# Health Risks of Drug and Alcohol Use and Abuse

Following is a list of some of the health risks and symptoms associated with the following categories of substances. It is not intended to be the final word on such health risks, since the scientific and medical communities will continue their research into and discoveries concerning the abusive use of drugs and alcohol.

#### 1. Cannabis

- Includes marijuana, hashish, hashish oil, and tetrahydrocannabinol (THC).
- Regularly observed physical effects of cannabis are a substantial increase in the heart rate, bloodshot eyes, a dry mouth and throat, and increased appetite.

Use of cannabis may impair or reduce short-term memory and comprehension, alter sense of time, and reduce ability to perform tasks requiring concentration and coordination, such as driving a car. Research also shows knowledge when they are "high." Motivation and cognition may be altered, making the acquisition of new information difficult. Marijuana can also produce paranoia and psychosis. Because users often inhale the unfiltered smoke deeply and then hold it in their lungs as long as possible, marijuana is damaging to the lungs and pulmonary system. Marijuana smoke contains more cancer-causing agents than tobacco. Long-term users of cannabis may develop psychological dependence and require more of the drug to get the same effect. The drug can become the center of their lives.

#### 2. Cocaine

- Includes cocaine in powder form and "crack" in crystalline or pellet form.
- Cocaine stimulates the central nervous system.

Its immediate effects include dilated pupils and elevated blood pressure, heart rate, respiratory rate, and body temperature. Occasional use can cause a stuffy or runny nose, while chronic use can ulcerate the mucous membrane of the nose. Injecting cocaine with unsterile equipment can cause AIDS, hepatitis, and other diseases. Preparation of freebase, which involves the use of volatile solvents, can result in death or injury from fire or explosion. Cocaine can produce psychological and physical dependency, a feeling that the user cannot function without the drug. In addition, tolerance develops rapidly. Crack or freebase rock is extremely addictive, and its effects are felt within 10 seconds. The physical effects include dilated pupils, increased pulse rate, elevated blood pressure, insomnia, loss of appetite, tactile hallucinations, paranoia, and seizures. The use of cocaine can cause death by disrupting the brain's control of the heart and respiration.

## 3. Other Stimulants

- Includes amphetamines and methamphetamines (speed); phenmetrazine (Preludin); methylphenidate (Ritalin); and "anorectic" (appetite suppressant) drugs such as Didrex, Pre-State, etc.
- Stimulants can cause increased heart and respiratory rates, elevated blood pressure, dilated pupils, and decreased appetite.

In addition, users may experience sweating, headache, blurred vision, dizziness, sleeplessness, and anxiety. Extremely high doses can cause a rapid or irregular heartbeat, and physical collapse. An amphetamine injection creates a sudden increase in blood pressure that can result in stroke, very high fever, or heart failure. In addition to the physical effects, users report feeling restless, anxious, and moody. Higher doses intensify the effects. Persons who use large amounts of amphetamines over a long period of time can develop an amphetamine psychosis that includes hallucinations, delusions, and paranoia. These symptoms usually disappear when drug use ceases.

### 4. Depressants

• Includes such drugs as barbiturates, methaqualone (Quaaludes), and tranquilizers such as Valium, Librium, Equanil, Miltown, etc.

• The effects of depressants are in many ways similar to the effects of alcohol. Small amounts can produce calmness and relaxed muscles, but somewhat larger doses can cause slurred speech, staggering gait, and altered perception. Very large doses can cause respiratory depression, coma, and death.

The combination of depressants and alcohol can multiply the effects of the drugs, thereby multiplying the risks. The use of depressants can cause both physical and psychological dependence. Regular use over time may result in a tolerance to the drug, leading the user to increase the quantity consumed. When regular users suddenly stop taking large doses, they may develop withdrawal symptoms ranging from restlessness, insomnia and anxiety to convulsions and death. Babies born to mothers who abuse depressants during pregnancy may be physically dependent on the drugs and show withdrawal symptoms shortly after they are born. Birth defects and behavioral problems also may result.

#### 5. Narcotics

- Includes such substances as heroin, morphine, opium, and codeine as well as methadone, meperidine (Demerol), hydromorphine (Dilaudin), and such drugs as Percocet, Percodan, Darvon, Talwin, etc.
- Narcotics initially produce a feeling of euphoria that often is followed by drowsiness, nausea, and vomiting. Users also may experience constricted pupils, watery eyes, and itching.

An overdose may produce slow and shallow breathing, clammy skin, convulsions, coma, and possibly death. Tolerance to narcotics develops rapidly and dependence is likely. The use of contaminated syringes may result in diseases such as AIDS, endocarditis, and hepatitis. Addiction in pregnant women can lead to premature, stillborn, or addicted infants who experience severe withdrawal symptoms.

# 6. Hallucinogens

- Includes phencyclidine ("PCP"), lysergic acid diethylamide ("LSD"), mescaline, peyote, and psilocybin.
  - Phencyclidine ("PCP"), interrupts the functions of the neocortex, the section of the brain that controls the intellect and keeps instincts in check.

Because the drug blocks pain receptors, violent PCP episodes may result in self- inflicted injuries. The effects of PCP vary, but users frequently report a sense of distance and estrangement. Time and body movement are slowed down. Muscular coordination worsens and senses are dulled. Speech is blocked and incoherent. Chronic users of PCP report persistent memory problems and speech difficulties. Some of these effects may last six months to a year following prolonged daily use. Mood disorders—depression, anxiety, and violent behavior—also occur. In later stages of chronic use, users often exhibit paranoid and violent behavior and experience hallucinations. Large doses may produce convulsions and coma, heart and lung failure, or ruptured blood vessels in the brain. Lysergic acid ("LSD"), mescaline, and psilocybin cause illusions and hallucinations. The physical effects may include dilated pupils, elevated body temperature, increased heart rate and blood pressure, loss of appetite, sleeplessness, and tremors. Sensations and feelings may change rapidly. It is common to have a bad psychological reaction to LSD, mescaline, or psilocybin. The user may experience panic, confusion, suspicion, anxiety, and loss of control. Delayed effects, or flashbacks, can occur even after use has ceased.

# 7. Inhalants

- Includes such substances as nitrous oxide ("laughing gas"), amyl nitrite, butyl nitrite, chlorohydrocarbons (used in aerosol sprays), and hydrocarbons (found in gasoline, glue, and paint thinner).
- Immediate negative effects of inhalants include nausea, sneezing, coughing, nosebleeds, fatigue, lack of coordination, and loss of appetite.

Solvents and aerosol sprays also decrease the heart and respiratory rates, and impair judgment. Amyl and butyl nitrite cause rapid pulse, headaches, and involuntary passing of urine and feces. Long-term use may result in hepatitis or brain hemorrhage. Deeply inhaling the vapors, or using large amounts over a short period of time, may result in disorientation, violent behavior, unconsciousness, or death. High concentrations of inhalants can cause suffocation by displacing the oxygen in the lungs or by depressing the central nervous system to the point that breathing stops. Long-term use can cause weight loss, fatigue, electrolyte imbalance, and muscle fatigue. Repeated sniffing of concentrated vapors over time can permanently damage the nervous system.

## 8. Designer Drugs

- Designer drugs include analogs of fetanyl and analogs of meperidine (synthetic heroin), analogs of amphetamines and methamphetamines (such as "Ecstasy"), and analogs of phencyclidine.
- Illegal drugs are defined in terms of their chemical formulas.

Underground chemists modify the molecular structure of certain illegal drugs to produce analogs known as designer drugs. These drugs can be several hundred times stronger than the drugs they are designed to imitate. The narcotic analogs can cause symptoms such as those seen in Parkinson's disease—uncontrollable tremors, drooling, impaired speech, paralysis, and irreversible brain damage. Analogs of amphetamines and methamphetamines cause nausea, blurred vision, chills or sweating, and faintness. Psychological effects include anxiety, depression, and paranoia. As little as one dose can cause brain damage. The analogs of phencyclidine cause illusions, hallucination, and impaired perception.

#### 9. Alcohol

- Ethyl alcohol, a natural substance formed by the fermentation that occurs when sugar reacts with yeast, is the major active ingredient in wine, beer, and distilled spirits.
- Ethyl alcohol can produce feelings of well-being, sedation, intoxication, unconsciousness, or death, depending on how much is consumed and how fast it is consumed.

Alcohol is a "psychoactive", or mind-altering, drug as are narcotics and tranquilizers. It can alter moods, cause changes in the body, and become habit-forming. Alcohol depresses the central nervous system and too much can cause slowed reactions, slurred speech, and unconsciousness. Chronic use of alcohol has been associated with such diseases as alcoholism, and cancers of the liver, stomach, colon, larynx, esophagus, and breast. Alcohol abuse can also lead to damage to the brain, pancreas and kidneys, high blood pressure, heart attacks, and strokes; hepatitis and cirrhosis of the liver; stomach and duodenal ulcers; colitis; impotence and infertility; and premature aging. Abuse of alcohol has also been linked to birth defects and Fetal Alcohol Syndrome.