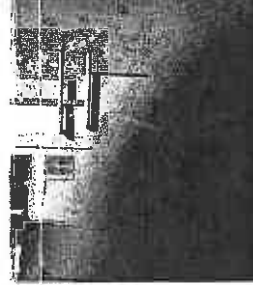


# Healthy Active Living

Keep Fit, Stay Healthy, Have Fun



*In the course of history, many more people have died for their drink and their dope than have died for their religion or their country.*

**Aldous Huxley**

Author of *Brave New World*

## Key Terms

**L**ike most teens, you have probably heard a great deal about drugs. You have almost certainly heard that when drugs are overused or abused they can create serious problems for the user. You may think that you have already heard everything you need to hear about drugs, so why does everyone keep telling you about them?

People keep telling you because they know that, as a teenager, you are more likely to confront decisions about alcohol, tobacco, and illegal drugs. In order to make safe, sensible decisions, you need to know as much as you can.

Drugs have been with us throughout history, and drug problems in our communities can be serious. Regardless of age, we all need to understand how we can prevent substance abuse in our own lives, in our families, and in our communities.

## Chapter Objectives

In this chapter, you will:

- Identify the main types of mood-altering drugs available in Canada today
- Investigate the “continuum of drug use” in the context of substance use and abuse
- Investigate reasons why drug use begins and why young people in particular may be at risk
- Identify the likely consequences of substance use and abuse
- Identify gambling as a separate but related dependence issue for Canadians
- Explore the main features of the Canadian government’s policy for dealing with the widespread use of drugs
- Begin to understand the special problems associated with the lack of quality control with respect to illegal drugs

## What Are Drugs?

**Drugs** are substances, other than food, that affect a person's mental, emotional, or physical state. **Psychoactive drugs** (mood-altering drugs) affect our mental and emotional state.

A person who uses drugs is not usually trying to cause damage to his or her lungs, brain, or other vital organs. However, many drugs have harmful side effects, and such damage can occur.

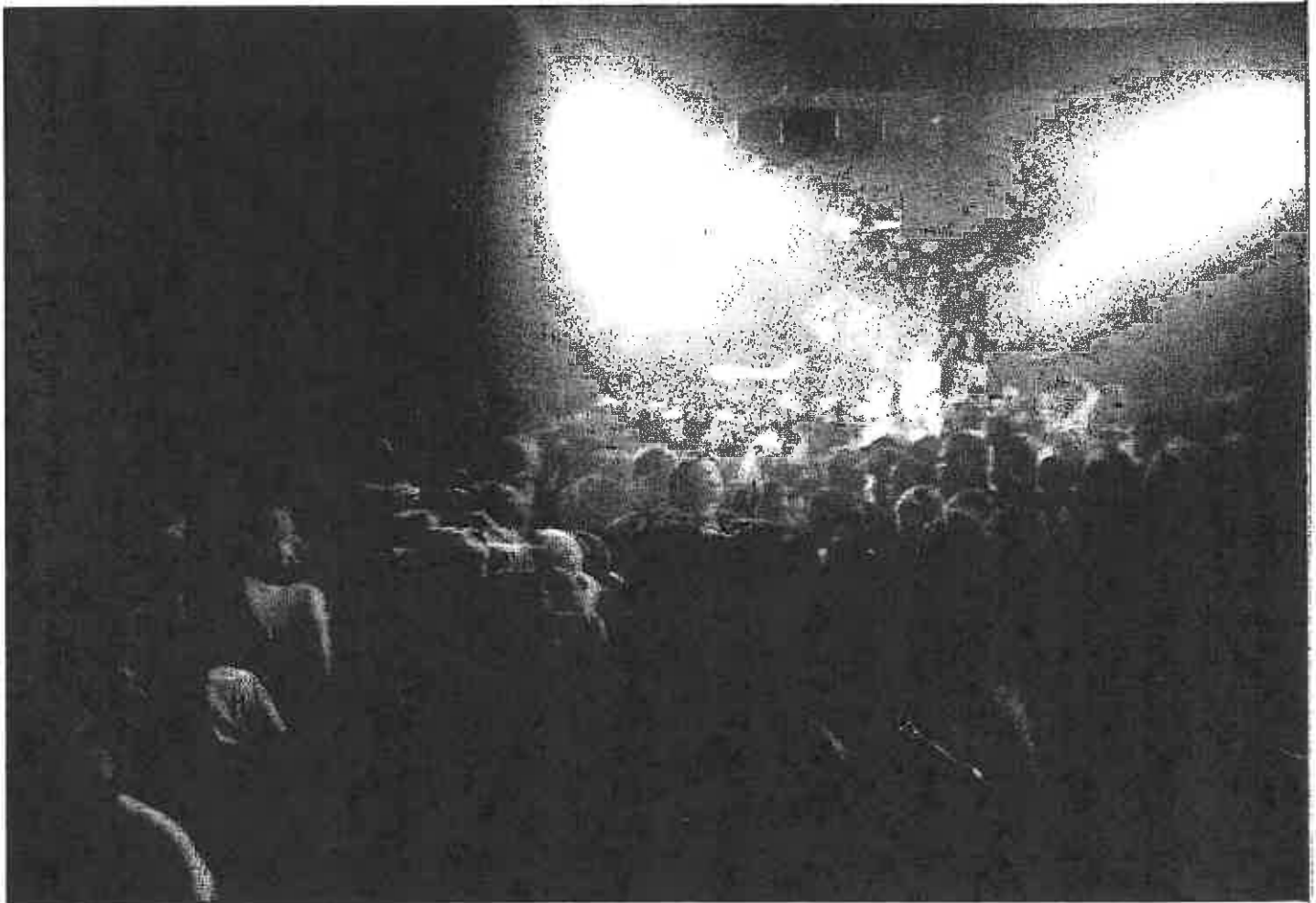
### Making Decisions about Drugs

Legal and illegal mood-altering drugs are increasingly available in Canada, and the pressures to use such drugs are widespread. This is especially true for young people, who are experimenting with new levels of independence and responsibility, and who may experience pressure from friends, peers, the media, and other sources.

The same decision-making skills you use to make other health-conscious decisions can be applied to decisions about substances. All you need is good information. People with good information are more likely to make sound decisions, and they will pass this information on to their friends as well.



Young people often feel pressure from friends, peers, and the media to try drugs.



Psychoactive (mood-altering) drugs are those that affect a person's mental and emotional state.

## Risky Business

**T**here are three main factors to keep in mind when considering the risk of using drugs: the drug itself, the user, and the context.

- **The drug.** The way a drug is prepared (for example, weak vs. strong dosage), the way it is used (swallowing, sniffing, inhaling, or injecting), and the actual amount of drug taken, all play a large role in determining risk level.
- **The user.** The physical traits of the person using the drug (such as weight, gender, metabolism, and state of health) can all play a role in determining risk levels. Risk also increases when a person drinks or uses drugs to cope with anger, stress, or sadness rather than to enhance an enjoyable situation.
- **The context.** The context is the setting or situation in which people use drugs. Certain contexts always pose a high risk and should be avoided: before driving a car, boat, ATV, or snowmobile, or using other machinery; before playing sports or doing other physical activity; before engaging in sexual activity (lack of inhibition may lead to unsafe practices); or when sick or using medication or other substances.

## Types of Drugs

Mood-altering drugs affect the body's central nervous system (CNS), which sends information about what we are sensing or feeling to the body. We can classify mood-altering drugs according to the specific effects they have on our minds and bodies.

### Marijuana (Cannabis)

**Marijuana**, the most popular form of cannabis, is placed in a class of its own because it acts mostly as a hallucinogen, but also has depressant effects (it slows response time and affects memory) and a stimulant effect (it raises the heart rate). Common sources of cannabis are marijuana, hashish, hash oil, and tetrahydrocannabinol (THC).

### Hallucinogens

**Hallucinogens** alter users' perceptions of the world around them, causing distortions in the way they sense their surroundings. While overdoses are rare, these drugs can pose a risk of accidents and injuries because they distort what the user experiences. Users also may experience flashbacks later in life. Hallucinogens include LSD, psilocybin (magic mushrooms), mescaline, ecstasy, and peyote.

### Depressants

**Depressants** slow down the CNS and reduce inhibitions. Like stimulants, many depressants can be easy to obtain; however, this does not make them harmless. Examples of typical depressants are alcohol, solvents (for example, glue or gasoline); opiates (such as heroin); painkillers; and tranquilizers and sleeping pills, including the "club drugs" GHB, and Rohypnol®.

### Stimulants

As the name implies, **stimulants** speed up body systems such as the CNS and the cardiorespiratory system, delay fatigue, and may produce hyperactivity. Some stimulants are prescribed for certain medical conditions. Common stimulants include nicotine, caffeine, diet pills, Ritalin, cocaine, crack, speed, methamphetamine, some of the so-called "club drugs," and other illegally manufactured amphetamine-type drugs.

### Anabolic Steroids

**Anabolic steroids** are commonly used to treat certain medical conditions. Non-medically, steroids can help increase training endurance and build muscles, and so people use them to enhance athletic performance and body image. They are a controlled substance; using them without a prescription is illegal. Anabolic steroid use is linked to a range of problems, both physical and psychological, which may continue even after a person stops using the steroids. Sports authorities worldwide ban the use of steroids as a form of cheating. For more information on steroids and their side effects, see pages 254–55.

# The Continuum of Drug Use

## Weighing the Hazards of Substance Abuse

**U**sing drugs for non-medical reasons almost always poses a degree of risk. Risk can range from very low to very high, and harm can occur even if it is your first time.

The **Continuum of Drug Use** is a way of measuring your potential drug use and the risks associated with it.

### Levels of Use

There are different types or levels of drug use, and each of these has a certain level of risk that accompanies it:

It is estimated that about 1/3 of young Canadians choose not to use tobacco, alcohol, or any illegal substance. Non-use is the healthiest choice, because it involves zero risk.

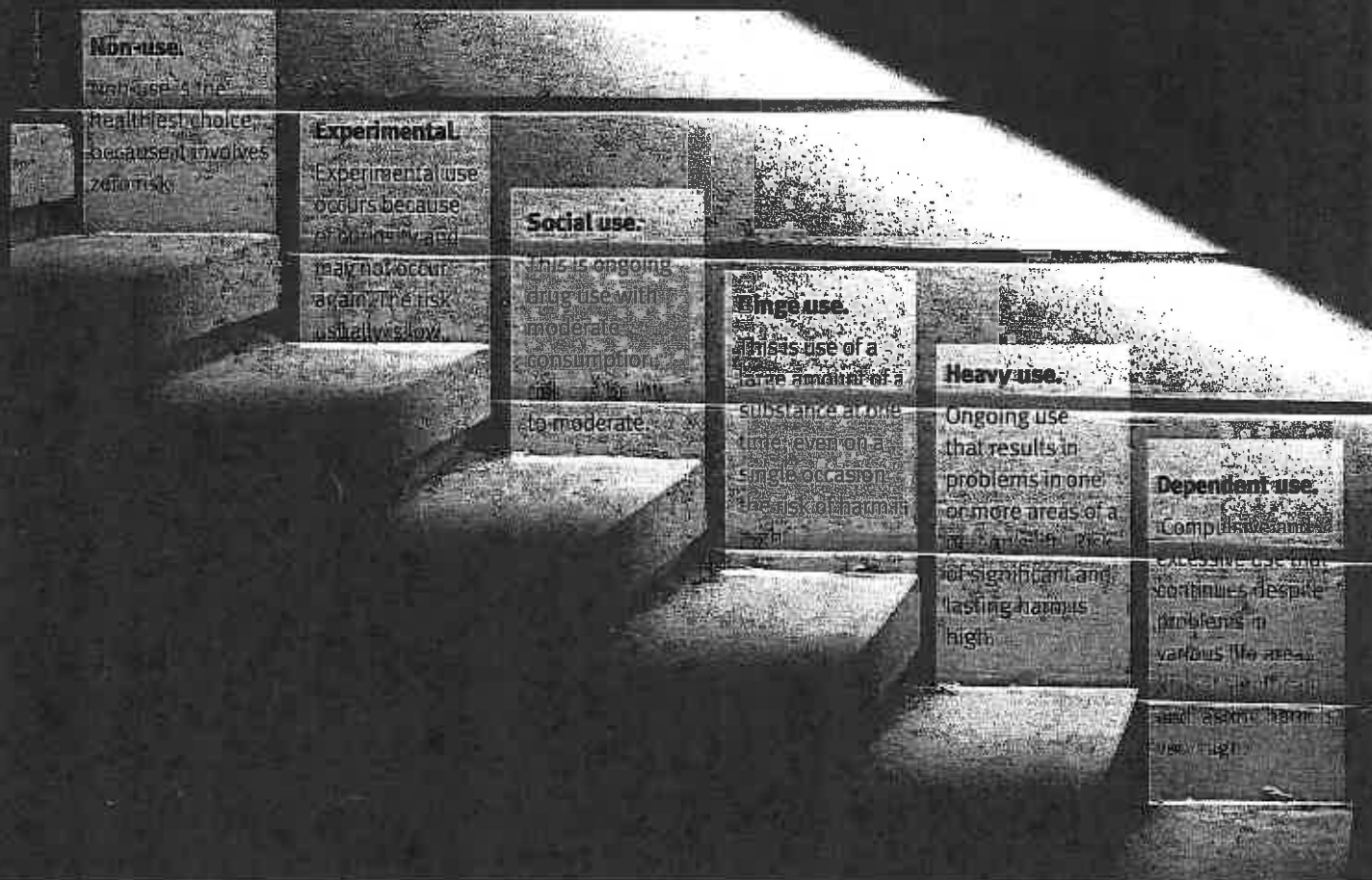
**Experimental use** occurs because of curiosity and may not occur again. The risk usually is low, but it depends on several factors: the drug taken, how it is taken, and how much of it is taken; the user's personality, mood, and expectations; and the surroundings. The risks can be higher for inexperienced users, who may accidentally take too much or not know how to handle the drug's effects.

This is ongoing drug use with moderate consumption. The risk can be low to moderate depending on the particular drug and how it is used.

This is use of a large amount of a substance at one time. Even on a single occasion the risk of harm is high.

This is ongoing drug use that leads to problems in one or more areas of a person's life (e.g., study, work, friendships, family relations). Risk of significant and lasting harm is high.

This is compulsive and excessive drug use that continues despite problems in various life areas (for example, employment, relationships, etc.). Risk of significant and lasting harm is very high.



## Use and Abuse

**W**hat is the difference between drug use and drug abuse?

- If a person's substance use makes it difficult to carry on with the rest of his or her life, then that person is abusing the substance.
- If a person is using a substance in order to "cope" with other problems, such as stress, shyness, or pain, that person is abusing the substance.
- If a person is using a substance for a medical purpose without medical supervision, or in a way that doesn't match the prescription, that person is abusing the substance.

Many people consider any illegal drug use to be drug abuse.

## What's the Harm in It?

Often we hear rumours of celebrities using illegal substances. You may know some people who use drugs and don't seem to be harmed. Indeed, some drugs, such as alcohol, and tobacco, are legal for adults, therefore it's easy to wonder what the fuss is all about.

Society does not present a very consistent message about the risks of substance use and abuse. All drugs, including the readily available, socially acceptable ones, carry risks for users and abusers, but not all drugs carry the *same* risks.

### Safety Concerns

Most substances (e.g., alcohol, cannabis, amphetamines) affect the user's judgment and motor coordination. Intoxication can cause users to make unsafe choices. This makes any kind of physical activity, such as using equipment or machinery, or even playing sports, very dangerous.

### Long-Term Physical Health Problems

Introducing a foreign substance into the body on a regular basis may have long-term physical effects. The risks associated with some substances, such as tobacco, decrease greatly when a person stops using them. With other substances, such as methamphetamine, it is not clear whether the effects are reversible. With still other substances, such as anabolic steroids, some of the effects are clearly not reversible.

### Mental Health Problems

Casual use of some drugs such as amphetamines, ecstasy, and crystal meth can cause short-term anxiety and other negative feelings. Longer-term use can lead to more serious mental health problems. People with mental health problems often use substances to "self-medicate" their condition, but this is ultimately self-defeating because the highs and lows of intoxication will likely aggravate mental health problems.

### Cognitive Problems

Some substance use has a clear effect on the way users perceive and understand what is going on. For example, even short-term use of cannabis, cocaine, and ecstasy has been shown to impair short-term memory and the ability to concentrate. These effects can make it difficult for young people to develop a strong, positive identity, and to learn the coping skills they need.

### Violence and Crime

Many substances reduce inhibitions, give users a sense of self-confidence and invulnerability, and impair judgment. These effects can lead to violent behaviour. Alcohol has the strongest link with violent acts—an estimated 40–50 percent of the violent crimes committed by inmates in Canadian correctional facilities involved alcohol.

## No Quality Control for Illegal Drugs

Although it is a serious criminal offense, new illegal drugs are constantly being developed. Many of the drugs currently available, such as crystal meth and MDMA (ecstasy), are manufactured in secret labs found in barns, mobile homes, motel rooms, houseboats, storage units, and basements by drug dealers, not chemists. There is no quality control over their production and, unlike real pharmaceutical laboratories, these labs have no guidelines for cleanliness or scientific procedures. During the manufacturing process, it is easy to make errors that can cause poisoning. Even if no impurities are purposely added to the drug, it may become contaminated because of poor or dirty facilities.

## The Risk of an Overdose

The risk of an overdose is also always present. Users of opiates, such as heroin, develop a tolerance to the drug. This increases the risk of overdose because users have to take larger doses to get the same effect, until they have taken so much of the drug that their bodies can't cope. Injecting a drug holds a greater risk than swallowing a drug. Mixing drugs can greatly increase the possibility of overdose because the drugs may work together to produce a stronger reaction.



Most substances affect the user's judgment and motor coordination, making any kind of physical activity very dangerous.

## Binge Use of Substances Risking It All

**W**hen young people in Canada drink alcohol or use another substance, they are more likely than adults to do so past the point of intoxication. Young people also may feel that they haven't had the full experience unless they have consumed to excess.

This is known as **bingeing**.

With alcohol, a female is considered to be bingeing when she has four or more drinks per drinking occasion. A male is considered to be bingeing when he has five or more drinks per drinking occasion.

The limit is higher for males because women's bodies have a higher proportion of fat tissue than men's, so their bodies absorb alcohol more quickly. With drugs other than alcohol, bingeing is not so easy to measure, but it is still defined as using a substance past the point of intoxication.

Combining drugs such as marijuana and alcohol, or alcohol and certain pharmaceutical drugs, can have a multiplier effect. Much less of each substance may be necessary to intoxicate an individual than would otherwise be the case if either substance was used alone.

### Bingeing Is Dangerous

Bingeing is a major cause of death and injuries due to accidents or violence, often a result of impaired judgment or an overdose. Bingeing on alcohol can also result in fetal alcohol spectrum disorder (FASD) if the binger is pregnant.

This pattern of substance use can also contribute to problems with parents, trouble with authorities, poor performance in school, unwanted and unprotected sexual activity, and an increased risk of HIV infection.



## How Drug Use Begins

People often believe that using mood-altering drugs will make them feel better or contribute to their enjoyment of sensory stimulation. Other factors also influence some young people to use substances.



Advertising often sends the wrong message by linking drugs with good times, popularity, and success.

### Culture and Media

Popular culture, which sometimes glamorizes the use of alcohol and other drugs, influences young people in Canada and around the world through the Internet, television, and movies. An example of this is the powerful advertising messages that link the consumption of alcoholic beverages with images of good times, popularity, and success.

### Curiosity

Drug issues are often in the news and frequently a topic of conversation among adults and teenagers. Curiosity is natural in young people (and most often a positive trait), so it is not surprising that some teens become curious enough to experiment with alcohol or other drugs.

### Social Acceptance

Some young people may feel pressure to smoke, drink, or use other substances if their friends do, and some believe that substance use is a way to gain acceptance to a particular social group.

### Lack of Knowledge About the Risks

Information is important. Young people may use a new drug heavily before good information is available about its risks. Conversely, fewer young people will choose to use a potentially harmful drug if they have believable, accurate information about its risks.

### Celebrations and Religious Observances

Drugs (alcohol, for example) are often a part of family or community celebrations and religious services. These are events in which people tend to value drugs more for their symbolic importance than for their effect.

### Everyday Emotional Pressures

Mood-altering substances hold the promise of temporarily improving feelings. That is why some stressed or anxious people—young or old—may find legal and/or illegal substances appealing.

### Mental Health Problems

Up to 15 percent of Canadian children and adolescents may experience clinical mental health problems such as anxiety disorder, attention deficit hyperactivity disorder (ADHD), depression, or schizophrenia. People with such problems are at risk for substance abuse because they may look to various drugs to “self-medicate” for the distress they feel.

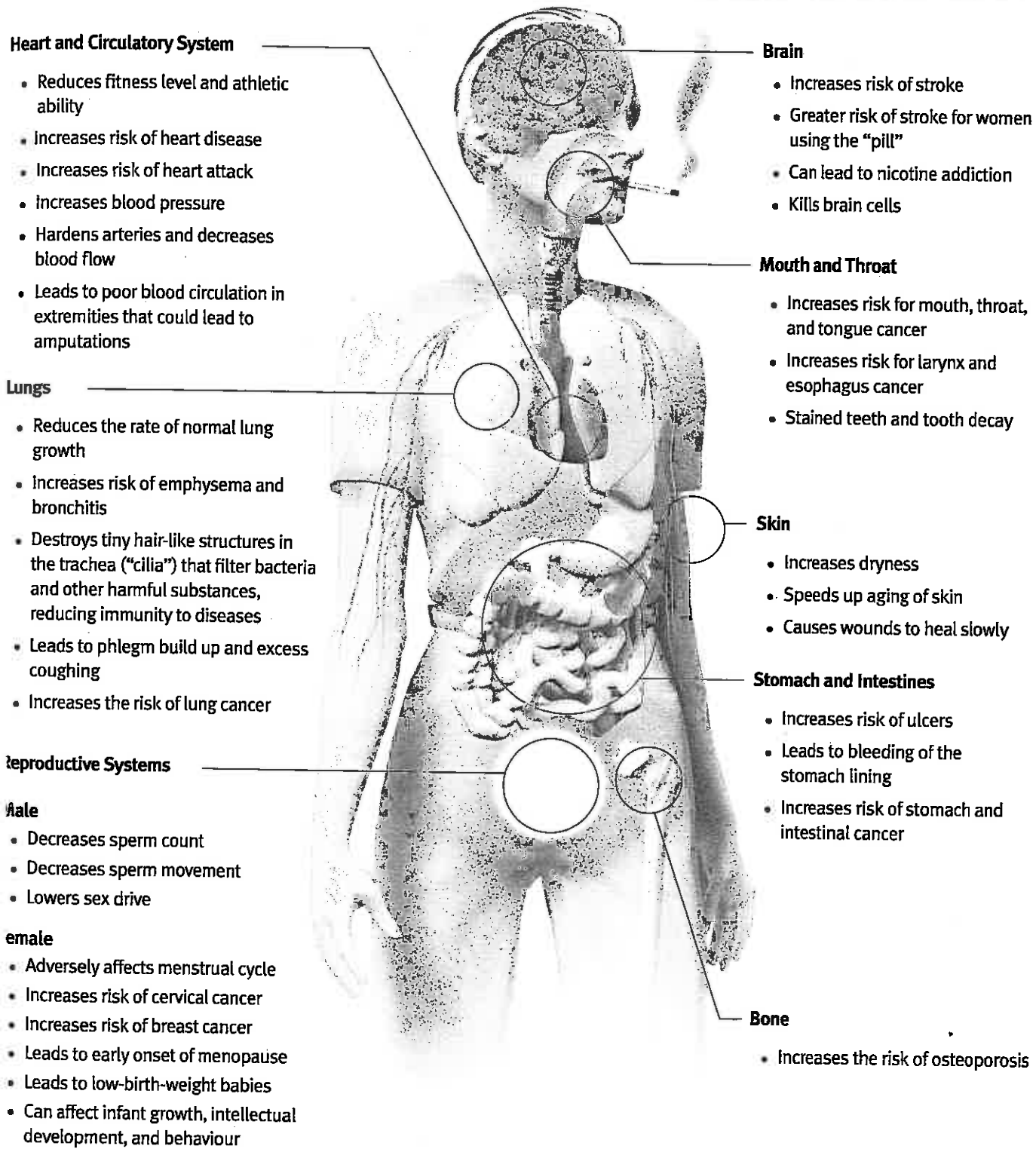


The desire to be accepted into a social network or the pressures of friends is a reason young people may drink or try other substances.



# The Long-Term Health Effects of Smoking Tobacco

## Leaving No Body Part Unharmmed



Over the years, many of these effects of tobacco can be reversed if the individual quits smoking.

# The Long-Term Health Effects of Alcohol

## Leaving No Body Part Unharmmed

### Heart and Circulatory System

- Damages heart muscle and can lead to heart failure
- Weakens the heart's ability to pump blood
- Increases risk of high blood pressure
- Increases risk of heart attack
- Increases risk of stroke
- Reduces the production of red and white blood cells

### Liver

- Increases risk of developing cirrhosis (where scar tissue is formed in the liver as a result of dead liver cells)
- Increases risk of liver cancer
- Promotes excess fat to build up in the liver blocking the flow of blood to liver cells causing liver damage
- Can cause liver failure leading to coma or death

### Reproductive Systems

#### Male

- Decreases sperm count
- Leads to impotence

#### Female

- Increases reproductive problems such as irregular periods
- Drinking during pregnancy could lead to fetal alcohol syndrome

### Brain

- May lead to physical and psychological dependence on alcohol
- Leads to memory loss
- Disturbed sleep patterns
- Kills brain cells
- Affects normal growth patterns
- Impairs ability to think clearly
- May lead to mood swings and violent behaviour

### Pancreas

- Leads to inflammation of the pancreas. This blocks the entry to the small intestines, stopping pancreatic chemicals from entering the small intestines. These pancreatic chemicals begin to kill the pancreas. Death can result in severe cases.

### Stomach and Intestines

- Leads to ulcers, inflammation, and bleeding
- Leads to loss of appetite and vitamin deficiencies

### Bone

- Interferes with calcium absorption
- Leads to osteoporosis

Over the years, many of these long-term effects of alcohol can be reversed if the individual quits drinking.

## Dealing with Marijuana Dependence

Contrary to what some believe, psychological and physical dependence on marijuana, and other forms of cannabis, does occur in people who use these substances regularly and heavily. Users also develop a tolerance to marijuana and, as a result, they gradually need more to get the same effect.

Withdrawal symptoms may be relatively mild compared to other substances, but they include anxiety, irritability, sleeping problems, sweating, and loss of appetite. These withdrawal symptoms and psychological cravings can make it difficult for long-term marijuana users to stop using the drug. As with any drug, dependence on marijuana is characterized by compulsive use, increased focus on acquiring and using it, and continued use despite growing problems.

Treatment for marijuana dependence is much like treatment for other substance dependencies, and it usually involves learning the skills to live well without the use of any substance. Although some people may be able to learn to control their marijuana smoking and remain occasional users, a person who has developed a full dependency usually will find it very difficult to control.



Lack of motivation and lack of interest in life have been linked to marijuana use.

### IMMEDIATE, SHORT-TERM, AND LONG-TERM EFFECTS OF MARIJUANA USE

EFFECT	IMMEDIATE	SHORT-TERM	LONG-TERM
Red eyes	✓		
Dry mouth/throat	✓		
Short-term memory loss	✓	✓	
Enhanced sensory perception	✓		
Paranoia	✓	✓	
Lack of coordination		✓	
Increased heart rate	✓		
Anxiety	✓	✓	
Concentration problems	✓	✓	
Trouble with problem solving	✓	✓	
Cancer			✓
Respiratory problems			✓
Mental health problems			✓
Dependence			✓

## The Classification of Illegal Drugs—The Risks and Effects

CLASS AND EXAMPLES	EFFECTS (CAN HAVE AT LEAST ONE OF THESE EFFECTS)	HARMS/DANGERS (CAN INCLUDE SOME OF THESE)
<b>CANNABIS</b>		
Marijuana	Drowsiness, relaxation	Impaired driving
Hash	Feelings of well-being, euphoria	Linked to schizophrenia
Hash oil	Increased appetite	Panic reactions
<b>HALLUCINOGENS</b>		
Mescaline	Altered/distorted body image	Panic reactions
Ecstasy	Feelings of enhanced mental capacity	Psychosis
Phencyclidine (PCP, "angel dust")	Muscle twitches	Flashbacks
Lysergic acid diethylamide (LSD)	Dizziness, nausea, vomiting	Anxiety and depression
Psilocybin ("magic mushrooms")	Out of touch with reality	Memory and thinking problems
	Visual and auditory distortions, hallucinations	Poor judgment leading to serious accidents or death
<b>CENTRAL NERVOUS SYSTEM DEPRESSANTS</b>		
Alcohol	Decreased inhibitions	Respiratory depression
Solvents, inhalants	Increased confidence	Seizures
Minor tranquilizers (Valium®, Ativan®)	Relaxation	Liver disease
Sleeping medications (Halcion®, Imovane®)	Intoxication	Heart disease
Barbiturates (Tuinal®)	Poor judgment	Increased risk of cancer
	Slurred speech	Fetal alcohol spectrum disorder
	Impaired memory/thinking	Fatal overdose
	Decreased motor skills	Brain damage
<b>OPIATES/NARCOTICS (A SUB-CLASS OF CNS DEPRESSANTS)</b>		
Various prescription pain killers	Pain killer (analgesia)	Hepatitis (from sharing needles)
Morphine	Drowsiness	HIV/AIDS (from sharing needles)
Codeine	Intoxication followed by euphoria	Increased risk of some cancers
Heroin	Constipation	Brain damage
	Decreased breathing rate	Pulmonary problems
	Pinpoint pupils	Fatal overdose
<b>CENTRAL NERVOUS SYSTEM STIMULANTS</b>		
Amphetamines (including crystal meth)	Euphoria	Paranoid psychosis
Ritalin® (methylphenidate)	Increased energy	Depression
Cocaine and crack	Increased heart rate, blood pressure	Seizures
Nicotine	Decreased appetite	Insomnia
Caffeine	Dilated pupils	Sexual disinterest
	Feelings of enhanced sociability, sexuality, and confidence	HIV/AIDS (from sharing needles)
		Heart attacks/stroke
		Extreme anxiety, panic states
		Hallucinations

## Consequences of Marijuana Use

The effects of smoking marijuana are almost immediate and last from 2 to 4 hours. If the drug is eaten, effects appear more gradually, last longer, and can be more intense.

Typically, use of marijuana or cannabis causes red eyes, dry mouth and throat, increased appetite, and problems with concentration and short-term memory. Although basically a hallucinogen, marijuana also produces a mix of depressant effects, such as relaxation, and stimulant effects, such as increased heart rate. Sensory perception seems enhanced, and sense of time and space is distorted.

Some people experience more intense, unpleasant effects including hallucinations, anxiety, and depression, while a few experience panic, paranoia, or an increase in psychiatric symptoms that already existed.

### Physical and Psychological Effects

With most drugs, including marijuana, the longer and more heavily a person uses, the more likely it is that he or she will suffer from long-term effects:

- **Respiratory system.** Like tobacco smoke, marijuana smoke damages the respiratory system. Both contain many of the same carcinogens (cancer-producing chemicals), but marijuana smoke contains more tar and higher amounts of carcinogens. Marijuana smokers inhale more deeply and hold the smoke in their lungs longer—as a result, respiratory problems can occur from smoking less cannabis than tobacco.
- **The mind.** Long-term, heavy use of marijuana leads to problems with memory, concentration, and the brain's ability to organize and process complex information. Lack of motivation and lack of interest in life also seem to go hand in hand with regular, long-term marijuana use (although no one knows for sure if this is a direct effect of using, or a reason that a person might start using).
- **Mental and emotional health.** Recent important research has shown that marijuana use can make symptoms of schizophrenia (a serious mental disorder) worse in people who already have it. It also can bring on the disorder if a person is predisposed to it. Long-term marijuana use also may bring on schizophrenia in a person who has no predisposition to it.
- **Pregnancy.** Marijuana should not be used by pregnant women. Studies have shown that marijuana use during pregnancy can have a negative effect on the mental development of a child.
- **Dependence.** Users can develop a tolerance and will gradually need more to get the same effect. Treatment programs in Canada report that marijuana is the drug of choice for an increasing number of their patients.

### Marijuana Use and Driving

In Canada, the use of marijuana and other forms of cannabis has risen in the past number of years, and so have concerns over people driving under the influence of the drug.

Cannabis use before driving (or involvement in any other activity that requires coordination, such as using machines or playing sports) is dangerous. Cannabis use reduces motor coordination, especially when used in combination with alcohol.

THC, the major psychoactive ingredient in cannabis, has been found in the bodies of many fatally injured drivers and pedestrians in Canada and the United States.

## What are "Club Drugs"?

**T**he term **club drugs** refers to a range of illegal and dangerous substances associated with some nightclubs and other dance or party venues.

Little is known about the long-term effects of these substances. A major concern is that often they contain unknown additives or impurities. This means that the results can be unpredictable and potentially very harmful, especially when these substances are used in combination with alcohol or other drugs.

In addition to LSD, ecstasy, crystal meth, and speed (discussed in this chapter), this group of illegal substances includes ketamine, GHB, and Rohypnol®.

The latter are the so-called "date-rape drugs" that are sometimes used intentionally to sedate unsuspecting victims. The victims are then sexually assaulted.

Date rape is a form of violent, sexual assault and is a very serious criminal offence.

## Hallucinogens

The **hallucinogens** include a wide range of both naturally occurring substances (e.g., mescaline, peyote, psilocybin) and synthesized substances (e.g., LSD, PCP, MDA, MDMA or ecstasy). Hallucinogenic drugs greatly distort the senses and, as their classification implies, can cause hallucinations. Most of these substances are taken orally.

### LSD

**LSD (lysergic acid diethylamide)**, commonly known as "acid," is one of the most common hallucinogenic drugs. It is manufactured from lysergic acid, which is found in a fungus that grows on rye and other grains. It is very powerful; there are 3,000 doses of pure LSD in a pill the size of an aspirin. Pure LSD is a tasteless, odourless, fine white powder that is sold in capsules or tablets.

As is the case with other drugs, the effects of LSD are unpredictable. Usually, the user feels the first effects of the drug 30 to 45 minutes after taking it. Emotional reactions vary greatly. Users may feel several emotions in quick succession—euphoria (a feeling of extreme well-being) can quickly change to sadness or fear, and then back again. It is not uncommon for users to experience disorienting sensations that can lead to a "bad trip" involving anxiety, and terrifying thoughts and feelings. Because LSD trips last 12 hours or more, a negative experience can be extremely disturbing.

A person cannot overdose or become physically dependent on LSD, but regular users can experience upsetting flashbacks in which they feel the effects of LSD without taking the drug again.

### Ecstasy

**Ecstasy (methylenedioxymethamphetamine, or MDMA)** is considered a hallucinogen but it also has stimulant effects. It is made in illegal drug labs and goes by other names such as E, XTC, Adam, Euphoria, X, MDM, and Love Doves. It comes usually in gelatin capsules or tablets. The pills can be any colour, and they may have a design on one side such as a dove or a diamond. Ecstasy can also come as a powder that users snort or, less commonly, dissolve and inject.

As is the case with other drugs, the effects from ecstasy have a great deal to do with the state of mind and health of the user. Initially, users' pupils become dilated, their jaw tightens, and often they experience nausea, sweating, and dry mouth and throat—effects that are common with other stimulants. Their blood pressure and heart rate increase and they often lose their appetite. Some users also report a heightened sense of their surroundings, greater appreciation of music, and a heightened sensual experience.

The effects of long-term ecstasy use include impairment in short-term memory, depression, mood changes, and disrupted sleep patterns. Users also may experience flashbacks or psychosis. The signs of an overdose include eye-rolling, chest pain, and seizures.

## Effects and Consequences of Cocaine

Cocaine users describe a range of effects from cocaine, saying they feel more alert, energetic, confident, physically strong, and intelligent. Although they may perceive those benefits, they actually are experiencing numerous negative psychological and physical effects, including rapid heart beat and fast breathing, dilated pupils, sweating, and decreased appetite.

Large doses can cause severe agitation, paranoid thinking, erratic or violent behaviour, muscle spasms, tremors, twitching, hallucinations, headache, pressure in the chest, nausea, blurred vision, fever, convulsions, and death. Impurities in street cocaine can bring on a fatal allergic reaction. People typically experience depression and extreme tiredness as a “hangover” from cocaine use.

Repeated use of cocaine may cause long-lasting problems with memory, attention, and behaviour. Chronic users, who alternate cocaine “binges” with crashes (periods of abstinence), often experience mood swings, restlessness, extreme excitability, sleep disorders, suspiciousness, hallucinations and delusions, eating disorders, weight loss, constipation, and sexual problems. People who inject cocaine get a short-lived high, so they need to inject a number of times a day to maintain the high. If they share needles, this greatly increases the risk of contracting HIV and/or hepatitis.



Caffeine is a common stimulant that speeds up or excites the central nervous system.



Repeated cocaine use leads to use of larger amounts because of the tolerance for the drug that regular users develop.

- **Your physical health.** Steroids can be very dangerous to your overall health. For example, if you inject steroids and share your needles or vials, you can become infected with Hepatitis B and C. You also put yourself at serious risk of getting HIV/AIDS. Some of the other side effects are just as serious, and can include high blood pressure, damage to the liver (and liver cancer), damage to the kidneys, and high cholesterol (leading to heart attack or stroke).
- **Your reproductive health.** Steroids can wreak havoc on your reproductive organs. In boys, steroids can shrink the testicles and cause impotence (difficulty in achieving erection). In girls, steroid use can cause irregular periods. In both girls and boys, it can cause infertility.
- **Your psychological health.** Your personality can undergo a number of changes as well. You can experience uncontrollable bursts of anger and aggressiveness, or even violence, which is known as “roid rage.” You can experience depression, mood swings, nervousness, or edginess. You can even impair your learning and memory.



Long-term effects of steroids include shrunken testicles, impotence, severe acne, liver damage and stunted growth.

## Effects of Steroids on the Body

### More than You Bargained for ...

**S**teroids have a number of effects on the sexual characteristics of both males and females, which can change the user's appearance, sometimes drastically. They can also affect your physical, psychological, and reproductive systems.

Long-term use of steroids can cause the following changes to the user's body:

#### Specifically in Boys and Men

- Shrunken testicles, leading to impotence
- Impaired sperm production, leading to infertility
- Breast growth and tenderness
- Hair loss

#### Specifically in Girls and Women

- Irregular periods, or loss of periods, leading to infertility
- Deepening of the voice
- Growth of facial and body hair
- Shrinkage of breasts
- Growth of clitoris

#### In Men and Women

- Severe acne
- Stunted growth
- Muscle spasms
- Decreased flexibility
- Water retention
- Nose bleeds
- Kidney damage
- Liver damage
- Weakened immune system
- Increased blood pressure
- Increased cholesterol