

Marijuana: Facts for Teens

Q: What is marijuana? Aren't there different kinds?

A: Marijuana is a green, brown, or gray mixture of dried, shredded leaves, stems, seeds, and flowers of the hemp plant. You may hear marijuana called by street names such as pot, herb, weed, grass, boom, Mary Jane, gangster, or chronic. There are more than 200 slang terms for marijuana.

Sinsemilla (*sin-seh-me-yah; it's a Spanish word*), hashish ("*hash*" for *short*), and hash oil are stronger forms of marijuana.

All forms of marijuana are mind-altering. In other words, they change how the brain works. They all contain THC (*delta-9-tetrahydrocannabinol*), the main active chemical in marijuana. They also contain more than 400 other chemicals. Marijuana's effects on the user depend on the strength or potency of the THC it contains. THC potency of marijuana has increased since the 1970s but has been about the same since the mid-1980s.

Q: How is marijuana used?

A: Marijuana is usually smoked as a cigarette (*called a joint or a nail*) or in a pipe or a bong.

Recently, it has appeared in cigars called blunts.

Q: How long does marijuana stay in the user's body?

A: THC in marijuana is strongly absorbed by fatty tissues in various organs. Generally, traces (*metabolites*) of THC can be detected by standard urine testing methods several days after a smoking session. However, in heavy chronic users, traces can sometimes be detected for weeks after they have stopped using marijuana.

Q: How many teens smoke marijuana?

A: Contrary to popular belief most teenagers have not used marijuana and never will. Among students surveyed in a yearly national survey, only about one in five 10th graders report they are current marijuana

users (*that is, used marijuana within the past month*). Fewer than one in four high school seniors is a current marijuana user.

Q: Why do young people use marijuana?

A: There are many reasons why some children and young teens start smoking marijuana. Most young people smoke marijuana because their friends or brothers and sisters use marijuana and pressure them to try it. Some young people use it because they see older people in the family using it.

Others may think it's cool to use marijuana because they hear songs about it and see it on TV and in movies. Some teens may feel they need marijuana and other drugs to help them escape from problems at home, at school, or with friends.

No matter how many shirts and caps you see printed with the marijuana leaf, or how many groups sing about it, remember this: **You don't have to use marijuana just because you think everybody else is doing it. Most teens do not use marijuana!**

Marijuana Fact: Marijuana can mess you up. Your performance in school, sports and other activities will suffer if you're high.

Q: What happens if you smoke marijuana?

A: The effects of the drug on each person depend on the user's experience, **as well as:**

- * how strong the marijuana is (*how much THC it has*);
- * what the user expects to happen;
- * where (*the place*) the drug is used;
- * how it is taken; and
- * whether the user is drinking alcohol or using other drugs.

Some people feel nothing at all when they smoke marijuana. Others may feel relaxed or high. Sometimes marijuana makes users feel

thirsty and very hungry - an effect called "the munchies."

Some users can get bad effects from marijuana. They may suffer sudden feelings of anxiety and have paranoid thoughts. This is more likely to happen when a more potent variety of marijuana is used.

Q: What are the short-term effects of marijuana use?

A: The short-term effects of marijuana include:

- * problems with memory and learning;
- * distorted perception (*sights, sounds, time, touch*);
- * trouble with thinking and problem-solving;
- * loss of coordination; and
- * increased heart rate, anxiety.

These effects are even greater when other drugs are mixed with the marijuana; and users do not always know what drugs are given to them.

Q: Does marijuana affect school, sports, or other activities?

A: It can. Marijuana affects memory, judgment and perception. The drug can make you mess up in school, in sports or clubs, or with your friends. If you're high on marijuana, you are more likely to make stupid mistakes that could embarrass or even hurt you. If you use marijuana a lot, you could start to lose interest in how you look and how you're getting along at school or work.

Athletes could find their performance is off; timing, movements, and coordination are all affected by THC. Also, since marijuana use can affect thinking and judgment, users can forget to have safe sex and possibly expose themselves to HIV, the virus that causes AIDS.

Q: What are the long-term effects of marijuana use?

A: Findings so far show that regular use of marijuana or THC may play a role in some kinds of cancer and in problems with the

respiratory and immune systems.

*** Cancer**

It's hard to know for sure whether regular marijuana use causes cancer. But it is known that marijuana contains some of the same, and sometimes even more, of the cancer-causing chemicals found in tobacco smoke. Studies show that someone who smokes five joints per week may be taking in as many cancer-causing chemicals as someone who smokes a full pack of cigarettes every day.

*** Lungs and airways**

People who smoke marijuana often develop the same kinds of breathing problems that cigarette smokers have: coughing and wheezing. They tend to have more chest colds than nonusers. They are also at greater risk of getting lung infections like pneumonia.

*** Immune system**

Animal studies have found that THC can damage the cells and tissues in the body that help protect people from disease. When the immune cells are weakened, you are more likely to get sick.

Q: Does marijuana lead to the use of other drugs?

A: It could. Long-term studies of high school students and their patterns of drug use show that very few young people use other illegal drugs without first trying marijuana. For example, the risk of using cocaine is 104 times greater for those who have tried marijuana than for those who have never tried it. Using marijuana puts children and teens in contact with people who are users and sellers of other drugs. So there is more of a risk that a marijuana user will be exposed to and urged to try more drugs.

To better determine this risk, scientists are examining the possibility that long-term marijuana use may create changes in the brain that make a person more at risk of becoming addicted to other drugs, such as alcohol or cocaine. While not all young people who use

marijuana go on to use other drugs, further research is needed to predict who will be at greatest risk.

Q: How can you tell if someone has been using marijuana?

A: If someone is high on marijuana, he or she might

- * seem dizzy and have trouble walking;
- * seem silly and giggly for no reason;
- * have very red, bloodshot eyes; and
- * have a hard time remembering things that just happened.

When the early effects fade, over a few hours, the user can become very sleepy.

Q: Is marijuana sometimes used as a medicine?

A: There has been much talk about the possible medical use of marijuana. Under U.S. law since 1970, marijuana has been a Schedule I controlled substance. This means that the drug, at least in its smoked form, has no commonly accepted medical use.

THC, the active chemical in marijuana, is manufactured into a pill available by prescription that can be used to treat the nausea and vomiting that occur with certain cancer treatments and to help AIDS patients eat more to keep up their weight. According to scientists, more research needs to be done on marijuana's side effects and potential benefits before it is used medically with any regularity. --

Marijuana Fact: Marijuana and driving do not mix. Users often have delayed responses to sights and sounds drivers need to notice.

Q: How does marijuana affect driving?

A: Marijuana has serious harmful effects on the skills required to drive safely: alertness, the ability to concentrate, coordination, and the

ability to react quickly. These effects can last up to 24 hours after smoking marijuana. Marijuana use can make it difficult to judge distances and react to signals and sounds on the road.

Marijuana may play a role in car accidents. In one study conducted in Memphis, TN, researchers found that, of 150 reckless drivers who were tested for drugs at the arrest scene, 33 percent tested positive for marijuana, and 12 percent tested positive for both marijuana and cocaine. Data have also shown that while smoking marijuana, people show the same lack of coordination on standard "drunk driver" tests as do people who have had too much to drink.

Q: If a woman is pregnant and smokes marijuana, will it hurt the baby?

A: Doctors advise pregnant women not to use any drugs because they could harm the growing fetus. One animal study has linked marijuana use to loss of the fetus very early in pregnancy.

Some scientific studies have found that babies born to marijuana users were shorter, weighed less, and had smaller head sizes than those born to mothers who did not use the drug. Smaller babies are more likely to develop health problems. There are also research data showing nervous system problems in children of mothers who smoked marijuana.

Researchers are not certain whether a newborn baby's health problems, if they are caused by marijuana, will continue as the child grows. Preliminary research shows that children born to mothers who used marijuana regularly during pregnancy may have trouble concentrating.

Q: What does marijuana do to the brain?

A: Some studies show that when people have smoked large amounts of marijuana for years, the drug takes its toll on mental functions.

Heavy or daily use of marijuana affects the parts of the brain that control memory, attention, and learning. A working short-term

memory is needed to learn and perform tasks that call for more than one or two steps.

Smoking marijuana causes some changes in the brain that are like those caused by cocaine, heroin, and alcohol. Some researchers believe that these changes may put a person more at risk of becoming addicted to other drugs, such as cocaine or heroin. Scientists are still learning about the many ways that marijuana could affect the brain.

Q: Can people become addicted to marijuana?

A: Yes. While not everyone who uses marijuana becomes addicted, when a user begins to seek out and take the drug compulsively, that person is said to be dependent or addicted to the drug. In 1995, 165,000 people entering drug treatment programs reported marijuana as their primary drug of abuse, showing they need help to stop using the drug.

According to one study, marijuana use by teenagers who have prior serious antisocial problems can quickly lead to dependence on the drug.

Some frequent, heavy users of marijuana develop a tolerance for it. "Tolerance" means that the user needs larger doses of the drug to get the same desired results that he or she used to get from smaller amounts.

Q: What if a person wants to quit using the drug?

A: Up until a few years ago, it was hard to find treatment programs specifically for marijuana users.

Now researchers are testing different ways to help marijuana users abstain from drug use. There are currently no medications for treating marijuana addiction. Treatment programs focus on counseling and group support systems. There are also a number of programs designed especially to help teenagers who are abusers. Family

doctors are also a good source for information and help in dealing with adolescent marijuana problems.

References

1. Brookoff, D.; Cook, C. S.; Williams, C.; and Mann, C. S. Testing reckless drivers for cocaine and marijuana. *New England Journal of Medicine*, 331:518-522, 1994.
2. Cornelius, M. D.; Taylor, P. M.; Geva, D.; and Day, N. L. Prenatal tobacco and marijuana use among adolescents: effects on offspring gestational age, growth, and morphology. *Pediatrics*, 95: 738-743. 1995.
3. Crowley, T. J.; Macdonald, M. J.; Whitmore. E. A.; and Mikulich, S. K. Cannabis Dependence, Withdrawal, and Reinforcing Effects Among Adolescents With Conduct Symptoms and Substance Use Disorders. *Drug and Alcohol Dependence*, 1998.
4. Fletcher, J. M.; Page, J. B.; Francis, D. I.; Copeland, K.; Naus, M. J.; Davis. C. M.; Morris, R.; Krauskopf, D.; and Satz, P. Cognitive correlates of long-term cannabis use in Costa Rican men. *Arch. of General Psychiatry*, 53: 1051-1057, 1996.
5. Harder. S. and Reitbrock, S. Concentration-effect relationship of delta-9-tetrahydrocannabinol and prediction of psychotropic effects after smoking marijuana. *International Journal of Clinical Pharmacology and Therapeutics*, 35(4): 155-159, 1997.
6. Jones, R.T. et al. Clinical relevance of cannabis tolerance and dependence. *Journal of Clinical Pharmacology*, 21 (Suppl 1): 143-152, 1981.
7. Kandel, D.B. Stages in adolescent involvement with drugs. *Science*, 190:912-914, 1975.
8. Liguori, A.; Gatto, C. P.; and Robinson, J. H. Effects of marijuana on equilibrium. psychomotor performance, and simulated driving. *Behavioral Pharmacology*, 9:599-609, 1998.

9. National Association of State Alcohol and Drug Abuse Directors, Inc.. State Resources and Services Related to Alcohol and Other Drug Problems for Fiscal Year 1995: An Analysis of State Alcohol and Drug Abuse Profile Data, July 1997.
10. National Institute on Drug Abuse. National Survey Results on Drug Use from The Monitoring The Future Study, 1975-1997, Volume I/Secondary School Students. NIH Publication No. 98-4345. Printed 1998.
11. Pope, H. G. and Yurgelun-Todd, D. The Residual Cognitive Effects of Heavy Marijuana Use in College Students. Journal of the American Medical Association, Vol 275, No. 7, February 21, 1996.
12. Rodriguez de Fonseca, F.; Carrera, M. R. A.; Navarro, M.; Koob, G. F.; and Weiss, F. Activation of Corticotropin-Releasing Factor in the Limbic System During Cannabinoid Withdrawal. Science, Vol. 276, June 27, 1997.
13. Substance Abuse and Mental Health Services Administration, Office of Applied Sciences. Preliminary Results From the 1996 National Household Survey on Drug Abuse. DHHS No. (SMA) 97-3149. Rockville, MD: SAMHSA, July 1997.
14. University of Michigan. News and Information Services. Drug use among American teens shows signs of leveling after a long rise. December 18, 1997.
15. Wu, T. C.; Tashkin, D. P.; Djahed, B.; and Rose, J.E. Pulmonary hazards of smoking marijuana as compared with tobacco. New England Journal of Medicine, 318: 347-351, 1988.