

# Marijuana

Marijuana is a mixture of the dried and shredded leaves, stems, seeds, and flowers of the cannabis sativa plant. The mixture can be green, brown, or gray. A bunch of leaves seem harmless, right? But think again. Marijuana has a chemical in it called delta-9-tetrahydrocannabinol, better known as THC. The THC content of marijuana has been increasing since the 1970s.

## What Are the Common Street Names?

Some common names are: “pot,” “grass,” “herb,” “weed,” “Mary Jane,” “reefer,” “skunk,” “boom,” “gangster,” “kif,” “chronic,” and “ganja.”

## How Is It Used?

The most common method is smoking loose marijuana rolled into a cigarette called a “joint” or “nail.” Sometimes marijuana is smoked through a water pipe called a “bong.” Others smoke “blunts”—cigars hollowed out and filled with the drug. And some users brew it as tea or mix it with food.

## What Are the Short-Term Effects of Marijuana Use?

Within minutes of inhaling, a user begins to feel “high,” or filled with pleasant sensations. THC triggers brain cells to release the chemical dopamine. Dopamine creates good feelings—for a short time.

Loss of coordination can also be caused by smoking marijuana. Marijuana affects memory, judgment, and perception. It’s difficult to know how marijuana will affect a specific person at any given time, because its effects vary based on individual factors: a person’s genetics, whether they’ve used marijuana or any other drugs before, how much marijuana is taken, and its potency. Effects can also be unpredictable when marijuana is used in combination with other drugs.

## THC Affects Brain Functioning

THC finds brain cells, or neurons, with specific kinds of receptors called cannabinoid receptors and binds to them. Certain parts of the brain have high concentrations of cannabinoid receptors: the hippocampus, the cerebellum, the basal ganglia, and the cerebral cortex.



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## **Other Effects of Marijuana and THC**

THC effects can cause disaster on the road. Research shows that drivers on marijuana have slower reaction times, impaired judgment, and problems responding to signals and sounds. Studies conducted in a number of localities have found that approximately 4 to 14 percent of drivers who sustained injury or death in traffic accidents tested positive for THC.

## **Marijuana Use Increases Heart Rate**

Within a few minutes after inhaling marijuana smoke, an individual's heart begins beating more rapidly, the bronchial passages relax and become enlarged, and blood vessels in the eyes expand, making the eyes look red. The heart rate, normally 70 to 80 beats per minute, may increase by 20 to 50 beats per minute or, in some cases, even double. This effect can be greater if other drugs are taken with marijuana.

## **What Are the Long-Term Health Effects of Marijuana Use?**

People who use marijuana over the long term self-report less life satisfaction, poorer education, and job achievement, and more interpersonal and mental health problems compared to people who do not use marijuana.

Marijuana also may affect your mental health. Studies show that early marijuana use may increase your risk of developing psychosis if you have a genetic vulnerability to the disease. Marijuana also has been associated with depression and anxiety.

Many people don't think of marijuana as addictive—they are wrong. About 9 percent of people who use marijuana become dependent on it. The number increases to about one in six among those who start using it at a young age, and to 25 to 50 percent among daily users.

People who abuse marijuana are at risk of injuring their lungs through exposure to respiratory irritants and carcinogens found in marijuana smoke. The smoke from marijuana contains some of the same chemicals found in tobacco smoke; plus, marijuana users tend to inhale more deeply and hold their breath longer, so more smoke enters the lungs. Not surprisingly, people who smoke marijuana have some of the same breathing problems as those who smoke tobacco.

## **What About Medical Marijuana?**

Under U.S. law since 1970, marijuana has been a Schedule I controlled substance. This means that the drug has no approved medical use. However, there are medications containing synthetic THC, the main active ingredient in marijuana, that are used to treat nausea in cancer patients undergoing chemotherapy, and to stimulate appetite in patients with wasting syndrome—severe, involuntary weight loss—due to AIDS.