

*Straight Facts
About Drugs
&
Drug Abuse*

Canada

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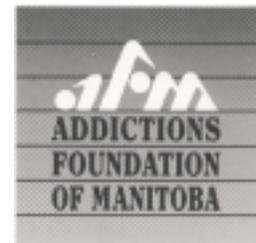
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canada's drug strategy



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WHY THIS BOOKLET?

This booklet was written primarily as a resource for police, educators, trainers, social service and health care providers, and senior high school, college and university students.

It provides information on commonly used mood-altering or psychoactive drugs. In this booklet, the term “drug” is used to refer to any psychoactive or mood-altering substance, including alcohol, inhalants, tobacco, over-the-counter and prescription medication and psychoactive substances which are illegally possessed or distributed. Today, there are more drugs available than ever before, both legally and illegally.

Drug-related problems, including personal and family unhappiness, dependency, physical and mental health problems, premature death, lost productivity, increased crime, highway crashes, and ever-growing costs of law enforcement and health care, are a major social concern.

The widespread availability and use of drugs means that drug-related problems will impact all Canadians in one way or another. As a result, there is a need for accurate information about different types of drugs and their effects, how people use them, and how they can affect our lives.

How This Booklet Works

There are three main parts:

The first part looks at drug issues from a general point of view, without going into detail about individual drugs except when they

are used as examples. This part is divided into six major sections, each one dealing with a separate drug-related issue. The sections are:

- What is a Drug?
- Why Do People Use Drugs?
- When Does Drug Use Become a Problem?
- What Are the Harmful Consequences of Drug Use?
- What is Canada’s Drug Strategy?
- What are Canada’s Drug Laws?

The second part of the booklet consists of nine charts designed as a quick, ready reference for more detailed information on drugs. Each chart covers a major drug group or family:

- Hallucinogens
- Opioid Analgesics
- Alcohol and Inhalants
- Benzodiazepines
- Barbiturates/Other Sleeping Pills/Other Psychotropic Drugs
- Stimulants
- Cannabis
- Antidepressants
- Anabolic Steroids

The charts contain detailed information on the individual drugs within each drug group or family, including a description of each drug, its origin and medical uses, its short- and long-term effects, its tolerance and dependence properties, and legal status.

The third part of the booklet, the Appendix, contains more information on specific topics associated with drug use.

For quick reference, the booklet also includes a summary listing of each of the drug families and an index of individual drugs.

Prescription drugs are listed by their generic designations; for each drug, an example of a widely-used brand name product which contains that drug is also listed and is indicated by the symbol “®”. It should be recognized that some drugs may be available under other brand names and in other forms (e.g., capsule rather than tablet).

The final section of the booklet lists useful names and addresses and sources of information.

For additional information and statistics on drug use, see the web sites listed in this section. Information specifically on substances that are banned by national and international athletic and sports regulatory bodies is available from the Canadian Centre for Ethics in Sport, whose toll-free number is listed on page 57.

CAUTION

The information in this booklet is based on current knowledge and may change as new research information becomes available. Much is known about drugs and their possible risks and benefits. Much remains to be found out. Many of the long-term effects of drugs may not be discovered for years.

While many drugs have legitimate uses, no drug should be used without proper caution as to its possible short-term and long-term effects.

WHAT IS A DRUG?

Definitions and Terms

In general, a drug is defined as any substance, other than food, which is taken to change the way the body and/or mind function.

Mood-altering drugs—also called psychoactive (sy-ko-active) drugs—are drugs that can change or affect the way a person thinks, feels or acts. These drugs usually have physical effects as well, but the thing that sets them apart from other drugs is that they work on the mind and the senses. The word “psychoactive” literally means working (active) on the mind or behaviour (psycho).

The effects of a drug are also influenced by how it is taken and by factors such as the age and gender of the person who uses the drug. *(For more information on this topic see the sections on Absorption, Metabolism and Elimination and Gender Differences in the Appendix.)*

Drug use is often described as being legal or illegal (although, for most drugs, it is the possession, manufacture, cultivation and/or sale of the drugs which may be judged technically to be legal or illegal). Most drugs used for medicinal purposes are legally available by prescription or sold over-the-counter. A large number of drugs prescribed in Canada each year are psychoactive drugs that can be used to relieve pain, calm nervousness or aid sleep. Drugs used for non-medicinal purposes include alcohol and

tobacco which can be purchased or used legally by almost anyone who is of legal age.

Some drugs are usually obtained illegally. These include cannabis (marijuana [marihuana], hashish [hash] and hash oil), cocaine, heroin and LSD. Such drugs are usually produced (grown or manufactured in illegal laboratories) for sale on the street. Prescription drugs are also sold and possessed illegally when the transaction does not involve the legal filling of a valid prescription (e.g., Ritalin® and Percodan® are often sold on the street).

When the term “drug” is used in this booklet, it includes drugs used for medicinal and non-medicinal purposes, whether used legally or illegally.

Drugs can come from plants growing wild in fields or planted as a crop, or they can be manufactured in laboratories. They can be helpful or harmful and they may or may not have recognized medicinal properties or purposes.

Continuum of Risk

The continuum of risk provides a framework for understanding drug use and its hazards and consequences as discussed in the following sections. People who use drugs may be at different points on the continuum of risk for different drugs, e.g., a person may be using one drug at a level that results in negative consequences, but using another

drug on an occasional or social basis, or using medication as directed. The continuum ranges from no use to dependence.

No use - the person does not use alcohol or other drugs.

Experimental Use - the person tries a drug out of curiosity and may or may not use the drug again.

Social or Occasional Use - the person uses the drug in an amount or frequency that is not harmful (e.g., a drink on a social occasion).

Medication Used as Directed - the person uses a drug as prescribed, under medical supervision. The risk of harm is minimized.

Harmful Use - the person experiences negative consequences of drug use, e.g., health problems, family, school, work problems, legal problems.

Dependence - the person is psychologically and/or physically dependent on a drug, which is used excessively and the use continues despite the person experiencing serious problems.

WHY DO PEOPLE USE DRUGS?

The Most Common Reasons

The majority of adult Canadians use some type of mood-altering drug, though most do not experience problems or misuse drugs.

People use different drugs for different reasons. The reasons can vary from drug to drug, from person to person or from occasion to occasion. A person may have more than one reason. People may start using a drug for one reason (curiosity, pleasure, social pressures, or for medical reasons) and may continue using it for quite another (such as tension relief or escape).

Media and Communications

Advertisements on radio or TV and in magazines or newspapers, product sponsorship of sporting and artistic events, portrayal of substance use in plays and films and availability of information on the Internet can all affect the way people think about drugs in general, including how they regard illegal drug use. Advertisements may promote drinking or smoking as a social activity or link use to the achievement of success; magazine and TV advertisements may also promote use of over-the-counter medications as treatments for

minor ailments; characters in plays or films may provide models for healthy or unhealthy substance use; the Internet provides access to information on drugs through sources ranging from government public awareness materials to “how to” manuals advising on the illegal use or manufacture of drugs.

Positive Reinforcement

A person may use a drug and keep using a drug because the effects are pleasurable or positively reinforcing. Examples of such pleasurable or positively reinforcing effects can include: feeling “high”, relaxation, disinhibition, relief from pain, tension or unpleasant emotions, being able to sleep or to stay awake or achieve enhanced athletic performance.

Curiosity

Drugs are talked and written about a lot these days. They are a frequent topic of conversation. Some people may have friends or acquaintances who use drugs illegally. Since curiosity is a natural aspect of human behaviour, it is not surprising that many people, especially young people, are tempted to experiment with drugs, both legally and illegally.

Celebration

The use of drugs such as alcohol, may be part of a family occasion, cultural or religious celebration or practice.

Emotional Pressures

Some people use psychoactive drugs to relieve various emotional problems, such as anger, stress, anxiety, boredom or depression. Others take psychoactive drugs to boost their self-confidence. Some young people may use drugs as a way of rebelling or to express their alienation from mainstream society.

People may also use drugs to help them forget about or cope with traumatic life events or situations or to relieve the symptoms of severe psychiatric illness.

Social Pressures

The social pressures to use drugs can be very strong. Both young people and adults may feel social pressure to use drugs (e.g., alcohol on social occasions). Children may be especially influenced by their parents’ use of alcohol, tobacco or other drugs, and use their parent’s use to justify their own drug use.

In some groups, drug-taking is the fashionable thing to do. It is the badge of belonging and the key to social acceptance. Abstainers are excluded. It is hard to be different; so people go along. Going along may mean using cannabis or drinking heavily to be part of a group in which this is the norm without regard to potential negative consequences.

Group pressures of a different kind exist for those engaged in competitive sports or body building. People may use substances, particularly anabolic steroids, because they view such drug use as an accepted part of a successful training regimen.

Previous Drug Use

For most people, trying a drug, particularly using a drug illegally, for the first time is a major step. A single experiment does not mean a person will become a regular user of drugs, but it may remove some of the barriers against trying drugs again.

In some cases, people who regularly use one drug are more likely to use other drugs as well. For example, regular smokers are more likely to be heavy drinkers than nonsmokers. Not surprisingly, there is also a high correlation between smoking tobacco and cannabis use.¹ Also, those who start to smoke or drink early in adolescence are more likely to develop drug problems in later life, than those who begin smoking or drinking in later adolescence.²

¹ Health Canada (1997) *Canada's Alcohol and Other Drugs Survey 1994: A Discussion of the Findings*. Minister of Public Works and Government Services Canada. Cat. No. H39-338/1-1994E.

² Grant, Bridget F. (1998) *Age at Smoking Onset and Its Association with Alcohol Consumption and DSMIV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiology Survey*, *Journal of Substance Abuse*, Vol. 10, 59-73.

Dependence

Some people use drugs because they have become physically or psychologically dependent on them. It does not matter whether the drug is mild or strong, whether it was first used for medical or non-medical purposes, or whether it is used legally or illegally. When people continue using a certain drug because they experience discomfort or distress when use is discontinued or severely reduced, they can be said to be drug-dependent.

WHEN DOES DRUG USE BECOME A PROBLEM?

Definition

Drug use becomes a problem when use of a drug results in negative consequences for the person who uses the drug.

These may be physical, mental, social, emotional, legal, economic or environmental consequences. When a person continues to use a drug despite negative consequences to him or herself or to other people such as family, friends or employer, this use is often informally referred to as drug or substance abuse. Other terms used to describe drug use associated with negative consequences include “misuse”, “dependence” and “addiction”.

As well as being used informally to describe the negative consequences of drug use, the terms “abuse” and “dependence” are also used by professionals in classifying substance-related disorders, e.g., drug dependence, alcohol abuse.

“Drug or substance misuse” is generally used to describe drug problems that are less serious or longstanding or, in some cases, inadvertent, such as not complying with prescription medication instructions.

When used informally, “dependence” refers to when a person who uses drugs feels unable to function without taking the drug. Dependence may be either psychological or physical or both. Dependence includes continued use of the

drug despite adverse consequences and usually, but not always, the presence of tolerance and withdrawal symptoms.

Although the term “addiction” is no longer used as a medical diagnosis, it is still commonly used to describe a range of compulsive behaviours, including drug abuse and gambling problems. It is also often used to describe specialized services (as well as related policies and activities) for people with drug abuse problems.

Drug abuse can result in increased risk of health problems such as illness, injuries and physical damage to the body or death.

Drug abuse can result in personal problems such as loss of motivation, or physical and/or psychological dependence, problems at work or school.

Drug abuse can result in family problems like strained and unhappy family relationships and family breakdown.

Drug abuse can contribute to social problems like increased crime and traffic crashes.

Drug abuse can also result in financial costs to society for things like health care, crime or lost productivity. (*See section on the Costs of Substance Abuse in Canada in Appendix.*)

Sometimes even the use of a drug for medicinal purposes can

cause problems. These problems may occur because of side effects from the medication, or because the drug is used for too long, at the wrong dosage or because the person does not use it as directed.

Different Types of Drug Problems

Drug problems can develop for a variety of reasons and from use of any type of drug.

Using Drugs Too Much

Use of a drug can cause a problem if too much of the drug is taken at one time or if the drug is taken too frequently.

These problems may include immediate consequences such as unpleasant side effects or even a harmful or fatal overdose. Other problems may take some time to develop, such as needing more of the drug to achieve the same effect and becoming dependent on the drug.

Some medicinal drugs can have a beneficial effect if taken at the correct dose for that person, but cause problems if too large a dose of the drug is taken or if the drug is used more frequently than prescribed. In the same way, a drug like alcohol may not be harmful if taken in moderation. Many of the problems caused by alcohol result from drinking too much at one time.

Using Drugs for Too Long

A drug can cause problems if it is taken regularly for a long period of time. Some medicinal drugs, like pain killers, as well as drugs taken to aid sleep or reduce anxiety, can cause problems if they are taken after they are no longer needed. For instance, people who use drugs may have difficulty stopping use of the drug because they have become dependent on it.

Taking Drugs for the Wrong Reasons

A drug can cause problems if it is taken for the wrong reason. A common example is using alcohol as a way of coping with unpleasant feelings, rather than drinking as part of a social or celebratory occasion.

Taking Drugs Without Following Directions

Taking drugs without paying attention to label directions and warnings can also lead to serious problems, especially with drugs that can impair driving performance and drugs that should not be mixed with alcohol. Taking a drug prescribed for someone else is another example of not following directions as a prescription label designates that the prescription is for a particular individual. Also, taking less than the prescribed dose of a drug or stopping its use too early can result in problems.

Combining Drugs

A drug can cause problems if it is taken in combination—either knowingly or unknowingly—with certain other drugs. Some combinations can produce unwanted and unexpected effects. Using alcohol with a benzodiazepine increases the likelihood that the person who uses the drugs may feel increased effects such as drowsiness, dizziness and confusion. Other combinations, like barbiturates with alcohol, can cause death.

Extremely Dangerous Drugs

With a few drugs, like PCP (Angel Dust), and inhalants such as gasoline, the potential dangers are extremely high and there are no legitimate human uses. These drugs can cause serious problems no matter how or when they are taken. With such drugs there is no difference between use and abuse. To use them is to abuse them.

Commonly Used and Abused Drugs

Caffeine is the most commonly used psychoactive drug in our society. However, alcohol and tobacco are the most widely abused drugs by both young people and adults. Abuse of these two drugs results in enormous costs to both the individual person who uses drugs and society. Among smokers, those who begin smoking as adolescents often become regular, lifelong smokers. Smoking and heavy drinking are major causes of

health problems and premature death among Canadians, and they result in enormous costs to both the individual and society.

Illegal use of drugs is more common among adolescents and young adults than other age groups. Several surveys have found that as many youth report using cannabis in the past year as tobacco. In contrast, use of medication to aid sleep or reduce anxiety is more common among seniors than other age groups.

WHAT ARE THE HARMFUL CONSEQUENCES OF DRUG USE?

Definition

Drugs can be considered harmful when their use causes physical, mental, social, legal or economic problems.

Not all drugs are equally hazardous. Drugs sold legally in Canada for medicinal purposes are generally considered safe when taken according to the directions on the label. However, some of these drugs may produce unpleasant side effects even when used under medical guidance. Drugs obtained illegally are more likely to be hazardous; their effects are much less predictable and potentially dangerous. Many drugs are harmful when used in large doses, or in combination with other drugs.

The specific hazards or problems of individual psychoactive drugs are listed in the charts in the second half of this booklet. Here we will discuss these hazards or problems in a general way and define some widely-used terms.

Safety Hazards

Most psychoactive drugs can reduce physical coordination, distort the senses or impair memory, attention and judgment. These effects can lead to serious safety risks, especially if the person who uses the drugs drives a vehicle or operates machinery. Many road injuries and fatalities are caused by drivers intoxicated by alcohol or some other drug or

combination of drugs. Also, effects such as reduced physical coordination and impaired judgment can lead to falls and other serious accidents. People who have taken alcohol or other drugs are often unaware of the extent of their impairment.

This makes the risk that much greater. (*See sections on Server Liability and Drugs and Driving in Appendix.*)

Physical Health Problems

All psychoactive drugs have effects other than those for which they are used, and some of these can be very damaging to physical health. Smoking marijuana or tobacco, for example, can cause lung damage. Alcohol abuse can cause liver damage. Sniffing cocaine can damage the inside of the nose. People who inject drugs by hypodermic needles can get infections such as hepatitis or HIV. (*See section on HIV/AIDS and Hepatitis in Appendix.*)

Mental Health Problems

Some drugs can cause short-term confusion, anxiety or mental disturbance (“bad trips”). In the longer term, drug abuse can result in personality disturbances, learning problems, and loss of memory, and can contribute to mental health problems. A person who turns to drugs as a way of avoiding normal anxiety and sadness may be establishing a pattern of behaviour that can be hard to

break. Many people who use drugs in this way come to believe that they cannot function normally without drugs. People with histories of serious emotional or mental health problems may also turn to drugs as a way of coping with unpleasant feelings. Also, experience of physical or sexual abuse is common among people with alcohol or other drug problems. (*See section on Concurrent Disorders in Appendix.*)

Violence and Crime

Use of drugs is sometimes associated with violence and crime. Although, alcohol or other drugs do not cause violence, both the victims and perpetrators of violence may be using certain drugs. Date rape is one example, where the effects of benzodiazepines or alcohol may put the victim at increased risk for such violence. Two drugs, Rohypnol (flunitrazepam) and GHB (gamma-hydroxybutyrate) have been associated with date rape because their effects incapacitate the victim and make the person unable to resist the sexual assault. Because they are colourless, odourless and tasteless, the victim may not be aware that the drug has been deliberately added to their drink.

People may also commit crimes in order to make money to buy drugs, and drug problems are frequent among criminal offenders.

Tolerance

Tolerance means that, over time and with regular use, a person who uses drugs needs more and more of a drug to get the same effect.

Tolerance increases the physical health risks of any drug simply because it can result in increased drug use over time. Tolerance also increases the risk of dangerous or fatal overdose, for two reasons.

First, the body does not necessarily develop tolerance to all the effects of the drug to the same extent. Long-term use of barbiturates, for example, causes a person to become tolerant to the mood-altering effect of barbiturates, but less so to their depressant effect on respiration. When this happens, the dose required to achieve the mood-altering effect may be dangerously close to the lethal dose and death can result from respiratory failure.

Second, if a person has not taken the drug in a long time, the expected tolerance may actually have decreased. So, after a long period of abstinence, the size of the dose the person had previously become accustomed to may actually be enough to cause a life threatening or fatal overdose.

As people age, physiological changes may mean they need less of a drug to get the same effect.

This result may be compounded if their liver or kidneys have been damaged by chronic disease.

Physical Dependence

Physical dependence occurs when a person's body becomes so accustomed to a particular drug that it can only function normally if the drug is present. If people who use drugs drastically reduce their level of use or stop using the drug abruptly, they may experience a variety of signs and symptoms ranging from mild discomfort to seizures. These effects, some of which can be fatal, are collectively referred to as "withdrawal".

Withdrawal symptoms are often opposite to the effects produced by taking the drug, e.g. when a person stops using a stimulant drug such as cocaine they may become depressed, need to sleep a lot, and have increased appetite when they awaken. To avoid the discomfort of withdrawal, the person who uses drugs may start to use again or feel unable to stop using the drug. Not all drugs produce physical dependence, but they may still be abused because the person who uses drugs becomes psychologically dependent on the drug's effects.

Psychological Dependence

Psychological dependence exists when a drug is so central to a person's thoughts, emotions and activities that it is extremely difficult to stop using it, or even stop thinking about it. A strong desire or craving to use a drug may be triggered by internal or external cues such as the end of a meal for smokers or seeing injection equipment for people who inject drugs. Like physical dependence, psychological dependence is a

cause of continued drug use. An individual may be both psychologically and physically dependent on a drug.

Overdose

An overdose of any drug is a dose that can cause serious and sudden physical or mental damage. An overdose may or may not be fatal, depending on the drug and the amount taken. Dangerous overdoses are more likely to occur in people who have developed a tolerance for some effects of a drug more than others, those who return to drug use after a long period of abstinence, or those who use drugs illegally and have no way of knowing the exact potency of what they are buying. Sudden increases in the purity of some illegal drugs (e.g., heroin), have resulted in unintentional fatal overdoses.

Hazards of Using Drugs Illegally

Using drugs illegally has its own set of risks. People who use drugs that have been obtained illegally can never know exactly what they are taking. Dealers may not know (or reveal) exactly what they are selling. Some drugs are laced with other drugs or chemicals, or contaminated by fungi or moulds, that can be harmful. Often one drug is sold in place of another, e.g., PCP sold as LSD. As a result, many bad drug reactions, including fatal overdoses, have occurred. People who use drugs heavily may use any drug that is available at the right price.

As well, people who regularly use drugs illegally, particularly people who inject drugs, are at increased risk for a range of health, legal and social problems.

Combining Drugs

Many drugs become more dangerous when they are mixed. People may combine drugs intentionally to enhance the effects, or to counteract undesirable side-effects, or they may use a hazardous combination of drugs without intending to do so. For example, they may take sleeping medications after drinking alcohol without being aware that using these drugs together is hazardous. Even if the person is aware that mixing drugs is dangerous, they may do so anyway. Today a mixture of heroin and cocaine is a common example. People who use drugs illegally may mix drugs unknowingly because they do not know what they are taking.

Many drugs taken together have the potential to interact with one another to produce greater effects than either drug taken by itself. Or, the combination of drugs may produce a new or unexpected effect. For example, alcohol, opioid analgesics (like codeine), barbiturates (like Seconal®) and benzodiazepines (like Valium®) are all depressant drugs. When taken alone, they can cause relaxation, disinhibition, loss of coordination and sleepiness. If these depressant drugs are taken at the same time, these effects are increased. Such combinations may result in confusion, injuries from falls,

depressed breathing, coma and death.

Some antidepressants and many drugs taken to treat epilepsy, nausea, allergies and colds also have depressant effects. When taken with other depressants like alcohol, they can dangerously slow or stop breathing. Alcohol can also interact with common medications for heart problems, blood clotting disorders, fungal and bacterial infections, and diabetes, either making them less effective or producing unexpected and undesirable effects.

Although classed as a stimulant, cocaine can also cause irregular and shallow breathing. Taking cocaine with heroin, a depressant, increases the risk of death from respiratory depression.

Combining drugs may also seriously impair a person's ability to operate a motor vehicle or other machinery.

Legal Problems

A drug-related conviction can have serious consequences for the individual. The conviction may result in a fine or prison sentence as well as a criminal record. Having a criminal record may restrict employment opportunities and travel outside the country. A subsequent conviction may result in a harsher sentence.

Athletes who use a substance that is banned by their local, provincial, national or international sporting organization may be convicted of a doping infraction. This may

result in being banned from participating in sports and may also have consequences for their future career opportunities.

WHAT IS CANADA'S DRUG STRATEGY?

Canada's Drug Strategy

Canada's Drug Strategy is a national, concerted effort to address alcohol and other drugs in Canada. The long-term goal of Canada's Drug Strategy is to reduce the harm associated with the use of alcohol and other drugs to individuals, families, and communities. This is accomplished through pursuing the following five goals:

- ▶ Reducing the demand for drugs
- ▶ Reducing drug-related mortality and morbidity
- ▶ Improving the effectiveness of and accessibility to substance abuse information and interventions
- ▶ Restricting the supply of illicit drugs and reducing the profitability of illicit drug trafficking
- ▶ Reducing the costs of substance abuse to Canadian society.

Canada's Drug Strategy reflects a balance between reducing the supply of drugs and reducing the demand for drugs. It involves federal, provincial and territorial governments and addiction agencies,

nongovernmental organizations, professional associations, law enforcement agencies, the private sector and community groups.

A comprehensive framework provides the basis for the federal government's drug strategy. The framework recognizes the importance and interdependence of seven components: research/knowledge development; knowledge dissemination; prevention programming; treatment and rehabilitation; legislation, enforcement and control; national coordination; and international cooperation.

The effectiveness of individual interventions is linked to the degree to which six principles have been recognized: sensitivity to gender, culture, and age; involvement of target groups; attention to the needs of people who use drugs; the underlying determinants associated with drug abuse; the need for an appropriate legislative framework and prevention as the most cost-effective approach.

WHAT ARE CANADA'S DRUG LAWS?

Controlled Drugs and Substances Act

The importation, production, distribution and possession of various drugs and substances in Canada are governed primarily by the provisions of the ***Controlled Drugs and Substances Act (CDSA)***, which replaced the *Narcotic Control Act* and Parts III and IV of the *Food and Drugs Act* on May 14, 1997. Some provisions of this legislation will not apply to certain drugs and substances until regulations, to be made on the recommendation of the Minister of Health, are enacted. Consequently, the legal status sections of the charts in this publication describe both those provisions that are currently in force, as well as those (shown in light italics) which will come into force when regulations are enacted. Legal status information concerning the various substances described is intended solely to provide general guidance and should not be taken to be a complete statement or interpretation of the law.

The ***CDSA*** prohibits the importation, exportation, production, sale, provision and possession of a wide variety of controlled drugs and substances except where permitted by regulations. Controlled drugs and substances for medical treatment may be legally obtained only with a prescription from a licensed medical practitioner (including

dental and veterinary practitioners). A prescribed drug may, of course, be legally possessed and used only by the person for whom it was prescribed. A conviction for trafficking, or unlawful possession, export, import, trade or production of a drug can result in imprisonment, a fine or, in some cases, both.

Not all offences under the ***CDSA*** result in a criminal record upon conviction. Offences under the ***CDSA*** which are *summary conviction only* offences do not normally result in a criminal record (criminal record refers to a conviction entered in a register maintained by the RCMP, and known as the Canadian Police Information Centre [CPIC]). For example, the offence of simple possession of 30g or less of cannabis (marihuana/marijuana) or 1g or less of cannabis resin (hashish) is a *summary conviction only* offence and does not normally result in a criminal record. However, simple possession of more than 30g of cannabis or 1g of cannabis resin is an example of a dual offence under ***CDSA*** and may be either a *summary conviction* or *indictable offence*, and upon conviction will result in a criminal record. Offences which are *indictable offences only*, such as possession of cannabis for the purposes of trafficking or trafficking will also result in a criminal record upon conviction. Those convicted of a summary offence

resulting in a criminal record may apply for a pardon three years after conviction, while those convicted of an indictable offence may apply for a pardon five years after conviction.

It is also an offence under the ***CDSA*** for a person to seek or obtain a controlled substance from a practitioner without disclosing to that practitioner all other controlled substances obtained by that person from other practitioners within the previous thirty days. The maximum punishment for this offence upon indictment is seven years, five years less a day, three years and eighteen months, respectively. For a first offence upon summary conviction, the maximum punishment is a fine of up to \$1,000 and up to six months imprisonment, and for a subsequent offence, a fine of up to \$2,000 and up to one year imprisonment.

Sentencing

Judges have considerable discretion in sentencing offenders under the ***CDSA***. Sentences may take into account aggravating factors such as selling drugs to children, using or involving children under 18 years in the commission of the offence or selling drugs in or near schools or school grounds, or other public places where youth frequent.

Drug Paraphernalia

Laws

Section 462.2 of the Criminal Code of Canada addresses drug paraphernalia. Under this section, it is a summary conviction offence to import, export, manufacture, promote or sell instruments or literature for illicit drug use. However, in 1994, a lower court in Ontario ruled that this prohibition in relation to “drug literature” was unconstitutional. This ruling does not apply to any other province/territory or to drug instruments.

Sale of Alcohol and Tobacco

Sale and use of tobacco and alcohol is subject to both federal and provincial/territorial legislation, e.g., sale to minors, use in public places.

Impaired Driving

As well, the Criminal Code of Canada contains offences related to driving while impaired by alcohol or other drugs. Provinces/territories have also enacted legislation to address impaired driving.

Diversion to Treatment

Some legislation allows for diversion of persons from the criminal justice system to treatment (alternative measures). This legislative reform will enhance the expanding collaboration that is occurring across Canada between the police/justice system and the health/social service system. Diversion to treatment also recognizes the reality of overcrowded courts

and the limitations of enforcement, and builds on the trends in community policing and collaboration in addressing community problems such as drug abuse. Many provinces/territories also require those convicted of impaired driving offences to attend substance abuse education and/or treatment programs.

International Conventions

Canada has also ratified a number of international conventions to control drugs. These include: the 1961 Single Convention on Narcotic Drugs, as amended by the 1972 Protocol; the 1971 Convention on Psychotropic Substances; and the 1988 Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.

Banned and Restricted Performance-Enhancing Sport Drugs

Sports regulatory bodies, both in Canada and internationally, have banned the use of many drugs.

THE CHARTS

The following pages contain a series of charts with detailed information on specific drugs. Each chart represents a different group or family of drugs. Each individual drug within a group is described by its physical appearance, its origin and medical uses, its short-term effects, its long-term effects, its addictive properties and its legal status. Each drug is listed by its common designation (for hallucinogens and cannabis preparations) or its generic name (for other drugs), in bold face type. Where a common designation is used, it is followed by the drug's chemical name. For drugs marketed as (or in) prescription products, the generic name is followed by at least one widely recognized example brand name indicated by the symbol "®". Finally, where relevant, some popular street names are given in italics.

Eight of the nine charts deal with distinct groups of drugs. These are sometimes called pharmacological (farm-a-ko-logical) drug groups. The word "pharmacology" means the study of drugs. It comes from the Greek words *pharmakon* (drugs) and *logos* (study).

Anabolic steroids are included because of both their use for enhancing performance or changing body image, and their psychoactive effects. It should be noted that national and international sports bodies have also banned many other types of drugs such as stimulants, cannabis, and CNS depressants from use in sports.

1. Hallucinogens

Hallucinogens are drugs that dramatically affect perception,

emotions and mental processes. They distort the senses and can cause hallucinations—sensory images similar to dreams or nightmares. Hallucinogens are sometimes called "psychedelic drugs". They are most often used for their so-called "mind-expanding" effects. The best known and most frequently used hallucinogen is LSD. There is no currently accepted medical use for hallucinogenic drugs, although in the past LSD and some other hallucinogens were used experimentally to treat some psychiatric disorders. Use of some hallucinogens, particularly MDMA "Ecstasy", has become popular in the dance scene and at raves. Accidental deaths due to hyperthermia (overheating) and dehydration (fluid loss) have occurred among young people from use of Ecstasy.

2. Central Nervous System Depressants

Included in this category of drugs are opioid analgesics, alcohol, inhalants, benzodiazepines, barbiturates and other sleeping pills.

Central Nervous System (CNS) depressants are drugs that cause a slowing down or depression of the central nervous system. At low doses, they produce a feeling of calm, drowsiness and well-being. At higher doses, some CNS depressants can produce severe intoxication, unconsciousness, coma and death.

When more than one CNS depressant is present in the body at the same time, their effects may be dangerously intensified. Alcohol and barbiturates are an example of a particularly dangerous combination.

Regular use of CNS depressants can result in physical and psychological dependence.

Opioid Analgesics are highly addictive painkilling drugs that may also produce an extreme sense of well-being. Some are natural drugs that come from the opium poppy; others are synthetics produced in laboratories. When opioid analgesics are taken with other CNS depressant drugs, the effects are intensified and can result in death. Opioids, such as morphine, meperidine, and methadone, have valuable medical uses, but should only be used under medical supervision. Because the abuse of opioid analgesics poses serious personal and social problems, these drugs are under the strictest legal control.

Alcohol affects the central nervous system in similar ways to other depressant drugs, producing relaxation and disinhibition at low doses, while at higher doses, producing intoxication, impaired judgment and coordination, and at very high doses, coma and death.

Alcohol is found not only in beer, wine and liquor, but also in some commonly used liquid, over-the-counter medications and products.

Inhalants (also known as volatile solvents) are depressant drugs that produce feelings of euphoria, light-headedness, exhilaration and vivid fantasies, and also slow down body functions such as breathing. Their use can result in brain damage, asphyxiation and death.

Because they can be sniffed or inhaled, these substances are known as inhalants. They are also known as volatile solvents because they evaporate when exposed to the air (volatile), and as liquids,

they dissolve many other substances (solvents).

Inhalants can be categorized as solvents, gases or nitrites. Solvents include industrial and household products such as cleaning fluids, glues, paint thinners and removers. Gases are found as aerosol propellants in some paint, hair and deodorant sprays. Gases also include gasoline for motor vehicles, lighter fluids and medical anaesthetic gases such as ether and nitrous oxide, as well as the less commonly encountered vasodilator nitrites, amyl nitrite and butyl nitrite.

Benzodiazepines produce a sense of calm and well-being at lower doses. At very high doses, they can cause effects similar to barbiturates, including unconsciousness. They are seldom fatal in overdoses, except when mixed with other drugs. Benzodiazepines are commonly prescribed for the management of anxiety, including panic disorders, for sleep problems, as muscle relaxants, for control of seizures and to reduce symptoms associated with alcohol withdrawal. One of the most widely known benzodiazepines is Valium®. Street names include: tranks, downers (a name also used in reference to barbiturates), Vs (Valium®).

Barbiturates are much less frequently prescribed today and have largely been replaced by benzodiazepines. At low doses, they produce a feeling of calm, drowsiness and well-being. Many barbiturates were first developed as sleeping pills. At higher doses, they can produce severe intoxication, unconsciousness, coma and death. When combined with another CNS depressant drug such as alcohol, their use can be life threatening.

Barbiturates can produce severe dependence with regular use.

3. Stimulants

Stimulants are drugs that excite or speed up the central nervous system. They are generally used for their ability to increase alertness and endurance, to keep people awake for a long period of time, to decrease appetite, and to produce feelings of well-being and euphoria. They have only limited medical application. In Canada, they are used in the treatment of narcolepsy, attention-deficit hyperactivity disorder (ADHD), Parkinson's Disease, and have had some very limited use in the treatment of obesity. Stimulants can produce severe psychological dependence. The psychological dependence produced by cocaine, for example, is believed to be among the strongest of all drugs.

Stimulants, including nicotine and caffeine, can produce physical dependence.

4. Cannabis

Cannabis, which includes marijuana (also spelled marihuana), hashish and hash oil, is presented in a chart of its own. It is the most widely-used of all drugs that are used illegally. Although basically a hallucinogen, cannabis also produces depressant effects, as well as increased heart rate.

5. Antidepressants

Antidepressants are drugs used to treat clinical depression and some other disorders such as panic attacks, obsessive compulsive disorders and bulimia. They are designed to elevate mood. There are three types of antidepressants currently in use which all work in slightly different ways on the central nervous system. Tricyclic antidepressants and Monoamine oxidase inhibitors (MAOIs) were

first introduced in the 1950s. Tricyclic antidepressants have been the most widely used antidepressant drugs. However, another class of antidepressants, Selective Serotonin Reuptake Inhibitors (SSRIs), has been introduced more recently. SSRIs are now more commonly used because they have fewer side effects. Despite their name, some antidepressants also have some depressant properties and should not be used with alcohol or other depressant drugs.

6. Anabolic Steroids

Anabolic androgenic steroids belong to a class of drugs known as ergogenic or performance-enhancing drugs. They include both testosterone and synthetic drugs related chemically to testosterone. They are used primarily in veterinary medicine and in the treatment of a few human disorders. Their use as performance-enhancing drugs became popular among some Olympic athletes as a way of improving muscle development and endurance. They continue to be used for these purposes, (as well as to improve body image) although they have been banned by most national and international athletic and sports regulatory bodies. They have the potential to seriously damage the person's health. It is also important to note that many other substances are banned by national and international athletic and sports regulatory bodies.

Note: The next section illustrates some of the drugs that are most often used illegally. These pictures are just examples. Drugs that are intended for medicinal use, such as antidepressants, steroids and benzodiazepines are not included.

1
HALLUCINOGENS

The term "hallucinogen" (from the Latin word *allucinari*, meaning "to dream, to wander in the mind") is applied to any drug used to produce distortions of reality and hallucinations. These drugs are sometimes called illusionogenic or psychedelic.

PCP
(phencyclidine)
angel dust, elephant, hog

LSD
(lysergic acid diethylamide)
acid, blotter

MDA
(3,4-methylenedioxy-amphet-amine)

MDMA
(3,4-methylenedioxy-N-meth-ylamphetamine or 3,4-methylenedioxy-metham-phetamine)
Ecstasy, Euphoria, X, XTC, Adam

MESCALINE
(3,4,5-trimethoxybenzene-et-hanamine)
mesc

PEYOTE (Lophophora)
(3,4,5-trimethoxyphenethyl-a-mine)

PSILOCYBIN
(occurs together with psilocin in some mushrooms)
magic mushrooms, shrooms

STP or DOM
(2,5-dimethoxy-4-methylam-petamine)

PMA
(paramethoxy-amphetamine)

DMT
(N,N-dimethyltryptamine)

2CB or 2C-B or 2-CB
(4-Bromo-2,5-dimethoxyphe-nethylamine or α -desmethyl-DOB)
Nexus, bromo, toonies, herox, Synergy

2A
**CNS DEPRESSANTS:
OPIOID ANALGESICS**

CNS Depressant drugs are drugs that cause a slowing down or depression of the central nervous system.

CODEINE

OPIUM

MORPHINE

HEROIN
(diacetylmorphine)
(diamorphine)
H, horse, junk, smack

METHADONE
dollies

MEPERIDINE or PETHIDINE
Demerol®

HYDROMORPHONE
Dilaudid®

HYDROCODONE
Novahistex DH®
Novahistex DH
Expectorant®
Novahistine DH®

OXYCODONE
Percodan®
percs

PENTAZOCINE
Talwin®
Ts and Rs: Talwin® and Ritalin®

BUTALBITAL with codeine, ASA and caffeine
Fiorinal-C®

2B
**CNS DEPRESSANTS:
ALCOHOL &
SOLVENTS/INHALANTS**

ALCOHOL
(ethyl alcohol or ethanol)

INHALANTS
(volatile solvents)
sniff

2C
**CNS DEPRESSANTS:
BENZODIAZEPINES**

Benzodiazepines used primarily as tranquilizers: (anxiolytics)

DIAZEPAM
Valium®

OXAZEPAM
Serax®

LORAZEPAM
Ativan®

ALPRAZOLAM
Xanax®

Benzodiazepines used primarily as sleeping pills:

TEMAZEPAM
Restoril®

FLURAZEPAM
Dalmane®

TRIAZOLAM
Halcion®

FLUNITRAZEPAM
Rohypnol®
roofies, rope, the forget pill

2D
**CNS DEPRESSANTS:
BARBITURATES/OTHER
SLEEPING PILLS/OTHER
PSYCHOTROPIC DRUGS**

Barbiturates/Other Sleeping Pills

SECOBARBITAL
Seconal®
reds, red birds, red devils

PENTOBARBITAL
Nembutal®
yellow jackets

AMOBARBITAL
Amytal®
blue heavens

AMOBARBITAL-SECOBARBITAL
Tuinal®
Christmas trees, rainbows

ZOPICLONE
Imovane®
Other Psychotropic Drugs

GHB
(gamma-hydroxybutyrate)
liquid ecstasy, liquid x, grievous bodily harm, Scoop

3 STIMULANTS

Stimulants (from the Latin word *stimulare*, meaning “to goad, torment, incite”) are drugs that produce a quick temporary increase of energy. Tobacco and caffeine are the two most popular stimulants. Cocaine has gained popularity in recent years. Most of the other drugs in this category are amphetamines or chemically-related substances.

COCAINE

C, coke, snow, flake, nose candy, crack (a free-base form of cocaine)
Amphetamines:

DEXTROAMPHETAMINE

Dexedrine®
dexies

METHAMPHETAMINE

Desoxyn®
speed, crystal, meth, ice, crank

METHCATHINONE

cat

KHAT

(*Catha edulis*)
qat, kat

Other:

METHYLPHENIDATE

Ritalin®

DIETHYLPROPION

Tenuate®

PHENTERMINE

Ionamin®

TOBACCO

(*Nicotiana tabacum*)

CAFFEINE

4 CANNABIS

Cannabis refers to the preparations of the plant *Cannabis sativa* (Latin for “cultivated hemp”). THC, a synthetic preparation, the major psychoactive ingredient in cannabis preparations, is also included in this section.

MARIJUANA

(marihuana)
cannabis, pot, grass, weed, reefer, ganja, joint

HASHISH

hash

HASH OIL

oil, honey oil

THC

(tetrahydrocannabinol)

5 ANTIDEPRESSANTS

Antidepressants are drugs designed to treat clinical depression by elevating mood.

Tricyclics:

AMITRIPTYLINE

Elavil®

CLOMIPRAMINE

Anafranil®

DESIPRAMINE

Norpamin®

DOXEPIN

Sinequan®

IMIPRAMINE

Tofranil®

TRIMIPRAMINE

Surmontil®

SSRIs:

FLUOXETINE

Prozac®

VENLAFAXINE

Effexor®

FLUVOXAMINE

Luvox®

SERTRALINE

Zoloft®

MAOIs:

TRANLYCYPROMINE

Parnate®

PHENELZINE

Nardil®

MOCLOBEMIDE

Manerix®

6 ANABOLIC STEROIDS

Anabolic steroids act like the male sex hormone testosterone, and are known as ergogenic or performance-enhancing drugs.

OXYMETHOLONE

Anadrol-50®

STANZOLOL

Winstrol® and Winstrol V®

NANDROLONE

Deca-Durabolin®

METHANDROSTENOLONE

or METHANDIENONE
or METANDIENONE
Dianabol®

OXANDROLONE

Anavar®

BOLDENONE

Equipoise®

METHENOLONE

METENOLONE
Primobolan®

MESTEROLONE

Proviron®

TESTOSTERONE CYPIONATE

Depo-testosterone®

TESTOSTERONE ENANTHATE

Delatestryl®

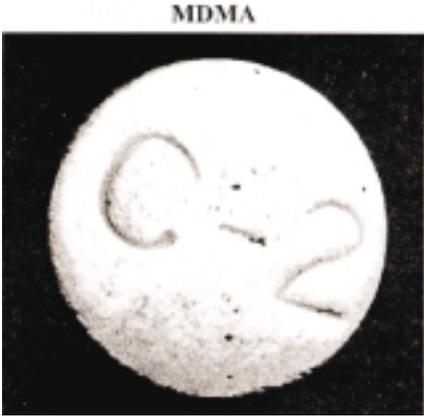
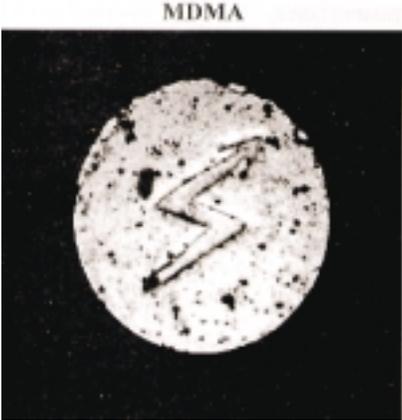
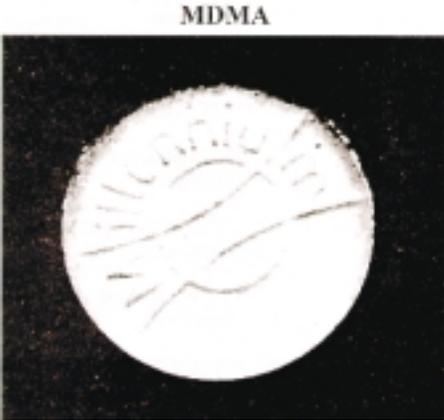
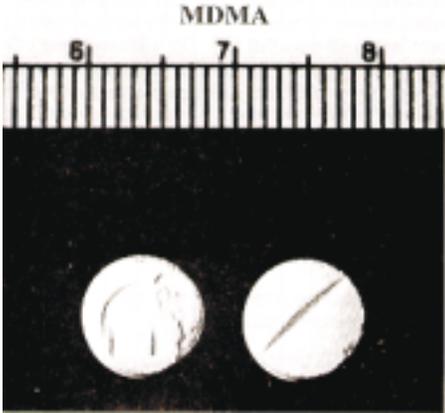
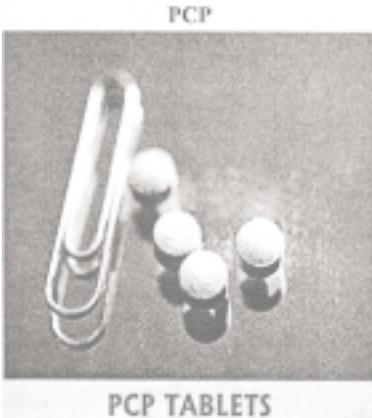
TESTOSTERONE PROPIONATE

Testex®

TESTOSTERONE UNDECANOATE

Andriol®

Hallucinogens



Central Nervous System Depressants

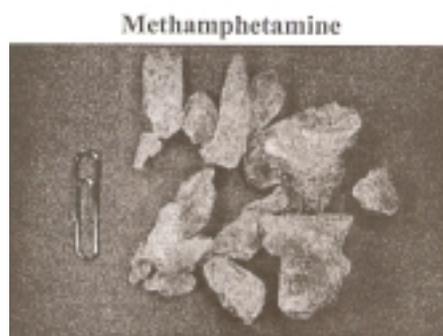
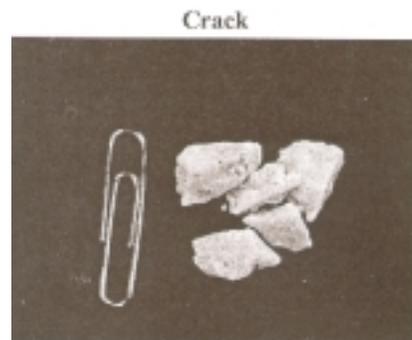
Opium Poppy



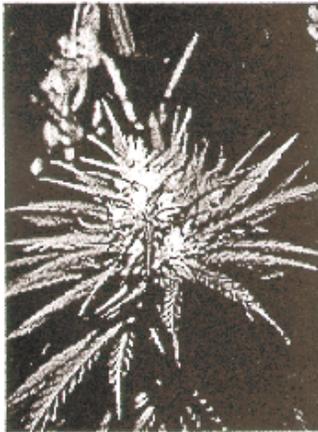
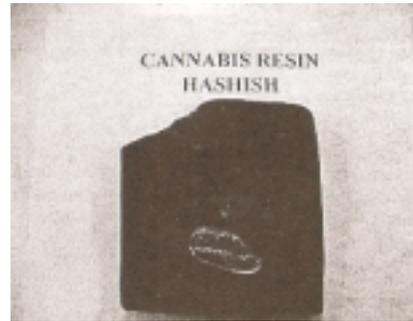
Heroin - Black Tar



Stimulants



Cannabis



The flowering top of *Cannabis sativa*



1 HALLUCINOGENS

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
PCP (phencyclidine) <i>angel dust, elephant, hog</i>	Sold as powder of any colour, in crystals, liquid, tablet, capsule or paste. Frequently passed off as LSD, THC, mescaline or other drugs. In samples analyzed at drug testing labs, content of a single dosage unit (e.g., tablet, capsule) has ranged from 1.3 to 81 mg; however, 1-5 mg is enough for a high in non-tolerant people. Can be sniffed, smoked, swallowed or injected.	Originally developed as an intravenous anaesthetic; now discarded for human use. Later used in veterinary medicine as general anaesthetic or tranquilizer for large animals, but is no longer used for this purpose.	Effects of low to moderate doses last 3 to 18 hours. Effects of high doses may last for several days. It can produce a state of pleasurable intoxication, a sense of separation from surroundings, perceptual distortions, difficulty in concentrating and communicating. People may become highly confused, paranoid, terrified, aggressive, passive. Bad trips are more common with PCP than with other drugs. Overdose can cause seizures, coma and death. Accidental death can result from drug-induced confusion.
LSD , and any salts thereof (Lysergic acid diethylamide) <i>acid, blotter</i>	Sold on street as coloured drops on blotting paper, on gelatin sheets, as tablets, capsules, or liquid solution. Common dose is 15 to 50 micrograms (1,000 micrograms = 1 mg), usually taken orally.	Synthesized from lysergic acid, which is found in a fungus growing on various grains. Produced in labs specifically for illegal drug market. No current medical use.	Effects are felt within an hour, and last 2 to 12 hours. Perception intensifies, colours appear brighter, objects more sharply defined or distorted. Possible changes in the perception of time and distance. A person may feel the body as light, heavy or distorted. Thinking and concentration are difficult and short-term memory is impaired. Extreme mood swings, including joy, inspiration, depression, anxiety, terror, aggression can occur. There are no known deaths directly caused by overdose, but drug-induced confusion has caused accidental deaths.
MDA (3,4-methylenedioxy-amphetamine)	Brown or white powder sold loose, in capsules, or as amber liquid. Common dose is 100 to 200 mg, usually taken orally.	Produced in labs specifically for illegal drug market. No medical use.	Effects occur in 30 to 60 minutes and typically last about 8 hours. MDA produces a sense of well-being, heightened tactile sensations and emotions. Pupils dilate, blood pressure increases, and nose and throat become dry. Higher doses produce effects similar to LSD. Overdose can cause death.
MDMA (3,4-methylenedioxy-N-methylamphet-amine) (3,4-methylenedioxy-methamphetamine) <i>Ecstasy, Euphoria, X, XTC, Adam</i>	Usually sold as white or off-white tablets. Common dose is 50 to 200 mg usually taken orally. A similar chemical MMDA has been misrepresented as Ecstasy on the street.	Produced in labs specifically for illegal drug market. No currently accepted medical use.	A hallucinogen with stimulant properties which can produce feelings of euphoria, pleasure, empathy and sociability, as well as confusion, depression, sleep problems, anxiety, panic attacks, blurred vision, nausea, muscle tension, teeth-clenching, faintness, chills, sweating and increased heart rate and blood pressure. Higher doses produce distortions in perception, thinking and memory, hallucinations and, in some people, anxiety and depression. Deaths as a result of kidney and/or heart failure due to dehydration or hyperthermia have occurred in the context of raves or dances.
Mescaline (3,4,5-trimethoxybenzene-ethanamine), and any salts thereof Peyote (Lophophora) (3,4,5-trimethoxyphenethylamine)	Synthetic mescaline is a white or coloured powder; usually taken in form of powder, tablet, capsule or liquid. Common dose is 300 to 500 mg, usually taken orally. Organic or natural mescaline is used to describe the peyote button which usually comes in capsule form, but can also be chewed or ground up and smoked. Of samples analyzed at drug-testing labs, nearly 90% turn out to be PCP, LSD or some other substance.	Derived from dried buttons of peyote cactus, or synthesized. No commonly accepted medical use.	Effects appear slowly, last 10 to 18 hours, and include changes in perception and mood, disorientation, impaired short-term memory and concentration. Physical effects include dilation of pupils, increased blood pressure and heart rate, fever, sweating, nausea and vomiting. High doses can cause a headache.
Psilocybin , and any salts thereof (occurs together with psilocin in some mushrooms) <i>magic mushrooms, shrooms</i>	Can be distributed as mushrooms or in capsules containing powder of any colour. Can be sniffed, smoked or injected. Powder mixed with fruit juice is common form of preparation. Common dose is anywhere from 1 mg to 20 mg, taken orally. What is sold as psilocybin usually turns out to be PCP or LSD.	Active ingredients in several species of mushroom and other fungi that grow throughout Canada; the most common belong to the genus <i>Psilocybe</i> .	Effects are felt after about half an hour, last several hours, and include sensations of relaxation or fatigue, separation from surroundings, heaviness or lightness. Larger doses produce perceptual distortions, dizziness, abdominal discomfort, numbness of the mouth, nausea, shivering, yawning, flushing and sweating. There are no known deaths directly caused by overdose, but drug-induced hazardous behaviours have occurred in some individuals.

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Flashbacks may occur (see LSD below). Other effects include persistent speech problems, depression, anxiety or more severe psychological consequences, including toxic psychosis, similar to amphetamine psychosis or acute schizophrenia.</p>	<p>Regular use may produce tolerance. Chronic users may become psychologically dependent. PCP does not cause physical dependence.</p>	<p>In Canada, phencyclidine, its salts, derivatives and analogues and salts of derivatives and analogues are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule I. Unlawful possession is a criminal offence punishable on indictment by imprisonment for up to seven years and on summary conviction for a first offence to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year, or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export are indictable offences punishable by up to life imprisonment. (Peyote is not covered by this Schedule.)</p>
<p>Decreased motivation and interest, or prolonged depression and anxiety. LSD high may spontaneously recur days, weeks or even months later (called "flashback"). Use during pregnancy may be related to increased incidence of spontaneous abortion or fetal abnormality.</p>	<p>After using LSD, user must abstain for several days to regain sensitivity. This tolerance crosses over to mescaline and psilocybin. Chronic users may become psychologically dependent. LSD does not cause physical dependence.</p>	<p>In Canada, these hallucinogens are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession is a criminal offence punishable on indictment by imprisonment for up to three years and on summary conviction to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to eighteen months or on indictment by imprisonment for up to ten years.</p>
<p>Some animal research indicates repeated use can cause brain damage.</p>	<p>Although insufficient research has been carried out, it seems that tolerance to MDA does not develop. Chronic users may become psychologically dependent. MDA is not known to cause physical dependence.</p>	
<p>Regular use may result in hangovers, weight loss, exhaustion, flashbacks, paranoia, depression, psychosis and liver damage. Studies in animals have found evidence of brain damage with repeated or heavy use</p>	<p>With repeated use, tolerance may develop. Chronic users may become psychologically dependent. MDMA is not known to cause physical dependence.</p>	
<p>These drugs may precipitate psychosis in vulnerable users.</p>	<p>After using mescaline or psilocybin, user must abstain from both for several days to regain sensitivity. This tolerance crosses over to LSD. Chronic users may become psychologically dependent. Mescaline and psilocybin are not known to cause physical dependence.</p>	

1 HALLUCINOGENS (Continued)

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
STP or DOM (2,5-dimethoxy-4-methylamphetamine)	Usually sold as white or off-white powder. Taken orally, sniffed or injected. Typical dose is 3-10 mg.	Produced in labs specifically for illegal drug market. No medical use.	Effects may last 16 to 24 hours. Small doses produce mild euphoria, talkativeness and CNS stimulation; higher doses produce LSD like effects and can include exhaustion, confusion, excitement, dry mouth, nausea, blurred vision, sweating, flushing and shaking. Adverse reactions (bad trips) may result in intense anxiety, panic and sometimes psychosis.
PMA (paramethoxy-amphetamine)	Beige, white or pink powder, usually misrepresented as MDA.	Produced in labs specifically for illegal drug market. No medical use.	Effects are similar to MDA and Mescaline, though far more toxic with excessive CNS stimulation including restlessness, agitation, muscle contraction, hyperactivity, rigidity, racing pulse, high blood pressure, increased and laboured breathing, high fever, erratic eye movement, muscle spasms and vomiting. At moderate to high doses, PMA often causes convulsions, coma and death. One of the most dangerous hallucinogens.
DMT , and any salts thereof (N,N-dimethyltryptamine)	Naturally occurring in certain plants found in South America and West Indies. Also available in synthetic form. Usually parsley is soaked in solution of DMT and then dried and smoked. Typical dose is 50 to 100 mg. Can also be injected.	Produced in labs specifically for illegal drug market. No medical use.	Effects begin almost immediately, and are similar to LSD, but last only one-half to 4 hours, and include mood changes and increased sensitivity to bodily sensations. At higher doses, can produce hallucinations, dissociation and euphoria. DMT may also produce anxiety and panic states.
2CB or 2C-B or 2-CB (4-bromo-2,5-dimethoxyphenethyl-amine or α -desmethyl DOB <i>Nexus, bromo, toonies, herox, Synergy</i>)	In its pure form, it is a powder, but is also available as purple/red or white pills and in yellow capsules. Usually swallowed, but it can also be snorted. It is readily dissolved in water or alcohol. Reported dosage ranges from 5 mg to 30 mg when swallowed, lower when snorted.	Synthetic chemical first synthesized in the 1970s. Structurally similar to DOM. Has been sold as MDMA and LSD. No medical use.	Effects have been likened to LSD, as well as DOM and MDMA. If it is taken orally, effects begin after one-half to 1 hour and can last up to 4-8 hours. If snorted, effects begin much more rapidly, within about 10 minutes and may last up to 1-2 hours. At low doses, it produces intoxication, euphoria and visual distortions. At higher doses, users report that it produces visual distortions, intense body awareness with increased responsiveness to smells, tastes and sexual stimulation. It may also produce nausea, chills, trembling, cramps, muscle tension and shallow breathing.

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
Insufficient research.	It appears that people may rapidly develop tolerance to the effects of STP/DOM, but psychological and physical dependence is not known to develop.	In Canada, these hallucinogens are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession is a criminal offence punishable on indictment by imprisonment for up to three years and on summary conviction to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to eighteen months or on indictment by imprisonment for up to ten years.
Insufficient research.	Insufficient research.	
Insufficient research.	Tolerance does not develop and there is no evidence of cross tolerance to LSD. No evidence of psychological or physical dependency.	
Insufficient research.	Insufficient research.	

2 CNS DEPRESSANTS

A. Opioid Analgesics

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Codeine	Available as tablets, capsules, elixirs, suppositories and solutions. Often sold in combination product, e.g., 222®, 292®, Tylenol with Codeine®, Benlyn Codeine 3.3 mg-D-E®.	Constituent of opium, used as painkiller and cough suppressant. Available only with a prescription except in low doses in combination with analgesics or in cough syrups.	At low doses, as well as suppression of pain and cough reflex, effects include dizziness, light headiness, reduced mental alertness, drowsiness, mild anxiety or euphoria. At higher doses, effects include increased sedation or euphoria, impaired concentration, reduced respiration and blood pressure and in some cases, rapid and irregular heart rate. Additional effects with overdoses can include seizures, delirium, coma, respiratory depression and fluid in the lungs.
Opium	Dark brown chunks or powder. Can be eaten or smoked.	Used and abused for centuries. Derived from seed pod of Asian poppy, <i>Papaver somniferum</i> . No current medical use for unrefined opium.	Effects include pain relief, euphoria, mental clouding, sense of well-being, relaxation, drowsiness, nausea, contraction of pupils, decreased urination, constipation, sweating, itchy skin and slowed breathing. With very large doses, the pupils contract to pinpoints, the skin is cold, moist, bluish, and breathing may slow to a complete stop, resulting in death.
Morphine	Available as solution for injection, as well as in the form of tablets and suppositories.	Constituent of opium. Used to control pain since 19th century.	Heroin use is particularly risky since purity and contents of dose can only be guessed. Use in combination with alcohol can be very dangerous.
Heroin (diacetylmorphine, diamorphine) <i>H, horse, junk, smack</i>	Fine white or brown powder. Can be sniffed, smoked (chasing the dragon) or taken orally, but is usually injected intravenously (mainlining). Can also be injected under the skin (skin popping). Dose varies according to availability, cost, purity, person's tolerance.	Derivative of morphine. Heralded as remedy for morphine addiction when introduced in 1898, but proved to be more addictive. Effective painkiller, but because of widespread abuse has very limited use in medicine in Canada. Some countries are examining the use of prescribed heroin for treating heroin addiction.	When an opioid is injected intravenously, the person feels a surge of pleasure, then a state of gratification into which hunger, pain, sexual urges do not intrude. The body feels warm and heavy, the mouth feels dry; the person goes into a stupor. The dose required for this effect may cause restlessness, nausea and vomiting. Taken orally, the effects are felt more gradually.
Methadone <i>dollies</i>	Not marketed commercially in Canada, but can be legally prescribed. Available as a soluble powder. Typically dispensed in orange-flavoured solution for oral administration.	Currently used to treat people dependent on other opioids; long-acting painkiller. Can be prescribed only by doctors who are specially authorized.	
Meperidine or Pethidine Demerol®	Available as tablets and injectable solution.	Painkiller.	
Hydromorphone Dilaudid®	Available as tablets, suppositories, injectable solution, and oral liquid.	Long-acting painkiller. It is the most popular substitute for heroin.	
Hydrocodone Novahistex DH® Novahistex DH Expectorant® Novahistine DH®	An ingredient of syrups for oral administration, and as tablets.	Cold and cough remedies.	

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>At high doses, severe constipation, contracted pupils, moodiness and menstrual irregularities can occur. These effects disappear after a person stops taking the drug. People who use chronic high doses may develop lung problems due to the effects of high-dose opioids on respiration. Hepatitis and HIV/ AIDS and other infections can be caused by unsterile needles, syringes and other drug paraphernalia. Abscesses, cellulitis, liver damage, tetanus, brain damage can also result. Perhaps half of all opioid-dependent women have complications during pregnancy and birth. Existing health problems such as anaemia, cardiac disease, diabetes, pneumonia and hepatitis may require special management during the pregnancy, and may complicate the pregnancy. Opioid dependence increases the risk for miscarriage, premature labour, breech delivery, Caesarian section, and low birthweight. Because opioids cross the placenta, the infant may also be born dependent and may suffer withdrawal because of the mother's use. However, the mother's withdrawal from opioids prior to birth can cause stillbirth.</p>	<p>Tolerance develops fairly rapidly, making higher doses necessary to maintain intensity of effects. Most opioids are highly addictive, and regular use may result in physical dependence. Withdrawal symptoms include severe anxiety, insomnia, profuse sweating, muscle spasms, chills, shivering, tremors, and can occur four to five hours after last dose. The acute symptoms reach peak intensity after about 36 to 72 hours and are usually over within 7 to 10 days. It may be 6 months or longer before total recovery from withdrawal occurs. Dependence on opioids taken in tablet or capsule form (such as Percodan® or codeine) can go undetected by a person for some time. People may respond to discomfort of withdrawal by taking another dose, without realizing they have become addicted.</p>	<p>In Canada, these drugs are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule I. Both unlawful possession and obtaining multiple prescriptions without proper disclosure are criminal offences punishable on indictment by imprisonment for up to seven years and on summary conviction for a first offence to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year, or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production (cultivation of opium poppy), import and export are indictable offences punishable by up to life imprisonment.</p>

2 CNS DEPRESSANTS

A. Opioid Analgesics (continued)

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Oxycodone Percodan® <i>percs</i>	Available as tablets.	Painkiller.	As well as suppression of pain, effects may include dizziness, light headiness, reduced mental alertness, drowsiness, mild anxiety and depression or euphoria, contraction of pupils, blurred vision, nausea, vomiting, constipation, itchy skin. With high doses, effects include increased sedation, impaired concentration, reduced respiration and blood pressure, and in some cases, very high doses may result in coma and death. With overdoses of products that contain acetylsalicylic acid (ASA) use of very high doses may result in salicylate intoxication, as well as opioid intoxication.
Pentazocine Talwin® <i>Ts and Rs: Talwin® and Ritalin®</i>	Available as tablets and injectable solution.	Painkiller.	Produces similar effects to oxycodone. However higher doses may produce changes in heart rate and blood pressure and hallucinations/delusions, disorientation and confusion. Respiratory depression is usually less severe than with other opioids.
Butalbital with Codeine, ASA and Caffeine Fiorinal-C®	Available as tablets.	Painkiller.	At low doses, produces state of relaxation, euphoria, dizziness, drowsiness, mild impairment of motor and cognitive functions and occasional vomiting, nausea and constipation. At higher doses, may result in increased central nervous system depression with effects similar to alcohol; very high doses may result in coma and death. Both codeine and butalbital contribute to these effects. With overdoses of products that contain acetylsalicylic acid (ASA), as well as an opioid, use of very high doses may result in salicylate intoxication, as well as opioid intoxication. Caffeine-containing products used in high doses may result in caffeine intoxication.

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Chronic high dose use of oxycodone may result in unstable mood; visual impairments such as constricted pupils, blurriness, reduced night vision; constipation; menstrual irregularities and respiratory problems. These effects disappear after the person stops taking the drug. Use of oxycodone by pregnant women may result in harm to the fetus and the infant being born dependent as occurs with use of other opioids.</p>	<p>Tolerance to opioids develops fairly rapidly, making higher doses necessary to maintain intensity of effects. Most opioids are highly addictive and regular use may result in physical dependence. Withdrawal symptoms include severe anxiety, restlessness, insomnia, profuse sweating, runny nose and eyes, muscle spasms including stomach cramps, chills, shivering, tremors and can occur four to five hours after last dose. The acute symptoms reach peak intensity after about 36-72 hours and are usually over within 7 to 10 days. It may be 6 months or longer before total recovery from withdrawal occurs. Dependence on opioid analgesics taken in tablet or capsule form (such as Percodan® or codeine) can go undetected by the person for some time. People may respond to the discomfort of withdrawal by taking another dose, without realizing they have become addicted.</p>	<p>In Canada, these drugs are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule I. Both unlawful possession and obtaining multiple prescriptions without proper disclosure are criminal offences punishable on indictment by imprisonment for up to seven years and on summary conviction for a first offence to a fine of up to \$1,000 or imprisonment for up to six months, or both. Subsequent offences may result in a fine of up to \$2,000 or imprisonment for up to one year, or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export are indictable offences punishable by up to life imprisonment. Note: Some ingredients of combination drugs or preparations, such as Fiorinal-C®, may be listed under other schedules of the CDSA.</p>
<p>Chronic high dose use of pentazocine may result in emotional disturbances, most commonly depression and disordered thinking, as well as nightmares, sleep disturbances including dizziness upon awakening and problems with concentration. Because of the risk to the developing fetus, pregnant women should use pentazocine only in accordance with physician advice.</p>	<p>Because pentazocine is a less potent opioid, withdrawal symptoms are somewhat milder than other opioids.</p>	
<p>The effects of chronic high doses of butalbital with codeine, ASA and caffeine may be a combination of the effects of the individual drugs in this product - see barbiturates, codeine and caffeine. Because of the risk to the developing fetus, this drug should only be used by pregnant women in accordance with physician advice.</p>	<p>Because butalbital with codeine, ASA and caffeine is a combination product, the development of tolerance and dependence may vary greatly with dosage and duration of use - see barbiturates, codeine and caffeine for further information on tolerance and dependence.</p>	

2 CNS DEPRESSANTS

B. Alcohol and Solvents/Inhalants

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
<p>Alcohol (ethyl alcohol or ethanol)</p>	<p>In Canada, a standard drink contains 13.6 g or 17 mL of absolute alcohol. This amount is contained in a 12-ounce (341 mL) bottle of regular (5%) beer, five ounces (142 mL) of (12%) table wine or 1.5 ounces (43 mL) of 80-proof liquor. Definitions of standard drinks are different in other countries.</p>	<p>Can be synthesized or produced naturally by fermentation of fruits, vegetables or grains. Although some physicians may occasionally recommend alcohol in moderation, this is not common medical practice.</p>	<p>Alcohol affects the central nervous system in proportion to the amount of alcohol in bloodstream. Usual effects of small doses are euphoria, drowsiness, dizziness, flushing, release of inhibitions and tensions. Larger doses produce slurred speech, staggering, double vision, stupor. Alcohol, even in fairly low doses, impairs driving or the operation of complex machinery. In combination with other drugs, small doses of alcohol may produce exaggerated effects. A "hangover" with headache, nausea, shakiness and vomiting may begin 8 to 12 hours after a period of excessive drinking. Very large doses can cause death by blocking the brain's control over respiration.</p>
<p>Solvents/Inhalants (volatile solvents) <i>sniff</i></p>	<p>Inhalants are found in many household and commercial products such as cleaning fluids, fast-drying glues, aerosols, paint thinners and removers. Inhalants also include gasoline and other fuels, anaesthetic gases (e.g., nitrous oxide) and some vasodilating nitrites (e.g., amyl nitrite).</p> <p>Most are poured into a bag and inhaled, or inhaled from a saturated cloth held over the nose. Aerosols are inhaled either directly from can or by spraying them into a plastic bag.</p>	<p>With few exceptions, these inhalants have no medical use. Rather, they are intended for commercial and household use.</p>	<p>Effects include feelings of euphoria, light-headedness, exhilaration, vivid fantasies, and sometimes recklessness and feelings of invincibility. Depending on the type of inhalant and method of use, possibly irritation and watering of the eyes, sneezing, coughing and nasal inflammation may occur. Inhalants enter the bloodstream from the lungs and then go to other organs, particularly the brain and liver. Breathing, heart beat and other body functions are slowed down. If the person passes out with a plastic bag over the nose and mouth, death from suffocation can occur. Death can also occur if the person is startled or engages in strenuous activity while intoxicated. There are also situational hazards such as explosions, burns and aspiration of foreign particles or objects into the lungs.</p>

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Regular consumption of more than two drinks a day may gradually bring about liver damage, brain damage, heart disease, certain types of cancer, blackouts (loss of memory), impotence, reproductive problems, ulcers, and disorders of the pancreas. Chronic heavy use may result in disruptions of the drinker's social, family and working life. Consumption of alcohol during pregnancy may result in babies with alcohol-related pre- and postnatal developmental and growth delays, learning and behavioural disorders, and other CNS problems and physical abnormalities. Since there is no definite information regarding a safe quantity of alcohol use during pregnancy, the prudent choice for women who are or may become pregnant is to abstain from alcohol.</p>	<p>Regular use induces tolerance, making increased doses necessary to produce desired effect. In the case of chronic use, people may drink steadily without appearing to get drunk. Their condition may go unrecognized, even by themselves for some time. Chronic drinkers are likely to become physically and psychologically dependent. Withdrawal symptoms may range from jumpiness, sleeplessness, sweating, nausea and vomiting, to tremors, seizures, hallucinations and even death.</p>	<p>Offences relating to underage drinking include possessing, consuming, purchasing, attempting to purchase or otherwise obtaining liquor outside of home. In some jurisdictions, parent or guardian may legally supply liquor at home to an underage person, but in others supplying liquor or selling liquor to a minor is an offence. The age at which young people are allowed to drink in Canada is regulated by legislation and enforcement policy in each province and territory. In the majority of provinces and territories, the drinking age was twenty-one until the early seventies. Currently, in all provinces and territories with the exception of Quebec, Manitoba and Alberta, the drinking age is 19 years. In Quebec, Manitoba and Alberta, the drinking age is eighteen years. Though the trend has been to lower the drinking age, several provinces/territories first lowered and then increased their drinking age from 18 years to 19 years, for example, Ontario, PEI, and Saskatchewan. It is an offence to drive with a blood alcohol level (BAL) of .08% or greater, and to drive while impaired even if one's BAL is less than .08%. Many provinces/territories have introduced 90-day administrative licence suspensions to take effect almost immediately after a driver registers a BAL over the statutory limit or fails to provide a breath sample. In most provinces/territories, this limit is a BAL of .05%.</p>
<p>Effects include pallor, fatigue, forgetfulness, inability to think clearly, tremors, poor coordination and difficulty walking, thirst, weight loss, depression, irritability, hostility, and paranoia. Kidney, liver and brain damage may occur. It is not known to what extent the damage is reversible. Simultaneous alcohol consumption may compound the damage. Elevated blood-lead levels and consequent brain damage have been found as a result of chronic sniffing of leaded gasoline.</p>	<p>Regular use induces tolerance, making increased doses necessary to produce the desired effect. Psychological and physical dependence can develop. Withdrawal symptoms include anxiety, depression, irritability, dizziness, tremors, nausea, abdominal pains and headaches.</p>	<p>Inhalants are generally not controlled in Canada. Inhalant abuse may be a factor taken into account in dealing with young offenders and children found in need of protection under provincial legislation. In Alberta, inhaling or selling inhalants to inhalers is illegal.</p>

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Benzodiazepines Primarily Used as Tranquilizers (Anxiolytics)			
Diazepam Valium®	Available as tablets and injectable solution.	Benzodiazepines were introduced as “tranquilizers” because they produce calm without sleep, although sleep may occur as a result of relaxation and reduced anxiety. They replaced barbiturates in the treatment of many disorders. They are usually prescribed to treat anxiety and nervousness, relax muscles, control certain types of muscle spasm and to treat sleep problems. Although they are safer and have fewer side effects than barbiturates, they can also produce dependence and are generally recommended for short-term use only.	Effects include a feeling of well-being, loss of inhibition, decreased muscle tension, reduced mental alertness and mildly impaired coordination and balance. On rare occasions, and usually at high doses, paradoxical reactions such as rage, personality changes, sleep disturbances can occur. Side effects such as skin rashes, nausea, dizziness have been reported. Driving motor vehicles and operating machinery should be avoided by those taking tranquilizers. It is particularly hazardous to take them together with alcohol, other CNS depressants, and some antihistamines (in cold, cough and allergy remedies). They are seldom fatal in overdoses except when mixed with other drugs, especially alcohol.
Oxazepam Serax®	Available as tablets.		
Lorazepam Ativan®	Available as tablets and injectable solution.		
Alprazolam Xanax®	Available as tablets.		
Benzodiazepines Primarily Used as Sleeping Pills			
Temazepam Restoril®	Available as capsules.		Benzodiazepines, used to aid sleep, may produce morning and daytime drowsiness and other “hangover” effects.
Flurazepam Dalmane®	Available as capsules.		
Triazolam Halcion®	Available as tablets.		
Flunitrazepam , and any salts or derivatives thereof Rohypnol® <i>roofies, rope, the forget pill</i>	Available as tablets (but tablets may be crushed to yield a powder which dissolves more rapidly in liquids). Often sold on the street in “bubble” packs. It is odourless, colourless and tasteless when added to alcoholic or non-alcoholic beverages.	Although not approved for general marketing as a therapeutic drug in Canada or the U.S., it is legally available in 64 countries in Europe, Latin America, Africa and the Middle East. Mexico and other Latin American countries are the main illegal source of supply for North America. Quantities of smuggled Rohypnol have been seized by the police in Canada. Its use has been associated with “date rape” when it is added to the victim’s drink to lower inhibitions and reduce memory of the sexual assault.	Rohypnol is an extremely potent benzodiazepine, which produces drowsiness, dizziness, memory loss, muscle relaxation, impaired thinking and motor coordination. It can also produce aggressive behaviour. It is absorbed very rapidly after oral administration with effects occurring after about 20 to 30 minutes. It has been associated with date rape because it produces sedation and memory loss. Also, because it is odourless and tasteless, the victim may have no idea that anything has been added to his/her drink. The amnesia produced by Rohypnol (“the forget pill”) means a rape victim may not remember the circumstances of the sexual assault or how the drug was taken. Combined with alcohol or other CNS depressants, the effects of Rohypnol can be dangerously increased.

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
Benzodiazepines		
<p>Some benzodiazepines which are eliminated slowly (such as diazepam) accumulate in body tissues during sustained use. Chronic abuse of benzodiazepines may result in impairment in thinking, memory and judgement, confusion, disorientation, and impaired motor coordination. Prolonged use may also lead to increased, rather than reduced, aggressiveness in some people. When benzodiazepines are used by pregnant women, they cross the placenta and are distributed to the fetus. After birth, babies exposed to benzodiazepines in the uterus may show withdrawal symptoms. There is some research evidence indicating an increased risk of major malformations and cleft palate.</p>	<p>Tolerance to the sedative, but not anxiety-relieving effects of benzodiazepines can develop with regular use over a few months, as can psychological and physical dependence. Stopping use abruptly may result in symptoms such as sleep disturbances, headache, tension, difficulty concentrating, trembling, anxiety, and feeling tired. During withdrawal from very high doses, there is a risk of seizures, depression, paranoia, agitation and delirium. Withdrawal symptoms may be greater for benzodiazepines that are eliminated rapidly from the body.</p>	<p><i>In Canada, benzodiazepines and their salts and derivatives are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule IV. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to one year or on indictment by imprisonment for up to three years.</i></p>
	<p>Like other benzodiazepines, regular use can induce tolerance making increased doses necessary to produce the desired effect.</p>	<p>Rohypnol is not approved for general marketing as a therapeutic drug in Canada. Flunitrazepam (Rohypnol) is governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession of Rohypnol is a criminal offence punishable by imprisonment for up to three years on indictment or upon summary conviction to a fine of up to \$1,000 or six months imprisonment, or both, for a first offence, and a fine of up to \$2,000 or up to one year imprisonment, or both, for a subsequent offence. Offences of trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export of flunitrazepam are punishable upon indictment by imprisonment for up to 10 years and upon summary conviction by imprisonment for up to eighteen months.</p>

2 CNS DEPRESSANTS D. Barbiturates/Other Sleeping Pills/Other Psychotropic Drugs

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
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Barbiturates and Other Sleeping Pills			
Secobarbital Seconal® <i>reds, red birds, red devils</i>	Available as capsules and injectable solution.	Barbiturates, also called "downers", were developed to treat sleep problems, anxiety, tension, high blood pressure and seizures. Some are used as anaesthetics.	Barbiturates slow down the activity of the central nervous system. Small doses relieve tension; large doses produce drowsiness, staggering, blurred vision, impaired thinking, slurred speech, impaired perception of time and space, slowed reflexes and breathing, and reduced sensitivity to pain. Overdoses can cause unconsciousness, coma and death. In the past, many of the deaths due to drugs (excluding alcohol) in Canada were caused by barbiturates and barbiturate-like drugs. Using barbiturates with alcohol can be very dangerous.
Pentobarbital Nembutal® <i>yellow jackets</i>	Available as capsules and injectable solution.		
Amobarbital Amytal® <i>blue heavens</i>	Available as capsules, tablets and injectable solution.		
Amobarbital-Secobarbital Tuinal® <i>Christmas trees, rainbows</i>	Available as capsules.		
Zopiclone Imovane®	Available as tablets.		

Other Psychotropic Drugs

GHB , and any salts thereof (gamma-hydroxybutyrate) <i>liquid ecstasy, liquid X, grievous bodily harm, Scoop</i>	Usually available as a colourless, odourless and tasteless liquid, but it is also available as a powder or as a capsule.	GHB was originally developed as an anaesthetic for its sedative rather than pain-reducing properties. It has also been used in some countries to treat alcohol withdrawal and narcolepsy. In England, it is marketed as an anti-aging drug. It has also been used by body builders to stimulate muscle building growth hormones during certain sleep cycles. Can easily be made in labs for illegal use.	Effects of lower doses may include lowered inhibitions, euphoria, calmness progressing to drowsiness, dizziness and amnesia. Higher doses may produce confusion, hallucinations, nausea, vomiting, diarrhea, tremors, combative and self-injurious behaviours, seizures, shortness of breath, loss of consciousness and coma. GHB is currently circulating at dances and raves, and is often used in conjunction with alcohol, which increases the degree of disinhibition and the risk of central nervous system and respiratory depression. GHB has been used to aid sexual assaults on women.
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LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Long-term, high-dose use may result in effects similar to chronic intoxication (impaired vision, memory and judgment, and slurred speech), as well as depression or mood swings. Changes in liver function may result in faster metabolism of other drugs. Babies of chronic users may have difficulty in breathing and feeding, disturbed sleep patterns, sweating, irritability and fever.</p>	<p>Regular use induces tolerance, making increased doses necessary to produce the desired effect. Tolerance develops more quickly to the mood-altering effects than to the effects on the respiratory system. Thus, the margin between an effective dose and a lethal dose gradually narrows. Psychological dependence can occur with regular use, as can physical dependence. Withdrawal symptoms including restlessness, anxiety, insomnia, delirium, seizures and may result in death.</p>	<p>In Canada, barbiturates and their salts and derivatives are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule IV. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to one year or on indictment by imprisonment for up to three years. Note: Zopiclone® is currently listed in Schedule F of the Food and Drugs Act.</p>
<p>Not enough evidence.</p>	<p>Withdrawal symptoms have been reported after chronic high-dose use.</p>	<p>GHB is governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession of GHB is a criminal offence punishable by imprisonment for up to three years on indictment or upon summary conviction to a fine of up to \$1,000 or six months imprisonment, or both, for a first offence and a fine of up to \$2,000 or up to one year imprisonment, or both, for a subsequent offence. Offences of trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export of GHB are punishable upon indictment by imprisonment for up to 10 years and upon summary conviction by imprisonment for up to eighteen months.</p>

3 STIMULANTS

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS						
Cocaine <i>C, coke, snow, nose candy, crack</i>	<p>Fine white crystalline powder often diluted with sugar, cornstarch, talcum powder or with substances which imitate its numbing effects, such as benzocaine. Can be sniffed, smoked or injected. As well as being sniffed through the nose, it can also be absorbed through other mucous membranes such as the mouth. Typical dose levels are 30-100 mg when sniffed; injected doses may be lower or higher, depending on the tolerance of the person. "Crack" is a smokable, freebase form of cocaine which has become increasingly available in recent years. It is made by adding baking soda to a cocaine solution and allowing the mixture to dry.</p>	<p>Derived from leaves of South American coca bush. Practice of sniffing cocaine began around turn of the century, when it was also consumed in the form of tonics and beverages. By 1911, cocaine was legally restricted in Canada. It is still used as a local anaesthetic for some surgery, but has been largely replaced by less toxic substances.</p>	<p>Effects resemble those of amphetamines with a shorter duration. The person feels euphoric, energetic, alert; has a rapid heart beat and breathing, dilated pupils, sweating, pallor, and decreased appetite. Large doses can cause severe agitation, paranoid thinking, erratic or violent behaviour, tremors, uncoordination, twitching, hallucinations, headache, pain or pressure in the chest, nausea, blurred vision, fever, muscle spasms, convulsions and death. Impurities in street cocaine may produce a fatal allergic reaction. People may experience depression, extreme tiredness and stuffy nose as a "hangover" from cocaine. The use of "crack" produces immediate and very intense effects.</p>						
Amphetamines:									
Dextro-amphetamine Dexedrine® <i>dexies</i>	<p>Available as capsules and tablets. Can be taken orally, smoked or injected.</p>	<p>Amphetamines were developed in the 1920s. Used at first to treat depression and obesity, but stringent controls have greatly reduced medical use in Canada. Used in the treatment of narcolepsy, attention-deficit hyperactivity disorder (ADHD) and Parkinson's Disease. Produced through chemical synthesis by pharmaceutical companies and illegal labs.</p>	<p>Effects include increased alertness and energy, a feeling of well-being, decreased appetite, rapid heart beat and breathing, increased blood pressure, sweating, dilated pupils, and dry mouth. A person may become talkative, restless, excited, feel powerful, superior, aggressive, hostile or behave in a bizarre, repetitive fashion. Very large doses produce flushing, pallor, very rapid or irregular heart beat, tremors, severe paranoia, frightening hallucinations. Death can result from use as a consequence of burst blood vessels in brain, heart failure, very high fever. Violence, accidental or otherwise, is the leading cause of amphetamine-related deaths.</p>						
Meth-amphetamine Desoxyn® <i>speed, crystal, meth, ice, crank</i>	<p>Available as a powder. Can be taken orally, smoked or injected.</p>			Methcathinone, Cathinone and any salts thereof <i>cat</i>	<p>White or off-white powder. It can be snorted, taken orally mixed with liquids such as coffee or soft drinks, smoked in crack pipes or mixed with tobacco or marijuana cigarettes or injected intravenously. Usual dose is 100-250 mg, although doses of 500 to 1000 mg used by intravenous injection or by sniffing, have been reported.</p>	<p>Manufactured in illegal laboratories using ephedrine or pseudo ephedrine mixed with a number of commercial products such as paint thinners, battery acid and lye. It has been manufactured illegally in the U.S. since 1989. Illegal manufacture has been associated with biker gangs.</p>	<p>Potent stimulant with effects similar to crack cocaine or methamphetamine with effects lasting 4-6 hours. May be used in binges over a period of several days. At low doses, effects include euphoria, increased alertness, increased heart rate, respiration and blood pressure, loss of appetite, dilated pupils. At higher doses, sleeplessness and agitation, tremors and muscle twitching, irregular heart rate and respiration, paranoia, hallucinations and delusions, aggressive behaviour, and seizures can occur. Deaths have been reported.</p>	Khat, its preparations, derivatives, alkaloids and salts (Catha edulis) <i>qat, kat</i>	<p>Leaves of Khat plant are chewed. Leaves must be fresh as they dry out and lose they potency after picking. The active ingredient of Khat is "cathinone", closely related to amphetamine. Higher concentrations are found in young plants.</p>
Methcathinone, Cathinone and any salts thereof <i>cat</i>	<p>White or off-white powder. It can be snorted, taken orally mixed with liquids such as coffee or soft drinks, smoked in crack pipes or mixed with tobacco or marijuana cigarettes or injected intravenously. Usual dose is 100-250 mg, although doses of 500 to 1000 mg used by intravenous injection or by sniffing, have been reported.</p>	<p>Manufactured in illegal laboratories using ephedrine or pseudo ephedrine mixed with a number of commercial products such as paint thinners, battery acid and lye. It has been manufactured illegally in the U.S. since 1989. Illegal manufacture has been associated with biker gangs.</p>	<p>Potent stimulant with effects similar to crack cocaine or methamphetamine with effects lasting 4-6 hours. May be used in binges over a period of several days. At low doses, effects include euphoria, increased alertness, increased heart rate, respiration and blood pressure, loss of appetite, dilated pupils. At higher doses, sleeplessness and agitation, tremors and muscle twitching, irregular heart rate and respiration, paranoia, hallucinations and delusions, aggressive behaviour, and seizures can occur. Deaths have been reported.</p>						
Khat, its preparations, derivatives, alkaloids and salts (Catha edulis) <i>qat, kat</i>	<p>Leaves of Khat plant are chewed. Leaves must be fresh as they dry out and lose they potency after picking. The active ingredient of Khat is "cathinone", closely related to amphetamine. Higher concentrations are found in young plants.</p>	<p>Grown in East Africa and Arabian Peninsula where it is used as a recreational drug and in some countries such as the Yemen, it is used as part of formal social occasions. No known medical uses.</p>	<p>Effects last 3-4 hours and include, at lower doses, euphoria and elation, increased energy and alertness, loss of appetite and insomnia, increased heart rate and blood pressure, respiration and body temperature, decreased sexual drive, increased aggression and fantasies of personal supremacy. At higher doses, effects include constipation, paranoia, psychotic episodes, very aggressive behaviour, as well as risk of brain haemorrhage, heart attack and pulmonary edema.</p>						

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>High-dose, chronic users, who alternate cocaine “binges” with crashes (periods of abstinence) may show mood swings, restlessness, extreme excitability, restlessness, sleep disorders, suspiciousness, hallucinations and delusions, eating disorders, weight loss, constipation and impotence. Characteristic signs of chronic cocaine sniffing are stuffiness and runny nose, chapped nostrils, perforation of nasal septum. Cocaine abuse is also associated with cardiac arrhythmias, myocardial infarctions, strokes, seizures and sudden deaths. People who inject cocaine are at risk for HIV and hepatitis.</p> <p>Heavy use of cocaine by pregnant women is associated with reduced fetal weight and an increased risk of miscarriage, stillbirth, premature birth and malformation. Newborns exposed to cocaine in the uterus may also experience abnormal sleep patterns, poor feeding and irritability for several days or weeks after birth.</p>	<p>Chronic use results in tolerance. Cocaine can produce very powerful psychological dependence leading to extremely compulsive patterns of use. In particular, the dependency-producing properties of cocaine are believed to be more powerful than any other psychoactive drug. Physical dependence may also develop. Withdrawal symptoms may include fatigue, long but disturbed sleep, strong hunger, irritability, depression, violence.</p>	<p>In Canada, cocaine is governed by the Controlled Drugs and Substances Act applicable to Schedule I. Unlawful possession is a criminal offence punishable on indictment by imprisonment for up to seven years and on summary conviction for a first offence to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable upon summary conviction by a fine of up to \$2,000 or imprisonment for up to one year, or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production (cultivation of <i>Erythroxylon coca</i>), import and export are indictable offences punishable by up to life imprisonment.</p>
<p>Chronic heavy users may develop malnutrition and amphetamine psychosis, a mental illness similar to paranoid schizophrenia. They may be prone to violence. Impurities injected with the drug can block or weaken small blood vessels. Kidney damage, lung problems, stroke or other tissue injury can result. Instances of withdrawal symptoms among newborn infants of mothers using amphetamines have been reported.</p>	<p>Although chronic use results in tolerance to the mood-elevating effects of amphetamines, tolerance does not appear to develop to the beneficial effects in treatment of attention-deficit hyperactivity disorder or narcolepsy. Like cocaine, amphetamines can produce very powerful psychological dependence leading to compulsive patterns of use.</p> <p>Although major physical signs of withdrawal do not occur after chronic high-dose users abruptly discontinue amphetamine use, they may experience extreme fatigue and prolonged but disturbed sleep, and subsequently, irritability, tiredness and depression.</p>	<p><i>In Canada, amphetamines and their salts, derivatives and analogues are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession is a criminal offence punishable on indictment by imprisonment for up to three years and on summary conviction to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year, or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to eighteen months or on indictment by imprisonment for up to ten years.</i></p>
<p>Insufficient research.</p>	<p>Khat is believed to cause at least psychological dependence and prolonged use may result in withdrawal symptoms such as lethargy, depression, nightmares and tremors.</p>	<p>In Canada, Khat is governed by the Controlled Drugs and Substances Act, applicable to Schedule IV. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, and import offences are punishable on summary conviction by imprisonment for up to one year or on indictment by imprisonment for up to three years.</p>

3 STIMULANTS (continued)

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Other:			
Methylphenidate and any salts thereof Ritalin®	Available as tablets.	Used to treat narcolepsy and children with attention-deficit hyperactivity disorder (ADHD).	An adult who uses high doses may experience increased alertness and energy, feeling of well-being, nervousness, insomnia, decreased appetite, rapid heart beat and breathing, increased blood pressure, sweating, dilated pupils, dry mouth. A person may become talkative, restless, excited, feel powerful, superior, aggressive, hostile or behave in a bizarre, repetitive fashion. Very large doses produce flushing, pallor, very rapid or irregular heart beat, tremors, severe paranoia, frightening hallucinations. Death can result from use as a consequence of burst blood vessels in the brain, heart failure, or very high fever. Violence, accidental or otherwise, is the leading cause of amphetamine-related deaths.
Diethylpropion , and any salts thereof Tenuate®	Available as tablets.	Limited use as an aid in treating obesity.	In children with ADHD, methylphenidate's effects include decreased hyperactivity, decreased impulsiveness, increased attention span, and more controlled activity. However, these effects may not be evident until some time after treatment has begun. Unwanted effects may include insomnia, decreased appetite, headache and dizziness. Some growth retardation has been reported in small numbers of children treated over long periods with methylphenidate.
Phentermine , and any salts thereof Ionamin®	Available as capsules.		
Tobacco (<i>Nicotiana tabacum</i>)	Shredded, cured (dried) leaves of the tobacco plant, which can be smoked in cigarettes, cigars or pipes, or chewed, or inhaled. New regulations will require manufacturers to display health warnings, health information and toxic constituent information on packages of all tobacco products. The health warnings will occupy 50 percent of the package and will include graphic images of the consequences of tobacco use. New regulations will also require manufacturers to collect and report on 43 of the over 4,000 chemicals found in tobacco smoke. Of these, tar, nicotine, carbon monoxide, benzene, formaldehyde and hydrogen cyanide will be listed on the package with a range of emissions, depending upon smoking patterns.	Discovered among Northern and Central American tribes during 16th century. There is no current medical use for tobacco. However, nicotine, the main psychoactive component of tobacco, is an active ingredient in nicotine "gum" and nicotine "patches", used as aids to assist smokers to quit smoking.	Effects include increased heart rate and blood pressure, drop in skin temperature, faster breathing, and decreased appetite. First-time smokers may feel dizzy and energized and may experience diarrhea and vomiting. Tar accumulates in the lungs. Inhaling smokers subject themselves to very high carbon monoxide levels. They also subject people around them to smoke effects. Two or three drops of pure nicotine, the plant's most potent ingredient, may rapidly kill an adult. A single cigarette puts about 1-2 mg of nicotine into the bloodstream of the 15-20 mg found in tobacco. When eaten, nicotine is absorbed slowly in stomach, which is why small children sometimes survive after eating cigarettes.
Caffeine	White bitter-tasting crystalline substance found in coffee beans, tea leaves, cacao leaves and kola nuts. Available in tea, coffee, chocolate, cola drinks, medication. The caffeine content of coffee and tea used as beverages depends upon the type of brew or leaves used in preparation, and the manner of preparation. In one study, a cup of instant coffee was found to contain about 66 mg of caffeine, percolated 74 mg, and drip 112 mg, and a cup of tea averaged 27 mg. Cola drinks contain about 35 mg per can (280 mL); chocolate bars contain as much as 20 mg. Caffeine in most headache remedies, pain relievers, cold remedies and stimulant mixtures is between 15-50 mg. Non-prescription medications to help in staying awake may contain considerably higher levels of caffeine.	Caffeine is an ingredient in many prescription and non-prescription pain relievers, cold remedies and stay-awake remedies. Coffee was introduced into Europe from Africa some 1,000 years ago.	Effects include mild mood elevation and reduced drowsiness and fatigue. Caffeine shortens sleep, stimulates secretion of stomach acid, decreases appetite, causes hand-tremor, and impairs fine coordination of movement, increases metabolic rate, blood pressure, urination and body temperature. Large doses of caffeine can produce headaches, nervousness, irritability, restlessness, agitation, rapid and irregular heart rate and delirium. Fatal dose of the pure substance is about 3.5 g taken intravenously or about 10 g taken orally.

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Chronic heavy users may develop malnutrition or amphetamine psychosis, a mental illness similar to paranoid schizophrenia. They may be prone to violence. If these tablets and capsules are used to prepare injectable mixtures, people are at risk from both infections from use of unsterile needles, syringes and other paraphernalia, and damage to kidney, lung and brain as a result of tablet particles entering the bloodstream.</p>	<p>Chronic use results in tolerance to the euphoric and appetite suppressant effects, although tolerance does not appear to develop to the beneficial effects when used therapeutically to treat disorders such as attention-deficit hyperactivity disorder or narcolepsy. Regular use of amphetamine-type drugs at high doses can produce very powerful psychological dependence and extremely compulsive patterns of use. Withdrawal symptoms include fatigue, long but disturbed sleep, hunger on awakening, irritability, depression and violence.</p>	<p>Methylphenidate is governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule III. Possession is a criminal offence punishable on indictment by imprisonment for up to three years and on summary conviction to a fine of up to \$1,000 or imprisonment for up to six months, or both. A subsequent offence is punishable on summary conviction by a fine of up to \$2,000 or imprisonment for up to one year or both. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to eighteen months or on indictment by imprisonment for up to ten years.</p> <p>These drugs and their salts and derivatives are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule IV. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to one year or on indictment by imprisonment for up to three years.</p> <p>Stimulant medications used to treat obesity are tightly controlled.</p>
<p>Tar is a complex mixture of particles found in tobacco smoke. It has been identified as causing cancer in smokers. An average smoker who consumes 20 cigarettes per day can inhale between 1 and 140 gm per year, depending upon the cigarette smoked and how it is smoked. Much of this is coughed up in phlegm. Possible effects of smoking include cancer of the lungs, mouth and throat, respiratory disease, heart attack, stroke and stomach ulcers. Smoking increases blood pressure, depletes Vitamin C levels, causes skin wounds to heal more slowly, and reduces immunity to disease. Research indicates that each cigarette cuts 5.5 minutes from smoker's lifespan. The babies of women who smoke tend to weigh less at birth than those of nonsmokers; the risk of prematurity, miscarriage and stillbirth is greater. Studies suggest that the mother's smoking can have a detrimental effect on the child's growth, intellectual development and behaviour.</p> <p>Second-hand smoke (passive smoking) increases the risk of lung cancer and heart disease in nonsmokers. Children whose parents smoke have more ear infections, more chest infections and other lung problems, such as asthma, than children of nonsmokers. Second-hand smoke is a special problem for allergic people and those with heart or lung disease.</p>	<p>Most smokers are physically and psychologically dependent. Those who quit early may achieve the same health levels as nonsmokers after a few years, although some damage may not be completely reversible.</p>	<p>The Federal <i>Tobacco Act</i> sets 18 as the minimum age at which retailers may furnish tobacco products to youth. Some provinces, notably Nova Scotia, New Brunswick, Newfoundland, Ontario and British Columbia, have set this age limit at 19. In addition, because it can harm the non-smoker in a variety of ways, from irritation to death, many municipalities and provinces have enacted by-laws that restrict or ban smoking in public places, including restaurants and bars. At the federal level, the Non-Smokers' Health Act bans smoking in all federally-regulated workplaces and bans smoking on trains, planes, buses and ships.</p>
<p>Regular use of more than 600 mg a day (eight cups of coffee) can cause chronic insomnia, persistent anxiety and depression, stomach upset. Heavy use of caffeine should be avoided during pregnancy since recent research has identified possible links between heavy use and birth problems.</p>	<p>Regular consumption of 350 mg or more of caffeine a day (two to four cups of coffee) may lead to a form of physical dependence. Abruptly stopping use of caffeine-containing beverages may result in withdrawal symptoms including severe headache, irritability and fatigue.</p>	<p>Although there are no laws in Canada governing the distribution or use of caffeine in foods, caffeine-containing dosage forms offered for sale or sold in Canada must comply with the Food and Drugs Act and Regulations respecting content, labelling, etc. Violation of the Act or Regulations is an offence punishable on indictment by a fine of up to \$5,000 or by imprisonment for up to three years, or both, and on summary conviction for a first offence by a fine of up to \$500 or imprisonment for up to three months, or both, and for a subsequent offence to a fine of up to \$1,000 or imprisonment for up to six months, or both.</p>

4 CANNABIS

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
<p>Marijuana (marihuana) <i>cannabis, pot, grass, weed, reefer, ganja, joint</i></p>	<p>Flowering tops and leaves of the cannabis plant. Ranges in colour from grey-green to greenish-brown; in texture, it resembles oregano or coarse tea. It usually contains seeds and stems. It has a strong odour and is smoked in a pipe or hand-rolled cigarette. There are greater concentrations of the active ingredient, THC, now than in the past.</p>	<p>Obtained from the plant <i>Cannabis sativa</i>, which grows in almost any climate. In the past, most Cannabis products found in Canada were grown in South and Central America. Now much is grown locally, some under hydroponic conditions. THC (delta-9 tetrahydrocannabinol) and other cannabis constituents have been claimed in anecdotal reports to relieve symptoms associated with the following medical conditions: nausea and vomiting, wasting syndrome, multiple sclerosis, epilepsy and glaucoma. THC chemically synthesized is marketed as Marinol® (dronabinol) and Cesamet (nabilone), a synthetic cannabinoid, are both used orally to treat nausea and vomiting resulting from chemotherapy. The treatment of AIDS-related anorexia associated with weight loss is another approved use of Marinol (dronabinol).</p>	<p>Effects of smoking are felt within a few minutes and last two to four hours. Effects from ingestion (e.g., eaten in baked or cooked foods) appear more gradually and last longer, and the person may feel dull and sluggish for some time afterwards. The person feels calm, relaxed, talkative and sometimes drowsy. Concentration and short-term memory are markedly impaired, and sensory perception seems enhanced, colours are brighter, sounds are more distinct, and the sense of time and space is distorted. Appetite increases, especially for sweets. Some people withdraw, or experience fearfulness, anxiety, depression; a few experience panic, terror or paranoia, particularly with larger doses. Some experience hallucinations with larger doses and symptoms worsen in persons with psychiatric disorders, particularly schizophrenia.</p>
<p>Hashish <i>hash</i></p>	<p>Dried, sticky resin of Cannabis plant. Sold in solid pieces, ranging in colour from light brown to black; in texture from dry and hard to soft and crumbly. Usually crumbled and smoked in pipe or hand-rolled cigarette with tobacco or marijuana. People who use heavily may use from 0.25 - 1 g daily. It can be baked into cookies or cakes.</p>		<p>Physical effects include impaired coordination and balance, rapid heartbeat, red eyes, dry mouth and throat. Usual doses impair motor skills; especially when used in combination with alcohol; cannabis use before driving is particularly dangerous. THC, the active ingredient, has been detected in many bodies of fatally-injured drivers and pedestrians in Canada and the United States.</p>
<p>Hash Oil <i>oil, honey oil</i></p>	<p>Thick, greenish-black, reddish-brown or yellow oil, obtained by extracting hashish with an organic solvent. Usually wiped onto a cigarette or rubbed into tobacco and smoked.</p> <p>Hash oil is much more potent than other forms of cannabis and only a small amount is required to achieve an effect.</p>		
<p>THC (tetrahydrocannabinol)</p>	<p>Active ingredient in cannabis. Pure, synthetic THC is seldom available on the street. What is sold as THC is almost always PCP or LSD (see Hallucinogens).</p>		

LONG-TERM EFFECTS	TOLERANCE AND DEPENDENCE	LEGAL STATUS
<p>Signs of chronic, heavy use may include decreased motivation and interest, as well as difficulties with memory and concentration. These problems tend to clear when regular use stops. However, there is increasing research evidence of lasting harmful effects on mental function in some people. The respiratory system is damaged by smoking; a single joint of marijuana yields much more tar than a strong cigarette. Tar in cannabis smoke contains higher amounts of cancer-producing agents than tar in tobacco smoke. Studies suggest that developmental delays may occur in children whose mothers used drugs heavily during pregnancy.</p>	<p>There is some evidence that tolerance develops in regular high-dose users. Psychological and physical dependence on cannabis can occur in people who use heavily or regularly. Withdrawal symptoms include anxiety, irritability, sleeping problems, sweating and loss of appetite.</p>	<p>In Canada, cannabis, its preparations, derivatives and similar synthetic preparations are governed by the provisions of the Controlled Drugs and Substances Act applicable to Schedule II. Both non-viable cannabis seeds and mature cannabis stalks without attached leaves, flowers, seeds or branches, as well as the fibre derived from such stalks are excluded from the application of the Act. However, the derivatives of non-viable cannabis seeds are covered.</p> <p>Unlawful possession is a criminal offence. A conviction for unlawful possession of 30 g or less of cannabis marijuana or 1 g or less of cannabis resin is an exclusively summary conviction offence punishable by a fine of up to \$1,000 or imprisonment for up to six months, or both. Unlawful possession of more than 30 g of cannabis marijuana, more than 1 g of cannabis resin, or any quantity of cannabis plant, hash oil, or other constituent of the cannabis plant or other preparations, derivatives or similar synthetic preparations is punishable upon conviction on indictment to imprisonment for up to five years less a day or upon summary conviction for a first offence to a fine of up to \$1,000 or imprisonment for up to six months, or both. Upon summary conviction for a subsequent offence, to a fine of up to \$2,000 or imprisonment for up to one year, or both.</p> <p>Trafficking and possession for the purpose of trafficking in 3 kg. or less of cannabis marijuana or cannabis resin is an indictable offence punishable by imprisonment for up to five years less a day. Trafficking and possession for the purpose of trafficking in quantities of cannabis marijuana or cannabis resin over 3 kg., any quantity of cannabis plant, hash oil, or other constituent of the cannabis plant, or other preparation, derivative or similar synthetic preparations is an indictable offence punishable by up to life imprisonment. Production (cultivation) of cannabis marijuana is punishable by imprisonment for up to seven years. Possession for the purpose of export, import and export of any quantity of cannabis plant, cannabis marijuana, cannabis resin, hash oil, or other constituent of the cannabis plant or other preparations, derivatives or similar synthetic preparations is an indictable offence punishable by up to life imprisonment.</p>

5 ANTIDEPRESSANTS

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Tricyclic Antidepressants		<p>There are three broad categories of antidepressants: Tricyclics, Monoamine oxidase inhibitors (MAOIs) and Selective serotonin reuptake inhibitors (SSRIs). Tricyclic antidepressants and MAOIs were introduced in the 1950s. The tricyclic antidepressants have been the most widely used type of antidepressant drugs, but the more recently introduced SSRIs have fewer side effects and are less dangerous if an overdose is taken. Antidepressants are primarily prescribed to treat clinical depression, but also used to treat chronic pain, severe anxiety syndromes, obsessive-compulsive disorders and bulimia. It is believed that antidepressants lift mood by working on several types of neurons and their neurotransmitters such as serotonin and norepinephrine which stimulate brain activity. Some antidepressants work by blocking the reuptake of these neurotransmitters (Tricyclics and SSRIs); others work by blocking the action of enzymes that break down the neurotransmitters (MAOIs).</p>	<p>Antidepressants take about 2 to 6 weeks to elevate mood. Side effects from the antidepressant medication can include dry mouth, drowsiness and fatigue, dizziness, blurred vision, sweating, drop or rise in blood pressure (depending upon the specific drug), muscle tremors or twitching, changes in libido or sexual performance and nightmares. Care should be taken when driving a car or operating machinery. They should not be combined with alcohol or other central nervous system depressant drugs, as combined use can potentiate central nervous system depressant effects resulting in excessive drowsiness, impaired coordination, confusion and increased risk of falls. As well as general side effects, the different types of antidepressants may have unique side effects, such as the need to follow a special diet with the older MOA inhibitors.</p>
Amitriptyline Elavil®	Available as tablets and oral liquid.		
Clomipramine Anafranil®	Available as tablets.		
Desipramine Norpramin®	Available as tablets.		
Doxepin Sinequan®	Available as capsules.		
Imipramine Tofranil®	Available as tablets.		
Trimipramine Surmontil®	Available as tablets and capsules.		
Selective Serotonin Reuptake Inhibitors (SSRIs)			
Fluoxetine Prozac®	Available as capsules and oral solution.		
Venlafaxine Effexor®	Available as tablets and capsules.		
Fluvoxamine Luvox®	Available as tablets.		
Sertraline Zoloft®	Available as capsules.		
Monoamine Oxidase Inhibitors (MAOIs)			
Tranylcypromine Parnate®	Available as tablets.		
Phenelzine Nardil®	Available as tablets.		
Moclobemide Manerix®	Available as tablets.		

TOLERANCE AND DEPENDENCE

Tolerance does not appear to develop for antidepressants. However, mild withdrawal symptoms may be experienced upon stopping use suddenly, thus their use should be reduced slowly over a one- to two-month period.

LEGAL STATUS

All of the tricyclics, MAOIs and SSRI antidepressants are subject to the provisions of the **Food and Drugs Act** and **Food and Drug Regulations** applicable to drugs listed in Schedule "F" to the Regulations. The Regulations generally require that the sale or distribution of Schedule "F" drugs be made pursuant to a prescription. Violation of the Act or Regulations is an offence punishable upon indictment by a fine of up to \$5,000 or imprisonment for up to three years, or both, and upon summary conviction for a first offence by a fine of up to \$500 or imprisonment for up to three months, or both. A subsequent offence is punishable by a fine of up to \$1,000 or imprisonment for up to six months, or both.

6 ANABOLIC STEROIDS

NAME	DESCRIPTION	ORIGIN AND MEDICAL USES	SHORT-TERM EFFECTS
Oxymetholone Anadrol-50®	Taken orally, for human use.	Anabolic steroids, also referred to as androgenic anabolic steroids, belong to a group of drugs known as ergogenic or performance enhancing drugs. They include both the naturally occurring male sex hormone, testosterone and its precursors, and synthetic derivatives of testosterone. Some are taken orally in pill form, but others are taken by intramuscular injection, especially for steroids that are destroyed in the liver after being taken orally. Some steroids can be used in both ways. Some athletes also engage in "stacking", taking several different types of steroids and other hormonal drugs at once. Other dosing regimes include "cycling" which refers to periods of steroid use followed by periods of abstinence and "pyramiding" which refer to building up to a peak dose and then tapering down. All these regimes are "peer learned". Anabolic steroids are commonly used in veterinary medicine. In human medicine, they are used to treat certain disorders such as testosterone deficiency in males, certain types of anaemia, some breast cancers, osteoporosis, chronic conditions involving tissue wasting and hereditary angioneurotic edema. Testosterone was first synthesized in the 1930s and use of anabolic steroids by athletes for their performance-enhancing effects in sports began in the 1940s and 1950s. Their use for body-image and other non-sport related purpose has been observed since the 1950's. As a result, there is now a black market for the illegal production and sale of these drugs for non-medical purposes.	Synthetic anabolic steroids are designed to mimic the body building properties of testosterone. These drugs increase lean muscle mass, strength and endurance but no scientific studies support their "performance-enhancing effects"; they have not been found to improve agility, skill, cardiovascular capacity or recovery. At prescribed doses (typically equivalent to 100 to 200 mg testosterone monthly), anabolic steroids produce muscle development, physical vigour and feelings of well-being. Women who use anabolic steroids are at risk of "masculinization" including development of body hair, breast reduction, deepened voice, reduction or cessation of menstruation. In adolescent and young adult males, who use excessive doses (in some cases equivalent to 100 to 200 mg testosterone weekly), anabolic steroids may cause male pattern baldness, shrinking of the testicles, reduced sperm count, increased risk of tumour of the testicles and prostate, and enlargement of breasts. Both sexes may experience liver damage and cancer, acne, increased chance of damage to joints, jaundice, swelling of feet and ankles, increased blood pressure, cardiac problems such as increased risk of heart attack, enlarged heart. Anabolic steroids are particularly dangerous for adolescents because they may stunt growth. Anabolic steroids can result in serious psychological effects including euphoria, anxiety, irritability and aggression ("roid" rage), insomnia, depression, mania and hypomania and psychosis.
Stanozolol Winstrol® & Winstrol V®	Taken orally; also available as injectable for human and veterinary use.		
Nandrolone Deca-Durabolin®	Injectable liquid, for human and veterinary use.		
Methandrostenolone or Methandienone or Metandienone Dianabol®	Taken orally, for human use.		
Oxandrolone Anavar®	Taken orally, for human use.		
Boldenone Equipoise®	Injectable liquid, for veterinary use.		
Methenolone or Metenolone Primobolan®	Taken orally or by injection, for human use.		
Mesterolone Proviron®	Taken orally, for human use.		
Testosterone Cypionate Depo-testosterone®	Injectable liquid, for human use.		
Testosterone Enanthate Delatestryl®	Injectable liquid, for human use.		
Testosterone Propionate Testex®	Injectable liquid, for human and veterinary use.		
Testosterone Undecanoate Andriol®	Taken orally, for human use.		

TOLERANCE AND DEPENDENCE

Some studies point to long-term steroid users experiencing symptoms of dependence such as cravings, difficulty in stopping use and withdrawal symptoms, but there is no evidence of increased tolerance.

LEGAL STATUS

In Canada, anabolic steroids are regulated under the **Controlled Drug and Substances Act** applicable to Schedule IV. Trafficking, possession for the purpose of trafficking, possession for the purpose of exporting, production, import and export offences are punishable on summary conviction by imprisonment for up to one year or on indictment by imprisonment for up to three years.

The International Olympic Committee banned steroid use in 1975. Since then most amateur and professional organizations have put steroids on their list of banned substances.

Substance Use and HIV/AIDS and Hepatitis

Substance users are at increased risk for HIV and other infections such as hepatitis, particularly hepatitis C (HCV). HIV and HCV are transmitted by sharing needles, syringes and other paraphernalia for injecting drugs. One national survey indicated that 41 per cent of persons who inject drugs have shared needles to inject drugs.¹ The proportion of reported adult HIV-positive cases directly attributed to injection drug use has increased from 9.1 percent prior to 1995, to 28.3 percent in 1999, after peaking at 33.8 percent in 1996.² Injection drug use is estimated to be associated with at least 70 percent of all new hepatitis C cases.³

Use of alcohol and other drugs may lower inhibitions and impair judgement leading to increased risk of unsafe sexual practices and unsafe injecting. HIV is transmitted through bodily fluids to sexual partners and, in pregnant women, to unborn children. It can also be transmitted to infants through breastfeeding.

Hepatitis C is also a blood-borne disease. Any blood, including blood from cuts and nosebleeds, and small amounts of blood found on razors, earrings, needles used for body piercing, tattooing or acupuncture, or nasal blood found on straws used for inhaling cocaine can carry the virus and be a source of infection.

Hepatitis C is not as readily spread through sexual contact as HIV. However, Hepatitis C may be passed from a pregnant woman to her baby. To date, research indicates that breastfeeding is safe, but caution is required by women with cracked nipples.

At this time, major urban centres in Canada, particularly Vancouver, Montreal, Toronto and Ottawa, are experiencing high rates of HIV infection and hepatitis C among people who inject drugs. In these cities, injection drug use is associated with use of both injectable cocaine and heroin. There is some evidence that people who use cocaine may more often engage in HIV-related risk behaviours, such as sharing needles and unprotected sex than people who inject other types of drugs.⁴

Costs of Substance Abuse in Canada

In 1992, the health, social and economic costs of alcohol and illicit drugs to Canadian society were conservatively estimated to be \$8.89 billion.⁵ These are costs to society as a whole, rather than costs to the user him or herself. Estimated costs include: those associated with health care (e.g., hospitalization, treatment services, prescription drugs, ambulance services), direct expenditures associated with the workplace (e.g., EAP programs, drug testing), direct administrative costs for transfer payments (e.g., social welfare and other programs, worker's compensation), direct costs for prevention and research (e.g., research, prevention programs, training programs for health professionals), direct costs for law enforcement (e.g., police, courts, corrections, customs and excise), other direct costs (e.g., fire damage, traffic accident damage), and indirect costs associated with lost productivity (e.g., morbidity, mortality and crime). The costs of alcohol are estimated to be \$7.52 billion and illicit drugs \$1.37 billion.

The direct health care costs for alcohol and illicit drugs total \$1.4 billion.

Concurrent Disorders

A concurrent disorder means that a person has both a substance use and mental health problem. It is believed that about half of persons in substance abuse treatment have some type of psychiatric disorder, with a similar percentage of persons receiving psychiatric treatment having a substance abuse problem.⁶

For example, one study of gender differences in substance use disorders found that among participants in a chemical dependency program, 48% of men and 70% of women had a concurrent affective or anxiety disorder.⁷

Substance use problems and psychiatric problems may be related in a number of different ways. The effects of some drugs or withdrawal from some drugs may mimic a psychiatric disorder—a drug-induced psychosis; a person may use a substance to “self medicate” a psychiatric problem; the two problems may co-occur by chance or both be caused by some third factor.

A study in the U.S., the Epidemiologic Catchment Area (ECA) Study, provides some estimates of the prevalence of concurrent disorders among non-treatment populations. Although the prevalence of substance use disorders in the general U.S. population is 16 per cent, among those with a mental disorder, the rate is 29 per cent.⁸ This study also found that those respondents with an alcohol use disorder were 21 times more likely to have a diagnosis of antisocial personality disorder compared with survey respondents without an alcohol use disorder.⁹ The rates for other psychiatric disorders were: mania 6.2 times, schizophrenia 4.0 times and depression 1.7 times the rate in non-alcoholics.

Server Liability

During the last 20 years the scope of liability for those who provide alcohol has increased dramatically. This is as a result of a series of landmark legal cases in which alcohol providers were found legally responsible for having served someone beyond the point of intoxication, following which the individual injured him or herself, or someone else, and the injured person sued for damages.

Though the majority of liability cases have involved bars, restaurants or other licensed commercial establishments, anyone who sells or provides alcohol is potentially liable if a person to whom alcohol is provided subsequently harms him or herself or others and alcohol is found to be a factor in causing the injury. Thus, a host in a private home, an office party, or any other private social occasion where alcohol is served, may be liable. A 1996 Alberta Court decision stated that the law may have moved beyond the narrow definition of a social host to impose a duty on even non-commercial hosts to take reasonable steps to prevent injury to third parties by inebriated guests, especially teenage guests. The courts have found that alcohol providers have a “duty of care” to prevent incidents which may lead to injury.

This duty of care requires the alcohol provider to take reasonable steps to prevent harm occurring to an intoxicated person, particularly since the courts have recognized that an intoxicated person is not able to exercise that care for themselves because they are not capable of appreciating the risk associated with their behaviour. A common example of potential liability is if a commercial establishment or a private host allows a patron or guest to drink to intoxication, does not take sufficient measures to prevent the person driving, and the person subsequently injures himself or others in a motor vehicle accident.

Absorption, Distribution, Metabolism and Elimination of Drugs

Absorption, distribution, metabolism and elimination refer to the processes by which drugs enter the blood stream (absorption) and reach the brain (distribution), are broken down (metabolized and biotransformed) and leave the body (elimination). Drugs have different rates of absorption, depending on the route of administration. Drugs may be taken orally, e.g., alcohol; smoked, e.g., cigarettes; absorbed through the mucous membranes of the nose or mouth or other parts of the body, e.g., snorting cocaine; or injected, e.g., injectable heroin or cocaine. Drugs which are smoked or injected directly into the bloodstream will reach the brain more quickly than other routes of administration and therefore the person will experience the effects more rapidly. For example, cocaine that is injected into the bloodstream will produce a more rapid effect than cocaine that is snorted. However, the effect will also wear off more rapidly. Other factors may delay a substance reaching the brain; for example, alcohol is mainly absorbed into the bloodstream through the small intestine. If a person has just eaten and has a full stomach, this may delay absorption and reduce the speed at which alcohol reaches the brain.

The rate at which drugs are metabolized and excreted varies, depending on the nature of the drug itself, as well as factors such as body build, gender, age, health and genetic factors. For example, alcohol is metabolized in an average person at the rate of about two-thirds of a standard drink per hour. However, with aging or chronic disease, the liver may not function as efficiently and thus the rate of alcohol metabolism will be slowed. Cocaine is also metabolized and eliminated very rapidly within a few hours. In contrast, drugs such as cannabis and some benzodiazepines (tranquilizers), both of which are stored in fatty tissues rather than being distributed in body water (as is alcohol), are eliminated from the body quite slowly. Long-acting benzodiazepines, such as Valium® (diazepam), may take weeks to leave the body completely, while cannabis may take a month or more. Because of differences in physiology, some drugs may reach higher levels in the bodies of women than men and take longer to be metabolized and eliminated.

The following table provides estimates of how long, after last use, specific types of drugs are likely to be detected in urine by routine clinical toxicological testing methods. The actual time over which urine will give a positive test depends upon the specific drug, dose and dosage form, the method of use, the individual user and the method of testing.

Drug or Class	Typical Duration of Positive Urine Test After Last Use
Amphetamines	1 to 2 days
Barbiturates: Short-acting (e.g., secobarbital) Long-acting (e.g., phenobarbital)	1 day 2 to 3 weeks
Benzodiazepines: Therapeutic Use Chronic Use	3 days 4 to 6 weeks
Cannabis: Occasional Use Chronic Use	1 to 7 days 1 to 4 weeks
Cocaine	2 to 4 days
Ethanol (Alcohol)	2 to 14 hours
Methadone	1 to 3 days
Other Opiates	1 to 2 days

Gender Differences

It takes less alcohol to affect women than men because women are generally smaller than men and their bodies contain less water in which to dilute the alcohol than men's bodies. Women also metabolize alcohol more slowly than men. As a result, if a woman drinks the same number of drinks as a man over the same time period, she will reach a higher blood alcohol level (BAL), that is, she will be more impaired. Women also develop alcohol-related health problems such as cirrhosis of the liver with lower levels of alcohol use over a shorter period of time than men.

Body differences in physiology may also make women more vulnerable than men to the effects of other psychoactive substances. Psychoactive medications are generally fat soluble and stay in women's bodies longer than men's bodies because women's bodies usually have a higher fat content than men's bodies. Women are also more vulnerable than men to the effects of tobacco and smoking-related diseases such as lung cancer.

Driving and Drug Use

Although much is known about driving under the influence of alcohol, driving while affected by drugs is an emerging issue. Driving involves skills and abilities such as attention, judgment, perception, concentration, physical reaction time and coordination, all of which can be impaired by use of any mood-altering substance. The risk of a driving accident is increased if a person is using more than one drug at the same time. For instance, having a couple of drinks and then taking medication such as a benzodiazepine or a cough/cold remedy, or smoking a joint of cannabis, will increase the risk of a driving accident. Driving a car or operating other types of vehicles such as boats or aeroplanes or operating complex machinery can be affected by most mood-altering substances, including cannabis, stimulants, hallucinogens, central nervous system depressants and antidepressants.

In Canada, it is an offence to operate a motor vehicle while impaired by alcohol or other drugs. Even without evidence from blood or urine testing, police can lay charges based on behavioural indicators such as erratic driving, slurred speech or lack of coordination.

It is difficult to determine the full extent of driving while impaired by drugs other than alcohol because our laws only allow for roadside blood or urine tests of drug-impaired drivers by police or medical personnel under limited circumstances.³ However, several studies done to date have been consistent in finding that cannabis, benzodiazepines and stimulants such as cocaine are the most commonly detected drugs in trauma victims or in blood samples sent for forensic testing. Not surprisingly, rates of driving while using cannabis have been found to be highest among younger people (those under 25 years of age) since those between 15 and 24 years of age report much higher rates of current cannabis use than older age groups. In contrast, older adults may be at risk of driving while impaired by drugs such as benzodiazepines because they are more likely than other age groups to be using one or more central nervous system depressant medications.

In Canada, some police forces, such as those in British Columbia, are beginning to adopt measures to deal with drug-impaired driving. In the United States, 39 states have adopted the Driver Recognition Expert Program (DRE). The DRE is a 12-step process, incorporating a series of behavioural assessments including a highly reliable eye test, and culminating in toxicological testing to arrive at a conclusion. The accuracy of

3 Also if the driver's blood alcohol level (BAL) is above the legal limit, police have the evidence to lay a charge and do not need to test for other drugs.

the DREs has been the subject of independent assessment by the U.S. National Highway Traffic Safety Association.

Recent legislation in the United States has had an impact in Canada. The Federal Highway Administration (FHWA) has extended policies on testing for alcohol and other drugs to foreign-based drivers of motor carriers operating in the U.S. As a result, Canada's national and provincial trucking associations have developed a package of services for their membership to respond to the U.S. regulations. The package includes alcohol and drug testing, employee assistance programs, supervisor training, employee education and materials, and the services of medical and substance abuse professionals.

References

1. Health Canada (1995). *Canada's Alcohol and Other Drug Survey: Preview 1995*. Minister of Supply and Services (H39-338/1995E).
2. Health Canada (1999). *Hepatitis C - Prevention and Control: A Public Health Consensus*, Canada Communicable Disease Report, Volume 2552.
3. Health Canada (2000). *HIV and AIDS in Canada: Surveillance Report to December 1999*. Ottawa, Minister of Public Works and Government Services Canada.
4. Hankins, C. (1997). *Needle Exchange: Panacea or Problem?* Canadian Medical Association Journal, 157, 275-277.
5. Single E., Robson, L., Xie, X. and Rehm, J. (1996). *The Costs of Substance Abuse in Canada*. Canadian Centre on Substance Abuse, Ottawa.
6. Cooper, G. and Kent, C. (1997). Helping Clients with Concurrent Disorders. In S. Harrison and V. Carver (Eds). *Alcohol and Drug Problems: A Practical Guide for Counsellors*, Toronto, Addiction Research Foundation.
7. Brady, K.T., Grice, D.E., Dustan, L. and Randell, C. (1993). *Gender Differences in Substance Use Disorders*. American Journal of Psychiatry, 150 (11), 1707-1711.
8. Regier, Daniel A., Farmer, Mary E., Rae, Donald S., Locke, Ben Z., Keith, Samuel, J., Judd, Lewis J., Goodwin, Frederick, K. (1990). *Comorbidity of Mental Disorders with Alcohol and Other Drug Abuse*. JAMA, 264 (19), 2511-2518.
9. National Institute on Alcohol Abuse and Alcoholism. Alcohol Alert: Alcoholism and Co-occurring Disorders. No. 14, PH 302 (October 1991).

Other Bibliographic Resource:

Brands, B., Sproule, B. and Marshman, J. (Eds) (1998). *Drugs and Drug Abuse*, Toronto, Addiction Research Foundation (ARF).

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Contacts

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NATIONAL

Canada's Drug Strategy
Division
Health Canada
Ottawa, ON
Tel: (613) 957-8340
Fax: (613) 957-1565
www.cds-sca.com

Canadian Centre on
Substance Abuse
Suite 300, 75 Albert
Street
Ottawa, ON K1P 5E7
Tel: (613) 235-4048
Publications Line:
1-800-214-4788
FAS/FAE Information
Service:
1-800-559-4514
website: www.ccsa.ca

Canadian Centre for
Ethics in Sport
Suite 205-1600 James
Naismith Drive
Gloucester, ON
K1B 5N4
Tel: (613) 748-5755
Fax: (613) 748-5746
Toll-free:
1-800-672-7775
website: www.cces.ca

NEWFOUNDLAND

Addiction Services
Program Development
Division
Department of Health and
Community Services
Main Floor
P.O. Box 8700
Confederation Building
West Block
St. John's, NF A1B 4J6
Tel: (709) 729-0719
Fax: (709) 729-5824
www.gov.nf.ca/health

NOVA SCOTIA

Addiction Services,
Strategic Health Services
Branch
P.O. Box 488
1690 Hollis Street
Halifax, NS B3J 2R8
Tel: (902) 424-7220
Fax: (902) 424-0550
www.gov.ns.ca/health/

NEW BRUNSWICK

Department of Health and
Community Services
P.O. Box 5100
520 King Street
Fredericton, NB
E3B 5G8
Tel: (506) 453-8446
Fax: (506) 453-2958
http://inter.gov.nb.ca/
hcs-ssc/

PRINCE EDWARD ISLAND

Department of Health and
Social Services, Division
of Child, Family and
Community Services
P.O. Box 2000
16 Garfield Street
Charlottetown, PEI
CIA 7N8
Tel: (902) 368-6710
Fax: (902) 368-6136
www.gov.pe.ca/hss/

QUEBEC

Ministère de la Santé et
des Services Sociaux
Direction générale des
services à la population
1075, chemin Sainte-Foy,
4^e étage
Québec (QC) G1S 2M1
Tel: (418) 646-3251
Fax: (418) 644-2009
www.msss.gouv.qc.ca

ONTARIO

Centre for Addiction and
Mental Health
33 Russell Street
Toronto, ON M5S 2S1
Phone toll-free (Ontario):
1-800-463-6273
Metro Toronto phone:
(416) 595-6111
Fax: (416) 595-5017
www.camh.net

Ontario Substance Abuse
Bureau
Ministry of Health and
Long Term Care
5th Floor, 5700 Yonge
Street
North York, ON
M2M 4K5
Tel: (416) 327-8856
Fax: (416) 327-0854
www.gov.on.ca/health

MANITOBA

Addictions Foundation of
Manitoba (AFM),
Provincial Administration
3rd Floor, 1031 Portage
Avenue
Winnipeg, MB
R3G 0R8
Tel: (204) 944-6200
Fax: (204) 786-7768
www.afm.mb.ca

SASKATCHEWAN

Alcohol and Drug
Services Program Support
Unit, Community Care
Branch, Saskatchewan
Health
3475 Albert Street
Regina, SK S4S 6X6
Tel: (306) 787-4686
Fax: (306) 787-7095
Toll-free in Sask:
1-800-667-7560

Resource materials:
SPMC Distribution
Centre (306) 787-2056
www.gov.sk.ca/health/

ALBERTA

Alberta Alcohol and Drug
Abuse Commission
2nd Floor, 10909 Jasper
Avenue
Edmonton, AB
T5J 3M9
Tel: (780) 427-7319
Fax: (780) 422-5237
www.aadac.com

BRITISH COLUMBIA

Ministry for Children and
Families, Addiction
Services Branch
737 Courtney Street
2nd Floor, P.O. Box 9717,
Stn. Prov. Govt.
Victoria, BC V8W 9S1
Tel: (250) 953-3113
Fax: (250) 953-3044
www.gov.bc.ca

YUKON

Alcohol and Drug
Services, Yukon Health
and Social Services
P.O. Box 2703, H-7
Whitehorse, YT
Y1A 2C6
Tel: (867) 667-5777
Fax: (867) 667-3498
www.gov.yk.ca

NORTHWEST TERRITORIES

Department of Health and
Social Services
Community Programs and
Services
P.O. Box 1320
Yellowknife, NT
X1A 2L9
Tel: (867) 873-7738
Fax: (867) 873-7706
www.hlthsslgov.nt.ca

RCMP National Drug Awareness Service

RCMP HQ - Ottawa

Drug Enforcement Branch
Drug Awareness Service
1200 Vanier Parkway, Room H-501L
Ottawa, ON K1A 0R2
Tel: (613) 993-2501
Fax: (613) 993-5454
Website: www.rcmp-grc.gc.ca/html/dr-awar.htm

“A” Division - Ottawa

“A” Division Drug Awareness Service
155 McArthur Street
Vanier, ON K1A 0R4
Tel: (613) 990-6803
Fax: (613) 993-5705
Website: www.deal.org

“B” Division - St. John’s

“B” Division Drug Awareness Service
P.O. Box 9700, Station “B”
St. John’s, NF A1A 3T5
Tel: (709) 772-4381
Fax: (709) 772-6010

“C” Division - Montréal

GRC, Division “C”
Service de sensibilisation aux drogues
5000, chemin de l’aéroport
St-Hubert (QC) J3Y 5K2
Tel: (450) 926-6450
Fax: (450) 926-6455

“C” Division - Québec City

GRC, Division “C” Québec/S.-Div.
Service de sensibilisation aux drogues
925, 9^e rue
Ste-Foy (QC) G2E 5W1
Tel: (418) 648-3653
Fax: (418) 648-7325

“D” Division - Winnipeg

“D” Division Drug Awareness Service
Box 5650
1091 Portage Avenue
Winnipeg, MB R3C 3K2
Tel: (204) 983-2285
Fax: (204) 984-0642

“E” Division - Vancouver (HQ)

Drug Awareness Service
657 - 37th Avenue West
Vancouver, BC V5Z 1K6
Tel: (604) 264-3029
Fax: (604) 264-2649
Internet: drugaware@uniserve.com

“E” Division - Prince George (North District)

Drug Awareness Service
1323 - 5th Avenue
Prince George, BC V2L 4S1
Tel: (250) 561-3128
Fax: (250) 561-3163
Internet: rcmpdas@netbistro.com
Website: www.pgonline/rcmp

“E” Division - Fort St. John

Drug Awareness Service
10648 - 100th Street
Fort St. John, BC V1J 3Z6
Tel: (250) 787-8144
Fax: (250) 787-8133

“E” Division - Prince Rupert

Drug Awareness Service
800 - 2nd Avenue West
Prince Rupert, BC V8J 3Y8
Tel: (250) 627-3146
Fax: (250) 627-3163

“E” Division - Kelowna (Southeast District)

Drug Awareness Service
2611 Norris Road
Kelowna, BC V1X 7M1
Tel: (250) 491-2396
Fax: (250) 491-2380

“E” Division - Kamloops

Drug Awareness Service
1280 Trans Canada Highway West
Kamloops, BC V2C 5Y5
Tel: (250) 828-3172
Fax: (250) 828-3107

“E” Division - Cranbrook

Drug Awareness Service
31-11th Avenue South
Cranbrook, BC V1C 2N9
Tel: (250) 417-4219
Fax: (250) 417-4214

“E” Division - Nelson

Drug Awareness Service
1010 Second Street
Nelson, BC V1L 6B6
Tel: (250) 354-5166
Fax: (250) 352-9677

“E” Division - Chilliwack (Southwest District)

Drug Awareness Service
46326 Airport Road
Chilliwack, BC V2P 1A5
Tel: (604) 702-4011
Fax: (604) 702-4047

“E” Division - Victoria (Island District)

Drug Awareness Service
2881 Nanaimo Street
Victoria, BC V8T 4Z8
Tel: (250) 380-6295
Fax: (250) 380-6264

“E” Division - Courteney

Drug Awareness Service
130B - 19th Street
Courteney, BC V9N 8S1
Tel: (250) 334-5945
Fax: (250) 897-0386

“E” Division - Nanaimo

Drug Awareness Service
303 Prideaux St.
Nanaimo, BC V9R 2N3
Tel: (250) 755-3226
Fax: (250) 755-3243

“F” Division - Regina

Drug Awareness Service
6101 Dewdney Avenue
Bag Service 2500
Regina, SK S4P 3K7
Tel: (306) 780-7499
Fax: (306) 780-8567

“G” Division - Yellowknife

Drug Awareness Service
Bag Service 5000
Yellowknife, NWT X1A 2R3
Tel: (867) 669-5277
Fax: (867) 669-5104

“H” Division - Halifax

Drug Awareness Service
3139 Oxford Street, Box 2286
Halifax, NS B3J 3E1
Tel: (902) 426-6677
Fax: (902) 426-7964

“J” Division - Fredericton

Drug Awareness Service
1145 Regent Street, Box 3900
Fredericton, NB E3B 4Z8
Tel: (506) 452-2034
Fax: (506) 452-3914

“K” Division - Edmonton

Drug Awareness Service
11140 - 109th Street
Edmonton, AB T5G 2T4
Tel: (403) 412-5461
Fax: (403) 412-5403
Website: www.straightfacts.com

“K” Division - Calgary

Calgary Subdivision
Drug Awareness Service
920 - 16th Avenue N.E.
Calgary, AB T2E 1K9
Tel: (403) 230-6533
Fax: (403) 230-5304

“L” Division - Charlottetown

Drug Awareness Service
450 University Avenue, Box 1360
Charlottetown, PEI C1A 7N1
Tel: (902) 566-7777
Fax: (902) 566-7119

“M” Division - Whitehorse

Drug Awareness Service
4100 - 4th Avenue
Whitehorse, YT Y1A 1H5
Tel: (867) 667-5530
Fax: (867) 393-6791

“O” Division - London

Drug Awareness Service
P.O. Box 3240, Station B
London, ON N6A 5R2
Tel: (519) 645-3893
Fax: (519) 871-7213

“O” Division - St. Davids/Niagara Falls

Drug Awareness Service
P.O. Box 220
St. Davids, ON L0S 1P0
Tel: (905) 988-4174
Fax: (905) 988-4564

“O” Division - Toronto

Drug Awareness Service
415 Baseline Rd. W.
P.O. Box 1500
Bowmanville, ON
Tel: (905) 697-6084
Fax: (905) 697-6101

“O” Division - Windsor

Drug Awareness Service
6080 Riverside Drive East
Windsor, ON N8S 1B6
Tel: (519) 948-5287
Fax: (519) 948-5289