

Substance Abuse and Alcoholic Beverages

New York Methodist Hospital's Center for Allied Health Education (the Center) is committed to creating and maintaining an environment that is free of alcohol and substance abuse and that complies with New York State and local laws. The Center views the abuse of alcohol and legal drugs and the use of illicit drugs as being antithetical to the pursuit of educational excellence and the realization of one's full potential as a student. Accordingly, the Center takes very seriously its obligation to address the issue of substance abuse.

At the same time, the Center expects that students will conduct themselves in accordance with the basic principles of personal responsibility, respect for order, and consideration of the rights of others. Implied in these expectations is the understanding that students are responsible for making their own decisions and accepting the consequences of those decisions. In order to make informed choices about alcohol and other drug use, students should educate themselves about the social, physiological, and psychological consequences of drug use or excessive drinking.

The United States Department of Education has issued regulations implementing the provisions of the Drug-Free Schools and Communities Act Amendments of 1989. These regulations require that the Center distribute the following information annually to you in writing concerning the possession, use, or distribution of alcohol and illicit drugs the Center's policies on substance abuse and on alcoholic beverages are set out below, along with related information on program sanctions for violation of these policies, on criminal sanctions for the illegal possession or distribution of drugs and alcohol, on the health risks associated with drugs and alcohol, and on places to obtain help concerning the use and abuse of alcohol and illicit drugs. These policies apply to all students and to all events or activities which are sponsored by the Center whether they occur at the Center or not. Please read all of this material very carefully. There is much information here, some of it technical, but all of it vitally important.

I. Standard of Conduct

The following are the Center's Statements of Policy on Substance Abuse and on Alcoholic Beverages. We believe that the best way to maintain an appropriate campus environment with respect to drugs and alcohol is through preventive education about the dangers of drug abuse and attention to the needs of those who may require help with alcohol or other drug-related problems. To that end, the Center provides information about related services that are available in the local community.

A. Statement of Policy on Substance Abuse

In addition to policies and practices that emphasize concern for the welfare of individuals, the Center also recognizes the importance of maintaining the safety and well being of the community as a whole. The Center therefore adheres to the following guidelines concerning the unlawful possession, use, or distribution of drugs:

- The unlawful possession, use, or distribution of drugs will not be tolerated on the Center's premises. Upon finding evidence of the unlawful possession, use, or distribution of drugs on its premises by any student, the Center will take appropriate disciplinary action, including, but not limited to, probation, suspension, or termination. The Center will take disciplinary action, up to and including discharge, against any student found to be unlawfully using, possessing, or distributing drugs on program premises.
- Students should also be aware that, in addition to program sanctions, they may be subject to criminal prosecution under federal and state laws that specify fines or imprisonment for conviction of drug-related offenses. Where appropriate or necessary, the Center will cooperate fully with law enforcement agencies.

B. Statement of Policy on Alcoholic Beverages

The sale, service, possession, and consumption of alcoholic beverages at the Center are governed by the New York State Alcoholic Beverage Control Law and other laws of the State of New York. Based on such laws, it is the policy of New York Methodist Hospital's Center for Allied Health Education that:

DRUG PREVENTION PROGRAM

- Persons under the age of 21 years are prohibited from possessing any alcoholic beverage at the Center or at any event sponsored by the Center, whether the event is at the Center's premise or not.
- The following rules are applicable to all events at which alcoholic beverages are served or sold at the Center and to all events or activities, whether or not at the Center, which are sponsored by the Center.
 - No person shall be sold or served any alcoholic beverage:
 - if that person is, or appears to be, under the legal drinking age of 21;
 - if that person is, or appears to be, intoxicated, or is known to the server or seller to be a problem drinker.
 - No person under the age of 21 years shall:
 - present any written evidence of his or her age that is false, fraudulent, or not actually his or her own in order to purchase or be served, or to try to purchase or be served, any alcoholic beverage or in order to gain access, or to try to gain access, to any event or activity at which any alcoholic beverage is being sold or served.
 - No person shall in any way misrepresent the age of any other person or help any other person to misrepresent the age of any other person or help any other person to misrepresent his or her age so that such person can purchase or be served, or try to purchase or be served, any alcoholic beverage or gain access, or try to gain access, to any event or activity at which any alcoholic beverage is being served or sold.
 - No alcoholic beverage shall be sold to any person unless:
 - a license or permit sanctioning the sale of such alcoholic beverage has been obtained by the seller; and
 - the license or permit sanctioning such sale and any posters, signs, notices, or other material or information required by applicable law or by the State Liquor Authority are prominently displayed at the site of such sale.

The individual or group(s) sponsoring an event or activity at which any alcoholic beverage is to be sold or served (the "sponsor") shall be responsible to make sure that all New York State laws and regulations and all the Center's rules and regulations regarding the sale, use, service, possession, and consumption of alcoholic beverages are observed at such event or activity. This responsibility shall include, without being limited to, the following:

- Sales of liquor include, without being limited to, cash bars, events to which admission tickets are sold or for which fees are charged, either by the event or for a period of time (e.g., entertainment charge or annual dues), entitling the purchaser access to an open bar, and parties at which alcoholic beverages are served and for which contributions or donations to offset the costs of the party are sought.
- To serve alcoholic beverages shall mean to give away, deliver, or otherwise provide alcoholic beverages to any person by any means other than by sale to such person complying with items a and b above, including examining attendees' evidences of age; notifying either the Program Director prior to each on-campus event at which alcoholic beverages are to be sold or served; and instructing the person or persons actually selling or serving alcoholic beverages at the event not to sell or serve alcoholic beverages to any person who is or appears to be intoxicated, or whom such server or seller knows to be a problem drinker, or who is or appears to be under the legal drinking age.
- Violation of the Center's Policy on Alcoholic Beverages will be addressed pursuant to applicable disciplinary codes and policies. Sanctions which may be imposed against violators include discharge. Students should also be aware that, in addition to program sanctions, they may be subject to criminal penalties under certain circumstances for the possession, service, or sale of alcoholic beverages, particularly for serving or selling an alcoholic beverage to a

DRUG PREVENTION PROGRAM

person under the age of 21 years. Where appropriate or necessary, the Center will cooperate fully with law enforcement agencies.

II. New York Methodist Hospital's Center for Allied Health Education Sanctions

Any member of the faculty, administration, or staff may file a complaint against an employee or student under the Center's Disciplinary Procedures if he or she knows or believes that an employee or student has violated the Center's Policy on Substance Abuse or its Policy on Alcoholic Beverages.

If you are alleged to have violated either or both of these policies, you may be suspended pending a hearing under the circumstances as described in the Center's Disciplinary Procedures. Moreover, if it is determined that you have violated either or both of these policies, the consequences may be severe. Sanctions can include suspension or termination.

Students may also be required to undergo evaluation and/or participate in and satisfactorily complete an appropriate counseling or rehabilitation program.

III. Criminal Sanctions

The unlawful possession, use, or distribution of illicit drugs and alcohol is punishable by criminal sanctions authorized by the Federal government and by the State of New York. These sanctions can include imprisonment, fines and or assigned community service.

Regarding illicit drugs, the seriousness of the offense and the penalty imposed upon conviction usually depend upon the individual drug and the amount of the drug held or sold. For example, in New York State, the criminal possession of 500 milligrams of cocaine is a class D felony, punishable by sentences ranging from 1 - 2 ½ years in prison. The sale of less than one-half an ounce of cocaine is a class B felony, punishable by sentences ranging from 1 - 9 years in prison. The criminal possession of eight to sixteen ounces of marijuana is a class E felony, punishable by sentences ranging from 1 – 1 ½ years in prison, as is the sale of more than 25 grams of marijuana. Possession or sale of larger amounts of marijuana is punishable by more severe penalties. In New York State, a gift of drugs, including marijuana, is treated as a sale.

Under federal law, possession of illicit drugs can be punished by jail terms of up to twenty years and minimum fines ranging from \$1,000 to \$5,000. Federal possession and trafficking convictions can also lead to the forfeiture of property (e.g. your car), the denial of federal benefits such as student loans and grants, and a criminal record which may prevent an individual from entering certain career fields.

A person need not be in actual physical possession of a controlled substance to be guilty of a crime. The unlawful presence of a controlled substance in an automobile is presumptive evidence of knowing possession of such substance by each passenger unless the substance is concealed on the person of one of the occupants. Similarly, the presence of certain substances, including marijuana, in open view in a room under circumstances demonstrating intent to prepare the substance for sale is presumptive evidence of knowing possession of such substance by anyone in close proximity.

Criminal penalties also may result from the misuse of alcoholic beverages. In New York, if you give or sell an alcoholic beverage to a person less than 21 years old, you are committing a misdemeanor punishable by a fine, a jail term, or both. Any sale of any kind of alcoholic beverage without a license or permit is also a misdemeanor punishable by a fine, a jail term, or both.

If you are under the age of 21, you are prohibited from possessing an alcoholic beverage with the intent to consume it. Each violation is punishable by a fine of up to \$50 and/or completion of an alcohol awareness program and/or up to 30 hours of appropriate community service. You can also be fined up to \$100 and/or be required to perform community service and/or be required to complete an alcohol awareness program if you are under 21 and present falsified proof when purchasing or attempting to purchase alcoholic beverages. Your driver's license may be suspended for three months if you are under 21 and use a driver's license to try to purchase alcohol illegally. Fines and license suspension periods may increase with subsequent violations.

These are only examples of the penalties that can be assessed against you for the illegal possession, use, or distribution of alcoholic beverages and/or drugs. You should also know that it is New York Methodist Hospital Center for Allied Health Education's policy to discourage violations of Federal, State, and City laws by its students. Where appropriate, New York Methodist Hospital Center for Allied Health Education will refer students who violate such laws for prosecution by the relevant government authorities and will cooperate fully with such authorities.

IV. Health Risks Associated with Illicit Drug Use and Alcohol Abuse

Below are summaries of the health risks and the signs and symptoms associated with illicit drug use and alcohol abuse. This is an overview and not a complete list. Each individual will experience the drug in a different way depending on individual characteristics such as body size, sex, and other physical and psychological factors. (Source of drug-related information: National Institute on Drug Abuse).

Terminology

Tolerance: Development of body or tissue resistance to the effects of a chemical so that larger doses are required to reproduce the original effect.

Withdrawal: Physical or emotional signs of discomfort related to the discontinued use of a substance.

Psychological Dependence: A tendency for repeated or compulsive use of an agent because its effects are considered pleasurable or satisfying, or because it reduces undesirable feelings.

Physical Dependence: Adaptation of body tissue to the continued presence of a chemical, revealed in the form of serious, even life-threatening withdrawal symptoms. The extent of physical dependence and the severity of withdrawal vary by drug and by amount, frequency, and duration of use. While physical dependence can complicate the process of cessation of use, it is the psychological relationship with a substance that often proves more difficult to alter.

Alcohol

Alcohol is a central nervous system (CNS) depressant that alters a variety of activities in the brain. When used to excess, it can produce anesthesia, coma, respiratory depression, and death. Regular or heavy use of alcohol carries a high risk of psychological and physical dependence. Tolerance develops to its depressant effects, and withdrawal symptoms occur within a few hours of heavy use contributing to the hangover symptoms suffered by many drinkers. The average person can safely metabolize one standard drink per hour. Binge drinking, which involves consuming large quantities over a short period of time, is especially dangerous because so much alcohol enters the bloodstream that vital body systems may shut down. Signs that may indicate overdose include: cold, clammy, pale or bruised skin, abnormally slow breathing, unconsciousness and vomiting while sleeping or passed out. Immediate medical attention should be sought for anyone exhibiting these symptoms. Short-term risks of alcohol use may include: impaired judgment, poor motor coordination, emotional instability, increased aggression, and risk of death by overdose (alcohol alone or in combination with other drugs). Drugs such as rohypnol (roofies), a valium-like drug, or gamma hydroxybutyrate (GHB) can be added to a drink, alcoholic or not, to disable a potential victim of sexual assault. Anyone experiencing symptoms of intoxication that are exaggerated beyond the amount of alcohol consumed may have been drugged and should seek immediate medical assistance. Long term risks of alcohol use may include: irreversible damage to brain, liver, pancreas, kidneys; memory problems and nutritional deficiencies and high risk of fetal damage – so much so that, by law, alcohol producers must add warning labels to their bottles cautioning women against use during pregnancy. Alcoholic withdrawal symptoms, when they occur, set in about three hours after the last drink. Early signs include tremors, nausea, anxiety, perspiration, cramps, hallucinations and hyper-reflex reactions. A second phase of withdrawal, beginning within 24 hours, can involve convulsions. The most severe form of withdrawal—delirium tremens (“DT’s”)—involves dangerously high fever, rapid heartbeat, hallucinations and delirium. Death can result from cardiac failure. Alcoholic withdrawal is considered more life-threatening than withdrawal from heroin. Because of the risk of complications, particularly in the DT phase, withdrawal following extensive, long-term use should only be attempted under medical supervision.

DRUG PREVENTION PROGRAM

Marijuana

Marijuana can produce stimulant, depressant and/or hallucinogenic effects depending on the dose. The active chemical ingredient is tetrahydrocannabinol (THC). Marijuana raises heart rate, lowers blood pressure, and causes reddening of the eyes. At low to moderate dosages, effects last from two to three hours and can range from euphoria and giddiness to mild lethargy. Perceptual changes such as paranoia and feelings of heightened sensitivity may occur. High dose effects can simulate the perceptual and cognitive changes associated with more potent hallucinogens, including those prompting panic attacks. Since the drug's effects on performance—particularly on tracking ability and reaction speed—can last hours after intoxicating effects fade, marijuana use can pose significant safety risks. High dose or regular use can lead to the development of tolerance. In addition, marijuana may cause problems in learning and social development for adolescent users. Research has suggested numerous health risks associated with smoking marijuana. These include: risk of lung damage, impaired memory and concentration, impaired immune system functioning, problems with motivation, and effects on fertility. Pregnancy-related effects can include higher levels of miscarriage, stillbirths, and low birth-weight babies, as well as problems in nervous system development in fetuses. The use of marijuana is more likely to produce a psychological dependence than a physical one. However, long-term or heavy use can result in a withdrawal syndrome characterized by irritability, depression, sleep disturbances, and decreased appetite. This syndrome, whether termed physical or psychological, can complicate the process of cessation of marijuana use.

Cocaine and Crack

Cocaine and its derivative Crack produce dilated pupils and elevated blood pressure, heart rate, respiratory rate, and body temperature. They may also cause insomnia, loss of appetite, tactile hallucinations, paranoia, seizure and death. Cocaine is a powerfully addictive drug of abuse. Once having tried cocaine, an individual cannot predict or control the extent to which he or she will continue to use it. The major routes of administration of cocaine are sniffing or snorting, injecting, and smoking (including free-base and crack cocaine). Compulsive cocaine use may develop even more rapidly if the substance is smoked rather than snorted. The injecting drug user is at risk for transmitting or acquiring HIV infection/AIDS if needles or other injection equipment are shared. Cocaine is a strong central nervous system stimulant. Physical effects of cocaine use include constricted peripheral blood vessels, dilated pupils, and increased body temperature, heart rate, and blood pressure. Cocaine's immediate euphoric effects include hyper-stimulation, reduced fatigue, and mental clarity. An appreciable tolerance to the high may be developed, and many addicts report that they fail to achieve as much pleasure as they did from their first exposure. Increased use can also reduce the period of stimulation. Some users of cocaine report feelings of restlessness, irritability, and anxiety. In rare instances, sudden death can occur on the first use of cocaine or unexpectedly thereafter. High doses of cocaine and/or prolonged use can trigger paranoia. Smoking crack cocaine can produce a particularly aggressive paranoid behavior in users. When addicted individuals stop using cocaine, they often become depressed. This also may lead to further cocaine use to alleviate depression. Prolonged cocaine snorting can result in ulceration of the mucous membrane of the nose and can damage the nasal septum enough to cause it to collapse. Cocaine-related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest. Mixing cocaine and alcohol compounds the danger of each drug separately.

Prescription Drugs

Opioids

These drugs are often prescribed to treat pain. Among those that fall within this class - sometimes referred to as narcotics - are morphine, codeine, oxycodone (OxyContin); propoxyphene (Darvon); hydrocodone (Vicodin); hydromorphone (Dilaudid); and meperidine (Demerol). In addition to relieving pain, opioids can affect regions of the brain that mediate what we perceive as pleasure, resulting in the initial euphoria that many opioids produce. They can also produce drowsiness and cause constipation. Taking a large single dose of these drugs, or combining them with other substances such as alcohol, antihistamines, barbiturates, or benzodiazepines, could cause severe respiratory depression or be fatal. Chronic use of opioids can result in tolerance to the drugs so that higher doses must be taken to obtain the same initial effects. Long-term use also can lead to physical dependence - the body adapts to the presence of the drug and withdrawal symptoms occur if use is reduced abruptly. Symptoms of withdrawal can include restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps ("cold turkey"), and involuntary leg movements.

DRUG PREVENTION PROGRAM

Central Nervous System (CNS) Depressants

These drugs slow down normal brain function and are used to treat anxiety and sleep disorders. In higher doses, some CNS depressants can become general anesthetics. CNS depressants can be divided into two groups, based on their chemistry and pharmacology:

Barbiturates, such as mephobarbital (Mebaral) and pentobarbital sodium (Nembutal), which are used to treat anxiety, tension, and sleep disorders; and

Benzodiazepines, such as diazepam (Valium), chlordiazepoxide HCl (Librium), alprazolam (Xanax), triazolam (Halcion), and estazolam (ProSom) which can be prescribed to treat anxiety, acute stress reactions, panic attacks, or sleep disorders. CNS depressants can be addictive and should be used only as prescribed. They should not be combined with any medication or substance that causes sleepiness, including prescription pain medicines, certain over-the-counter cold and allergy medications, or alcohol. The effects of the drugs can combine to fatally slow breathing and heart rate. Discontinuing prolonged use of high doses of CNS depressants can lead to withdrawal and a rebound in previously slowed brain activity to the point that seizures can occur.

Stimulants

Stimulants are a class of drugs that enhance brain activity. They cause an increase in alertness, attention, and energy and are accompanied by increases in blood pressure, heart rate, and respiration. Stimulants are prescribed for treating only a few health conditions, including narcolepsy, attention-deficit hyperactivity disorder (ADHD), and depression that has not responded to other treatments. Stimulants may also be used for short-term treatment of obesity, and for patients with asthma. Taking high doses of a stimulant can result in an irregular heartbeat, dangerously high body temperatures, and/or the potential for cardiovascular failure or lethal seizures. Taking high doses of some stimulants repeatedly over a short period of time can lead to hostility or feelings of paranoia in some individuals. Mixing stimulants with antidepressants or over-the-counter cold medicines containing decongestants may cause blood pressure to become dangerously high or lead to irregular heart rhythms. When misused, stimulants can be addictive.

Over the Counter Drugs

Diet Pills, Dextromethorphan (DXM) and dietary supplements are among those substances that can be misused and abused. Abuse of DXM, found in some cough medicines, can cause mental confusion and excitement, respiratory depression, hallucinations, and possible psychosis. Taking DXM in conjunction with alcohol can further depress breathing and cause vomiting. Products sold in health food stores can contain drugs. These products may not be regulated for safety by the Food and Drug Administration and therefore should be used cautiously. Dietary supplements and some so-called "smart drugs" like DHEA, chromium picolinate, melatonin and ephedra (Herbal Ecstasy or Mahuang) have all been touted as having remarkable powers. These advertising claims are not supported by substantive research. Ephedra has been linked to numerous deaths nationwide.

Heroin

Heroin is a highly addictive drug that can be injected, snorted, or smoked. Heroin is processed from morphine, a naturally occurring substance extracted from the seedpod of the Asian poppy plant. Heroin usually appears as a white or brown powder. Street names for heroin include "smack," "H," "skag," and "junk."

Heroin abuse is associated with serious health conditions, including fatal overdose, spontaneous abortion, collapsed veins, and infectious diseases, including HIV/AIDS and hepatitis. The short-term effects of heroin abuse appear soon after a single dose and disappear in a few hours. After an injection of heroin, the user reports feeling a surge of euphoria ("rush") accompanied by a warm flushing of the skin, a dry mouth, and heavy extremities. Following this initial euphoria, the user goes "on the nod," an alternately wakeful and drowsy state. Mental functioning becomes clouded due to the depression of the central nervous system. Chronic users may develop collapsed veins, infection of the heart lining and valves, abscesses, cellulitis, and liver disease. Pulmonary complications, including various types of pneumonia, may result from the poor health condition of the abuser, as well as from heroin's depressing effects on respiration. In addition to the effects of the drug itself, street heroin may have additives that do not readily dissolve and result in clogging the blood vessels that lead to the lungs, liver, kidneys, or brain. This can cause infection or even death of small patches of cells in vital organs. With regular heroin use, tolerance develops. This means the abuser must use more heroin to achieve the same intensity or effect. As higher doses are used over time, physical dependence and addiction develop. With physical dependence, the body has adapted to the presence of the drug and withdrawal symptoms may occur if use is reduced or stopped. Withdrawal, which in regular abusers may occur as early as a few hours after the last

DRUG PREVENTION PROGRAM

administration, produces drug craving, restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps ("cold turkey"), kicking movements ("kicking the habit"), and other symptoms.

Methamphetamine

Methamphetamine is an addictive stimulant drug. It is closely related chemically to amphetamine, but the central nervous system effects of methamphetamine are greater. Methamphetamine is made in illegal laboratories and has a high potential for abuse and dependence. Street methamphetamine is referred to by many names, such as "speed," "meth," and "chalk." Methamphetamine hydrochloride, clear chunky crystals resembling ice, which can be inhaled by smoking, is referred to as "ice," "crystal," and "glass." Methamphetamine is taken orally or intranasally (snorting the powder), by intravenous injection, and by smoking. Immediately after smoking or intravenous injection, the methamphetamine user experiences an intense sensation, called a "rush" or "flash," that lasts only a few minutes and is described as extremely pleasurable. Oral or intranasal use produces euphoria - a high, but not a rush. Users may become addicted quickly to methamphetamines, and use it with increasing frequency and in increasing doses. Animal research going back more than 20 years shows that high doses of methamphetamine damage neuron cell endings. The central nervous system (CNS) actions that result from taking even small amounts of methamphetamine include increased wakefulness, increased physical activity, decreased appetite, increased respiration, hyperthermia, and euphoria. Other CNS effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness. Hyperthermia and convulsions can result in death. Methamphetamine causes increased heart rate and blood pressure and can cause irreversible damage to blood vessels in the brain, producing strokes. Other effects of methamphetamine include respiratory problems, irregular heartbeat, and extreme anorexia. Its use can result in cardiovascular collapse and death.

LSD

Commonly referred to as "acid", LSD (lysergic acid diethylamide) is sold on the street in tablets, capsules, and, occasionally, liquid form. It is odorless, colorless, and has a slightly bitter taste and is usually taken by mouth. Often LSD is added to absorbent paper, such as blotter paper, and divided into small-decorated squares, with each square representing one dose. The physical effects include dilated pupils, higher body temperature, increased heart rate and blood pressure, sweating, loss of appetite, sleeplessness, dry mouth, and tremors. The user may feel several different emotions at once or swing rapidly from one emotion to another. If taken in a large enough dose, the drug produces delusions and visual hallucinations. Some LSD users experience severe, terrifying thoughts and feelings, fear of losing control, fear of insanity and death, and despair while using LSD. Some fatal accidents have occurred during states of LSD intoxication. Many LSD users experience flashbacks - recurrences of certain aspects of a person's experience - without the user having taken the drug again. A flashback occurs suddenly, often without warning, and may occur within a few days or more than a year after LSD use. LSD users may manifest relatively long-lasting psychoses, such as schizophrenia or severe depression. Like many of the addictive drugs, LSD produces tolerance, so some users who take the drug repeatedly must take progressively higher doses to achieve the state of intoxication that they had previously achieved. This is an extremely dangerous practice, given the unpredictability of the drug.

Steroids (Anabolic-Androgenic)

Anabolic-androgenic steroids are man-made substances related to male sex hormones. These drugs are available legally only by prescription. They are used to treat conditions that occur when the body produces abnormally low amounts of testosterone, such as delayed puberty and some types of impotence. Steroids are also used to treat body wasting in patients with AIDS and other diseases that result in loss of lean muscle mass. Abuse of anabolic steroids, however, can lead to serious health problems, some irreversible. Major side effects from abusing anabolic steroids can include liver tumors and cancer, jaundice (yellowish pigmentation of skin, tissues, and body fluids), fluid retention, high blood pressure, increases in LDL (bad cholesterol), and decreases in HDL (good cholesterol). Other side effects include kidney tumors, severe acne, and trembling. In addition, there are some gender-specific side effects: For men--shrinking of the testicles, reduced sperm count, infertility, baldness, development of breasts, and increased risk for prostate cancer. For women--growth of facial hair, male-pattern baldness, changes in or cessation of the menstrual cycle, enlargement of the clitoris, deepened voice. For adolescents--growth halted prematurely through premature skeletal maturation and accelerated puberty changes. This means that adolescents risk remaining short the remainder of their lives if they take anabolic steroids before the typical adolescent growth spurt. In addition, people who inject anabolic steroids run the added risk of contracting or transmitting HIV/AIDS or hepatitis, which causes serious damage to the liver. Scientific research also shows that aggression, extreme mood swings, including manic-like symptoms leading to violence, and other psychiatric side effects such as paranoid jealousy, extreme irritability, delusions, and impaired judgment

DRUG PREVENTION PROGRAM

stemming from feelings of invincibility may result from abuse of anabolic steroids. Depression often is seen when the drugs are stopped and may contribute to dependence on anabolic steroids. Research also indicates that some users might turn to other drugs to alleviate some of the negative effects of anabolic steroids.

Club Drugs

MDMA (Ecstasy), Rohypnol, GHB, and Ketamine are among the drugs used by some young adults who participate in a nightclub, bar, rave, or trance scene. Raves and trance events are generally night-long dances, often held in warehouses. Many who attend raves and trances do not use drugs, but those who do may be attracted to the generally low cost, seemingly increased stamina, and intoxicating highs that are said to deepen the rave or trance experience. Current science, however, is showing change to critical parts of the brain from use of these drugs. Also, in high doses most of these drugs can cause a sharp increase in body temperature (malignant hyperthermia) leading to muscle breakdown and kidney and cardiovascular system failure.

MDMA (Ecstasy)

MDMA is a synthetic, psychoactive drug with both stimulant (amphetamine-like) and hallucinogenic (LSD-like) properties. Street names for MDMA include Ecstasy, Adam, XTC, hug, beans, and love drug. Its chemical structure is similar to methamphetamine, methylenedioxyamphetamine (MDA), and mescaline, synthetic drugs known to cause brain damage. MDMA usually is taken in pill form, but some users snort it, inject it, or use it in suppository form. Many problems MDMA users encounter are similar to those found with the use of amphetamines and cocaine. Psychological difficulties can include confusion, depression, sleep problems, severe anxiety, and paranoia. Physical problems can include muscle tension, involuntary teeth clenching, nausea, blurred vision, faintness, and chills or sweating. Use of the drug has also been associated with increases in heart rate and blood pressure, which are special risks for people with circulatory or heart disease. Recent research also links MDMA use to long-term damage to those parts of the brain critical to thought, memory, and pleasure. Content of MDMA pills varies widely, and may include caffeine, dextromethorphan, heroin, and mescaline. In some areas of the country, the MDMA-like substance paramethoxyamphetamine (PMA) has been involved in the deaths of people who mistakenly thought they were taking true MDMA. The deaths were due to complications from hyperthermia.

Rohypnol, GHB, and Ketamine

Rohypnol, GHB, and ketamine are predominantly central nervous system depressants. Because they are often colorless, tasteless, and odorless, they can be added to beverages and ingested unknowingly. These drugs emerged a few years ago as "date rape" drugs. Because of concern about their abuse, Congress passed the "Drug-Induced Rape Prevention and Punishment Act of 1996", which increased Federal penalties for use of any controlled substance to aid in sexual assault.

Rohypnol ("rophies," "roofies," "roach," and "rope.")

Rohypnol, a trade name for flunitrazepam, has been of particular concern for the last few years because of its abuse in date rape. It belongs to the class of drugs known as benzodiazepines. When mixed with alcohol, Rohypnol can incapacitate victims and prevent them from resisting sexual assault. Individuals may not be able to remember events they experienced while under the effects of the drug. Also, Rohypnol may be lethal when mixed with alcohol and/or other depressants. Rohypnol is not approved for use in the United States, and its importation is banned.

GHB

GHB (gamma hydroxybutyrate) is abused for euphoric, sedative, and anabolic (body building) effects. It is a central nervous system depressant that was widely available over-the-counter in health food stores during the 1980s and until 1992. It was purchased largely by body builders to aid fat reduction and muscle building. Street names include Liquid Ecstasy, Soap, Easy Lay, and Georgia Home Boy. Coma and seizures can occur following abuse of GHB and, when combined with methamphetamine, there appears to be an increased risk of seizure. Combining use with other drugs such as alcohol can result in nausea and difficulty breathing. GHB may also produce withdrawal effects, including insomnia, anxiety, tremors, and sweating. GHB has been involved in poisonings, overdoses, date rapes, and deaths.

Ketamine ("Special K", "vitamin K")

Ketamine is an anesthetic used with both humans and animals in medical settings; about 90 percent of the ketamine legally sold is intended for veterinary use. It can be injected or snorted. Certain doses of ketamine can

DRUG PREVENTION PROGRAM

cause dream-like states and hallucinations, and it has become common in club and rave scenes and has been used as a date rape drug. At high doses, ketamine can cause delirium, amnesia, impaired motor function, high blood pressure, depression, and potentially fatal respiratory problems.

Inhalants

Inhalants are breathable chemical vapors that produce psychoactive (mind-altering) effects. Inhalants fall into the following categories:

Solvents

Industrial or household products (paint thinners, degreasers (dry-cleaning fluids), gasoline, and glues); and art or office supplies (correction fluids, felt-tip-marker fluid, and electronic contact cleaners);

Gases or aerosol propellants

Used in household or commercial products, including butane lighters and propane tanks, whipping cream aerosols or dispensers (whippets), and refrigerants, spray paints, hair or deodorant sprays, and fabric protector sprays; and medical anesthetic gases, such as ether, chloroform, halothane, and nitrous oxide (laughing gas);

Nitrites

Aliphatic nitrites include cyclohexyl nitrite, which is available to the general public; amyl nitrite, which is available only by prescription; and butyl nitrite, which is now an illegal substance. Although different in makeup, nearly all abused inhalants produce effects similar to anesthetics, which act to slow down the body's functions. When inhaled via the nose or mouth into the lungs in sufficient concentrations, inhalants can cause intoxicating effects. Initially, users may feel slightly stimulated; with successive inhalations, they may feel less inhibited and less in control; finally, a user can lose consciousness. Sniffing highly concentrated amounts of the chemicals in solvents or aerosol sprays can directly induce heart failure and death. This is especially common from the abuse of fluorocarbons and butane-type gases. High concentrations of inhalants also cause death from suffocation by displacing oxygen in the lungs and then in the central nervous system so that breathing ceases. Other irreversible effects caused by inhaling solvents include hearing loss, limb spasms, central nervous system or brain damage, and bone marrow damage. Death from inhalants usually is caused by a very high concentration of fumes. Deliberately inhaling from a paper or plastic bag or in a closed area greatly increases the chances of suffocation. Amyl and butyl nitrites have been associated with Kaposi's sarcoma (KS), the most common cancer reported among AIDS patients.

PCP (Phencyclidine)

PCP was developed as an intravenous anesthetic, but its use was discontinued because patients often became agitated, delusional, and irrational while recovering from its effects. PCP is illegally manufactured in laboratories and is sold on the street by such names as "angel dust," "ozone," "wack," and "rocket fuel." "Killer joints" and "crystal supergrass" are names that refer to PCP combined with marijuana. The variety of street names for PCP reflects its bizarre and volatile effects. PCP is a white crystalline powder that is readily soluble in water or alcohol. It has a distinctive bitter chemical taste. PCP can be mixed easily with dyes and turns up on the illicit drug market in a variety of tablets, capsules, and colored powders. It is normally used in one of three ways: snorted, smoked, or eaten. For smoking, PCP is often applied to a leafy material such as mint, parsley, oregano, or marijuana. PCP is addicting; that is, its use often leads to psychological dependence, craving, and compulsive PCP-seeking behavior. At low to moderate doses, physiological effects of PCP include a slight increase in breathing rate and a more pronounced rise in blood pressure and pulse rate. Respiration becomes shallow and flushing and profuse sweating occurs. Generalized numbness of the extremities and lack of muscular coordination also may occur. Psychological effects include distinct changes in body awareness, similar to those associated with alcohol intoxication. Use of PCP among adolescents may interfere with hormones related to normal growth and development as well as with the learning process. At high doses of PCP, there is a drop in blood pressure, pulse rate, and respiration. This may be accompanied by nausea, vomiting, blurred vision, flicking up and down of the eyes, drooling, loss of balance, and dizziness. High doses of PCP can also cause seizures, coma, and death. Psychological effects at high doses include illusions and hallucinations. PCP can cause effects that mimic the full range of symptoms of schizophrenia, such as delusions, paranoia, disordered thinking, a sensation of distance from one's environment, and catatonia. Speech is often sparse and garbled. People who use PCP for long periods, report memory loss, difficulties with speech and thinking, depression, and weight loss. These symptoms can persist up to a year after cessation of PCP use. Mood disorders also have been reported. PCP has sedative

DRUG PREVENTION PROGRAM

effects, and interactions with other central nervous system depressants, such as alcohol and benzodiazepines, can lead to coma or accidental overdose.

Cigarettes and Other Nicotine Products

Nicotine is one of the most heavily used addictive drugs in the United States. In 1989, the U.S. Surgeon General issued a report that concluded that cigarettes and other forms of tobacco, such as cigars, pipe tobacco, and chewing tobacco, are addictive and that nicotine is the drug in tobacco that causes addiction. In addition, the report determined that smoking was a major cause of stroke and the third leading cause of death in the United States. Nicotine is both a stimulant and a sedative to the central nervous system. The ingestion of nicotine results in an almost immediate "kick". Stimulation is then followed by depression and fatigue, leading the abuser to seek more nicotine. Nicotine is absorbed readily from tobacco smoke in the lungs, and it does not matter whether the tobacco smoke is from cigarettes, cigars, or pipes. Nicotine also is absorbed readily when tobacco is chewed. With regular use of tobacco, levels of nicotine accumulate in the body during the day and persist overnight. Thus, daily smokers or chewers are exposed to the effects of nicotine for 24 hours each day. Research has shown that stress and anxiety increase susceptibility to nicotine tolerance and dependence. Addiction to nicotine results in withdrawal symptoms when a person tries to stop smoking. These may include anger, hostility, aggression, and loss of social cooperation. Persons suffering from withdrawal also take longer to regain emotional equilibrium following stress. During periods of abstinence and/or craving, smokers have shown impairment across a wide range of psychomotor and cognitive functions, such as language comprehension. Women who smoke generally have earlier menopause. If women smoke cigarettes and also take oral contraceptives, they are more prone to cardiovascular and cerebrovascular diseases than are other smokers. In addition to nicotine, cigarette smoke is primarily composed of a dozen gases (mainly carbon monoxide) and tar. The tar in a cigarette, which varies from about 15 mg for a regular cigarette to 7 mg in a low-tar cigarette, exposes the user to a high expectancy rate of lung cancer, emphysema, and bronchial disorders. The carbon monoxide in the smoke increases the chance of cardiovascular diseases. The Environmental Protection Agency has concluded that secondhand smoke causes lung cancer in adults and greatly increases the risk of respiratory illnesses in children and sudden infant death.