

MARIJUANA



Call it pot, grass, weed, or any one of nearly 200 other names, marijuana is, by far, the world's most commonly used illicit drug - and far more dangerous than most users realize. At least one-third of Americans have used marijuana sometime in their lives.

Slang Terms

- Pot
- Grass
- Weed
- MJ
- Maryjane
- Reefer
- Smoke

Marijuana has been around for a long while. Its source, the hemp plant (*cannabis sativa*), was being cultivated for psychoactive properties more than 2,000 years

ago. Although cannabis contains at least 400 different chemicals, its main mind-altering ingredient is THC (delta-9-tetrahydrocannabinol). The amount of THC in marijuana determines the drug's strength, and THC levels are affected by a great many factors, including plant type, weather, soil, and time of harvest. Sophisticated cannabis cultivation of today produces high levels of THC and marijuana that is far more potent than in the past. THC content of marijuana, which averaged less than 1 percent in 1974, rose to an average 4 percent by 1994 and can contain as much as 10 percent today.

For the highly popular form of marijuana called Sinsemilla (from the Spanish "without seeds"), made from just the buds and flowering tops of female plants, THC content averages 7.5 percent and ranges as high as 24

percent. As for hashish, a resin made from flowers of the female plant, THC levels may be five to ten times higher than crude marijuana's.

Marijuana and other cannabis products are usually smoked, sometimes in a pipe or water pipe, but most often in loosely rolled cigarettes known as "joints." Some users will slice open and hollow out cigars, replacing the tobacco with marijuana, to make what are called "blunts." Joints and blunts may be laced with other substances, including crack cocaine and the potent hallucinogen phencyclidine (PCP), substantially altering effects of the drug.

Smoking, however, is not the sole route of administration. Marijuana can be brewed into tea or mixed in baked products (cookies or brownies).

Physical and Physiological Effects

A mild hallucinogen, marijuana has some of alcohol's depressant and disinhibiting properties. User reaction, however, is heavily influenced by expectations and past experience, and many first-time users feel nothing at all.

Effects of smoking are generally felt within a few minutes and peak in 10 to 30 minutes. They include dry mouth and throat, increased heart rate, impaired coordination and balance, delayed reaction time, and diminished short-term memory. Moderate doses tend to induce a sense of well being and a dreamy state of relaxation that encourages fantasies, renders some users highly suggestible, and distorts perception (making it dangerous to operate machinery, drive a car or boat, or ride a bicycle). Stronger doses prompt more

intense and often disturbing reactions including paranoia and hallucinations.

Most of marijuana's short-term effects wear off within two or three hours. The drug itself, however, tends to linger on. THC is a fat-soluble substance and will accumulate in fatty tissues in the liver, lungs, testes, and other organs. Two days after smoking marijuana, one-quarter of the THC content may still be retained. It will show up in urine tests three days after use, and traces may be picked up by sensitive blood tests two to four weeks later.

Marijuana use reduces learning ability.

Immediate Effects
➤ Increased pulse rate
➤ Impairment of short-term memory and logical thinking
➤ Confusion
➤ Restlessness and Excitement
➤ Hallucinations and Psychotic episodes
➤ Anxiety or panic
➤ Impaired coordination and motor skills
➤ Increased appetite

Research has been piling up of late demonstrating clearly that marijuana limits the capacity to absorb and retain information. A 1995 study of college students discovered that the inability of heavy marijuana users to focus, sustain attention, and organize data persists for as long as 24 hours after their last use of the drug. Earlier research, comparing cognitive abilities of adult marijuana users with non-using adults, found that users fall short on memory as well as math and verbal skills. Although it has yet to be proven conclusively that heavy

marijuana use can cause irreversible loss of intellectual capacity, animal studies have shown marijuana-induced structural damage to portions of the brain essential to memory and learning.

Chronic marijuana smokers are prey to chest colds, bronchitis, emphysema, and bronchial asthma. Persistent use will damage lungs and airways and raise the risk of cancer. There is just as much exposure to cancer-causing chemicals from smoking one marijuana joint as smoking five tobacco cigarettes. And there is evidence that marijuana may limit the ability of the immune system to fight infection and disease.

Although U.S. law classifies marijuana

Long-term Effects
➤ Toxic effect on brain nerve cells
➤ Increased risk of lung cancer
➤ Risk of Chronic bronchitis
➤ Respiratory diseases/cancer
➤ Energy loss
➤ Impaired immune system
➤ Blood vessel blockage

as a Schedule I controlled substance (which means it has no acceptable medical use), a number of patients claim that

smoking pot has helped them deal with pain or relieved the symptoms of glaucoma, the loss of appetite that accompanies AIDS, or nausea caused by cancer chemotherapy. There is, however, no solid evidence that smoking marijuana creates any greater benefits than approved medications (including oral THC) now used to treat these patients, relieve their suffering, or mitigate the side effects of their treatment. Anecdotal assertions of beneficial effects have yet to be

confirmed by controlled scientific research.

Withdrawal and Treatment

Long-term marijuana use can lead to addiction for some people. Users trying to quit using marijuana may experience cravings and other withdrawal symptoms and often can be irritable, have difficulty sleeping and anxiety. They also display increased aggression on psychological tests.

Treatment programs directed solely at marijuana abuse are rare, partly because many who use marijuana do so in combination with other drugs, such as cocaine and alcohol. However, with more people seeking help to control marijuana abuse, research has focused on ways to overcome problems with abuse of this drug.

Myths about Marijuana

There are many myths about marijuana. One myth is that marijuana is harmless. Marijuana use can lead to a host of significant health, social, learning and behavioral problems. It impairs judgment; it contributes to general apathy, irresponsible behavior, and risky choices.

Another widely believed myth regarding marijuana is that it is not addictive. Marijuana is more potent than ever. Long-term users use the drug compulsively even though it often interferes with family, work, and recreational activities. According to a 2001 National Household Survey on Drug Abuse, an estimated 5.6 million Americans age 12 and older reported problems with illicit drug use. Of these,

2 million met diagnostic criteria for dependence on marijuana/hashish.

There have been many studies conducted on passive inhalation of marijuana smoke and whether it results in a positive drug test result. These studies showed no instances where passive inhalation of marijuana smoke, even under extreme conditions, caused urine specimens of non-marijuana users to test positive for THC using screening and confirmation cutoff levels currently mandated by SAMSHA. These studies showed that although it is true that passive inhalation of marijuana smoke results in absorption of THC in the body, none of the THC levels from the non-marijuana users were high enough to cause a positive result using the current screening and confirmation cutoff levels mandated by SAMSHA (Substance Abuse and Mental Health Services Administration); of 50 ng/ml (nonograms per milliliter) for the screening test and 15 ng/ml for the confirmation test.

Myths
➤ Marijuana is harmless
➤ You can't get addicted to marijuana
➤ There are no long-term consequences to marijuana use
➤ You can test positive from second-hand smoke