SKILLS FOR ADOLESCENCE, FOURTH EDITION

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Introduction

This guide was developed to provide teachers and parents in the Lions Quest Skills for Adolescence program with current information about harmful chemical substances and their effects. Accurate information about drugs and their effects is essential in countering the wide variety of pro-drug messages children see and hear every day. This knowledge is basic to helping young people grow up drug-free, one of the main goals of Skills for Adolescence.

This guide emphasizes the "no drug use by minors" premise that is central to the Skills for Adolescence program. The program rejects the idea of "responsible use" of any mind-altering chemical by young people. The only acceptable position for minors is "no use."

A special note to teachers: In developing this guide, it was impossible to anticipate every question your students may ask. Nor is it possible or even necessary for you to become an expert on drugs. If you find you need additional information about drugs and their effects, please contact knowledgeable resource people in your community. In addition, visit the web sites of the organizations listed below for current information and useful links. Also note that many of the terms used in this guide are defined in the glossary.

The guide is based on information from the following sources:
Health Canada
Lions Clubs International
National Clearinghouse for Alcohol and Drug Information (US)
National Clearinghouse on Tobacco and Health (Canada)
Canadian Centre on Substance Abuse
National Institute on Drug Abuse (US)
Partnership for a Drug Free America

Web site addresses (URLs) and telephone numbers for the organizations above are listed in the Resources section.

Take responsibility
for your health.
The Effects of Drug Use on the Body and Mind

A drug is any chemical substance that changes the way the mind or body works. Some drugs are medicines. Medicines can be helpful when used properly, but any drug, including misused medicines, can be harmful to the body's organs and systems.

Drugs can either speed up the body or slow it down. A drug that speeds up the body can increase the breathing rate and cause heart problems, including a heart attack. A drug that slows the body down can lead to unconsciousness and death.

Drugs that affect the brain can change the user's feelings, thoughts, and coordination. After using a drug, a person may have trouble doing something difficult, like driving a car—or even something simple, like walking. The use of drugs often leads to accidents and car crashes.

If drugs damage the reproductive organs of either the male or female, their children can be born with birth defects and other health problems.

Because drugs can hurt the body and mind in so many ways, the only drug that should ever be taken by young people is medicine prescribed by a doctor or taken with the advice of a trusted adult.

Ways to Stay Healthy

More and more health experts believe that the way we treat our bodies can help us live a long, healthy life. Here are some ways to stay well:

Eat a well-balanced diet—This includes avoiding foods with lots of fat and sugar and eating a variety of foods: fruits, vegetables, grains, meats, and dairy products.

Exercise regularly—Running, walking, swimming, and other exercise can help keep your heart, blood vessels, lungs, and all your body's systems strong and healthy. Exercise can be something you like to do and want to do—not a chore. Make it a healthy habit.

Exercise your mind—Reading, thinking, learning, and solving problems all help your brain work better.

Get enough rest and sleep—You can't be on the go all the time. Rest is just as important as exercise.

Enjoy yourself—The fast pace and pressures of modern living are a big source of health problems. You can reduce stress by doing almost anything you find fun and relaxing—working on hobbies, playing games, laughing with friends, or playing or listening to music.

Stay drug-free—Drug use is one of the major threats to your body's health and well-being. An important part of keeping your body healthy is refusing to use drugs.
MAJOR DRUG CATEGORIES

Mind-altering drugs fall into one of four categories:

- **Depressants**
- **Hallucinogens**
- **Narcotics**
- **Stimulants**

DEPRESSANTS

Depressants slow down the way the body works. Some depressants are sold legally as prescription drugs to help people feel calm or sleep, to prevent convulsions, and to reduce pain. The depressant drug called alcohol is sold legally to adults. Other depressants, such as quaaludes (KWAY-loads), are sold illegally.

**Alcohol**
See the "Alcohol" section in this guide.

**Barbiturates (bar-BICH-yer-ets)**
Barbiturates are prescription drugs that come in tablets and capsules and help people sleep. Brand names include Seconal and Nembutal. Phenobarbital helps prevent or reduce the frequency of convulsions. Street names: barbs, reds

**Methaqualone (meth-uh-KWAH-lone)**
These drugs are now illegal to make and sell. Those for sale may be much more dangerous than the type that used to be legal. Street names: quaaludes, ludes

**Tranquilizers (TRANK-wil-eye-zers)**
Usually available as capsules or tablets, tranquilizers are prescription drugs used for their soothing, calming effects. Brand names include Valium and Librium.
Effects on the Body and Health

Brain and central nervous system
Depressants slow down the brain and central nervous system. All of them can be addicting, especially barbiturates.

Heart, breathing
An overdose of depressants, slowing the heart and breathing, can lead to a coma and even death.

Muscles
Depressants relax the muscles, which can result in coordination problems and staggering.

Reproductive system
Use of depressants during pregnancy can lead to birth defects and addicted babies.

Effects on Behavior

As depressants slow down the brain's functioning, they can cause confusion, loss of concentration, memory and perception problems, and poor judgment.

Users may be poorly coordinated and have trouble speaking and thinking clearly. They may appear to be drunk.
Did You Know?

- People who use depressants on a regular basis need more and more of the drug to get the same effect. Users run a serious risk of overdose, leading to death.

- Depressant users often lose track of how many pills they have taken. Some use alcohol with other depressants, which increases the dangers of both drugs.

- When regular users stop taking depressants, they feel anxious, have trouble sleeping, and lose their appetite. They may experience headaches, stomach cramps or an upset stomach, shaking, and vomiting.

- Depressants are the most frequently prescribed drug. Not all of them are used as the doctor directed, though. Almost one-third of all drug-related deaths involve depressants.

- Because they have such a powerful effect on the brain, depressants must be used carefully, under the guidance of a doctor.
Hallucinogens (huh-LOO-sin-uh-jens) change the user’s perceptions, thinking, and emotions. Often users see or hear things that aren’t really there; that is, they have hallucinations (huh-lu-sin-AY-shuns). Hallucinogens can be either organic (taken from plants) or synthetic (created in laboratories). Some hallucinogens, such as LSD and PCP, are also known as psychedelics (sy-kih-DEL-ics).

All types of hallucinogens are illegal to buy or sell.

**LSD (Lysergic Acid Diethylamide)**
This odorless, colorless, and tasteless drug is one of the most potent mind-altering chemicals available. Tiny amounts can affect the user for many hours. LSD is a synthetic hallucinogen available on blotter paper (blotter acid), in thin squares of gelatin, in clear liquid, in aspirin-size tablets (tab acid), and in tiny tablets (microdots). LSD is swallowed, licked off paper, or even dropped into the eyes. Other street names: acid, sugar cubes, pearly gates, wedding bells, white lightning, supergrass, embalming fluid.

**MDMA / Ecstasy and MDA**
See the “MDMA/Ecstasy” section in this guide.

**Mescaline (MESK-uh-lin) and Peyote (pay-OH-tee)**
These closely related drugs from the peyote cactus plant come in tablets, capsules, or hard, brown discs that are chewed, swallowed, or smoked. Street names: mesc, buttons, cactus.

**PCP/Phencyclidine (fen-SIC-lih-deen)**
Developed in the 1950s as an anesthetic, Phencyclidine, or PCP, had such severe side effects that a law was passed forbidding its use by humans. Afterward PCP was used as an animal tranquilizer. PCP comes in liquid, capsules, white powder, or pills. It is swallowed, injected, or smoked after being sprinkled on cigarettes or marijuana. Street names: angel dust, rocket fuel, ozone, wack; when combined with marijuana: crystal supergrass, killer joints.

**Psilocybin (sil-oh-SY-bin)**
The psilocybin mushrooms are eaten fresh or dried. Magic mushrooms are often sold as tablets or capsules.

Many other plants have hallucinogenic effects. These include members of the nightshade family (deadly nightshade, jimsonweed, or “locoweed”) and amanita muscaria, a poisonous mushroom.
Effects on the Body and Health

Brain
Hallucinogens can change the user's perceptions even in relatively low doses. Users may also have problems with memory, attention span, and abstract thinking. Use can lead to headaches, sleeplessness, convulsions, and brain damage. A loss of coordination contributes to falls and other accidents.

Eyes
Use results in dilated (widened) pupils, blurred vision, and sometimes rapid eye movement.

Heart, blood circulation
Use of these drugs can cause high blood pressure, increased heart rate, shakiness, and increased body temperature.

Digestive system
Users may suffer an upset stomach, vomiting, cramps, and loss of appetite.

Reproductive system
The use of hallucinogens during pregnancy can cause birth defects.
Effects on Behavior

Hallucinogens can change the thoughts, feelings, and behavior of the user, often in unexpected ways. Use of these drugs can lead to worry, depression, panic, paranoia, or long-term mental disturbance.

A “bad trip” (bad experience) is common. Users are often left with a tense, nervous feeling.

Users of PCP may become out of control and violent. In addition to causing poor judgment, the drug decreases the user's ability to feel pain, contributing to serious accidents and self-inflicted injury.

Among users of PCP, drownings are not uncommon. PCP raises the body temperature and makes the user's skin feel hot and dry. The user may bathe or swim without enough physical control and awareness to survive.

Did You Know?

- **Death is a common consequence of using hallucinogens. It can result from car crashes, falls, burns, other accidents, and overdoses.**

- **Some people who use hallucinogens have “flashbacks” weeks or even months later. Without taking the drug again, they experience some of the same perceptual problems as when they were using the drug. Flashbacks can be frightening, causing the person to feel out of control.**
Narcotics

Description
Narcotics dull the senses, relieve pain, and, if misused, can lead to unconsciousness and death.

Narcotics called opiates come from the seeds of a poppy plant that grows mainly in Asia and the Middle East. Wild poppies that grow in North America are not a source of narcotics, however. Opiates from plants include opium, morphine, codeine, and heroin. Other narcotics, such as Demerol, are made in laboratories.

Many narcotics are prescribed by doctors as pain relievers, but they are also bought and sold illegally.

Codeine (KOH-deen)
Codeine comes in tablets, capsules, and liquids. Because of its painkilling effects, small quantities of codeine are included in many medicines, such as Tylenol, Empirin, and some cough medicines. Street name: schoolboy

Demerol, Dilaudid
Doctors prescribe these synthetic narcotics in pill form to kill pain. Street name for Dilaudid: lords

Heroin
This white-to-dark-brown powder or tar-like substance made from morphine is highly addictive. Heroin, which is usually injected, is the strongest of all opiates. It is illegal to buy or sell heroin. Street names: smack, H, horse, junk

Methadone
Available in pills or liquids that can be swallowed or injected, methadone is a manufactured drug used to prevent the craving to use other opiates. It is often given to heroin addicts to help them stop using that drug. Although not so dangerous as heroin, methadone is also highly addictive. Street names: fizzes, dollies
**Morphine**
This painkilling drug comes in tablets or liquids that are swallowed, injected, or smoked.

**Opium**
This drug comes in dark brown chunks or powder and is smoked or eaten. It is illegal to buy or sell opium.

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**Effects on the Body and Health**

**Brain**
Narcotics affect the brain, making the user calm or drowsy. They can also kill pain.

Drugs in this category are highly addictive; regular users quickly need larger and larger doses to get the same effect.

**Eyes, skin**
Constricted (narrowed) pupils, watery eyes, and itchy skin are common side effects.

**Heart, breathing**
An overdose of narcotics causes slow, shallow breathing; cold, clammy skin; convulsions; coma; and possibly death.

**Digestive system**
Four to six hours after the last dose of a narcotic, the addict experiences diarrhea, stomach cramps, chills, sweating, an upset stomach, and vomiting. Although these symptoms eventually go away, sleeplessness and craving for the drug can last for months. Addicts often suffer from malnutrition because they don’t eat properly.

**Reproductive system**
Pregnant women who use narcotics risk having premature, stillborn, or addicted babies.

Over time, narcotics users can develop heart infections, congested lungs, and skin diseases. Using unclean mixtures of narcotics or infected hypodermic needles may result in hepatitis, tetanus, or AIDS.
Effects on Behavior

Narcotics users may feel drowsy and depressed while using the drug. However, addicts feel desperate and panicky when they can't get another dose, and their behavior may become increasingly wild and erratic.

DID YOU KNOW?

- In the 1800s, doctors commonly used narcotics as painkillers. Narcotics were also included in over-the-counter drugs. Eventually the addictive nature of these drugs led to strict laws governing how they are used. Any use of certain narcotics, such as heroin and opium, was outlawed.

- People who use narcotics often develop a psychological addiction to these drugs. This addiction can last long after they have overcome their physical addiction.

- People addicted to heroin are often referred to as "junkies." Usually they inject the drug into veins on their arms and spend most of their time under the influence of the drug. The injections leave scars called "track marks" up and down their arms. Many heroin addicts need several shots of this drug every day. Some rob stores and mug people on the street to get money to buy more heroin.

- Crime related to making, smuggling, and selling narcotics costs society billions of dollars every year. Many more millions are spent fighting crimes committed by users who rob others to get money to buy drugs.
MAJOR DRUG CATEGORIES

Mind-altering drugs fall into one of four categories:

- depressants
- hallucinogens
- narcotics
- stimulants

STIMULANTS

Description

Stimulants
Stimulants speed up the body’s functioning. Some mild stimulants, such as caffeine, are legal for anyone to use. Others are illegal for everyone to buy or sell. Doctors sometimes prescribe stimulant drugs to help depressed people function normally or to reduce the appetites of very overweight people.

Amphetamines (am-FET-uhmins)
Prescription amphetamines include Benzedrine (bennies) and Dexadrene (dexies). Amphetamines usually come in capsules, pills, and tablets and are swallowed, injected, or inhaled. Other common street names: black beauties, pep pills

Antidepressants
Antidepressants are prescribed by doctors to treat depressed patients. These drugs can have harmful side effects, such as fatigue, poor coordination, problems in concentration, and blurred vision.

Caffeine
Caffeine is a relatively mild stimulant and may be the world’s most commonly used drug. It is in many beverages, chocolate, aspirin, over-the-counter cough and cold remedies, and drugs to keep people awake. It’s also a major ingredient in many drugs sold on the street, such as speed, uppers, or PCP.

Caffeine reduces tiredness, but it also increases the heart rate, blood pressure, and body temperature. Other effects include increased urine production, higher blood sugar levels, and delayed sleep. Extremely high doses of caffeine may cause an upset stomach, diarrhea, sleeplessness, shakiness, headache, and nervousness.

Cocaine and Crack
See the “Cocaine and Crack” information sheet.
Ice
An extremely dangerous drug, ice is a type of methamphetamine (see below) manufactured illegally, mainly in Southeast Asia. Its odorless white crystals are smoked in a small pipe. Ice is highly addictive and far more powerful than other amphetamines. Its effect is immediate and lasts from 12 to 24 hours. The "crash" is even more severe than after using other amphetamines. The user may become aggressive, have hallucinations, feel paranoid, or die from kidney failure. "Ice babies," born addicted as a result of their mothers' addiction, may be permanently damaged physically and emotionally. Other street names: crystal, glass

Methamphetamines (METH-am-fet-uh-mins)
This is a form of amphetamine with a common prescription drug name of Methedrine. Methamphetamines come as white powder, pills, or a wax-like rock. They are swallowed, injected, or inhaled. Street names: meth, speed, chalk

Methcathinone (meth-CATH-uh-non)
This drug looks like salt crystals and is usually inhaled. Manufactured illegally, methcathinone is a form of methamphetamine and has similar effects. Street name: cat

Nicotine
See the "Tobacco" information sheet.

Effects on the Body and Health

Brain
Stimulants speed up the brain's functioning. They can cause shakiness, loss of coordination, and physical collapse. Heavy use can result in permanent brain damage.

Many types of stimulants are highly addictive.

Use of amphetamines is often followed by an extremely difficult period of withdrawal called "crashing." During withdrawal, users may experience convulsions and paranoia.

Eyes
Dilated (widened) pupils and redness are common side effects.

Heart, blood circulation
Stimulants speed up and strain the cardiovascular system, which can lead to rapid heartbeat, high blood pressure, and irregular heart rhythm. An injection of a stimulant can create a sudden increase in blood pressure, resulting in a stroke or heart failure.

Digestive system
Stimulants decrease the appetite. People under the effects of strong stimulants, such as amphetamines and cocaine, may go for a long time without eating or sleeping. Lack of food and sleep leaves the user open to infections and illness.
Effects on Behavior
Even mild use of stimulants can produce anxiety, moodiness, and restlessness. Larger doses can lead to severe nervousness and depression when the effect of the drug begins to wear off.

People under the effects of stimulants may seem disoriented and distracted, talk very fast, and not make sense. This is sometimes referred to as "speeding."

Amphetamine use can lead to strange, sometimes violent behavior as the user develops a severe mental disturbance called "amphetamine psychosis."

DID YOU KNOW?

- Some people use stimulants to counteract the drowsiness or "down" feeling caused by depressants, such as sleeping pills or alcohol. The up-and-down cycle that results from using both stimulants and depressants can cause greater damage to the body than the effects of either type of drug alone.

- Many stimulants have been illegally manufactured as "look-alike" drugs. (See "Designer Drugs and Look-Alikes."

- Ritalin is a prescription stimulant commonly used to treat attention deficit disorder in children. Misuse of Ritalin can produce the same harmful effects as the use of amphetamines. Some addicts try to dissolve Ritalin tablets in water and inject the solution. However, solid substances from the tablets can block their blood vessels and damage their lungs and eyes.

- Use of amphetamines is often followed by an extremely difficult period of withdrawal called "crashing." During withdrawal, users may experience convulsions and paranoia.
ALCOHOL, ETHYL ALCOHOL, ETHANOL

Description
Alcohol is a depressant and slows down the body's functioning. (For more information, see "Depressants.") Alcohol is a liquid made by fermenting (causing chemical changes in) various organic substances, such as grapes and certain grains. It comes in beer, wine, wine coolers, and in many forms of liquor, including whiskey, gin, vodka, rum, and brandy. Street names: booze, juice, sauce, hootch.

In the United States, it is legal for people age 21 and over to buy and use alcohol. In Canada, the legal age varies from province to province.

Effects on the Body and Health

How alcohol travels through the body
Alcohol passes from the mouth through the esophagus (eh-SAHF-th-gus) into the stomach and intestines. From there it quickly enters the bloodstream and affects most of the body organs. The liver and the kidneys filter out some of the poisons in the alcohol.

Brain
Using alcohol cuts down the flow of oxygen to the brain. The first area of the brain affected by alcohol is the part controlling judgment.

Other effects may include poor coordination and balance. Alcohol can dull the drinker's senses, and heavy drinking can permanently destroy brain cells. As the brain slows down, it, in turn, slows the heartbeat, breathing rate, and digestion. Heavy drinking can result in unconsciousness or death.

Eyes
Alcohol relaxes the eye muscles, making it difficult to focus.

continued
Heart
Alcohol weakens the heart muscle, reduces the amount of blood pumped to and from the heart, and can produce dangerous changes in the rhythm of the heartbeat. Drinking alcohol can lead to high blood pressure. It also widens blood vessels near the surface of the skin, causing loss of heat.

Lungs, breathing
Small doses of alcohol can increase the breathing rate, while large doses are more likely to slow it down.

Digestive system
Alcohol irritates the lining of the entire digestive system, including the throat, esophagus, stomach, intestines, and pancreas. It can cause problems ranging from vomiting to ulcers to cancer.

The liver, which works to filter alcohol out of the bloodstream, suffers more than any other organ. Alcohol eventually kills liver cells. Heavy drinking over a long period of time can lead to cirrhosis (suh-RO-sis) of the liver, a leading cause of death among alcoholics.

Muscles
Alcohol can lead to muscle weakness and breakdown.

Reproductive system
Alcohol goes directly from the mother’s bloodstream to the fetus (unborn baby). Drinking can cause a number of birth defects, called the “fetal alcohol syndrome.” This syndrome is the third leading cause of mental retardation that is present at birth. The only safe amount of alcohol during pregnancy is no alcohol.

Regular, heavy drinking also results in malnutrition, infections of body organs, and related illnesses.

Effects on Behavior
The first area of the brain affected by alcohol is the part controlling judgment. Alcohol also affects the drinker’s thinking, mood, and memory.

Drinking alcohol interferes with coordination, causing problems in walking, talking, operating machines, and driving motor vehicles.

Some people become more depressed, more angry, or even more violent or suicidal after drinking alcohol. Because alcohol affects the drinker’s judgment and mood, it is frequently linked with crime and violence.
DID YOU KNOW?

• Alcohol is definitely a drug. Anyone who has an uncontrollable need for alcohol has a drug problem and is called an alcoholic. Another word for dependence on alcohol is alcoholism. Many people consider alcoholism a disease.

• Alcohol is harmful to children’s mental, physical, and emotional growth. Children and adolescents, whose bodies are still developing, can become dependent on (addicted to) alcohol much more quickly than adults. It can take only six months to two years for a teenager to become addicted. Alcohol is the number one drug problem of teenagers in Canada and the United States.

• A 12-ounce (360-ml) can of beer or ale contains about the same amount of alcohol as a five-ounce (150-ml) glass of wine, a wine cooler, or a shot of liquor. Wine coolers are alcoholic beverages even though they’re often advertised as if they’re soft drinks.

• A person doesn’t have to be an alcoholic to have problems with alcohol. Serious problems—car crashes, drownings, accidents, and so on—can occur even among drinkers who are not dependent on alcohol.

• The three leading causes of death for 16- to 24-year-olds are traffic crashes, homicides, and suicides. Alcohol plays a major role in all three causes.

• Drinking alcohol while using other drugs, especially depressants such as sleeping pills, is extremely dangerous and can cause death. The effect of the two chemicals together is more serious than the effect of either one alone.

• Although alcohol is the most widely used drug among youth, one-third of all adults choose not to drink, and another one-third drink very rarely.
COCAIN AND CRACK

Description
Both cocaine and crack cocaine are stimulants that make the body work faster. They come from the coca plant, grown mainly in South America. Cocaine is a white powder, often mixed with other ingredients. The most common way to use cocaine is to "snort" the powder through the nose. Some users mix cocaine with liquid and inject it into their veins. Cocaine can also be inhaled as it burns with other chemicals. Street names: snow, coke, flake, blow, nose candy, Big C, or C

Crack is a form of cocaine that looks like small, light-brown rocks. Crack is usually smoked in a small pipe. Street names: crack, rock, base, sugar block

It is illegal to buy or sell any form of cocaine.

Effects on the Body and Health

How cocaine and crack travel through the body
Cocaine and crack usually enter the body through the mouth, nose, and throat. Then they pass into the lungs and the bloodstream and affect the user very quickly (crack within ten seconds).

Both drugs are highly addictive.
**Brain, central nervous system**

Cocaine use causes headaches, memory loss, and problems with concentration. Long-term use can lead to hallucinations (seeing things that aren’t there), restlessness, sleeplessness, and convulsions (uncontrollable physical movements).

**Eyes**

Dilated (widened) pupils are a common side effect.

**Nose, throat**

Sniffing cocaine can cause constant stuffy nose and numbness in the nose and the back of the throat. The lining of the nose may be destroyed. Serious bleeding and other problems in the nasal passages may require surgery to repair. Other problems include chronic bronchitis, hoarseness, and complete loss of the voice.

**Heart and blood circulation**

Cocaine or crack use can cause rapid or irregular heartbeat and increased blood pressure, resulting in heart failure. It can also cause overall failure of blood circulation (shock), heart attack, and death.

**Lungs**

Crack smokers risk serious damage to their lungs, including diseases similar to pneumonia.

**Digestive system**

Problems include severe dehydration, stomach pains, an upset stomach, loss of appetite, and malnutrition resulting from poor eating habits.

**Reproductive system**

Using either cocaine or crack during pregnancy can result in the birth of an addicted baby with physical and emotional problems.

Use of cocaine and crack can also worsen existing medical conditions including bronchitis, asthma, anxiety, depression, poor blood circulation, heart problems, diabetes, and epilepsy.

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**Effects on Behavior**

Anxiety is a common effect of using any form of cocaine. Wild mood swings, delusions, paranoia, and problems in thinking are also common. Users frequently become out of control and violent.

Severe depression can occur when the cocaine or crack wears off and the user “crashes.” This depression can lead to suicide.

Loss of interest in friends and everything not related to crack or cocaine is also common.
DID YOU KNOW?

- Both crack and cocaine are so addictive that users will often do anything to obtain more. Crack is more addictive than heroin and more powerful than cocaine in its powder form. Users can become addicted to crack after trying it once or twice.

- Although crack use is a serious problem in inner cities, it occurs in all parts of the population.

- A recent survey found that users of cocaine are likely to have used most of the other harmful drugs, including alcohol, marijuana, hallucinogens, other stimulants, and depressants.

- "Speedballing" means injecting a combination of cocaine and heroin. "Spaceballing" means sprinkling liquid PCP on crack before smoking it. Both are exceedingly dangerous.

- Crime is an important part of the cocaine and crack problem. The sale and use of cocaine and crack are a main focus of law enforcement efforts in the United States and Canada. Illegal drug sales amount to hundreds of millions of dollars every year. People who use cocaine or crack aren't just breaking the law themselves; they're helping to support criminals and murderers throughout the world.
Designer Drugs

Both the United States and Canada have laws describing the exact chemical makeup of all drugs that are illegal to manufacture or sell without a doctor's prescription. They are called "controlled drugs."

To get around these laws, illegal drug manufacturers produce the controlled drugs with small changes in their chemistry. Most of these drugs are narcotic pills and tablets.

Because chemists can change the chemical makeup of designer drugs very quickly, they can manufacture new drugs faster than they can be outlawed. And since the chemical makeup of these drugs varies from one underground laboratory to another, their health hazards can be even more serious than those of the drugs they resemble. In fact, they may be several hundred times stronger. According to one drug expert, "all the junkies in New York could be stoned for a year on the contents of a briefcase."

Fortunately, recent laws have significantly reduced the supply of certain chemicals needed to make designer drugs. These laws have made it more difficult for underground laboratories to find the raw materials they need to produce illegal drugs.

All designer drugs:
* are produced by illegal underground chemists, who may mix them with various harmful chemicals.
* are extremely dangerous, often fatal.

Look-Alikes

"Look-alike" drugs are also made in illegal laboratories and resemble other illegal drugs. However, they tend to be mixtures of caffeine (a relatively mild drug found in coffee) and various chemicals used in cold pills.

Look-alikes are sold illegally as amphetamines, depressants, or even cold pills. Like designer drugs, they are untested and illegal. They can produce a variety of serious health problems.
Description

Many household products that evaporate easily can be abused by sniffing or inhaling. Some inhalants or deliriants act as depressants, slowing the way the body works. Others are stimulants, causing the heart to beat so fast it seems to be jumping out of the user’s chest. Some inhalants cause hallucinations; all are dangerous.

One form of inhalants is solvents, which are found in cleaning fluids, model glue, plastic and rubber cement, gasoline, paint thinner, typewriter correction fluid, aerosol sprays, and adhesives, among other products.

Other inhalants are not so readily available. Amyl nitrite (poppers, snapper, pearls, amies) and butyl nitrite (rush, bolt, bullet, locker room) are similar chemicals. Both are often sold illegally in small capsules.

Nitrous oxide (laughing gas, whippets) is also considered an inhalant, although it is used mainly as an anesthetic to put people to sleep during surgery.

Effects on the Body and Health

How inhalants travel through the body
The vapors from inhalants go from the nose or mouth to the bloodstream and quickly affect the brain, heart, and lungs. Unlike most other drugs, inhalants are not digested in the stomach and intestines or filtered out by the kidneys and liver. Since doses cannot be precisely measured, an accidental overdose is possible, sometimes resulting in SSD (“sudden sniffing death”).

Brain
Inhalants distort perception and lead to headaches, dizziness, and problems in coordination. They can cause permanent brain damage.

Eyes
Inhalant use can lead to blindness.
Heart, blood
Heart, blood
Solvents and aerosol sprays increase the heart rate and can cause permanent heart damage. Sniffing some inhalants can produce rushes of adrenaline (uh-DREN-uh-lin), a heart-stimulating hormone released during crises or sudden surprises. This can also cause sudden death.

Respiratory system
Inhalants often cause sneezing, coughing, nosebleeds, and severe irritation to the lining of the nose. They tend to slow down breathing rates. The wide range of chemicals in inhalants can cause permanent lung damage or suffocation.

Digestive system
Inhalants can cause an upset stomach and loss of appetite. They can also damage the liver and kidneys as these organs try to filter out the poisons.

Muscles
Effects include weakness, shakiness, and staggering.

Long-term inhalant use can lead to cancer, genetic damage, severe anemia, and leukemia.

**Effects on Behavior**
The effects of inhalants are felt almost immediately.

The user may feel dizzy or "high" for just a few moments up to a half hour. Clumsiness, poor judgment, slurred speech, and giddiness are likely.

Aggressive behavior is common among users. That, plus poor coordination and poor judgment, can lead to accidental death.

**DID YOU KNOW?**

- Inhalants, because they are easy to obtain and low in cost, are most often used by youth between the ages of 7 and 17. Use may begin innocently when children accidentally inhale fumes from markers or gasoline. More likely, young children start when they see friends, siblings, or older neighborhood youth sniffing or huffing.

- Users sometimes put their heads in plastic bags to sniff inhalants. The user may lose consciousness while inhaling the drug. Then he or she suffocates by breathing concentrated drug fumes that lack oxygen.
Marijuana (mar-ih-WAN-a) can act as a stimulant, speeding up the heart rate; a depressant, slowing down messages from the brain; and a hallucinogen, causing the person to see or hear things that aren’t really there. Marijuana is also known as cannabis (CAN uh-bis) and sinsemilla (sin-suh-MEE- ya). There are many street names, including pot, grass, joint, reefer, weed, dope, Mary Jane, stick, Acapulco Gold, chronic, and blunt.

Marijuana comes from the cannabis sativa or hemp plant. It is made from the crushed leaves, twigs, and seeds. It is usually smoked as a hand-rolled cigarette or joint. It is sometimes smoked in a pipe or eaten mixed with food.

Marijuana contains more than 421 different chemicals. The most harmful one is THC (delta-9-tetrahydrcannabinol).

Hashish or hash is also taken from the cannabis plant and processed as a gooey greenish or dark-brown substance. When dried into small lumps, it is smoked in a pipe.

Hashish oil is a tarlike substance usually smoked in small amounts in tobacco or marijuana cigarettes or in small pipes. It is far more potent than marijuana or hashish.

It is illegal to buy or sell any form of marijuana.
Effects on the Body and Health
How marijuana travels through the body
When marijuana is smoked, the many chemicals in the smoke enter the lungs and then quickly pass into the bloodstream. If marijuana is eaten in food, the chemicals go to the stomach and intestines, where they also enter the bloodstream. The bloodstream takes these chemicals to all the body parts, including the brain. The liver and kidneys clean some of the poisons out of the blood.

More than 61 of the chemicals in marijuana are called cannabinoids (CAN-uh-bin-oids). Cannabinoids are poisons that can damage living cells by interfering with their ability to function normally.

THC
THC, the most damaging cannabinoid in marijuana, is absorbed by fatty tissues—especially those in the brain, the central nervous system, and the reproductive organs. A week after THC enters the body, one-fourth to one-third of it can still remain in body tissues. Traces may stay in the body for several weeks or more. This means the harmful effects of marijuana continue for weeks after the person has stopped using marijuana. This drug works like a time-release cold tablet that keeps affecting the user days or weeks later.

Brain
Even small doses of marijuana can impair memory function, distort perception, hamper judgment, and diminish motor skills.

Lungs, breathing system
Because users often inhale the smoke deeply and hold it in their lungs, marijuana is damaging to the lungs, other parts of the breathing system, and blood circulation. Along with cannabinoids and other dangerous chemicals, marijuana smoke contains extremely harmful tars. Research shows that smoking marijuana can lead to many of the same illnesses as smoking cigarettes, such as lung cancer.

Heart
Marijuana can make the heart beat faster than normal. This increase can cause chest pains and heart problems.

Digestive system
Users may feel sick to their stomachs or suddenly hungry. A dry mouth and throat are common.

Reproductive system, hormones
Hormones in both females and males can be seriously affected by marijuana. In females, long-term use of marijuana may interfere with the menstrual cycle; in males it may affect sperm production. The most important male hormone, testosterone, decreases by 25 to 35 percent within three hours after a male smokes marijuana. For females, using marijuana during pregnancy can cause birth defects in the unborn baby.

Immune system
Marijuana can damage the body’s immune system, which helps protect the body from disease. When the immune system isn’t working properly, the user will get sick much more easily.

Other physical side effects include bloodshot eyes, shaking, headaches, and a drop in body temperature.
Effects on Behavior
Marijuana affects the user's memory, attention span, speaking, listening, thinking, reading comprehension, problem solving, and decision making. Young people who use marijuana regularly can have problems keeping up in school.

People who use marijuana regularly can also have trouble with normal, everyday activities. Heavy marijuana users may lose their motivation to achieve in life, preferring to spend their time getting high. Marijuana can make emotional problems worse. Some marijuana users become fearful and confused, and others grow suspicious or aggressive. Paranoia and panic attacks are frequent.

DID YOU KNOW?

• In 1974, marijuana had a THC content of less than 1 percent. Now, the THC content had risen as high as 17 percent. Using marijuana might have been thought of as harmless in 1974, but rising levels of THC in the drug have made it much more dangerous.

• Four out of five grade 12 students—a great majority of young people—do not use marijuana. The reason students commonly give for not using marijuana is that they have learned about its harmful effects on their health.
MDMA/ECSTASY

Description
Widely known as ecstasy, MDMA is an illegal synthetic drug similar to its “parent,” methamphetamine. All of these drugs cause brain damage. Ecstasy, a stimulant as well as a hallucinogen, has been used as a substitute for LSD. Low cost and accessibility make ecstasy a growing concern in many communities.

Tablets, capsules, or the powdered form of ecstasy is sometimes used at parties, clubs, or “raves” (all-night dance parties) to increase stamina for dancing. The tablet form may be branded with popular commercial logos or look like a prescription drug. A new variation in tablet form, herbal ecstasy, may cause permanent brain damage and death.

Other common street names for MDMA: E, X, XTC, Adam, M and Ms, lover’s speed, clarity, wonder drug

Effects on the Body and Health
The physical effects of ecstasy use include faintness, nausea, involuntary body movements, chills or sweating, rapid eye movement, and problems sleeping. Internally the heart rate increases and blood pressure rises, which may lead to heart or kidney failure.

Psychological effects include impairment of memory and judgment, depression, anxiety, paranoia, and hallucinations. Some users claim enhanced mental and emotional clarity, as well as euphoria.

Combining ecstasy with alcohol or other combinations of so-called “club drugs” (often depressants) can lead to serious consequences, even death.

Effects on Behavior
Those taking ecstasy may react violently or irrationally. While the immediate effects of use seem to fade after 24 hours, recent studies show side effects, including paranoia, can surface weeks later.

Chronic use of ecstasy seems to affect parts of the brain important to thought, memory, and even pleasure—all areas that play a role in behavior.
DID YOU KNOW?

- Dancers who use ecstasy can end up extremely dehydrated.
- Studies indicate that the female hormone estrogen may make young women more vulnerable to the lethal effects of ecstasy than males.
- Makeshift laboratories that produce illegal "designer" and "club" drugs, such as ecstasy, can vary the strength of the drugs and supply harmful combinations of drugs.

MAJOR DRUGS

Prescription and Over-the-Counter Drugs

Description

About 500,000 types of over-the-counter drugs can be purchased in drug stores, pharmacies, grocery stores, and supermarkets. They are called "over-the-counter" because anyone can buy them by walking up to a counter. They include aspirin, cold remedies, and diet pills.

Prescription drugs are almost always more powerful than over-the-counter drugs and potentially more dangerous. They can be purchased only with a doctor's written prescription. The only people who can legally sell prescription drugs are licensed pharmacists.

Some types of prescription drugs are psychoactive (sy-ko-AK-tive). They change the way a person thinks and feels, and they can speed up or slow down the body's systems that are controlled by the brain. Other kinds of prescription drugs, such as antibiotics and vaccines, affect other body organs besides the brain.
How can medicine be helpful?

By preventing sickness—Vaccines are prescription drugs that help prevent illnesses such as polio, whooping cough, measles, and the mumps. Other drugs help prevent sickness by controlling conditions so they don't become problems. For example, people who have diabetes often take insulin to help control the amount of sugar in their blood.

By helping heal the body—Some prescription drugs, such as penicillin and other antibiotics, fight infections, such as those in ears, eyes, and throat. Some over-the-counter medicines kill germs in small cuts and scrapes.

By helping stop pain—Aspirin and many other over-the-counter drugs help control aches and pains. Doctors prescribe stronger painkilling medicines after serious accidents or surgery. Dentists use forms of novocaine during treatment.

By helping to control symptoms—Sometimes medicine won't help a problem, like a cold, go away, but it can make us feel better while the body heals itself.

How can medicine be harmful?

All prescription and over-the-counter drugs can be dangerous, mainly through overdose and misuse. Health hazards range from dizziness to death.

Prescription and over-the-counter drugs can also cause harmful side effects—unwanted effects on the body or mind, such as headaches or an upset stomach. Any side effects should be reported immediately to a trusted adult.

Why do people misuse and overuse medicines?

Most viewers watch thousands of TV commercials for over-the-counter drugs. This advertising is, in effect, a negative form of drug education. Children and young people learn through the commercials that over-the-counter drugs can help them avoid common health problems. But these ads tell only part of the story. They don't teach people how to stay healthy without drugs—by eating right, exercising, and taking care of their bodies.

One reason for all this advertising is the huge profits that manufacturers gain from making and selling legal drugs—more than $20 billion every year.
Guidelines for children and youth for using over-the-counter and prescription drugs

- Take all medicines, even over-the-counter drugs, only with the help of a trusted adult.

- Follow directions on the label carefully.

- Take only the amount of medicine that the label or your doctor says to take. Taking more than the recommended dose of even medicine like aspirin can lead to consequences ranging from an upset stomach to death.

- Never share your medicine with another person.

- Never take someone else’s prescription medicine.

- If you feel ill after taking a medicine, tell a trusted adult right away. You may be experiencing a harmful side effect.

- Never tell young children “medicine is candy.”

- Never share your medicine, even common medicines such as cough syrup, with anyone.

- Always make sure young children cannot reach medicines.

- Replace child-proof caps so young children can’t use the drug.
What the labels tell us

Labels on prescription drugs usually list the patient's name, doctor's name, name of the drug, dose, pharmacy, date that the prescription was filled, and number of refills allowed. The labels often include directions such as “Take with meals.”

Over-the-counter drug labels include the symptoms treated by the drug; how much, how often, and how long the drug should be taken; and possible side effects. These labels may also offer warnings or advice, such as “If this drug does not relieve symptoms, see a doctor” or “May cause drowsiness: do not use before operating a motor vehicle.”

DID YOU KNOW?

• Drug companies now advertise prescription drugs directly to consumers. They use commercials, newsletters, magazine ads, hotlines, and web sites.

• Each year, more people die from prescription drugs obtained legally, but used improperly, than from all illegal substances combined.

• One of every four hospital admissions is the result of the misuse of medicines. The most common mistake is not following doctor's directions for taking the medication. For every dollar spent on prescription medications, another dollar must be spent to treat the problems resulting from misuse of these drugs.

• Despite laws that require child-resistant packages for prescription drugs, many thousands of young children are poisoned each year by accidentally swallowing someone else's medicine.

• Fever is one way our bodies fight disease. A very high fever can damage the body and may require medicine to bring it down. But reducing a low fever by taking aspirin or other medicine can actually slow the healing process.

• Contrary to what most people think, many over-the-counter medicines have not been tested for effectiveness or safety. Medical advisory panels have concluded that only about one out of every three ingredients in over-the-counter products is safe and effective for its intended purpose.
Steroids that athletes use, also called anabolic steroids, are synthetic chemicals. They imitate the natural male hormone testosterone (tes-TAHSS-ter-ohn). In its natural form, testosterone increases strength and causes the growth of facial hair. In its synthetic form, it initially helps build muscles and promotes strength and speed. Anabolic steroids are stored in the body fat for several weeks.

Steroids are usually taken orally or by injection. Sometimes they are prescribed by doctors. However, many prescription steroids are sold illegally through magazines and mail-order companies. Only about 20 percent of steroids are sold legally through doctors' prescriptions. The illegal "black market" supplies the other 80 percent.

Effects on the Body and Health

Steroids can harm the heart and circulatory system, reproductive and nervous systems, lungs, kidneys, and muscles.

Short-term effects of steroid use include an increase in cholesterol and a decrease in sperm production. Steroids can damage the liver, sometimes permanently. Steroid use may also harm the body's immune system (its ability to heal after injuries and resist illnesses) and reduce the body's ability to deal with stress.

Steroids are dangerous and addictive.
Effects on Behavior

Even low doses of steroids may create psychological problems, but normal and large doses can result in significant personality changes and mental disturbance.

When users stop taking steroids, they become irritable, moody, listless, hostile, and depressed.

**DID YOU KNOW?**

- Steroids can actually harm an athlete’s endurance. Athletes on steroids may have short bursts of great energy but then be unable to compete at their normal levels. Steroids hurt the athlete’s abilities over the long term.

- Because steroids make muscles grow but not tendons and ligaments, athletes who use these drugs are frequently injured and take a long time to heal.

- In females, steroids can cause a deeper voice, more body hair, smaller breasts, and fewer menstrual cycles. In males, the use of steroids can cause larger breasts, smaller testicles, and early balding. Both sexes may experience severe skin problems and high blood pressure.

- The use of steroids can permanently stop teenagers’ bones from growing.

- Illegal suppliers of steroids often try to increase their sales by instructing users to take the drug in dangerously high doses.
Tobacco

Description

**Nicotine** (NIK-uh-teen), the main drug in tobacco. Tobacco is in cigarettes and cigars (smokes) and is also sold as *pipe tobacco*, *chewing tobacco* (chew), and *snuff*.

Smokers inhale smoke from cigarettes, cigars, and pipes into the mouth, throat, and lungs. Chewing tobacco, finely ground tobacco leaves mixed with a variety of flavors, is chewed but not swallowed. Snuff is powdered tobacco that is snorted or sniffed.

In most places it is illegal for people under the age of 18 (sometimes 16) to buy tobacco products.

Effects on the Body and Health

How the chemicals in tobacco travel through the body

When tobacco is smoked, the smoke enters the body through the mouth and nose, carrying with it the powerful drug nicotine. From there it passes down the throat to the lungs. When the smoke is exhaled, tar and many harmful chemicals stay in the lungs. The nicotine passes from the lungs into the bloodstream.

The heart pumps the nicotine-filled blood to the brain.

Finally, the liver is exposed as it works to filter the nicotine out of the blood.

Tobacco is highly addictive.
Brain
Nicotine shrinks the arteries, reducing the amount of blood that goes to the brain and interfering with the way it works.

Mouth, throat
People who smoke cigarettes, cigars, and pipes may get cancer of the lips, mouth, or throat. Chewing tobacco and snuff can also lead to these kinds of cancer and to gum disease. It is just as dangerous to chew tobacco as to smoke it.

Heart, blood
When nicotine narrows the body's arteries, the heart has to work harder to get blood to all the body parts. For this reason, smoking is closely linked with heart disease, the leading cause of death. The use of smokeless tobacco (chewing tobacco and snuff) can lead to poor blood circulation and heart disease.

In addition, the blood of smokers contains less oxygen than the blood of nonsmokers. The reason: cigarette smoke contains many other chemicals instead of oxygen. Many of the more than 1,200 chemicals in cigarette smoke enter the bloodstream in just a few seconds. One of the most damaging chemicals is the poison carbon monoxide.

Lungs
The tar from cigarette smoke coats the lungs and can lead to serious lung diseases. Ninety percent of all cases of lung cancer happen in people who smoke cigarettes. Ninety percent of all people who get lung cancer die within five years.

Another serious lung condition associated with smoking is emphysema (em-fi-SEE-ma), a disease that makes breathing difficult and often leads to death. Smokers also take the risk of getting a number of other serious diseases, such as chronic bronchitis and other forms of cancer.

Reproductive system
Using tobacco during pregnancy sends carbon monoxide and reduces the oxygen that goes to the developing baby. The baby of a smoking mother may be born too soon, be underweight and overly active, and have a short attention span. The only safe amount of tobacco during pregnancy is no tobacco.
Effects on Behavior
Smokers become dependent on nicotine and feel jittery and nervous when it is not in their bloodstream. Some people say they smoke because it calms them down, but smoking only calms the craving they have developed for nicotine.

People easily become addicted to or “hooked” on tobacco. Those who want to stop using it find it extremely difficult to do so.

DID YOU KNOW?

- More deaths are related to cigarette smoking than to any other form of drug use. Every year approximately 350,000 people in the United States and 35,000 people in Canada die from smoking-related illnesses, mainly heart disease and lung cancer. Smoking cigarettes has often been described as “slow-motion suicide.”

- Secondary smoke comes from burning cigarettes, cigars, and pipes and from the exhalations of smokers. Secondary smoke contains many harmful substances and causes as many as 3,000 lung cancer deaths a year among nonsmokers. Smoking is now banned in most work places and public buildings in an attempt to reduce deaths and illnesses among nonsmokers.

- The number of smokers has dramatically decreased. In 1965, more than half of the adults in North America smoked cigarettes. Now three of every four adults do not smoke, and many of the adults who do smoke are trying to quit.

- Tobacco smoke can lead to a variety of cancers in humans. Smoking has been linked to cancers of the lung, mouth, pharynx, larynx, esophagus, pancreas, cervix, kidney, and bladder.

- In spite of the claims of tobacco companies, there is no such thing as a safe cigarette. All cigarettes contain enough tar to be harmful, including so-called “low-tar” cigarettes.

- Chewing tobacco is even more addictive than smoking it. Besides causing bad breath and loose, stained teeth, chewing tobacco has been linked to cancers of the mouth, lips, and throat.
What is chemical dependence?

Chemical dependence, or addiction, is an uncontrollable need to use a particular drug. People who are addicted to cigarettes, for example, sometimes keep smoking even after they learn they have lung cancer. People who are alcoholic keep drinking even after it costs them their jobs. Heroin addicts keep using that drug even though their bodies are covered with sores from the injections.

Chemical dependence is dangerous and harmful to:

- The person who is dependent
- The person’s family, friends, and co-workers
- Society as a whole through car crashes, accidents in the workplace, and the high cost of medical care, crime, and other consequences of chemical dependence

Who can become an addict?

Anyone can become an addict, and all addicts begin by “experimenting” with drugs. The only way to be sure you’ll never become an addict is never to use alcohol or other drugs.

Because young people’s bodies and brains are not fully developed, they can become addicted to alcohol and other drugs much more easily and quickly than adults.

Teens who use drugs tend to use them heavily and frequently, which increases their chances of becoming dependent. In addition, young people are likely to use more than one drug, multiplying their opportunities for addiction.

Children of parents who are chemically dependent are at high risk for drug addiction. (See “How are the children of alcoholics affected?” in this section.) Children from families that are constantly in crisis are also at risk for becoming dependent on drugs. In these families and in families of alcoholics, children often learn not to talk about their feelings and not to trust others. These young people may turn to drugs as a means of escape from their feelings.
Difficulties with getting along with others and handling schoolwork can also put young people at risk for using drugs. "Hanging out" with drug-using friends can convince young people that everybody uses drugs, so they should, too.

**Why do young people start taking drugs?**

**Because of peer pressure**
Some young people don't have the courage to refuse—or they don't realize they can refuse drugs. They don't want to feel left out when their friends start using drugs. More and more, however, young people are choosing not to use drugs. And they're choosing friends who are also drug-free.

**Because of curiosity**
Drugs are constantly in the news. As a result, young people ask themselves, "Why not? Maybe I won't get hurt after all." But it's never a risk worth taking. It is best to stay drug-free.

**Because some drugs are legal for adults**
Hundreds of thousands of adults hurt themselves and their families every year by using legal drugs, mainly alcohol and tobacco. Many of these adults are "hooked" on legal drugs, and many have gone on to use illegal drugs.

**Why do dependent people keep taking more and more of the drug?**
Drug users often develop a tolerance for the drug. That is, their bodies require larger and larger doses to get the same effect or even just to feel normal. Tolerance can lead an addict to use dangerous quantities of a drug that is harmful to start with.

**Why can't the person see how harmful the drug is?**
Denial means that a dependent person won't admit that he or she has a drug problem. The chemically dependent person may say "I don't have a problem" or "I can handle drugs." Dependent people may also blame others for their problems—including accidents that result from their drug use. They are lying to themselves, and they need help to understand their addiction.
What happens when the dependent person stops taking drugs?

When most addicts stop using a drug, they go through a period called withdrawal. Depending on the drug, this can range from just feeling sick to experiencing extreme pain and convulsions. Suddenly giving up a drug is sometimes called “going cold turkey” because the addict may be in such pain and discomfort that he or she has goose bumps and cold skin.

What are the signs of a drug problem?

A person may have a drug problem or be addicted when he or she:
- Needs larger and larger doses of the drug to feel okay.
- Uses the drug all the time until it’s all gone; can’t refuse the drug or leave it alone.
- Uses the drug when alone.
- Prefers using the drug to other activities, such as spending time with family or friends.
- Does not follow through on commitments because of drug use.
- Becomes sick when he or she stops using the drug.
- Lies about his or her drug use.

Here are some other changes that may take place when children or teenagers start to use drugs regularly:
- Low grades or a loss of interest in school and positive activities
- Switching to drug-using friends
- Unwillingness to introduce friends to parents
- Secretiveness, lying
- Pro-drug attitudes

None of these changes is a certain indicator of drug use, but any of them may be a cause for concern.
Can a person addicted to drugs stop using them?

In the past, addicted people were thought of as criminals; helping them was hopeless. But now addiction is often considered an illness. Even though there is no cure for this illness, it can be controlled when the chemically dependent person stops using drugs.

Steps to Recovery

It's extremely difficult for an addict to stop using drugs on his or her own. People need help dealing with their addiction, just as people need help dealing with a number of other illnesses. The addict needs the support of friends and family—and often must complete a drug treatment program to make a successful recovery. Recovery can take months or even years and is never really over.

1. Intervention
   Intervention means helping the addict admit he or she has a problem and forcing the person to see how drug use has harmed his or her life and the lives of loved ones. This is the first step to recovery. To plan an intervention, family, friends, and sometimes co-workers meet with a drug treatment professional to decide how to help the addict.

2. Treatment
   This step may last from a few weeks to a year or more. In many cases the addicted person may need to live at the treatment center in order to avoid all contact with drugs. Treatment often involves individual or group counseling. The user's family should also participate in treatment, since family support can help the addicted person stay off drugs.

3. Aftercare
   Treatment formally ends when the addict is ready to try living a drug-free life. Then aftercare begins. Because addicts frequently slip back into their drug habits, they need continued support to remain drug-free. Addicts in aftercare often attend support groups that meet every week—or even every day—to help each other stay drug-free.

A lasting recovery often requires a new lifestyle: giving up friends who use drugs, avoiding places and situations that trigger the desire to use them, and finding new ways to feel good. An addicted person must always think of himself or herself as "recovering." That is, he or she is never completely cured and should never again use drugs. Recovery continues for the rest of the person's life.

Unfortunately, treatment programs are not always effective. A majority of addicts turn back to drugs over and over. Two voluntary support organizations help people in many communities deal with alcohol and other drug problems. They are Alcoholics Anonymous and Narcotics Anonymous (for people addicted to other drugs). Their phone numbers are usually in the telephone book.
How are the children of alcoholics affected?

More than five percent of the population is addicted to alcohol. Even if the children of alcoholics never try alcohol, they suffer from a variety of problems because of their parents' drinking. These include:

- Being afraid of or not trusting adults
- Blaming themselves for the parent's drug problem
- Feeling that they must "fix" or take care of the parent's drug problem
- Constantly seeking adult approval
- Being frightened of anger or criticism
- Having very low self-esteem
- Being afraid to assert themselves
- Hiding problems that bother them
- Being afraid to admit having feelings such as anger or shame

Children of alcoholics are much more likely to have alcohol and other drug problems than children of parents who are not alcoholics. Both Al-Anon and Alateen offer support groups for families where alcoholism is a problem. Their phone numbers are usually in the telephone book.

Suggestions for young people dealing with alcohol or other drug use in the family

Learn more about drug use and chemical dependence.
The more you know, the better you will understand the dependent person's behavior.

Realize that it's natural to feel angry, guilty, or ashamed. Lecturing, blaming, or threatening the dependent person does not help—and may make things worse. Remember that the person's drug use isn't your fault, even if the user says it is.

Don't try to fix the other person's problems. Don't attempt to cover up the problem by lying, acting as if nothing is wrong, or taking over the person's responsibilities. This may keep the dependent person from seeking help.

Talk about the problem with an adult or friend you trust. Also, go to Alateen meetings to talk with other young people dealing with similar problems.

Take good care of yourself. You cannot change the other person's behavior, but you can get involved in fun things that will improve your own life.
THE HUMAN AND ECONOMIC
COSTS OF DRUG USE

Drug use and jobs

Workplace drug use costs employers billions of dollars a year due to lost productivity, increased medical claims, and accidents.

To reduce this cost, many companies now ask job applicants to undergo drug testing. The companies usually reject people whose tests indicate any drug use. Some companies also periodically test employees, especially those suspected of using drugs. Evidence of drug use may mean that the employee will receive counseling—or be fired.

Tests use urine or hair samples, or both. Such tests can detect the presence of alcohol, cocaine, depressants, stimulants, and a number of other drugs, but they most often find marijuana.

Partly because of drug testing, the use of illegal drugs by workers has been dramatically reduced.

Drug use and AIDS

People who inject themselves with cocaine, amphetamines, steroids, or other illegal drugs sometimes use needles that have been used by someone else. They run a high risk of becoming infected with Acquired Immunodeficiency Syndrome, or AIDS. The virus is injected into their bloodstream, along with the drug. Nearly one of every three people with AIDS was infected while injecting drugs.

People who are using any drug, not just the injected ones, tend to have unprotected sex. This also puts them at high risk for contracting AIDS. Some addicts trade sex for money so they can buy more drugs. Along with the money, they can get AIDS.

Drug use and military service

The armed services are generally not interested in applicants who have even one conviction for driving under the influence (DUI) of alcohol or any other drug.

Applicants are tested for drug use and asked to sign sworn statements that they have not used illegal drugs. Anyone caught lying is immediately discharged. The military also conducts random tests of its members.
Drug use and crime

Drug use can result in violent, aggressive behavior that destroys property or hurts or kills others. Also, many users steal to get money for more drugs. In one study of crack users, 70 percent of the women and 85 percent of the men were involved in street crime to support themselves. Almost none of them had held a legal job in the previous 90 days.

Many criminals and even their victims are under the influence of alcohol or other drugs at the time of the crime. In one study, nearly one of every three convicted murderers reported being high on alcohol or marijuana at the time he or she committed the crime. In another study, cocaine users were found to be 10 to 50 times more likely to be victims of homicide than persons who remained drug-free.

Police officers spend much of their time and resources fighting drug use. Federal crime agencies use up much of their violent crime budgets on drug investigations.

Drug use and children

The harmful chemicals in drugs pass through a pregnant woman’s bloodstream directly to her unborn baby. The drugs mentioned below, plus others, can interfere with the baby’s development and even cause its death.

Babies and children of smokers

The chemicals in tobacco speed up the unborn baby’s heartbeat, reduce its oxygen supply, slow its growth, and cause other problems.

Pregnant women who smoke have higher rates of premature birth, miscarriage, and stillbirth than nonsmokers. Their babies usually weigh less than babies born to nonsmokers. Babies of smokers are also more likely to have birth defects and delayed mental development.

If a woman stops smoking when she becomes pregnant, her risk of having a baby who has low birth weight or is stillborn drops to that of a nonsmoking mother.

Children who live with smokers are likely to have more colds, earaches, and bronchitis than children of nonsmokers.

Babies of drinkers

When a pregnant woman drinks, her baby ends up with nearly the same level of alcohol in its bloodstream as the mother.

A mother who drinks may have a baby with Fetal Alcohol Syndrome (FAS). The effects of this syndrome include low birth weight, delayed growth, poorly formed facial features, heart defects, hyperactivity, and mental retardation. FAS children can have so many problems that they require special schooling.
FAS is the third leading cause of birth defects—and the only preventable cause of the top three. The amount of alcohol that causes FAS is still unknown, so pregnant women or women who think they might be pregnant should not drink at all.

**Babies of crack and cocaine users**
Cocaine in a mother's bloodstream keeps nutrients and oxygen from reaching the baby. This slows the baby's growth and leads to low birth weight. It can also cause a deformed heart, digestive system, and lungs. Other common problems include brain damage and hyperactivity. Babies can be born addicted to crack or cocaine. They are then forced to go through withdrawal. This makes them irritable and difficult to care for, especially for parents who are still using drugs themselves.

**Babies of marijuana users**
Babies born to women who regularly use marijuana can have low birth weights and problems related to their central nervous systems.

**Babies of inhalant users**
If a pregnant woman uses inhalants, her baby may be born with Fetal Solvent Syndrome. A baby with this syndrome can have a small head, deep-set eyes, distorted nose and ears, and stubby fingers.
Risks of Drug Use by Children and Youth

Risk of addiction
Because their bodies are still developing, young people who drink alcohol are at much larger risk for alcoholism than adults.

Risk to physical growth
The human body grows very fast during adolescence. The hypothalamus gland (hy-poh-THAL-uh-mus) in the brain controls this growth. Using alcohol and other drugs during adolescence can create a chemical (hormonal) imbalance in this gland that slows down the development of the entire body, especially the muscles, body mass, and liver.

Risk to emotional growth
Adolescence is the time for young people to learn to handle relationships and develop a sense of who they are. The use of alcohol and other drugs interferes with this. Young people who use drugs may reach adulthood unprepared to solve problems and cope with the challenges of life.

Risk of death
The top three causes of death for 16- to 24-year-olds are traffic crashes, homicides, and suicides. Alcohol plays a major role in all three causes.

For example, statistically, four of every ten fatal car crashes involve someone who was drinking alcohol. Those who commit murder and those who are murdered are both likely to have been using drugs. And three of every four young people who attempt suicide have been drinking or using drugs.

Legal risk
Laws are made to protect us, and the laws convey a clear message about drug use and youth: Most mind-altering drugs are illegal for minors. Young people who buy drugs, even alcohol or tobacco that are legal for adults, are breaking laws that are meant to protect their health and well-being. Young people are permitted to buy over-the-counter drugs, but even these can be dangerous if misused.
<table>
<thead>
<tr>
<th>Type/Name of Drug</th>
<th>How Taken</th>
<th>Category</th>
<th>Health Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>Swallowed</td>
<td>Depressant</td>
<td>Accidents, alcoholism, cirrhosis or the liver, brain damage</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>Swallowed,</td>
<td>Stimulant</td>
<td>Heart problems, strokes, malnutrition, brain damage, depression, psychosis</td>
</tr>
<tr>
<td></td>
<td>injected</td>
<td></td>
<td>(loss of contact with reality) when &quot;crashing&quot;</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>Swallowed</td>
<td>Depressant</td>
<td>Addiction; death or coma when used with other drugs</td>
</tr>
<tr>
<td>Cocaine</td>
<td>Sniffed, smoked, injected</td>
<td>Stimulant</td>
<td>Very rapid addiction, psychosis, damage to nose and throat, heart failure, depression from &quot;crashing&quot;</td>
</tr>
<tr>
<td>Crack cocaine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td>Injected</td>
<td>Narcotic</td>
<td>Addiction, unconsciousness, death</td>
</tr>
<tr>
<td>Inhalants</td>
<td>Sniffed</td>
<td>Stimulant</td>
<td>Damage to brain and other organs, death, blindness</td>
</tr>
<tr>
<td>Amyl nitrate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butyl nitrite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrous oxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type/Name of drug</td>
<td>How taken</td>
<td>Category</td>
<td>Health hazards</td>
</tr>
<tr>
<td>-----------------------------------</td>
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<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LSD</td>
<td>Swallowed</td>
<td>Hallucinogen</td>
<td>Accidents, paranoia, psychosis, brain damage</td>
</tr>
<tr>
<td><em>acid</em>, <em>sugar cubes</em>, <em>pearly gates</em>, <em>wedding bells</em>, <em>white lightening</em>, <em>microdots</em>, <em>tab acid</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana/ Cannabis</td>
<td>Smoked, eaten</td>
<td>Stimulant,</td>
<td>Stays in the body for weeks, damage to brain and reproductive system, loss of memory and motivation, lung diseases, accidents, paranoia</td>
</tr>
<tr>
<td><em>pot</em>, <em>grass</em>, <em>weed</em>, <em>reefer</em>, <em>dope</em>, <em>Mary Jane</em>, <em>Acapulco Gold</em>, <em>stick</em>, <em>sinsemilla</em>, <em>joint</em>, <em>chronic</em>, <em>blunt</em></td>
<td></td>
<td>Depressant, Hallucinogen</td>
<td></td>
</tr>
<tr>
<td>MDMA/Ecstasy and MDA</td>
<td>Swallowed</td>
<td>Hallucinogen,</td>
<td>Faintness, extreme dehydration, depression, paranoia, brain damage</td>
</tr>
<tr>
<td><em>essence</em>, <em>love drug</em>, <em>M and Ms</em>, <em>Adam</em>, <em>lover's speed</em>, <em>clarity</em>, <em>wonder drug</em></td>
<td></td>
<td>Stimulant</td>
<td></td>
</tr>
<tr>
<td>Opium</td>
<td>Smoked</td>
<td>Narcotic</td>
<td>Addiction</td>
</tr>
<tr>
<td>PCP (Phencyclidine)</td>
<td>Smoked, injected</td>
<td>Hallucinogen,</td>
<td>Accidents, paranoia, psychosis, brain damage</td>
</tr>
<tr>
<td><em>angel dust</em>, <em>killer weed</em>, <em>supergass</em>, <em>enthallming fluid</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steroids</td>
<td>Swallowed, injected</td>
<td>Synthesis</td>
<td>Damage to hormone reproductive and immune systems, depression, psychosis</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Smoked, chewed, sniffed</td>
<td>Stimulant</td>
<td>Addiction, lung cancer, emphysema, cancer of the mouth and throat, heart disease</td>
</tr>
<tr>
<td><em>smokes</em>, <em>chews</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>Swallowed</td>
<td>Depressant</td>
<td>Addiction, death or coma when used with other drugs</td>
</tr>
<tr>
<td><em>(including Valium and Librium)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Abstinence (to abstain)—refusal to do some thing, such as using drugs.

Addiction—an uncontrollable need for a drug; chemical dependence.

Adolescence—approximately from ages 10 to 19, when the body goes through its most important growth since infancy.

AIDS (Acquired Immunodeficiency Syndrome)—a fatal disease that can be spread by using a hypodermic needle infected by someone with AIDS; also passed through sexual contact.

Alcoholism—addiction to alcohol.

Anabolic steroids—chemicals that cause the body to develop temporary strength and speed.

Analgesics—painkillers.

Caffeine—the stimulant drug in coffee, tea, soda, chocolate, and other substances.

Cannabinoids—chemicals in marijuana that damage the body's cells.

Central nervous system—the brain, spinal cord, and nerve system throughout the body; it sends and receives messages telling the body how to function.

Chemical dependence—an uncontrollable need for a drug (addiction).

Cirrhosis of the liver—a disease that can be caused by drinking alcohol.
Convulsions—seizures; sudden unconsciousness and muscle contractions caused by electrical stimulation in the brain.

Delusion—something that isn’t true; someone having a delusion is confused about what is true and what isn’t.

Denial—the unwillingness or inability to admit having a drug problem.

Depressant—a drug that slows down the brain, central nervous system, and other body functions.

Digestive system—the organs that digest food and liquids: stomach, intestines, liver, kidneys, pancreas.

Drug—any chemical that changes the mind or body.

Hallucinations—seeing or hearing things that aren’t there.

Hormones—chemicals that control some body processes, including sexual development and reproduction.

Hypodermic needle (syringe)—a long, thin needle with a tube and plunger used to inject drugs.

Immune system—white blood cells and other substances in the blood that protect the body from certain infections or diseases.

Malnutrition—a condition resulting from eating too little food or the wrong kinds.

Misuse—not using something correctly, such as not following directions on medicines.

Nausea—feeling sick to your stomach.

Nutrients—vitamins, minerals, protein, and other substances the body needs to stay healthy.
Overdose—taking too much of any drug.

Paranoia—the feeling that people are out to get you.

Perception—seeing, hearing, smelling, tasting, and touching.

Psychedelics—another name for hallucinogens, including LSD and PCP.

Psychoactive drug—drug that changes the way the brain works.

Psychosis—loss of contact with reality

Recovery—the period following treatment for addiction; it lasts for the rest of the person’s life.

Reproductive system—the body organs involved in creating new human life.

Respiratory system—the organs that enable the body to breathe: trachea, bronchi, lungs.

Stimulant—a drug that speeds up the body functions.

THC-delta—9-tetrahydrocannabinol, the most harmful mind-altering chemical in marijuana.

Tolerance—needing more and more of a drug to achieve the same effect.

Treatment—the process of helping an addict stop using drugs.

Vaccine—a drug that protects against infection or disease.

Vapor—a gas.

Withdrawal—illness, pain, and other unpleasant feelings that happen when an addicted person stops using a drug.
Today educators, students, families, and community members can search the Internet and use toll-free phone numbers to get up-to-date information about alcohol, tobacco and other drugs.

Printed Information

Health Canada
Health Promotion Directorate
Tenth Floor, Jeanne Mance Building
Tunney's Pasture
Ottawa, ON K1A 1B4
613/941-2227
www.hc-sc.gc.ca (general)
www.hc-sc.gc.ca/hppb/alcohol-other-drugs/youth.htm

See related Canadian Health Network
www.canadian-health-network.ca
and click on pages for children and youth.
Both provide extensive information on
health promotion and programs.

National Clearinghouse for Alcohol and
Drug Information (NCADI)
PO Box 2345
Rockville, MD 20847-2345
800/729-6686
www.health.org
A comprehensive source for current information on substance abuse prevention.

National Clearinghouse on Tobacco and Health
170 Laurier Ave. West
Suite 1000
Ottawa, ON K1P 5V5
613/567-3050
www.cctc.ca/ncth
Provides fact sheets on tobacco both in print
and on its web site.

Canadian Centre on Substance Abuse
75 Albert Street, Suite 300
Ottawa ON K1P 5E7
613/235-4048, ext.222
www.ccsa.ca
Works to minimize harm associated with use
of alcohol, tobacco, and other drugs.

National Institute on Drug Abuse (NIDA)
National Institutes of Health
6001 Executive Blvd.
Bethesda, MD 20892-9561
888/644-6432 (toll free)
www.drugabuse.gov
www.nida.nih.gov
Drug prevention information and useful links
for teachers and families, including “Mind Over
Matter” pages developed for students in grades
5 through 9.

Partnership for a Drug Free America
405 Lexington Avenue
New York, NY 10174
212/922-1560
www.drugfreeamerica.org
A non-profit coalition of communications professionals known for their national anti-drug
advertising campaign directed to young people.
Hotlines

United States
- Al-Anon/Alateen: 800/344-2666
- Center for Substance Abuse Treatment
US Department of Health and Human Services
1-800-662-4357
www.drughelp.org

Canada
- Kids Help Line: 800/668-6868
- Al-Anon/Alateen: 888/425-2666