



Teen Marijuana Use

Marijuana puts kids at risk. It is the most widely used illegal drug among youth today and is more potent than ever. Marijuana use can lead to a host of significant health, social, learning and behavioral problems at a crucial time in a young person's development. Getting high also impairs judgment, which can wreak havoc on teens in high-pressure social situations, leading to risky decision making on issues like sex, criminal activity or riding with someone who is driving high.

And don't be fooled by popular beliefs. Kids can get hooked on pot. Research shows that marijuana use can lead to addiction. Each year, more kids enter treatment with a primary diagnosis of marijuana dependence than for all other illegal drugs combined.

Time and again, kids say their parents are the single most important influence when it comes to drugs. So this message needs to start with you. [Kids need to hear how risky marijuana use can be.](#) They need to know how damaging it can be to their lives. And they need to begin by listening to someone they trust.

Marijuana and the Teen Brain

Introduction to the Brain

New research is giving us better insight into the serious consequences of teen marijuana use, especially how it may impact mental health. This section explores how marijuana negatively affects a healthy teenage brain. Here are some facts:

- Weekly or more frequent use of marijuana doubles a [teen's risk of depression and anxiety](#).¹
- Teens aged 12-17 who smoke marijuana weekly are three times more likely than non-users to have suicidal thoughts.²

- There is evidence of increased risk for schizophrenia in later years in some teens who smoke marijuana.³

There is substantial evidence linking marijuana to causal symptoms of depression, suicidal thoughts and schizophrenia. A teen brain is different than an adult brain in many ways. Ever wonder why high schoolers love things and love them so intensely? The limbic system, the area that controls memory and emotions, is highly developed, whereas the prefrontal cortex, the area responsible for judgment, is still developing, well into a person's 20's. This may be why teens tend to make decisions based on their emotions rather than reason.



Certain brain centers, such as the limbic system, are highly influenced by THC (tetrahydrocannabinol), the active ingredient in marijuana. That's right...the same centers responsible for memory formation, emotion, aggression and fear are significantly affected by pot.

This is where YOU come in. The first step in being able to discuss the dangers of marijuana with your teen is knowing the facts.

Marijuana: Health Hazards

Usually smoked as a cigarette or joint, or in a pipe or bong, marijuana has appeared in "blunts" in recent years. These are cigars that have been emptied of tobacco and re-filled with marijuana, sometimes in combination with another drug, such as crack. Some users also mix marijuana into foods or use it to brew tea.

The main active chemical in marijuana is THC (delta-9-tetrahydrocannabinol). Short-term effects of marijuana use include problems with memory and learning; distorted perception; difficulty in thinking and problem-solving; loss of coordination; and increased heart rate, anxiety, and panic attacks.

Health Hazards

Effects of Marijuana on the Brain. Researchers have found that THC changes the way in which sensory information gets into and is acted on by the hippocampus. This is a component of the brain's limbic system that is

crucial for learning, memory, and the integration of sensory experiences with emotions and motivations. Investigations have shown that THC suppresses neurons in the information-processing system of the hippocampus. In addition, researchers have discovered that learned behaviors, which depend on the hippocampus, also deteriorate. [Take the virtual tour](#) to learn more about the effects of marijuana on the brain.

Effects on the Lungs. Someone who smokes marijuana regularly may have many of the same respiratory problems that tobacco smokers have. These individuals may have daily cough and phlegm, symptoms of chronic bronchitis, and more frequent chest colds. Continuing to smoke marijuana can lead to abnormal functioning of lung tissue injured or destroyed by marijuana smoke.

Regardless of the THC content, the amount of tar inhaled by marijuana smokers and the level of carbon monoxide absorbed are three to five times greater than among tobacco smokers. This may be due to marijuana users inhaling more deeply and holding the smoke in the lungs.

Effects of Heavy Marijuana Use on Learning and Social Behavior. A study of college students has shown that critical skills related to attention, memory, and learning are impaired among people who use marijuana heavily, even after discontinuing its use for at least 24 hours. Researchers compared 65 "heavy users," who had smoked marijuana a median of 29 of the past 30 days, and 64 "light users," who had smoked a median of 1 of the past 30 days. After a closely monitored 19- to 24-hour period of abstinence from marijuana and other illegal drugs and alcohol, the undergraduates were given several standard tests measuring aspects of attention, memory, and learning. Compared to the light users, heavy marijuana users made more errors and had more difficulty sustaining attention, shifting attention to meet the demands of changes in the environment, and in registering, processing, and using information. The findings suggest that the greater impairment among heavy users is likely due to an alteration of brain activity produced by marijuana.

Longitudinal research on marijuana use among young people below college age indicates those who used have lower achievement than the non-users, more acceptance of deviant behavior, more delinquent behavior and aggression, greater rebelliousness, poorer relationships with parents, and more associations with delinquent and drug-using friends.



Information provided by the National Institute on Drug Abuse.

Marijuana: Risks of Experimentation

What's the Big Deal About Marijuana?

"But it's only marijuana" or "it's only alcohol," you say. "It's a rite of passage." "Teens are expected to experiment." Not any more. The world has changed, and so have the drugs. In fact, the [marijuana](#) of today is stronger than ever before. Drug and alcohol use can lead to many negative consequences, including bad grades, broken friendships, family problems, trouble with the law, etc.

Most important, teens' brains and bodies are still developing, and substance use can interfere with their emerging independence and efforts to establish their own identity. Drug and alcohol use can change the direction of a young person's life - physically, emotionally, and behaviorally. It can weaken the ability to concentrate and retain information during a teen's peak learning years, and impair judgment leading to risky decision making that could involve sex or getting into a car with someone under the influence of drugs.

"Experimentation," even with marijuana, can also lead to addiction. Not everyone progresses from use to abuse to addiction, but it is a dangerous road and there is no way to know who will become addicted and who won't.

Scientific Research About Risks of "Experimentation"

Drug and alcohol abuse by teens is not something to be taken lightly.

- More teens are in treatment with a primary diagnosis of marijuana dependence than for all other illegal drugs combined.¹
- Research also shows that many adolescents start to drink at very young ages. In 2003, the average age of first use of alcohol was about 14, compared to about 17 1/2 in 1965.²
- A 1998 study by the National Institute on Alcohol Abuse and Alcoholism says if a 15-year-old starts to drink, he or she has a 40% chance of alcoholism or dependence as an adult.³
- Kids are using marijuana at an earlier age. In the late 1960s fewer than half of those using marijuana for the first time were under 18. In 2006, about 64 percent of marijuana users were younger than 18.⁴



- Marijuana affects alertness, concentration, perception, coordination and reaction time, many of the skills required for safe driving and other tasks. These effects can last up to 24 hours after smoking marijuana. Marijuana use can also make it difficult to judge distances and react to signals and sounds on the road.⁵
- Smoking marijuana leads to changes in the brain that are similar to those caused by cocaine, heroin, or alcohol.⁶

Parents Are the Most Important Influence in a Child's Life

There is a growing body of research that shows that parents are central to preventing adolescent substance abuse. In fact, kids themselves say that losing their parents' trust and respect are the most important reasons not to use drugs.

As a parent, your actions do matter. When you suspect, or know, that your child has used drugs, take action to stop it as soon as you can. It may be the most important step you ever take.

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1. *TEDS, SAMHSA, October 2001*
 2. *Newes-Adeyi, G.; Chen, C.M.; Williams, G.D.; and Faden, V.B. NIAAA Surveillance Report No. 74: Trends in Underage Drinking in the United States, 1991-2003. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism, 2005.*
 3. *Grant, B.F., and Dawson, D.A. Age of onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. Journal of Substance Abuse 9:103-110, 1997.*
 4. *Trends in Initiation of Substance Use. Based on the 2005 National Survey on Drug Use and Health. SAMHSA, 2006.*
 5. *Marijuana: Facts Parents Need to Know, Revised, NIDA, November 1998*
 6. *Marijuana: Facts Parents Need to Know, Revised, NIDA, November 1998*

Talking to Your Teen About Marijuana

Picture this: you're driving your child home one afternoon and she turns to you and asks, "Mom, did you ever use marijuana when you were a kid?" Or, you're helping your child with homework and he asks, "Dad, did you smoke pot when you were in high school?"

This is a question many parents hope to avoid. Unless the answer is an unequivocal "no," it may be difficult to know what to say.

How honest should you be? Phillippe Cunningham, a family therapist at the Medical University of South Carolina, recommends an honest answer when a child asks about your past. Otherwise, you risk losing credibility with your kids. "This doesn't mean you should recount every detail of your high school or college years," says Dr. Cunningham. "But use it as an opportunity to talk with your child. Kids can learn a lot from their parents' experiences."

What if your child thinks that since you admitted to using marijuana and you've grown up just fine it is okay for her to use marijuana, too? The fact is, we all want what's best for our children. Today's marijuana is not the ditchweed of the 1960s. Marijuana is more potent than it was a generation ago and more kids are using it at a younger age, when their bodies and minds are developing. We also know much more about the real risks of marijuana use, thanks to new research. Parents can also draw on real-life examples of friends who had trouble as a result of marijuana use, such as a friend who used marijuana for years and lost interest in school, a fellow student who failed to get a scholarship, or the neighbor who caused a car crash while high.

What if you are afraid of sounding like a hypocrite? "Do as I say, not as I do" has never been a good method of parenting. Parents can emphasize that this discussion is about your child's future, and not about your past. Even if you made mistakes in the past, be clear you do not want your child to repeat them.

Most importantly, remember that [when your child asks you about your past](#), he or she has just opened the door for an ongoing dialogue about drugs. Use this opportunity to talk to them about making good choices. Studies show that parents are the single most powerful influence on their children's decisions about drug use. Research affirms that parents who are involved and talk to their kids about drugs are more likely to keep their kids away from drugs.

FAQs: Pot and Learning

How can marijuana use impact a teen's academic success and ability to learn?

Parents and teens need to understand that marijuana use can potentially affect a teen's academic success. Research shows that students who use marijuana don't do as well in school, as compared to their non-using counterparts. A teen user's odds of dropping out are more than twice that of non-users. Marijuana use affects memory, judgment and perception. Teens with an average grade of "D" or below are more than four times as likely to have used marijuana in the past year as teens who reported an average grade of "A." A lack of motivation (amotivational syndrome) is also associated with long-term marijuana use. Problems include not caring about what happens in their lives and a lack of concern about the future. As a result of these symptoms, some users tend to perform poorly in school.

Why should parents be concerned about marijuana use in high school as kids prepare to take their college preparatory exams?

High school is a critical point in teen development. Teens are learning life skills and building an academic foundation for the rest of their lives. A teen's performance in high school has long-term implications—grade point averages and test scores can dictate where they go to college, and their success in high school is often an indicator of how they will perform later in an institution of higher learning.

Why are the short-term effects of marijuana use of particular concern for students?

The short-term effects of marijuana use can include problems with:

- Memory and learning;
- Problem solving and thinking;
- Distorted sensory perceptions such as sight, sound and time; and
- Motor coordination.

These effects could have a negative impact for a student learning new information and skills, or taking a test in school.

What does marijuana use do to the brain?

Teens who begin marijuana use at an early age when the brain is still developing may be more vulnerable to neuropsychological deficits, especially with respect to verbal abilities. Smoking marijuana causes some changes in the brain that are like those caused by cocaine, heroin and alcohol. Studies

have also shown that when people have smoked large amounts of marijuana for years, the drug takes its toll on mental functions and can affect parts of the brain that control memory, attention and learning.

Isn't trying marijuana and alcohol just a rite of passage for teens?

Many parents still believe that marijuana is harmless and that underage drinking is a rite of passage. But studies show otherwise. Don't let marijuana and drinking compromise your child's ability to learn and their future success. Stay active and be present in your teen's life even as he or she grows more independent during the high school years. Share the **facts about drug use**. The rules you set and enforce today will make all the difference in your teen's life tomorrow.

Marijuana and Academic Success Tips

As teens go through high school and prepare for college they are at an increased risk for drug use and drinking. At this critical time in their academic lives, parents need to be clear: smoking marijuana could threaten their academic success. Good parenting combines love and limits. Parents can make the grade in keeping their kids drug-free by following the S-U-C-C-E-S-S tips below:

Stay informed about your teen's progress in school and other activities

Stay in touch with the adult supervisors of your child (teachers, school counselors and coaches) and have them inform you of any changes in your teen's academics or behavior. Get to know your child's friends and their parents. Help your teen with homework assignments and projects. Limit time spent watching TV and using the Internet.

Understand challenges facing your teen as they enter high school

The high school years can be an anxious time in your child's life. Highly stressed teens are twice as likely as teens with a low level of stress to smoke, drink, get drunk and use illegal drugs. Be supportive and responsive to your teen's needs, help your teen cope with stress and teach them skills to handle peer pressure.

Communicate with your teen about the harmful physical, mental and social effects of marijuana and other drugs

Young people who learn about the risks of drugs at home are up to 50 percent less likely to try drugs than their peers who don't get that same

information from their parents. Look for teachable moments in everyday life to keep the conversation ongoing.

Check in with your teen after school

The danger zone for drug use is between 3:00 p.m. and 6:00 p.m. on weekdays. If you are unable to be home at these times, arrange for your teen to check in with you periodically from a landline phone, so that you can confirm where they are. If your child will be with friends, make sure there is adult supervision - not just an older sibling. Check in with parents of your child's friends.

Engage your teen in supervised activities

Teens involved in supervised after school activities or programs were less likely to have used cigarettes, alcohol or illicit drugs in the past month than youths who did not participate in those kinds of activities during the past year.

Set clear rules and let your teen know that marijuana use is unacceptable

Parental disapproval plays a strong role in preventing drug use. Youth who believed that their parents would strongly disapprove of marijuana use had usage rates over 80 percent lower than those whose parents would not strongly disapprove. Set limits with clear consequences for breaking them; praise and reward good behavior.

Spend time with your teen and build a sense of connection

Teens who spend time, talk and have a close relationship with their parents are much less likely to drink, take drugs or have sex. It's important to encourage your teen to talk to you about their thoughts and feelings, fears and concerns. Plan a family activity with your teen in the coming weeks, such as taking a walk or sharing a meal.