, rising from 3.5 percent in 2007 to 4.6 percent in 2015.<sup>2</sup>
- This means one in every 22 college students uses marijuana daily or near daily.<sup>2</sup>
- Almost 38 percent of college students said they used marijuana in 2015, compared with 30 percent in 2006.<sup>2</sup>
- Since 2003, 19- to 22-year-olds seeing regular marijuana use as dangerous to the user has declined sharply, from 58 percent in 2003 to 33 percent by 2015.<sup>2</sup>

# Changes in Perceived Risk

- A large majority of 12th graders perceive that regular use of any illicit drug presents great risk of harm for the user.<sup>3</sup>
- In 2015, 85 percent of 12th graders perceived great risk of harm from regular use of heroin (85 percent), crack (81 percent), cocaine (79 percent), and LSD (61 percent).<sup>3</sup>
- Among the illicit drugs, marijuana has the lowest perceived risk, with approximately one-third (32 percent) thinking regular use carries great risk.<sup>3</sup>
- Substantial proportions of 12th graders view even experimenting (i.e., using once or twice) with most of the illicit drugs as risky. But only 12 percent of 12th graders see experimenting with marijuana as entailing great risk.<sup>3</sup>
- Only 32 percent of 12th graders perceive risk of harm from regular marijuana use, which is its lowest level ever. Between 2006 and 2015, perceived risk of regular use generally declined, while current use (i.e., past 30 days) rose steadily, at least through 2012.<sup>3</sup>

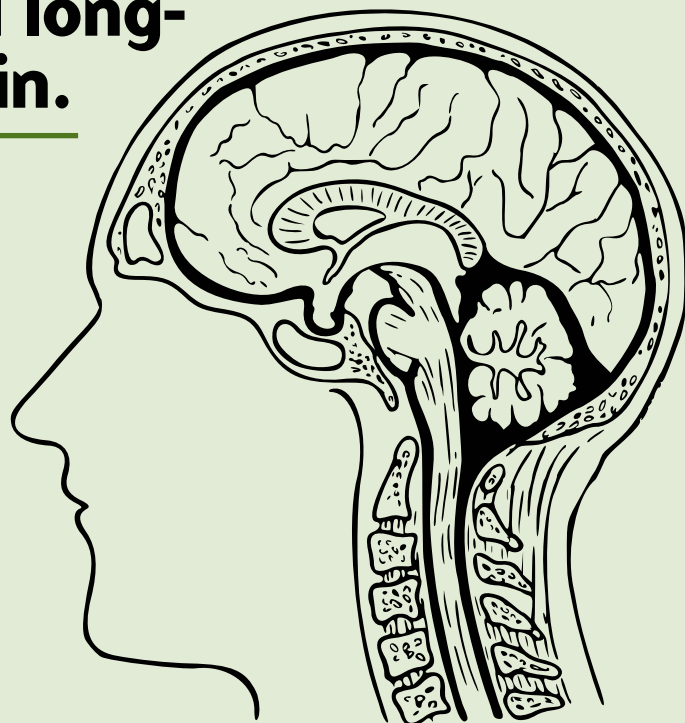
## KNOW THE FACTS

### Marijuana is addictive.

- Research suggests 30 percent of users may develop some form of problem use, which can lead to dependence and addiction.<sup>4</sup>
- People who begin using marijuana before age 18 are 4 to 7 times more likely than adults to develop problem use.<sup>4</sup>

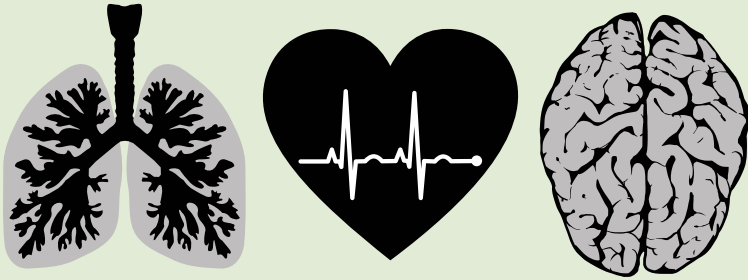
### Marijuana has short- and long-term effects on the brain.

- When marijuana is smoked, the mind-altering chemical tetrahydrocannabinol (THC) passes from the lungs to the bloodstream.<sup>4</sup>
- Blood then carries the chemical to the brain and other organs throughout the body.<sup>4</sup>
- User generally feels the effects after 30 to 60 minutes, including changes in mood, impaired body movement, difficulty with thinking and problem solving, and impaired memory.<sup>4</sup>
- When marijuana users begin using as teenagers, long-term effects can include reductions in thinking, memory, and learning functions.<sup>4</sup>



# Marijuana use can have a wide range of physical and mental effects.

---



- Physical effects include breathing problems, increased heart rate, and problems with child development during and after pregnancy.<sup>4</sup>
- Long-term use has been linked to mental illness in some users, such as temporary hallucinations, temporary paranoia, and worsening symptoms in patients with schizophrenia.<sup>4</sup>

# Marijuana is unsafe if you are behind the wheel.

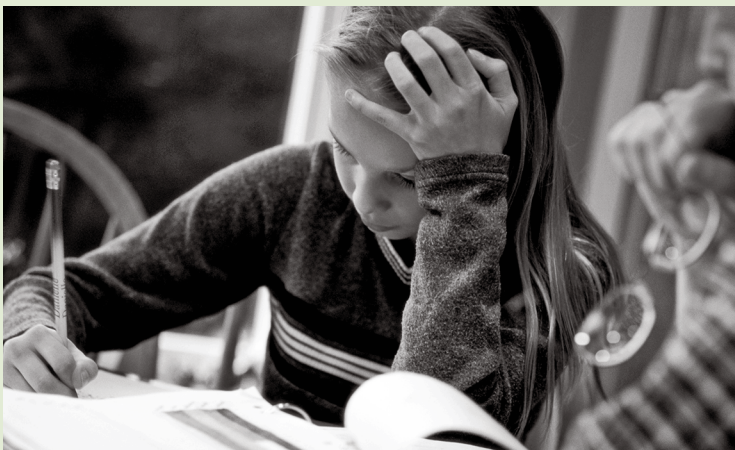
---

- Marijuana is the most common illegal drug involved in auto fatalities.<sup>5</sup>
- Marijuana is found in the blood of approximately 14 percent of drivers who die in car crashes, often in combination with alcohol or other drugs.<sup>5</sup>
- Marijuana affects skills required for safe driving:
  - alertness
  - concentration
  - coordination
  - reaction time<sup>5</sup>



# Marijuana is linked to school failure.

---



- Marijuana's negative effects on attention, memory, and learning can last for days and sometimes weeks.<sup>5</sup>
- Students who smoke marijuana tend to get lower grades and are more likely to drop out of high school, compared with their peers who don't use.<sup>5</sup>
- Research shows IQ can be lowered if marijuana is smoked regularly during the teen years.<sup>5</sup>



## The THC content in marijuana has been increasing since the 1980s.



- In the early 1990s, average THC content in confiscated samples was roughly 3.7 percent for marijuana; in 2016, it was 13.18 percent.<sup>6</sup>
- Smoking or eating THC-rich hash oil extracted from the marijuana plant may deliver high levels of THC to the user.<sup>7</sup>
- Average marijuana extract contains over 50 percent THC; some samples exceed 80 percent.<sup>7</sup>

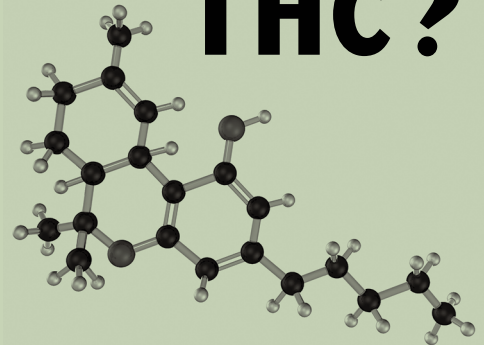
## Exposure to higher THC levels means a greater chance of a harmful reaction.



- Higher THC levels may explain the rise in emergency room visits involving marijuana use.<sup>4</sup>
- Users can mix marijuana in food (i.e., edibles), such as brownies, cookies, or candy, or brew it as a tea. Edibles take longer to digest and produce a high, so people may consume more to feel the effects faster, leading to dangerous results.<sup>4</sup>

- Higher THC levels may mean a greater risk for addiction if users are regularly exposing themselves to high doses.<sup>4</sup>

## What is THC?

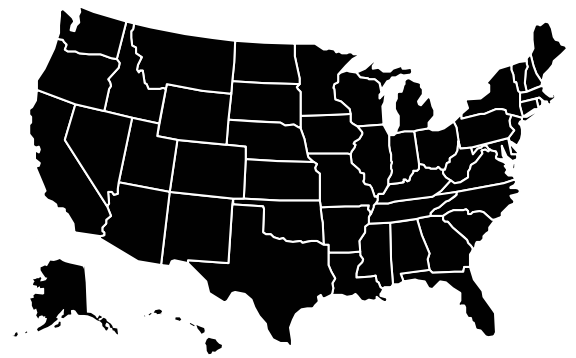


- The primary mind-altering chemical in marijuana, responsible for most of the intoxicating effect people seek, is delta-9-tetrahydrocannabinol (THC).<sup>7</sup>
- The chemical is found in resin produced by the leaves and buds primarily of the female cannabis plant. The plant also contains over 500 other chemicals, including more than 100 compounds that are chemically related to THC, called cannabinoids.<sup>7</sup>
- Organs in the body have fatty tissues that quickly absorb the THC in marijuana. Standard urine tests can detect traces of THC several days after use. In heavy marijuana users, urine tests can sometimes detect THC traces for weeks after use stops.<sup>7</sup>

# Marijuana as Medicine?



- The term “medical marijuana” refers to using the whole unprocessed marijuana plant or its basic extracts to treat a disease or symptom.<sup>8</sup>
- The U.S. Food and Drug Administration (FDA) has not recognized or approved the marijuana plant as medicine. However, two FDA-approved medications contain cannabinoid chemicals in pill form.<sup>8</sup>
- The FDA requires carefully conducted clinical trials in hundreds to thousands of human subjects to determine the benefits and risks of a possible medication. To date, researchers have not conducted a sufficient number of large-scale clinical trials to show that the benefits of the marijuana plant (as opposed to its cannabinoid ingredients) outweigh its risks in patients it is meant to treat.<sup>8</sup>



“But It’s Legal Now”

- Currently, eight states and the District of Columbia allow “recreational” (i.e., personal) use of marijuana.
- To date, 28 states and the District of Columbia allow medical use of marijuana.
- However, under federal law, marijuana is not medicine and its use is prohibited.
- Under the federal Controlled Substances Act, marijuana is classified as a Schedule I drug, meaning it has no currently accepted medical use and a high potential for abuse.

## Is Marijuana a Gateway Drug?

Some research suggests that marijuana use is likely to precede use of other licit and illicit substances. Marijuana use also is linked to substance use disorders, including addiction to alcohol and nicotine.<sup>9</sup>



# GET INVOLVED IN PREVENTION



- **Red Ribbon Week** is an annual opportunity for children, teens, and adults to show they are committed to being healthy and drug free. The nationwide event occurs annually on October 23-31. ([www.dea.gov/redribbon/RedRibbonCampaign.shtml](http://www.dea.gov/redribbon/RedRibbonCampaign.shtml))
- **Red Ribbon Patch Program** provides Boy Scouts and Girl Scouts the opportunity to earn a patch from the DEA by performing anti-drug activities. ([www.dea.gov/redribbon/boy\\_scouts.shtml](http://www.dea.gov/redribbon/boy_scouts.shtml))
- **National Drug & Alcohol Facts Week** is an annual health observance for teens that aims to shatter myths about drugs and drug abuse. ([www.drugabuse.gov/news-events/public-education-projects/national-drug-alcohol-facts-week](http://www.drugabuse.gov/news-events/public-education-projects/national-drug-alcohol-facts-week))
- **National Prevention Week** is an annual health observance held in May. Communities and organizations nationwide promote the importance of substance misuse prevention and positive mental health. ([www.samhsa.gov/prevention-week](http://www.samhsa.gov/prevention-week))
- Join your school or community's anti-drug coalition. If your school or community doesn't have one, visit [www.cadca.org](http://www.cadca.org) to learn how to start a coalition in your community.

- Organize a drug abuse prevention information fair at your school to help raise awareness of the impact of drug use on individuals, families, and communities.
- Set up a program to help educate your peers or younger children about substance abuse. Being a mentor or role model for younger children can have a positive impact on them.

**It's important to be up to date on drug facts and trends. Get information and training from local contacts and programs to help you in these areas.**

**Some potential resources include:**

- The DEA has a Demand Reduction Coordinator in each Field Division around the nation: [www.dea.gov/about/domesticoffices.shtml](http://www.dea.gov/about/domesticoffices.shtml)
- Several federal agencies have publications and other resources that are free of charge:
  - **DEA:** [www.dea.gov/prevention/overview.shtml](http://www.dea.gov/prevention/overview.shtml)
  - **National Institute on Drug Abuse:** [www.drugabuse.gov/children-and-teens](http://www.drugabuse.gov/children-and-teens)
  - **Substance Abuse and Mental Health Services Administration:** [www.samhsa.gov](http://www.samhsa.gov)



# PREVENTING MARIJUANA USE AMONG YOUTH & YOUNG ADULTS



This publication was produced by the United States Drug Enforcement Administration ([www.dea.gov](http://www.dea.gov)).

For more information, please e-mail [demand.reduction@usdoj.gov](mailto:demand.reduction@usdoj.gov).

## RESOURCES

### [www.justthinktwice.com](http://www.justthinktwice.com)

DEA's website for teens provides credible information about various drugs and harmful effects of drug use.

### [www.teens.drugabuse.gov](http://www.teens.drugabuse.gov)

NIDA's website for teens where you can learn how different drugs affect the brain and body.

### [www.store.samhsa.gov](http://www.store.samhsa.gov)

SAMHSA's brochure, *Tips for Teens: The Truth about Marijuana*, contains information about marijuana, including how it affects the brain, short- and long-term health risks, and signs of marijuana use.

## SOURCES

1. Center for Behavioral Health Statistics and Quality. (2016) Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health (HHS Publication No. SMA 16-4984, NSDUH Series H-51).
2. Johnston, L.D., O'Malley, P.M., Bachman, J.G., Schulenberg, J.E., and Miech, R.A. (2016) *Monitoring the Future national survey results on drug use, 1975-2015: Volume 2, College students and adults ages 19-55*. Ann Arbor: Institute for Social Research, The University of Michigan.
3. Miech, R.A., Johnston, L.D., O'Malley, P.M., Bachman, J.G., and Schulenberg, J.E. (2016) *Monitoring the Future national survey results on drug use, 1975-2015: Volume I, Secondary school students*. Ann Arbor: Institute for Social Research, The University of Michigan.
4. NIDA (2016). Marijuana. Retrieved February 16, 2017, from [www.drugabuse.gov/publications/drugfacts/marijuana](http://www.drugabuse.gov/publications/drugfacts/marijuana). National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.
5. NIDA (2015). Marijuana: Facts for Teens. Retrieved February 16, 2017, from [www.drugabuse.gov/publications/marijuana-facts-teens](http://www.drugabuse.gov/publications/marijuana-facts-teens). National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.
6. University of Mississippi, Potency Monitoring Program, Quarterly Report 135.
7. NIDA (2017). Marijuana. Retrieved February 16, 2017, from [www.drugabuse.gov/publications/research-reports/marijuana](http://www.drugabuse.gov/publications/research-reports/marijuana). National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.
8. NIDA (2015). Is Marijuana Medicine?. Retrieved February 16, 2017, from [www.drugabuse.gov/publications/drugfacts/marijuana-medicine](http://www.drugabuse.gov/publications/drugfacts/marijuana-medicine). National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.
9. NIDA (2017). Marijuana. Retrieved March 15, 2017, from [www.drugabuse.gov/publications/research-reports/marijuana](http://www.drugabuse.gov/publications/research-reports/marijuana).