



# Using psychoactive substances

**A psychoactive substance is a chemical derived from a plant (or manufactured in a laboratory) that affects the brain in such a way as to alter consciousness.**

**Throughout history, people have been using psychoactive substances to help them in their daily lives, or to explore different perspectives on reality. Some examples of psychoactive substances are: caffeine, medication, alcohol, tobacco, and illicit drugs.**

**M**oderate amounts of **caffeine** can increase alertness or treat a headache. Even the daily consumption of caffeine—a coffee or two to kick off the day—is usually harm-free. However, having four or five cups of coffee per day (450 mg of caffeine or more) can lead to dependence and toxicity, which can produce nasty side effects: nausea, diarrhea, indigestion, light-headedness, irregular heartbeat, and “the jitters.”

**Medications** can also be helpful or harmful, depending on how they’re used. For example, prescription painkillers may be just what you need to get back on your feet after a knee injury. But when painkillers are used for other reasons, or in combination with other substances, they can either lose their effectiveness or greatly increase their impact and perhaps even lead to overdose. Even subtle changes in the pattern or context of medication use can turn into problem use over time. Prolonged use of certain medications such as benzodiazepines (e.g., Valium) can lead to dependence.

**Alcohol** is another substance that

## How substances affect a person depends on:

- the type of drug (caffeine, medications, alcohol, etc.)
- the nature of the person using the drug (age, gender, ethnicity, substance use history, etc.)
- the context in which the drug is being used (how much, how often, when, in combination with other substances, etc.)

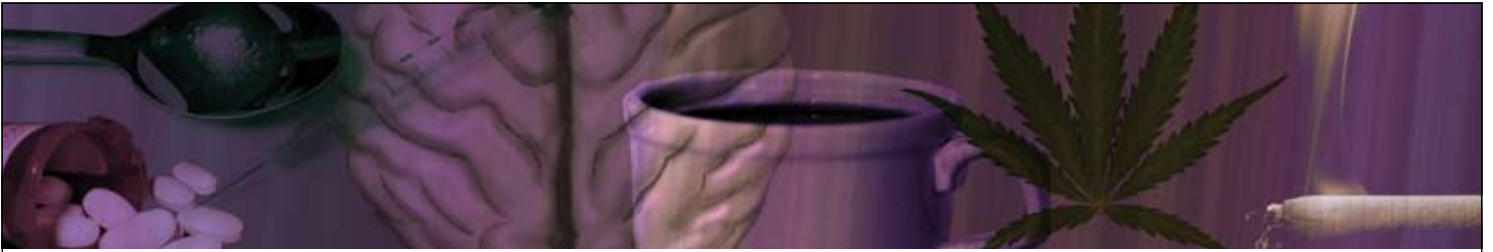
In other words, psychoactive substances have the potential to be both helpful and harmful.

can be consumed responsibly and in a low-risk, non-problematic way. Small amounts every day or two may even be beneficial for men over 40 and women over 45. However, when a person drinks every day, or drinks heavily (more than 20 drinks in a week for a man, and more than 10 for a woman), or drinks excessively in a single evening (more than four drinks for a man, and more than three for a woman), there is great potential for harm in the form of in-

juries, accidents, diseases, and even death.

Regarding **nicotine**, the highly-addictive drug found in tobacco, there really is no safe level of intake in the form of cigarettes. Paradoxically, nicotine is a stimulant that feels like a relaxant at first. This is because the drug triggers the release of dopamine, a chemical in the brain that is associated with feelings of pleasure. However, long-term use of nicotine depresses the brain’s ability to experience pleasure, meaning users have to smoke greater amounts of tobacco to reach satisfaction. Since withdrawal symptoms set in soon after the effects of nicotine wear off, most users relieve their symptoms with further smoking, which ultimately leads to dependence.

**Cannabis** and other illicit drugs can be fun to use, and may even help people bond with their friends on weekends. But regular or excessive use can lead to serious substance-related harms, such as troubled relationships with family and friends, performance problems at school or work, accidents, and even death from overdose.



## How to minimize harm from psychoactive substances

### Caffeine

- Limit your caffeine intake to less than 450 mg per day.
- Avoid coffee, chocolate, and other caffeine products in the evenings and before bed.
- Opt for low-alcohol drinks, or lower the alcohol content yourself by adding more mix.
- Have a plan in place for a safe ride home.

### Medications

- Take medications as prescribed and only when needed.
- Before using other substances, make sure you understand how they may interfere or react with your medications.

### Alcohol

- Eat a meal before you begin drinking.
- Pace yourself (one drink per hour) and put a limit on the total amount you consume in one sitting (no more than four drinks for men, and three for women).
- Alternate alcoholic beverages with non-alcoholic ones.

### Tobacco (Nicotine)

- Quit smoking, or at least cut back on the number of cigarettes you smoke in a day.
- Limit your nicotine intake to social occasions and avoid smoking on a daily basis.
- Smoke outside, rather than in an enclosed room or vehicle.

### Illicit drugs

- Make sure you know what you're taking. Drugs sold on the street often contain a wide range of chemicals. If you're not sure what you're taking, it's safer not to take it.
- Don't share needles, pipes, or other equipment that may lead to the transmission of body fluids.

### Most people use psychoactive substances in beneficial or non-problematic ways, but even low-risk use can lead to health and social issues.

For example, a small amount of alcohol daily can help reduce the risk of heart disease in men over 40 and women over 45. However, that same small amount of alcohol can increase a person's risk of developing certain forms of cancer.

### All psychoactive substances are more harmful to children than adults.

Because children are still developing physically, mentally, and emotionally, substances have a more profound effect on their systems.

Young children should have no more than 45 mg of caffeine per day.

**1 regular cola = 30-60 mg**

**1 average-sized chocolate bar = 10-50 mg**

## General harm reduction tips

- Avoid mixing substances. It can be dangerous to combine certain substances, such as alcohol and medications, or cocaine and heroin.
- Use a health book or trusted Web site to study the substances you're taking.
- Be aware of any changes in your substance use patterns (method, amount, frequency, context) and discuss them with friends you trust.
- If you believe you're developing a problem with substances and need help cutting back or quitting, ask for help.
- If you experience serious withdrawal symptoms when cutting back on or quitting using a substance, get medical help.