Introduction to Chemical Dependence
The Cycle of Need

Need (Underlying Condition)

Relaxation

Intervention

Expression (Behavior)

Social Control

Nurture
Fact Sheet:  
Relationship Between Child Maltreatment and Substance Abuse

The National Committee for the Prevention of Child Abuse has estimated that at least 675,000 children each year are seriously mistreated by a caretaker who has a substance abuse problem (Bays 1990). There is some evidence that child maltreatment associated with substance abuse is increasing (Office of the Inspector General [OIG] 1990). The following items highlight some findings of research relevant to this issue.

Research results suggest a strong positive correlation between substance abuse and child maltreatment.

- The percentage of child maltreatment cases involving parental substance abuse exceeds 30 percent in many states (Feig 1990).
- In 1990, estimates of new child welfare cases involving parents with substance abuse problems 50 percent in Illinois, 76 percent in San Francisco and 70 percent in Philadelphia (Feig 1990).
- A New York City task force reported a 72 percent increase in child maltreatment related to substance abuse from 1985 to 1988 (OIG 1990).
- In a study of runaway youth, youth who were physically abused by parents were twice as likely to have parents who abuse substances than youth who were not physically abused (Stiffman 1989).
- Researchers comparing families in which one parent was an alcoholic with “nonalcoholic” families found that physical and sexual abuse were reported far more often in the “alcoholic” families (Black et al. 1986).
- A study of Native American children in the Southwest found that alcohol was found to be present in 85 percent of reported child neglect cases and 63 percent of reported child abuse cases (Lujan et al. 1989).
- In a study of 206 serious child abuse and neglect cases, researchers found that parental substance abuse was considered to be a factor in 50 percent of the cases (Murphy et al. 1991). This correlation has serious consequences for the children, families and society.
- A Children’s Bureau report indicates that 75 percent of abandoned infants and boarder babies were drug exposed (Child Welfare League of America 1994).
- In 1986 parental substance abuse was found to be a contributing factor in 36 percent of out-of-home placements in Detroit, Houston, Miami, New York City, and Seattle (National Black Child Development Institute 1989).
Perinatal exposure to alcohol is the major cause of birth defects, including mental retardation (Bays 1990).

Babies exposed perinatally to heroin have multiple physical problems at birth, and at 1-year-old, tend to be impulsive, easily frustrated and have sleep-disturbances and temper tantrums (Bays 1990).

Studies of older children and teenagers from substance abusing families indicate the presence of severe behavior and school adjustment problems (Deren 1986).

A study of adolescent girls in substance abuse treatment found that 35 percent had been sexually abused (Eigen 1990).

In a sample of child welfare cases, parental compliance with court ordered treatment was significantly lower among substance abusing parents compared to those who did not abuse substances (Famularo et al. 1989).
Women and Drug Abuse

Today, more than 4 million women in this country use drugs. Women of all ages, races and cultures. Drug abuse is a serious, continuing illness. There are no easy cures.

Facts About Women and Drug Abuse

- 9 million women have used illegal drugs in the past year.
- 3.7 million women have taken prescription drugs non-medically during the past year.
- More than 28,000 (70%) of the AIDS cases among women are drug-related.
- Almost half of all women age 15-44 have used drugs at least once in their life. Of these women, nearly 2 million have used cocaine and more than 6 million have used marijuana within the past year. Most women drug abusers use more than one drug.

Women can have special risk factors for drug abuse

- Women who use drugs often suffer from other serious health problems, including sexually transmitted diseases and mental health problems, such as depression.
- Many women who use drugs have had troubled lives. Studies have found that at least 70 percent of women drug users have been sexually abused by the age of 16. Most of these women had at least one parent who abused alcohol or drugs.
- Often, women who use drugs have low self-esteem, little self-confidence and feel power-less. They often feel lonely and are isolated from support networks.
- Women from certain cultural backgrounds or who have difficulty with the English language may not know how to find help for their addiction.

Drug Use is a Serious Health Problem

- Women who use drugs risk becoming infected with HIV, the virus that causes AIDS. The virus can be spread through needles used to inject drugs. Therefore, women who inject drugs and share needles are especially at risk. The AIDS virus is also spread through sexual contact. Women who have sex with men who inject drugs are at great risk. Between 1990 and 1991, AIDS cases among women rose 17 percent. Today, almost 70 percent of AIDS cases in women are related to either injecting drugs or having sex with a man who injects drugs.
- AIDS is now the fourth leading cause of death among women.
A mother who uses drugs risks her life and her baby’s

- When a pregnant woman uses drugs, she and her unborn child face serious health problems. During pregnancy, the drugs used by the mother can enter the baby’s bloodstream. The most serious effects on the baby can be HIV infection, AIDS, prematurity, low birth weight, Sudden Infant Death Syndrome, small head size, stunted growth, poor motor skills and behavior problems.

- A mother’s continuing drug use puts her children at risk for neglect, physical abuse, and malnutrition. However, NIDA research shows that providing care and treatment to the pregnant drug abuser can reduce many of the negative effects on her baby.

Health Risks Associated with Drug Abuse

<table>
<thead>
<tr>
<th>Mother</th>
<th>Baby</th>
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<tbody>
<tr>
<td>Poor Nutrition</td>
<td>Prematurity</td>
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<tr>
<td>High Blood Pressure</td>
<td>Low Birth Weight</td>
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<tr>
<td>Rapid Heart Beat</td>
<td>Infections</td>
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<td>Low Weight Gain</td>
<td>Small Head Size</td>
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<td>Low Self Esteem</td>
<td>Sudden Infant Death Syndrome</td>
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<td>Preterm Labor</td>
<td>Birth Defects</td>
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<td>Sexually Transmitted Disease</td>
<td>Stunted Growth</td>
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<td>Early Delivery</td>
<td>Poor Motor Skills</td>
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<td>HIV/AIDS</td>
<td>HIV/AIDS</td>
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<tr>
<td>Depression</td>
<td>Learning Disabilities</td>
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<tr>
<td>Physical Abuse</td>
<td>Neurological Problems</td>
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</tbody>
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Many women are afraid to seek treatment

- Studies have found that more than 4 million women need treatment for drug abuse. Unfortunately, there are many important reasons why women do not seek help. Some women may not be able to find child care. They fear that the authorities may take away their children. Some women fear they will be punished if they admit their drug addiction. Many women fear violence from their husbands, boyfriends or partners.

- Friends and family can help relieve these fears for the woman who uses drugs. They can support her by helping her find good drug abuse treatment and by providing child care and transportation.
Good treatment meets women’s special needs

NIDA research shows that women drug abusers get better when treatment takes care of all their basic needs. Some women need the basic services of food, shelter and clothing. Other women also need transportation, child care and parenting training. Women may need medical care, mental health therapy and legal assistance. Good treatment also teaches reading, basic education, and skills to find a job. Treatment programs aimed at men often do not provide all of these services.

Treatment is especially effective when women can live at a treatment center with their children.

Women can get help for their drug addiction

It is hard to beat drug addiction, but the woman who uses drugs CAN get better with the right kind of treatment, even if she has tried to quit before and failed.

Treatment is available, often close to home. The first step is to find out what kind of treatment a woman needs and where she can get it.

Call the free National Drug Information Treatment and Referral Line. Call for yourself... or call for a friend. 1 800 662 HELP

Women who get treatment can rebuild their lives

After completing drug treatment and getting off drugs, women need help from family, friends and employers to stay off drugs.

Family education and counseling programs in the neighborhood help women return to their families or jobs.

With good treatment and community support, women can recover from the illness of drug abuse and begin to build a better life.

Public Health Service
National Institutes of Health
National Institute on Drug Abuse
NIH Publication No. 943732, 1994
Necessary Elements of Treatment
Training Programs for Women*

- Be clearly focused on work.

- Explore and respect a women’s own treatment and training goals.

- Address issues of violence and abuse. Provide vocational training, career exploration, job search and job placement services.

- Tie training and career exploration to local labor market.

- Work directly with employers and provide them with services that help them employ clients.

- Provide at least some women-only groups.

- Make individual counseling available.

- Provide self-esteem development.

- Use a non-confrontational approach.

- Provide a safe, non-threatening, supportive and respectful environment.

- Discuss sex, sexuality and sex-role stereotyping.

- Involve family members and other significant individuals.

- Provide parenting training, child care and elder care.

- Provide case management.

- Conduct comprehensive and ongoing screening and assessment.

- Address mental illness and prescribe medication when necessary.

- Attend to concrete problems, such as housing, healthcare, transportation and legal assistance.

- Provide AIDS education.

- Provide life skills training.

- Use a mixed strategy of job search plus education and training.

- Include program and staff performance measures on employment.

### Criteria for Use, Abuse and Dependence*

<table>
<thead>
<tr>
<th>Use</th>
<th>Abuse</th>
<th>Dependence</th>
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</thead>
<tbody>
<tr>
<td>No Problems</td>
<td>Control (choice)</td>
<td>Less than 100 Percent Control (choice)</td>
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<tr>
<td></td>
<td>Non-progressive</td>
<td>Progressive (Continued use despite adverse consequences)</td>
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Addiction and Dependence

What is Addiction?
Considerable confusion exists regarding the nature of addiction. The most common misunderstanding is that addiction refers to a state of physical dependence on a drug whereby discontinuing drug intake produces withdrawal symptoms or sickness.

Addiction is better defined as a behavioral syndrome where getting and using seems to dominate the individual’s motivation, and where continued drug intake seems necessary to maintain optimal psychological functioning of the individual. This condition may or may not be accompanied by the development of physical dependence on the drug.

What is Dependence?
Drug dependence is divided into two components, physical and psychological dependence.

Physical dependence refers to the body’s need for the drug, in order to remain chemically balanced. The presence of withdrawal symptoms is the only sure sign of a physical dependence on drugs.

Withdrawal symptoms can occur in a variety of ways, such as nausea, weakness, anxiety, perspiration, headaches, cramps, vomiting, diarrhea, hallucinations, confusion, disorientation, loss of appetite, watery eyes, runny nose, dizziness, agitation, physical shock, sleeplessness or “the shakes.”

Psychological dependence is separate from the person’s physical need for the drug. Rather, it refers to the person’s belief that he or she needs the drug to function mentally, to feel normal and to improve his or her mood. The need for the effects of these drugs can range from mild to intense. Psychological dependence is just as real and severe as physical dependence; it is not simply a figment of the person’s imagination.
Three Factors Contributing to Chemical Dependence*

There is no single cause for the disease of chemical dependence. Rather, chemical dependence is caused by an interrelationship of three factors: host, environment and agent.

**Host:**

⇒ Genetic factors may predispose an individual to chemical dependence. The Scandinavian twin studies are evidence of this line of inquiry, which found a genetic “predisposition” to becoming alcoholic in twins from alcoholic parents, even when reared apart.

⇒ Personality and temperament of the individual influence predisposition to chemical dependence. This includes such factors as how impulsive or withdrawn the person is.

⇒ In-utero variables influence chemical dependence, as when the mother’s addiction has an impact on the fetus.

⇒ Physical or mental health problems can make individuals more susceptible to chemically dependency.

**Environment:**

⇒ A person’s susceptibility to chemical dependence is influenced by those factors in the environment that influence use or abuse, such as poverty, social isolation, peers, life stressors, racism, unemployment, inadequate health care and poor housing.

**Agent:**

⇒ Chemical dependence depends heavily on the addictive properties of the chemical itself and the changes it produces in the user’s central nervous system. For example, crack is dangerous because it is so addictive and the high is so quick and powerful.

⇒ The affordability and availability of the drug influences how potentially addictive it is. Crack tempts people into dependence because it is so affordable.

Glossary of Drugs: Their Effects and Prevalence*

**Stimulants**

**Names:**
Benzedrine, Dexedrine, Methedrine Desoxyn, Preludin, Ritalin, Diphetamine, Dexamyl and Daprisal.

**Street Names:**
Bennies, Splash, Peaches, Diet Pills, Speed, Copilots, Uppers, Meth, Crystal, Footballs, Black Beauties, Crank and Ice.

**Methods of Use:**
Pills are taken orally; the crystal form is inhaled, or sometimes mixed with water and injected. A form of methamphetamine that can be smoked, known as “ice,” has appeared on the West Coast and in Hawaii. This produces effects similar to crack, but lasts several hours as opposed to 15 to 30 minutes.

**Effects:**
Increased alertness, mood elevation, intense feelings of well-being, excitation, euphoria, insomnia and decreased appetite.

**History:**
Stimulants are natural and synthetic substances that stimulate the central nervous system. The advent of synthetic stimulants in the 1930s resulted in an era of stimulant abuse. Japan experienced an amphetamine epidemic immediately following World War II. Sweden and Denmark had problems with amphetamines and phenmetrazine in the 1950s and 1960s. The American amphetamine era began in the 1960s and the term “speed freak” was introduced into our language to describe the chronic stimulant abuser.

**Prevalence:**
Stimulant use peaked in 1981 with 15.8 percent of high school seniors reporting use in the month preceding the annual survey. Stimulant abuse has generally decreased, with the 1985 survey reporting that 6.8 percent of high school seniors reported use. Some suggest that amphetamines could recapture the abuse market if the supply of cocaine were interrupted.

**Chronic Abuse:**
The initial energizing properties are overshadowed by feelings of tremulousness, irritability, depression, paranoia and ultimately a schizophrenic-like psychosis. Amphetamine psychosis is characterized by bizarre or violent behavior. Long-term, heavy use can lead to malnutrition, ulcers, skin disorders and illnesses that stem from vitamin deficiency.
Stimulant abuse is often associated with depressive disorders. The stimulant abuse may be self-medication for the depressive disorder or the depressive disorder may be secondary to the stimulant abuse. Depletion of important neurotransmitter pools has been established. Chronic abuse results in brain damage manifested by speech and thought disorders. People who become tolerant to amphetamines are also tolerant to cocaine. Intravenous use also spreads infectious diseases, especially hepatitis, AIDS and bacterial endocarditis.

**Signs and Symptoms:**
Dilated pupils, trembling of hands and feet, heavy perspiration, paleness, sleep disturbances, weight loss, excitability, talkativeness, needle marks. Paraphernalia include pills and capsules, white powder, small vials, syringes and glass pipes.

**Cocaine**

**Street Names:**
Coke, “C,” Speedball (when mixed with heroin), Crack (free base), Snow, Charles and Rock (crystallized).

**Methods of Use:**
Cocaine is usually snorted through a tube called a “quill” and absorbed through the mucous membrane. Rolled up dollar bills and cocktail straws are also used for snorting. It can also be injected. Injected cocaine is extremely dangerous because it can anesthetize the heart muscle and cause death. A pure form of cocaine called crack can be smoked, is less expensive and produces a rapid high.

**Effects:**
Mood enhancement, euphoria, increased self-confidence and physical effects similar to other stimulants.

**History:**
Cocaine is a natural stimulant derived from coca bush leaves. The coca plant is cultivated in semi-tropical areas (South America). Cocaine first became widely available in the late 19th century and soon became widely abused. State and federal restrictions on its availability resulted in a significant decrease in abuse, and by World War I, abuse had become uncommon.

Widespread recreational use of cocaine occurred in the 1970s and culminated in the current cocaine epidemic. The purity of cocaine increased from an average of 29 percent purity in 1982 to 73 percent in 1984. The price of cocaine dropped to pre-1977 levels in 1984-85 for what was a purer drug. Current reports suggest decreased purity and higher prices for cocaine, but increased affordability for crack and rock.
Prevalence:
Findings from a national survey conducted in 1982 suggested that the prevalence of cocaine use had become stable in the general population. More recent data suggests that use continues to increase. There was a 15 percent reported increase for high school seniors in a national survey from 1984 to 1985. Current trends suggest stabilization in the abuse pattern for cocaine. The widespread availability of inexpensive crack and rock contributes to increased use of this form of cocaine.

Chronic Abuse:
Cocaine produces a profound dependency. Compulsive use, despite disastrous effects on the chronic user’s social and physical well-being, is common. Depression, strong cravings, tremors, muscle pain, EEG changes and eating and sleep disturbances represent the physical withdrawal symptoms. Prolonged use may lead to psychosis. Weight loss, malnutrition and nasal membrane ulcers are other side effects. Increased irritability, restlessness, hyper-vigilance, paranoid and suspicious behavior are also common with chronic use. Sexual dysfunction is also common with heavy use.

Signs and Symptoms:
Runny nose, tremors, irritability, decreased appetite, needle marks and depression. Paraphernalia include quills, razor blades, white powder, glass vials, glass pipes, syringes.

Marijuana

Names:
Tetrahydrocannabinol (THC), Marinol

Street Names:
Pot, Reefer, Grass, Weed, Dope, Herb, Hash and Joint.

Methods of Use:
Marijuana is usually made into hand-rolled cigarettes or put into pipes and smoked. It can be added to foods and eaten.

Effects:
Altered perceptions, red eyes, reduced concentration and coordination, euphoria, laughter, hunger and sedation. Hashish contains a concentration of the cannabis sativa’s resin and is usually five to 10 times stronger than crude marijuana. Psychological effects range from euphoria to depression, depending on the user and the potency of the drug. Anxiety, fear and panic are common reactions to use.
History:
Prior to 1960, marijuana was an exotic weed with an aura of mythical power and was unknown to the majority of the population. The use of this drug reached a high point in the late 1970s and has been declining ever since. Multiple surveys suggest a decline in use. By age 20, the major risk for initiation to use is essentially completed.

Prevalence:
The proportion of daily users had dropped to four percent in a 1986 survey as opposed to 11 percent reporting daily use in 1978. Through several national surveys sponsored by NIDA (1988), 26 percent of adolescents reported using marijuana within the last 30 days and five percent reported daily use.

Chronic Abuse:
Tolerance and withdrawal symptoms are rarely a serious problem for marijuana users. Existence of a motivational syndrome continues to be unproven due to the absence of confirmations from controlled studies. Studies have examined the brain, the immune system, the reproductive system and the lungs. Suggestions of Long-term damage come almost exclusively from animal experiments and other laboratory work. Observations of marijuana users in the Caribbean, Greece and other studies reveal little disease or organic pathology associated with the drug. Effects on the male and female reproductive systems are complicated and need more study. However, standard conservative recommendations suggest avoiding marijuana use during pregnancy. A well-confirmed danger of heavy marijuana use is its effect on the lungs. Inflammation of the air passages, damage to bronchial cells, bronchitis, emphysema and lung cancer are possible effects of use.

Signs and Symptoms:
Red eyes, dry mouth, increased appetite and poor coordination. Paraphernalia include rolling papers, pipes, bags, dried plant material, odor of burnt hemp rope and roach clips.

Inhalants

Names:
Aerosol products (paints, hair sprays), gasoline, Freon, butane, glue, laughing gas and amyl and butyl nitrites.

Methods of Use:
Inhaled as breathable chemicals. Dosages are difficult to control due to their method of ingestion. Severe abusers use cloths soaked with the chemical and place them in their mouths for intense dosages.
**Effects:**
Brief, intense intoxication similar to alcohol-induced state. Low doses work as a mild stimulant. Moderate doses result in reduced inhibitions and control, giddiness and misperceptions of events (illusions). High doses cause users to pass out. The physical effects of inhalant abuse include coughing, sneezing, loss of appetite, weight loss, bad breath, dizziness, headaches, muscle weakness, abdominal pain, impaired coordination, nosebleeds and fatigue. Higher acute doses can lead to clinically relevant levels of agitation and confusion, including visual hallucinations and severe mood swings. Very high levels of acute intake can result in life-threatening toxic reactions.

**History:**
Inhalant abuse has received much less attention than other abused substances. Because a drug-high can be obtained relatively cheaply and easily, this is a common experimental substance for pre-adolescents and early adolescents, particularly those with low socioeconomic status. The majority of young people move on to other drugs of abuse as they age. For a small percentage, this remains their drug of choice.

**Prevalence:**
Systematic data on the prevalence of use had not been a focus of national surveys until approximately 10 to 12 years ago. Surveys suggest 20 percent to 30 percent of adolescents experiment with inhalants, but less than 3 percent report using within the last 30 days (1985).

**Chronic Abuse:**
Chronic use results in liver and kidney damage, impairment in lung functioning, destruction of blood-producing cells, peripheral neuropathy, decrease in or loss of a sense of smell, decrease in visual acuity, loss of memory and the ability to concentrate, and long-lasting or permanent brain or central nervous system damage.

**Signs and Symptoms:**
Odor of substance on clothing and breath, excessive use of household and commercial products, intoxication, drowsiness and poor motor control. Paraphernalia include solvent-soaked rags, bags, balloons and siphoning hoses.

**Opiates (Narcotics)**

**Names:**
The natural source of some opiates is the Asian poppy. This group includes opium, morphine, codeine and about 20 other chemically related substances. Synthetic derivatives with similar properties include Heroin, Percodan, Dilaudid, Hycodan and Etorphine. Demerol, Darvon, Talwin and Methadone are purely synthetic drugs that differ from morphine but have similar physiological and psychological effects.
Street Names:
Junk, Smack, Horse, Hop, White Lady, Footballs, D’s

Methods of Use:
Heroin accounts for 90 percent of opiate abuse in the United States. It comes in a powder form which is typically mixed with water and injected just under the skin, which is called skin popping, or directly into the vein, which is called mainlining. Opium is commonly seen in chunks or powder form, and is usually smoked or eaten. Opiate powder can be inhaled through a quill, but smoking is the most common method of consumption. Other opiates come in capsules, tablets, syrups and suppositories.

Effects:
Commonly abused opiates suppress pain, reduce anxiety, induce euphoria and cause mild drowsiness. Intravenous injection causes a rush of pleasure followed by a dreamy state. Opiates also slow the rate of breathing, constrict the pupils, depress the cough reflex and cause constipation (or relieve diarrhea) by reducing the activity of muscles in the digestive tract. Initial use causes nausea, but this effect fades. An overdose may induce a coma. Alcohol use heightens the danger. Overdose is common with illicit opiate abusers who have been injecting drugs heavily diluted with sugar or cornstarch to receive a purer batch than they are used to injecting.

History:
Opiates and alcohol are the oldest and most abused drugs. In the late 19th century synthetic derivatives of natural opiates were created. Heroin, the most infamous, is 22 times as potent as morphine and has become the preferred drug for abuse. In the 20th century chemists developed purely synthetic drugs that differ from morphine in chemical structure but have similar physiological and psychological effects. Natural opiates, their derivatives, and synthetic morphine-like drugs are grouped together under the name of opiates. The opiates were the first drugs to be classified as narcotics, deriving that term from the root of a Greek word the means “numbing.”

The popularity of opium began in the 17th century and in the next 200 years, many Chinese and some Europeans became opium smokers. By 1900, opium smoking and medically-induced morphine dependence had become common in this country. In the late 19th and early 20th centuries the manufacturing, prescribing and dispensing of opiates were restricted. Between 1919 and 1923 there were many clinics in the United States where addicts could legally obtain morphine. They were eventually closed when it became evident that addicts could not make the transition to abstinence. In the next 40 years the only available treatment was prolonged hospitalization at a private sanatorium or in one of two federal hospitals. In the 1960s, new treatment approaches were introduced and methadone maintenance was initiated.
Prevalence:
The number of problem users and opiate dependent persons is estimated at 500,000.

Chronic Abuse:
Opiate use has surprisingly few toxic effects on the body. Opiates do not damage the brain, liver or heart. They do not cause psychosis or heighten susceptibility to seizures. However, chronic abusers tend to neglect their health and safety due to the numbing of their body’s normal warning signals. The practice of intravenous injection creates more health problems than the drugs themselves. Phlebitis, inflammation of the veins, occurs due to constant puncturing. Contaminants injected into the blood may block arteries and cause heart failure. Shared needles spread many infections including malaria, syphilis and disorders of the lymph nodes. The most important needle-bred infections are bacterial endocarditis (inflammation of the lining of the heart), viral hepatitis and AIDS. Some people can take opiates in large amounts orally for many years without suffering serious health problems.

Signs and Symptoms:
Needle tracks on arms, hands, knees and abdomen. Flushing, drowsiness, itching, pinpoint pupils and cold, moist skin. Paraphernalia include needles, syringes and spoons.

Sedative-Hypnotics

Names:
Librium, Tranxene, Valium, Dalmane, Halcion, Ativan, Xanax, Serax, Quaalude, Amytal, Tuinal, Seconal, Nembutal and Phenobarbital.

Street Names:
Downers, Tranks, Ludes, Reds, Yellow Jackets, Purple Hearts, Goofball, Courage Pills, Dolls, Bluebirds and Backwards.

Methods of Use:
Sedative-hypnotics are generally taken in pill or capsule form.

Effects:
Small amounts relax muscles, induce sleep, reduce tension and produce a calming effect. Large amounts can cause slurred speech, poor reflexes, a staggering gait and impaired judgment (similar to alcohol intoxication). Mixing Sedative-hypnotics with alcohol is extremely dangerous and can lead to accidental overdose and death.
History:
Historically, alcohol and opiates were used to treat anxiety and insomnia. The medical terms sedative, hypnotic and tranquilizer are now reserved for a number of synthetic drugs developed and introduced in the last 100 years. Barbiturates were introduced at the turn of the century and remained for a long time the most widely used and abused prescription sedative-hypnotics. Barbiturates have been replaced by benzodiazepines, which are regarded as safer drugs. Benzodiazepines in current use differ mainly in their effects. Their half-lives (the time it takes half of the drug to leave the bloodstream) vary from four to 72 hours. Those with a long half-life need to be taken only once or twice a day. Shorter-acting drugs can be taken three to four times a day or once at night. Generally, hospitals and family doctors, not psychiatrists, are responsible for most prescriptions.

Prevalence:
Use of benzodiazepines reached a peak in the mid-1970s. In a 1985 survey, 12 percent of high school seniors said they had ever used benzodiazepine; six percent reported use in the previous year, and two percent reported use in the previous month. These figures represented a 50 percent decline from 1977.

Chronic Abuse:
At therapeutic doses, physical dependence takes at least four to six weeks, and more often takes four to six months. Withdrawal results in restlessness, irritability, insomnia, muscle tenseness, feelings of weakness, aches and pains, blurred vision, racing heart, nightmares, sensitivity to light and sound, and increased blood pressure. Withdrawal after high doses for a long time may produce seizures, confusion, delusions and hallucinations. The symptoms produced by the longer-acting drugs appear several days after the drug is withdrawn and subside in two to three weeks. With Shorter-acting drugs, the reaction is briefer and more intense and begins sooner. Detoxification is usually the only treatment indicated for benzodiazepine dependence. A lingering craving for the drug is rare. The less used barbiturates produce liver and brain damage and withdrawal can be extremely dangerous. To prevent seizures and cardiovascular collapse, the dose must be gradually reduced over several weeks.

Signs and Symptoms:
Confusion, slurred speech, increased sleep, impaired coordination and lowered inhibitions. Look for pills and capsules.

Hallucinogens

Names:
Natural psychedelic drugs are Mescaline, Psilocybin, Harmine, Harmaline, Dimethyltryptamine (DMT), and Ibogaine. Synthetic drugs include Lysergic Acid Diethylamide (LSD), Diethyltryptamine (DET), Dipropyltryptamine (DPT), and a number of substances classified as Methoxylated Amphetamines such as 2, 5Dimethoxy4Methylamphetamine (DOM) and 2, 5Dimethoxy4Ethylamphetamine (DOET).
Street Names:
Acid, Bad Seed, Big Chief, Blotter, Blue Acid, Electric Kool-Aid, Deeda, Flying Saucers, The Ghost, The Hawk, Pellets, Mind Detergent, Microdot, STP, Sacred Mushrooms, Shrooms, Window Pane and Patches, to name a few.

Methods of Use:
LSD is usually taken orally, but it is also injected, or applied topically. Psilocybin is extracted mushrooms and is taken in capsule and tablet form. Mescaline is available in a variety of forms, including pieces of cactus (“buttons”), powder and liquid. It is injected sometimes, but is most often mixed with liquids (Kool-Aid) and taken orally.

Effects:
Changes in thought, feeling and perception, especially at high doses, are profound and complex. Dreamlike imagery appears before closed eyes, and the world looks strange to open eyes. Perceptions are intensified, and ordinary unnoticed details compel attention. True hallucinations are rare but visual distortions are common. The appearance of faces and objects are often transformed. The user’s body image is altered, and time and space may seem warped. Emotions become unusually intense and may change abruptly. Suggestibility increases. The self may seem to lose its boundaries and merge with internal images or the external world. The experience is often diffused with a sense of heightened reality and significance that may produce feelings of personal, religious or philosophical insight. Physically, the drugs act as stimulants, producing enlarged pupils, increased heart rate and faster breathing. Their effects on the mind can also produce a variety of accompanying psychosomatic sensations.

The most common disturbing reaction to psychedelic drugs is hallucinogen hallucinosis, more commonly called a “bad trip.” It resembles an acute paranoid or an acute anxiety reaction. The symptoms may include panic, depression, confusion, and fear of insanity. Bad trips are reportedly more common if the user has serious emotional problems or is not comfortable with the setting and company. Reassurance is the best intervention. A tranquilizer or sedative may be necessary, preferably Valium. Antipsychotic drugs are used as a last resort.

History:
The natural psychedelic drugs are found in peyote cactus (mescaline) and in about a hundred species of mushrooms (psilocybin). Harmine, Harmaline and DMT are found in the bark and seeds of certain South American trees. Ibogaine is found in the root of an African plant. Among synthetic psychedelics is LSD, which is chemically related to the lysergic acid amides, substances found in certain morning glory seeds. The most potent is LSD, which is active at a dose of 50 micrograms (less than 1/500,000 of an ounce). Mescaline is about 4,000 times less powerful than LSD. LSD and mescaline are active for six to 10 hours, mushrooms for two to four hours, and DOM for as long as 24 hours. Historically, psychedelic drugs were used for religious services and for healing. From 1950 to the mid-1960s researchers investigated the therapeutic use of various psychedelic drugs. Legal restrictions and lack of funding interfered with continued research. In the mid-1960s and 1970s LSD was quite popular.
Prevalence:
Current surveys suggest that only one percent of the population uses psychedelic drugs. Illicit psychedelic drug use has been steadily declining since the late 1970s.

Chronic Abuse:
Psychedelic drug use is mostly experimental and driven by curiosity. Long-term or frequent use is rare. Tolerance develops quickly and a person who develops a tolerance to one psychedelic drug will be tolerant to others as well. Most people would find the effects too powerful and unpredictable for frequent use. Craving, withdrawal reactions and dependence are unknown. Laboratory animals offered LSD refuse to take it. A few people may become chronic abusers. Chronic LSD users tend to be eccentric and socially marginal. However, they do not have consistent psychotic or other psychiatric symptoms, and have no signs of organic brain damage or major abnormalities on neuropsychological tests. There are reports of vision abnormalities, primarily prolonged after-images and trails.

Signs and Symptoms:
Unpredictable behavior, emotional instability, violent behavior (with PCP), altered mood, focus on detail, anxiety, panic, nausea and synaesthesia (smelling colors) are physical symptoms. Look for capsules, tablets, microdots and blotter squares.

PCP (Phencyclidine)

Trade Names:
Ketamine (human anesthetic) or Sernyl (veterinary anesthetic).

Street Names:
Angel Dust, Whack, Mist and Hog.

Methods of Use:
PCP comes in powder, capsule or tablet form and can be smoked, sniffed, swallowed or injected. Smoking is the most common method of use.

Effects:
Physical effects include sweating, an increased heart rate and increased blood pressure, dizziness and numbness. Changes in sensory perceptions and visual hallucinations occur at low doses. At slightly higher doses, intense agitation and confusion are common. The prominent clinical syndrome – Organic Brain Syndrome – can last several months or more. The effects of PCP are variable and unpredictable. PCP use can produce severely aggressive and violent behavior. Other users may become withdrawn, anxious, fearful or paranoid. Space-busting or ghost-busting refers to a mixture of PCP with crack and cocaine. It results in violent and paranoid behavior.
**History:**
PCP was developed in the 1950s as a tranquilizer. The human form, Ketamine, is no longer used due to the observation that a significant number of people developed a state of extreme agitation and confusion when coming out of surgery. Sernyl is rarely used since 1979, as production was halted. PCP, and variations such as TCP, PCE, PCPY, and PCC are primarily sold illegally as mescaline or THC.

**Prevalence:**
During the late 1970s, the use of PCP seemed to be increasing rapidly. The 1980s resulted in a dramatic decline in PCP medical emergencies and other emergencies related to PCP use. There are, however, episodic upsurges in some communities. PCP is easily manufactured and often substituted for other drugs.

**Chronic Abuse:**
Regular use can affect memory, judgment and thought processes. Chronic use can result in loss of memory, depression, personality changes, speech disorders and thinking disorders. These conditions can last from several months to two years after PCP use is discontinued. There is inconclusive evidence, to date, that chronic use of PCP causes irreversible damage.

**Signs and Symptoms:**
Blank stares and high sensitivity to light, involuntary eye movement, anxiety, disorientation, profuse perspiration, loss of response to pain, flushing, unpredictable behavior, emotional instability and violent behavior. Look for powder, capsules or tablets.

Addictive Properties of Different Drugs*

If you take any 10 human beings from throughout the world and expose them to different drugs, how many will become addicted?

How long does it take for someone to realize he or she has a problem with a drug and need help? The following are some very general guidelines from which individual cases widely vary:

- **Crack Cocaine**: 6 months
- **Heroin**: 5-6 years
- **Alcohol**: 5-20 years

Now how long does it take to get the effects (the high) of the drug?

- **Crack Cocaine**: 5-10 seconds
- **Heroin**: 30 seconds
- **Alcohol**: 20-30 minutes

# Models of Chemical Dependency*

<table>
<thead>
<tr>
<th>Model</th>
<th>Etiology</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral</td>
<td>Moral weakness. Lack of will-power. Bad character.</td>
<td>Increase will power against evil or evil temptations. Religious counseling or conversion. Punishment</td>
</tr>
<tr>
<td>Learning</td>
<td>Learned, maladaptive habits. The abuser learned “bad” habits through no particular fault of his or her own.</td>
<td>Self-control via new learning. Teaching new coping skills. “Controlled” drinking or abstinence.</td>
</tr>
<tr>
<td>Disease</td>
<td>The abuser is viewed as ill or unhealthy, not because of an underlying mental disorder, but because of the disease of chemical dependency itself.</td>
<td>Once present, the disease is regarded as always present. Complete abstinence necessary to “arrest” the disease.</td>
</tr>
<tr>
<td>Self-medication</td>
<td>Symptom of another primary mental disorder. The abuser uses to alleviate painful symptoms of another disorder or as a coping mechanism.</td>
<td>Therapy. Medication. Improving mental functioning.</td>
</tr>
<tr>
<td>Social</td>
<td>CD results from environmental, cultural, social, peer or family influences.</td>
<td>Altering of environment or coping responses to it. Improved social responses to it. Improved social functioning.</td>
</tr>
<tr>
<td>Dual diagnosis</td>
<td>Incorporates basics of the self-medication, social and disease models. Ex: clinical depression AND chemical dependence.</td>
<td>Addiction and co-existing mental disorder are primary problems, each needing its own treatment. Both can exacerbate the other.</td>
</tr>
</tbody>
</table>

Characteristics of Inpatient and Outpatient Treatment Programs

The following are general characteristics of outpatient and inpatient programs:

**Outpatient Programs:** The major treatment modality is usually group work, which usually meets a total of 1 to 4 hours a week. They may also provide drug screening and services. Typically, these programs run from 8 to 16 weeks. Some programs have an active family component, which may include orientation and education, multiple family groups, and support groups for non-addicted family members such as Al-Anon and Naranon.

**Intensive Outpatient Programs:** These programs are relatively new in the treatment field and show promise. The patient comes to the treatment center 3 to 5 times per week, usually after work. Patients receive group and family therapy, as well as anti-abuse and drug screening services. The main advantages of these programs is that they allow the patient to avoid the life-disrupting effects of inpatient treatment.

**Inpatient Programs:** In these programs, individuals are admitted for residential stays of 2 to 4 weeks in private or public centers. Most centers offer detoxification programs that are based on AA 12 Step models. They also offer individual, group and family treatment.
Signs of Relapse

The relapse process often begins when the following events occur:

1. **Set-ups:**
   - going into high-risk situations like bars or other familiar hangouts where most of a recovering person’s drinking/drug use was done.
   - going back to old, substance-using friends and not making new, non-substance-using friends.
   - letting everyday problems intensify to the point of being suddenly unable to cope with the stress of daily living.
   - avoiding or not using support systems, such as a drug treatment program, AA/NA, or the case manager.

2. **Feeling cured after a few weeks or months** – This involves the consumer:
   - saying that she does not have a disease or she has it under control.
   - arguing that everybody should leave her alone since she is now “clean.”

3. **Desire to test control** – This involves the consumer:
   - deciding to begin the social use of alcohol or other drugs.
   - switching from her drug of choice to another drug (e.g. cocaine to alcohol), since she never had a problem with “booze.”

4. **Negative moods** – This involves the consumer becoming:
   - angry, impatient and critical of others.
   - bored, restless and argumentative.
   - withdrawn from others, or isolated due to loneliness.

5. **Exhaustion** – This involves the consumer:
   - falling into old patterns of behaviors, such as skipping meals, sleeping less, or overworking and not taking care of himself or herself physically.
The Components of Recovery*

When recovering from chemical dependence, a customer will successfully manage the disease by adhering to the following:

международнě abstaining from all mood and mind-altering drugs. It is not acceptable for the recovering customer to switch her drug of choice (e.g., from cocaine to alcohol or from alcohol to prescription drugs).

roadcasting to have contact with and gain support from other people in recovery. The 12-Step programs that have evolved from the original Alcoholics Anonymous fellowship all derive their effectiveness from providing a sense of community, reducing shame and providing empathy and acceptance for participants. In addition, they offer an alternative peer group that can exert positive peer pressure and provide role models for a successful recovery from chemical dependence.

adapting a philosophy of living that demands four essential components: acceptance, honesty, open-mindedness and willingness:

1) **Acceptance** – when a customer accepts the fact of her addiction and disease, she is guarding against the need to let denial enter her life once again.

2) **Honesty** – to continue using a drug or alcohol despite adverse consequences, a chemically-dependent customer must be ingenious in her dishonesty and denial. During a customer’s active addiction, forgoes telling the truth and prefers to lie. At times, the chemically-dependent customer will not even be sure what is the truth and what is not. In recovery, a customer must be willing to be honest with herself and others.

3) **Open-mindedness** – for most chemically-dependent customers, entering treatment is an act of desperation. They were trapped and had nowhere else to go. Unwilling participants in their own treatment, the customer prefers to experience the familiar pain of addiction than risk recovery, where she is told she needs to change everything in her life. Open-mindedness means not saying “no” to the changes involved in recovery.

4) **Willingness** – recovery is a process that requires energy and work. Those who attend 12-Step groups soon learn that if they put nothing in to the recovery process, they will get nothing out of it. The gains made in recovery are in direct proportion to how hard the customer is willing to work toward recovering.

* Adapted from ASAM Patient Placement Criteria for the Treatment of Substance Related Disorders., 2nd Edition, 1996
The 12 Steps of Alcoholics Anonymous

1. We admitted we were powerless over alcohol - that our lives had become unmanageable.

2. We came to believe that a Power greater than ourselves could restore us to sanity.

3. We made a decision to turn our will and our lives over to the care of God, as we understood Him.

4. We made a searching and fearless moral inventory of ourselves.

5. We admitted to God, to ourselves, and to another human being the exact nature of our wrongs.

6. We were entirely ready to have God remove all these defects of character.

7. We humbly asked Him to remove our shortcomings.

8. We made a list of all persons we had harmed and became willing to make amends to them all.

9. We made direct amends to such people wherever possible, except when to do so would injure them or others.

10. We continued to take personal inventory and, when we were wrong, promptly admitted it.

11. We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.

12. We, having had a spiritual awakening as the result of these steps, tried to carry this message to other alcoholics and to practice these principles in all our affairs.

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