

## What is Marijuana?



Marijuana is comprised of the cured leaves, and flower clusters from the hemp plant, *Cannabis Sativa*. It is classified as a minor psychedelic drug because it does not cause a total break with reality as do major psychedelics. However, if large amounts of high potency marijuana are used, it could lead to a full psychedelic effect.

The major psychoactive ingredient in marijuana is tetrahydrocannabinol (THC). Over 400 other chemicals are found in marijuana, including tar and carcinogens.

Marijuana is not a new drug. The first written records date it to 4,000 years ago in China, where the emperor, Shen Nung, advocated its use as an all-purpose medication and as a sedative. From there its use spread to India and neighboring countries.

Early Hindus used cannabis for a variety of purposes, including leprosy and fever. They also felt it was useful for creating energy and stimulating the mind. Hindus and Muslims also employed it to treat constipation, dandruff, hemorrhoids, obesity, asthma, urinary tract infections, loss of appetite, inflammation, and cough.

From India, the use of cannabis spread to surrounding countries and the Middle East, then to Europe and the Americas.

Initially hemp was cultivated in early America as a fiber crop for making rope. It was not used for its psychoactive properties by early American settlers.

Several years later Cannabis made its way up the Mississippi to larger cities from the port of New Orleans. In 1920 marijuana use was prevalent in the United States. By 1930 marijuana was available in most of the larger cities.

During the 60's and early 70's marijuana use reached epidemic proportions as it became a popular drug among young people. During this period marijuana use spread to youthful white males, from urban to rural areas, to larger numbers of women, and to older segments of the population as well.



## Physical Signs of Marijuana Usage

It can be very difficult to tell when someone is "high" on marijuana, which is one reason why it is so common and so many kids get away with using it. By itself it doesn't make you drunk, slur your speech, stumble around, etc. The most noticeable sign is redness of the eyes.

Marijuana has its major physiological effects on the cardiovascular and central nervous system, where it has sedative effects. When someone first starts smoking marijuana, he gets a sense of well-being, relaxation, a willingness to speak or laugh openly and sleepiness. As one continues to smoke it in higher doses, it causes mild sensory distortions, an altered sense of time, loss of short-term memory, loss of balance and difficulty in completing thought processes. Even higher doses can result in feelings of depersonalization, severe anxiety and panic, hallucinations, delusions, and paranoia.

Physically, when someone smokes marijuana, his heart rate increases and the blood vessels of the eye dilate, which causes the eyes to become reddened. A feeling of tightness in the chest, difficulty breathing, and a lack of muscle coordination may also occur.

### **Paraphernalia**

Cigarette rolling papers (such as Zig-Zag's), pipes ( soda cans, wooden, metal and glass), bong (water-filled pipes), alligator clips.



### **Common Nicknames for Marijuana**

Pot, grass, weed, bud, jay, reefer, joint, ganja, herb, dope, smoke, boo ya, red hair, chronic, the green, the kind, mary jane, skunk, sens, thai sticks, maui wowie, J, hooter, toke, yesca, budah, bionic, shwag, indica, mex, herbage, doobage, wacky tobacky, hemp, THC, indo, homegrown, hydro, and doobie.

### **The Effects of Marijuana**

A boy or girl who is smoking marijuana at 13 is likely to earn less money as a young adult than peers who aren't abusing the drug. An adolescent who smokes less marijuana than a friend but enjoys the experience more is likelier to be addicted to the drug at 21. These are the findings from two recent studies that looked at adult outcomes associated with marijuana abuse in adolescence.

Source: National Institute on Drug Abuse , Jan. 2005

### **What is Alcohol?**

Most abusable substance fall into one of three general categories: stimulants, depressants, or psychedelics. Alcohol is classified as a depressant. Alcohol produces some of its effects by depressing various brain functions. Alcohol is also a chemical solvent, a local



anesthetic, and an irritant. Many of alcohol's side effects are due to these actions rather than to the sedative effect of the agent. Alcohol is found in many different beverages and also in many prescription and nonprescription medications.

Alcohol in low doses causes suppression of inhibitory centers and produces apparent stimulation while impairment of abstract thinking lessens anxiety. At moderate doses, alcohol can cause drowsiness, slowed reflexes and incoordination. In large amounts, alcohol decreases vital brain functions, produces sedation, slows the breathing rate, and can cause death.

Alcohol is absorbed from all parts of the gastrointestinal tract. Most of the alcohol enters the bloodstream from the stomach and small intestine. The peak Blood Alcohol Level (BAL) occurs 60 to 90 minutes after ingestion when the stomach is empty. It readily passes from the blood into nearly every tissue in the body, including the brain. The presence of food in the stomach slows the rate of absorption. However the amount of alcohol absorbed remains unchanged.

While no one would get drunk from the alcohol in one or two teaspoons of cough syrup, liver and stomach enzymes cannot deactivate large amounts of alcohol consumed at one time. Alcoholic drinks, including beer cause the amount of alcohol in the blood to rise. Excessive drinking may lead to vomiting and other unpleasant toxic effects. These symptoms are part of the automatic defense systems of the body which are activated to prevent more alcohol from being absorbed. When drinking stops, the liver enzymes will eventually convert excess alcohol into less harmful substances. The final products of alcohol metabolism are carbon dioxide and water. According to recent news reports, Americans are at risk for a variety of sleep-related health problems. Alcohol use affects sleep in a number of ways and can exacerbate these problems. Because alcohol use is widespread, it is important to understand how this use affects sleep to increase risk for illness. For example, it is popularly believed that a drink before bedtime can aid falling asleep. However, it also can disrupt normal sleep patterns, resulting in increased fatigue and physical stress to the body. Alcohol use can aggravate sleeping disorders, such as sleep apnea; those with such disorders should be cautious about alcohol use. Many nursing mothers are still regularly advised by their physicians to have a drink to promote lactation (so-called let-down reflex). Babies who receive alcohol in breast milk are known to have disrupted sleeping patterns. Because researchers do not yet know what effect this disruption has on nursing infants, physicians should reconsider this advice.

### What is Cocaine?

The Incas probably were the first to use cocaine. Up to 5,000 years ago, they began to chew the leaves of the coca bush. Today the inhabitants of the Andes mountain still chew coca leaves mixed with lime from ashes. This natural source gives a low dose of cocaine with effects similar to drinking cups of strong coffee. People who chew coca leaves do not often have a serious addiction problem because there is so little cocaine in each leaf.

Cocaine could only be taken in leaf form until 1858, when it was isolated from the plant material by chemist Albert Niemann at the University of Gottingen in Germany. Shortly after it was purified, people began to inhale it into the nose ("snorting") and to inject it. Cocaine was added to various medicines and was an ingredient in Coca Cola until 1903.

The use of cocaine in its pure form led to the first major epidemic of cocaine use at the end of the 1800's and the beginning of the 1900's. At the beginning of that epidemic, as now, many people thought that cocaine was a harmless drug. As more and more people tried it and



became addicted to it, it gained a reputation as a highly dangerous, very addictive drug. In the early 1900's, the terms "dope" and "dope fiend" were used to describe cocaine and the cocaine user who would do anything to get the next dose of cocaine. The drug's bad reputation combined with stricter laws against sales and possession led to less and less use of cocaine in the first few decades of the twentieth century. Sixty years after it began, cocaine use had practically disappeared by 1930.

In the 1960's cocaine again began to be seen as a harmless stimulant. "Freebasing", was developed, enabling users to convert the injectable white cocaine salts into a smokable form.

When coca leaves are harvested in Peru and Colombia, they are thrown into pits, chopped, pounded and mixed with gasoline, kerosene, and other chemicals to remove cocaine from the coca leaves. Cocaine comes out of the leaf in the freebase form. If it were left in this form for long it would lose its potency, so the cocaine freebase is mixed with other chemicals to convert it into a salt form. The salt form may be shipped long distances or stored for a long time without losing its strength. The salt form is the form used by doctors to produce local anesthesia for minor surgery.

Drug abusers know that they can inject the salt form but cannot smoke it. If the drug user wants to smoke cocaine, he mixes the cocaine salt with chemicals to convert it back to its freebase form. This second process is known as "freebasing" and is very dangerous because of the chemicals used to do it. The comedian Richard Pryor was severely burned on the face when the chemicals he was using to make freebase cocaine exploded and burned. Other less famous people have suffered serious injury or death in this process.

The current cocaine epidemic seemed to be leveling off in 1984, but a new and easily made form of cocaine called "crack" was developed at that time. Crack is nothing more than freebase cocaine which has been prepared by a different method. The method used to produce crack allows the freebase cocaine vapors to penetrate deeply into the lungs. This produces a greater high, but is also an even more addictive way to use cocaine. Crack smoking can also cause severe lung damage. With the advent of crack, the high costs of cocaine came down. Cocaine use increased even further. Today we are experiencing the largest epidemic of cocaine use ever recorded. According to a recent estimate, "one of two Americans between 25 and 30 have tried cocaine." It is currently mentioned more frequently than any other drug, including alcohol, as a reason for treatment in hospital emergency rooms.

### **How is Cocaine Used?**

Smoking "crack" cocaine is the most common method of use but some users still sniff (snort) the white powder into the nose, using a straw or rolled-up dollar bill. Because the cocaine passes into the bloodstream rapidly, the initial effects are immediate.

Cocaine use affects all ages and socioeconomic brackets. Many users are success-oriented and high achieving, whether on the job, in school, or with friends and peer groups, but most people who continue to use cocaine will end up addicts.



### **Effects and Dangers of Cocaine Use?**

Cocaine is among the most psychologically and physically addictive of all drugs. It takes from 30 seconds to 2 minutes to create pleasure sensations. When the high, with its transitory spurt of energy and illusion of super-competence wears off (in 15 to 30 minutes), the person experiences fatigue, depression and confusion.

The moment it enters the bloodstream, cocaine produces a profound effect on the heart, raises the blood pressure, increases the body temperature and dilates the pupils of the eyes. Repeated sniffing causes an irritated, chronic runny nose and the chemical eats holes in the cartilage.

Cocaine users subject themselves to destruction of liver cells, lung damage, severe weight loss, hallucinations, psychosis, and sudden and lingering death.

### **How Does Cocaine Kill?**

When taken, the drug causes the heart to beat rapidly. At the same time, it constricts blood vessels. The effect is like turning up the water pressure in a hose while shrinking the diameter of the hose.

A weak spot in a blood vessel, especially if it's near the heart or in the brain, can burst under the increased pressure. People with a family history of heart disease are naturally more susceptible. In such instances, only a small amount of cocaine can be deadly.

As more of the drug is taken, it interferes with the electrical signals the brain sends to the heart and lungs to keep them working. Seizures and heart failure can result. And because it produces severe depression (when one comes down from the "high") cocaine can sometimes even lead to suicide.

### **Paraphernalia**

Mirrors, razor blades, straws, small plastic tubes (used to "snort" speed), oddly-folded pieces of paper (used to store speed), small plastic bags (around 1" square), glass vials, glass pipes.

### **Common Nicknames for Cocaine**

coke, yay, snow, flake, blow, rock, crack, rails, nose candy, toot, white, co-co puff, powder, fluff, sniff, and stuff.