



A drug is any chemical you take that affects the way your body works. Alcohol, caffeine, aspirin and nicotine are all drugs. A drug must be able to pass from your body into your brain. Once inside your brain, drugs can change the messages your brain cells are sending to each other, and to the rest of your body. They do this by interfering with your brain's own chemical signals: neurotransmitters that transfer signals across synapses. Drugs are both legal and illegal. Illegal drugs are drugs like cannabis, ecstasy and cocaine. Illegal drugs are against law and they also include drugs like speed, heroin and magic mushrooms.

## Alcohol

Alcohol is created when grains, fruits, or vegetables are fermented. Fermentation is a process that uses yeast or bacteria to change the sugars in the food into alcohol. Fermentation is used to produce many necessary items — everything from cheese to medications. Alcohol has different forms and can be used as a cleaner, an antiseptic, or a sedative.

There are different types of alcohol. Some are used in chemistry laboratories and industry, e.g. Isopropyl and methyl alcohol. Isopropanol or isopropyl alcohol is also used in industrial processes as well as in home cleaning products and skin lotions. It is also commonly known as "rubbing alcohol". Methanol, or methyl alcohol or wood alcohol has been used as an industrial solvent and is also commonly available as methylated spirit. Another type of alcohol is ethyl alcohol, also known as ethanol. This has been consumed by human beings for its intoxicating and mind-altering effects.

## Global trends

In the past decade, the global beer market has gone through a process of rapid change. In many emerging and developing markets, economic and societal developments and transformative improvements in the quality and appeal of beer brands have resulted in strong organic growth in the beer category. Developed markets have also undergone change as brewers have responded to constrained or declining beer consumption trends.

Industry consolidation has continued apace, and today the four largest brewers – Anheuser-Busch InBev, SABMiller, Heineken and Carlsberg – produce almost half of all industry volume and generate up to 70% of industry profits. Beer industry consolidation has continued during the last 12 months, with smaller transactions in Asia, Africa and Latin America.

Beer consumption continues to rise in Africa, Latin America and Asia, driven by growth in population and incomes and improvements in beer quality and appearance. In this context, many consumers are shifting from informal and unregulated forms of alcohol to aspirational, attractively-branded and safer commercial beers. The beer category is therefore growing at the expense of subsistence alcohol.

## Alcohol in Zambia

The Chainama Hills Mental Hospital has bemoaned the rise in cases of mental illness among youths, due to alcohol abuse, especially the infamous *tujijiji*. A check by the **Daily Mail** revealed that patients, mostly male youths as young as 16 years, are being treated for mental illness due to alcohol abuse.

Youth Alive Zambia, an organization that works in partnership with local churches to raise awareness about HIV and AIDS and gender issues, says there is a long list of things that has led to the explosion of alcohol abuse by young people in Zambia – but a lack of recreational activities and employment opportunities top the list.

University of Zambia experts say it is Zambia's lack of regulation and monitoring systems that are contributing to the rise in alcohol abuse here. They state that "the government is not doing enough to ensure that laws stipulating alcohol are followed and that the drinking places are monitored to ensure that no one underage is allowed".

## Use and abuse of alcohol

Alcohol use, as the term implies, is the consumption of alcohol. It does not indicate the amount used or the extent of harm from use. Alcohol use usually starts as a social phenomenon. Many communities consider the occasional use of alcohol, for recreational purposes or on social occasions, as 'normal' and 'acceptable'. There is little awareness that even the occasional or social use of alcohol does carry a risk of road traffic injuries or industrial accidents. Intoxication from occasional use can lead to violence or socially inappropriate or embarrassing behaviour.

Harmful use of alcohol is when some people, usually after a period of prolonged use, develop a pattern of use which causes damage to an individual's health. Harmful use is not necessarily linked to drinking too much alcohol or drinking alcohol every day. Harmful drinking is usually related to the circumstances of drinking alcohol.

Alcohol abuse, also called "problem drinking", is a pattern of excessive drinking that result in adverse health and social consequences to the drinker, and often to those around the drinker. People with an alcohol abuse problem:

- Use alcohol to help them change the way they feel about themselves and/or some aspects of their lives
- Experience some problems associated with their alcohol use
- Get complaints about their alcohol use
- Lose interest in activities and hobbies that used to bring pleasure

- Get irritable as their usual drinking time approaches, especially if alcohol isn't available
- Keep alcohol in unlikely places at home, at work and in the car
- Gulp drinks, become intoxicated intentionally
- Drink alone or in secret

Alcohol dependence refers to a cluster of symptoms. There are four main symptoms:

- Craving — A strong need, or compulsion, to drink
- Impaired control — the inability to limit one's drinking on any given occasion
- Physical dependence — Withdrawal symptoms, such as nausea, sweating, shakiness, and anxiety, when alcohol use is stopped after a period of heavy drinking
- Tolerance — the need for increasing amounts of alcohol in order to feel its effects

### Advantages of alcohol

Alcoholic beverages are imbibed across the world. For some they serve as a unifying commonality for socializing, while others partake in tasty alcohol-containing drinks to reach altered states of consciousness, or to get drunk. The paradox of enjoying alcoholic beverages is that it comes with benefits and risks not just to your physical health but also other significant domains of your life, including work and relationships. The key to staying on the side of reaping the advantages of alcohol use resides in safe, moderate consumption.

*Heart Health.* The cardiovascular system includes your heart, circulatory and neurological systems, and cardiovascular disease is the primary killer of American men and women. Cardiovascular diseases can impact your arteries and heart, blood vessels leading to major organs or your brain, and include damage to any of these systems that can lead to stroke or heart attack. People free of cardiovascular complications actually can protect this system with moderate alcohol consumption. According to Harvard Health Publications, moderate alcohol use raises the high-density lipoprotein, or good cholesterol, level in your bloodstream, which plays a role in reducing the risk of clots in your blood vessels

*Source of vitamins, minerals and flavonoids.* Beer is rich in many vitamins of the B group and in minerals such as magnesium. Barley and hops used in the production of beer are rich in flavonoids, which have powerful antioxidant effects.

*Cholesterol.* Moderate alcohol drinking affects many processes in the body, one of which is the significant increase in HDL cholesterol - the good cholesterol. There is supporting [evidence](#) for beer's cardio-protective effect and for its help in altering the ratio of beneficial HDL cholesterol to the LDL cholesterol.

*Kidney stones.* Beer consumption may reduce the risk of developing kidney stones. Finnish researchers [found](#) that there was a 40% lower risk of kidney stones in beer drinkers.

*X-Rays radioprotection.* Japanese researchers found that beer helps reduce chromosomal damage from radiation exposure.

*Other Health-Risk Reduction.* Type II diabetes, a form of chronic metabolic disease due to poor insulin production, can result from differing contributing factors, like poor diet, pancreatic complications or obesity. Studies indicate that the risk of developing diabetes is reduced with regular, moderate alcohol consumption, but the exact benefit of alcohol on blood glucose management warrants on-going research.

### Disadvantages of Alcohol

Moderate alcohol consumption in healthy adults can be cardio-protective, but excessive alcohol consumption or alcohol use if you have existing heart disease increases your risk of heart complications. Continued alcohol use if you have high blood pressure can lead to blockage in the arteries from the brain, causing a sudden or severe disruption in the brain blood supply, or stroke. Excess alcohol consumption also increases the chance of chronic high blood pressure, which impacts the functionality of your heart.

### Abuse and Alcoholism

The psychological impact of drinking alcohol presents with a wide-range of consequences depending on your drinking pattern. Alcohol abuse occurs when you engage in drinking that is unsafe and harmful to others. Binge drinking is a form of alcohol abuse. Blackouts or alcohol poisoning resulting from over-consumption are serious residual effects of alcohol abuse. Other affects include:

- "Beer belly" - Heavy beer drinking may promote abdominal obesity in men
- Heartburn - Beer contains powerful stimulants of gastric acid secretion and may provoke [gastroesophageal reflux](#) and cause heartburn
- Blood pressure - Daily beer consumption (approximately 40 g of alcohol) [may increase blood pressure](#)
- Intoxication & Dehydration - Alcohol is a dehydrating agent and downer that reduce activity of the central nervous system. High amounts of alcohol can turn into dehydration, intoxication, and hangover
- Impairment of driving-related skills - Even small amounts of alcohol can have adverse effects on attention and motor skills. Many serious accidents are alcohol related.

### Key Statistics about alcohol

A total of 1928 individuals participated in a 2001 survey looking at the relationship of drinking to sexual behavior and risk of acquiring HIV infection (random sample of just under 2000 respondents) in Lusaka. About half of the participants were in 25 to 34 years age group (53.2%), and a third of the respondents had attained secondary level of education (35.8%).

Study results:

- 43.7% of men and 73% of women stated that they had never taken alcohol
- 26.7% of road traffic accident cases showed a blood alcohol concentration higher than the statutory limit of 80 mg%. 50% of drinking

drivers were below the age of 30 years.

- Blood alcohol concentrations were found in 31.1% of pedestrians, 17.7% of passengers, 30.3% of drivers and 33.3% of cyclists.
- The overall prevalence of alcohol consumption over a period of one year was 26.3% (43.5% among males and 17.7% among females).

### Zambian Government action and intervention on alcohol

In mitigating the impact of alcohol abuse, the Government in collaboration with other stakeholders such as the World Health Organization (WHO) and the United Nations Children Emergence Fund (UNICEF) has set into motion the creation of a policy that will establish the basis for the place of alcohol in the lives of Zambians.

## DRUGS

Drugs are both legal and illegal. Illegal drugs are drugs like cannabis, ecstasy and cocaine. Illegal drugs are against law and they also include drugs like speed, heroin and magic mushrooms. There are many drugs which are legal but still they have potential to cause harm to the body and mind like alcohol, headache tablets, cigarettes and glue. Addiction to them is potentially very dangerous for the health of an individual. Many legal drugs are actually used as medicines and are available to the patient through a doctor's prescription. One example is tranquilizers. A doctor gives a special letter called prescription which has to be given to the chemist and he provides the drugs to the patients.

Illegal drugs are put in different categories and Class A drugs are considered most harmful. Examples are heroin, cocaine, Ecstasy etc. Class B drugs include amphetamines such as speed and barbiturates. Class C drugs include cannabis, tranquilizers, valium and anabolic steroids. Possession and transaction of all these drugs are illegal and warrant penalties and punishments according to the class of drugs with Class A at the top of the list for severity of penalties and punishments.

### Drug abuse

Substance abuse, also known as drug abuse, refers to a maladaptive patterned use of a substance (drug) in which the user consumes the substance in amounts or with methods not condoned by medical professionals. Substance abuse/drug abuse is not limited to mood-altering or psycho-active drugs. Activity is also considered substance abuse when inappropriately used (as in steroids for performance enhancement in sports). Therefore, mood-altering and psychoactive substances are not the only drugs of abuse. Substance abuse often includes problems with impulse control and impulsivity.

Drugs change the way the body and the brain function. Sometimes the results are pleasant as in the case of prescription medications that are used to treat various conditions and diseases. However, sometimes, the results are monstrous and cause great harm to your body and well-being. But one thing remains the same: any addictive substance has the potential of changing your life-for good or for bad. That is why it's important when looking at the different types of drugs not to demonize them nor presume they're always safe, but rather to recognize if you are addicted. For the drug addict, serious consequences can result from the use of almost all illicit drugs and prescription medications.

One thing that's often misunderstood about drug abuse is that it only involves illegal substances, but that's simply not the case. Any drug can be abused, whether it be bought on a street corner or obtained from your doctor. So really, there's no dividing line between prescription and so-called recreational drugs because they often include the same or similar ingredients just in different dosages. That's why prescription drugs are so often abused-it is merely the intent of use that divides them from illegally obtained substances, and even then, prescriptions can be abused.

### Common drug types

There are many different types of drugs you should be aware of. Some are prescribed, others are known as club drugs, illicit or illegal substances, and some are called designers drugs.

Drug types include:

*Antidepressants.* Antidepressants are a prescription medication used to treat depression and mood disorders like obsessive-compulsive disorder, eating disorders and other anxiety problems. The problem is that some antidepressant drugs can actually carry serious side effects and when used in combination with alcohol or other depressant drugs, can actually make you more depressed. Likewise, discontinuing use suddenly can cause mild withdrawal symptoms.

*Barbiturates.* Barbiturates are drugs that act as central nervous system depressants, and can therefore produce a wide spectrum of effects, from mild sedation to total anesthesia. They are also effective as anxiolytics, as hypnotics, and as anticonvulsants. Barbiturates also have analgesic effects; however these effects are somewhat weak, preventing barbiturates from being used in surgery in the absence of other analgesics. They have addiction potential, both physical and psychological.

*Cannabis.* Cannabis is also known as marijuana and has psychoactive effects. It is taken into the body in the form of smoke or vapor and can even be consumed and mixed into food or steeped in a tea. While is not clinically proven whether or not marijuana is addictive, it is often believed to act as the "gateway" to other more serious substances.

*Depressants.* Depressants are a type of drug that works by reducing the function of the central nervous system. Drugs often included in this category are barbiturates and benzodiazepines.

*Hallucinogens.* While hallucinogens have been around for years in ceremonies and rituals, they play a role in modern society as well. They work by producing sensory hallucinations in users involving any of the five senses. Common substances that fall within this category include LSD, PCP and Peyote.

*Inhalants.* As their name would suggest, inhalants refer to a group of drugs that are inhaled in the form of a gas or solvent. Potential inhalants can be found just about anywhere and include common products like nail polish remover, gasoline, glue and aerosol cans.

*Narcotics.* While the term "narcotics" is often used to refer to any illicit substance, it technically means a substance derived from opium (opiates) or its synthetic replacements. Examples of narcotics include cocaine, morphine and heroin, all of which are highly addictive.

*Steroids.* Anabolic steroids are not the same as the kind used in medicine for the reduction of inflammation. Rather, these substances are used to build muscle mass and strength. They typically consist of male sex hormones and can be very damaging when used without a prescription.

*Stimulants.* Stimulants are a class of drugs that boost alertness and increase the activity of the central nervous system. Examples of this type of drug include amphetamines, methamphetamines, cocaine and nicotine, all of which are highly addictive.

*Tobacco.* Tobacco is often smoked in the form of cigarettes or cigars or chewed and contains nicotine, which is a stimulant. It's a highly addictive substance and has been known to cause cancer and other diseases.

### **Advantages of drugs**

Prescription drugs serve as complements to medical procedures (e.g., anti-coagulant's with heart valve replacement surgery); substitutes for surgery and other medical procedures (e.g., lipid lowering drugs that lessen need for bypass surgery) and new treatments where there previously were none (e.g., drugs for HIV and Parkinson's). Some of the major advances in public health -- the near eradication of polio and measles and the decline in infectious diseases -- are largely the result of vaccines and antibiotics. And, as the understanding of genetics increases, the possibility for pharmaceutical and biotechnology interventions will multiply.

Hallucinogenic drugs have played a role in human life for thousands of years. Various cultures from the tropics to the arctic have used plants to induce states of detachment from reality, to precipitate "visions," to provide mystical insight, as medicines, and during social and religious rituals. These plants contain chemical compounds that are structurally similar to serotonin, and they produce their effects by disrupting normal functioning of the serotonin system.

### **Global trends**

According to the World Health Organization (WHO) substance abuse is a serious threat to the social and economic fabric of nation's communities and families. WHO estimates there are 2 billion people who are abusing alcohol, 1.3 billion people who are smokers and approximately 185 million people who are abusing drugs. Those numbers are truly staggering.

### **Drug abuse in Zambia**

Lusaka Province has the highest number of pupils abusing drugs such as alcohol and cannabis, the Drug Enforcement Commission (DEC) has revealed. According to the Drug Enforcement Commission (DEC) statistics 221 pupils who were counseled for drug abuse related problems, 180 of them came from Lusaka.

Lack of effective parenting, especially in broken homes, availability of drugs such as alcohol and cannabis, peer influence and identity crisis, experimentation, freedom; in search of freedom from pain, problems, insecurities, boredom and rules are some of the reasons that lead pupils into drug abuse.