

Health Risks of Alcohol and Drug Abuse

Drugs and alcohol are toxic to your body and if abused can have catastrophic consequences on your health. Some drugs, such as crack, are so toxic that even one experimental use can be fatal. When it comes to drugs and alcohol, what you don't know cannot only hurt you, it can kill you. West Chester University believes that the better informed you are about the health risks associated with the use of illicit drugs and the abuse of alcohol, the more likely you are to avoid these substances altogether or to seek help if you become the victim of a chemical dependence. Therefore, the following is a summary of the various health risks associated with alcohol abuse and use of specific types of drugs. This summary is not intended to be an exhaustive or final statement of all possible consequences to your health of substance abuse, but rather is intended to increase your awareness of the grave risks involved in this kind of behavior.

Alcohol Use and Abuse

Alcohol-related automobile accidents are the number one cause of death among people ages 15 through 24. Approximately 50 percent of all youthful deaths from drowning, fires, suicide, and homicide are alcohol-related. Furthermore, alcohol and other drug use is often a factor in date rape.

Repeated use of alcohol can lead to physical and psychological dependence. Dependent persons who suddenly stop drinking are likely to suffer withdrawal symptoms, including severe anxiety, tremors, hallucinations, and convulsions. Alcohol withdrawal can be life threatening. Long-term consumption of large quantities of alcohol, particularly when combined with poor nutrition, can also lead to permanent damage to vital organs such as the brain and the liver. Mothers who drink alcohol during pregnancy may give birth to infants with fetal alcohol syndrome. These infants have irreversible physical abnormalities and mental retardation. In addition, research indicates that children of alcoholic parents have an increased risk of becoming alcoholics themselves.

Low doses significantly impair the judgment and coordination needed to operate vehicles. Small amounts can also lower inhibitions. Moderate to high doses cause marked impairments in higher mental functions, and loss of memory and the ability to learn and remember information. High doses cause respiratory depression and death. If combined with other depressants of the central nervous system, much lower doses of alcohol will produce the effects just described.

Drug Use

Drugs interfere with the brain's ability to take in, sort, and synthesize information. They distort perception, which can lead users to harm themselves or others. Drug use also affects sensation and impairs memory. In addition to these general effects, specific health risks associated with particular types of drugs are discussed below.

Amphetamines/Other Stimulants

Amphetamines (speed, uppers) and other stimulants can cause increased heart and respiratory rates, elevated blood pressure, dilated pupils, and decreased appetite. In addition, users may experience sweating, headache, blurred vision, dizziness, sleeplessness, and anxiety. Extremely high doses can cause a rapid or irregular heartbeat, tremors, loss of coordination, and even physical collapse. An amphetamine injection creates a sudden increase in blood pressure that can

result in stroke, very high fever, or heart failure. In addition to the physical effects, users report feeling restless, anxious, and moody. Higher doses intensify the effects. Persons who use large amounts of amphetamines over a long period of time can develop an amphetamine psychosis that includes hallucinations, delusions and paranoia. The use of amphetamines can cause physical and psychological dependence.

Anabolic Steroids

Steroid users subject themselves to more than 70 side effects ranging in severity from liver cancer to acne and including psychological as well as physical reactions. The liver and the cardiovascular and reproductive systems are most seriously affected by steroid use. In males, use can cause withered testicles, sterility, and impotence. In females, irreversible masculine traits can develop along with breast reduction and sterility. Physical effects in both sexes include jaundice, purple or red spots on the body, swelling of feet or lower legs, trembling, unexplained darkening of the skin, and persistent unpleasant breath odor. Psychological effects in both sexes include very aggressive behavior known as "roid rage" and depression. While some side effects appear quickly, others, such as heart attacks and strokes, may not show up for years.

Barbiturates/Other Depressants

Barbiturates (downers), methaqualone (quaaludes), tranquilizers (valium), and other depressants have many of the same effects as alcohol. Small amounts can produce calmness and relaxed muscles, but somewhat larger doses can cause slurred speech, staggering, and altered perception. Very large doses can cause respiratory depression, coma, and death. The combination of depressants and alcohol can multiply the effects of the drugs, thereby multiplying the risks. The use of depressants can cause both physical and psychological dependence. Regular use over time may result in a tolerance to the drug, leading the user to increase the quantity consumed. When regular users suddenly stop taking large doses, they may develop withdrawal symptoms ranging from restlessness, insomnia, and anxiety, to convulsions and death.

Babies born to mothers who abuse depressants during pregnancy may be physically dependent on the drugs and show withdrawal symptoms shortly after they are born. Birth defects and behavioral problems also may result.

Cocaine/Crack

Cocaine stimulates the central nervous system. Its immediate effects include dilated pupils and elevated blood pressure, heart rate, respiratory rate, and body temperature. Occasional use can cause a stuffy or runny nose, while chronic use can ulcerate the mucous membrane of the nose. Injecting cocaine with contaminated equipment can cause Acquired Immune Deficiency Syndrome (AIDS), hepatitis, and other diseases. The use of cocaine can cause death by cardiac arrest or respiratory failure.

Preparation of freebase, which involves the use of volatile solvents, can result in death or injury from fire or explosion. Cocaine can produce psychological and physical dependency, a feeling that the user cannot function without the drug. In addition, tolerance develops rapidly thus leading to higher and higher doses to produce the desired effect.

Crack or freebase rock is a purified form of cocaine that is smoked. Crack is far more addictive than heroin or barbiturates. Repeated use of crack can lead to addiction within a few days. Once addicted, many users have turned to stealing, prostitution, and drug dealing in order to support

their habit. The effects of crack are felt within ten seconds. The physical effects include dilated pupils, increased pulse rate, elevated blood pressure, insomnia, loss of appetite, tactile hallucinations, paranoia, and seizures. Continued use can produce violent behavior and psychotic states similar to schizophrenia. Cocaine in any form, but particularly in the purified form known as crack, can cause sudden death from cardiac arrest or respiratory failure.

Designer Drugs

Designer drugs are produced by underground chemists who attempt to avoid legal definitions of controlled substances by altering their molecular structure. These drugs can be several hundred times stronger than the drugs they are designed to imitate. Some of the designer drugs have been known to cause permanent brain damage with a single dose. Many of the so-called designer drugs are related to amphetamines and have mild stimulant properties but are mostly euphorants. They can cause nausea, blurred vision, chills or sweating, and faintness. Psychological effects include anxiety, depression, and paranoia. As little as one dose can cause severe neurochemical brain damage. Narcotic designer drugs can cause symptoms such as those in Parkinson's disease: uncontrollable tremors, drooling, impaired speech, paralysis, and irreversible brain damage.

Hallucinogens

Phencyclidine (PCP, Angel Dust) interrupts the functions of the part of the brain that controls the intellect and keeps instincts in check. Because the drug blocks pain receptors, violent PCP episodes may result in self-inflicted injuries. The effects of PCP are unpredictable and can vary, but users frequently report a sense of distance and estrangement. Time and body movements are slowed down. Muscular coordination worsens and senses are dulled. Speech is blocked and incoherent. Chronic users of PCP report persistent memory problems and speech difficulties. Mood disorders - depression, anxiety, and violent behavior - also occur. In later stages of chronic use, users often exhibit paranoid and violent behavior and experience hallucinations. Large doses may produce convulsions and coma, as well as heart and lung failure. The physical effects may include dilated pupils, elevated body temperature, increased heart rate and blood pressure, loss of appetite, sleeplessness, and tremors.

Inhalants

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

Lysergic acid

LSD, Acid, mescaline, and psilocybin (mushrooms) cause illusions and hallucinations. The physical effects may include dilated pupils, elevated body temperature, increased heart rate and blood pressure, loss of appetite, sleeplessness, and tremors. Sensations and feelings may change rapidly. It is common to have a bad psychological reaction to LSD, mescaline, and psilocybin.

The user may experience panic, confusion, suspicion, anxiety, and loss of control. Delayed effects or flashbacks can occur even after use has ceased.

Marijuana

Marijuana use causes a substantial increase in the heart rate, bloodshot eyes, a dry mouth and throat, increased appetite, and it may impair short-term memory and comprehension, alter sense of time, reduced sperm count and sperm motility, may affect ovulation cycles, and reduce ability to perform tasks requiring concentration and coordination, such as driving a car. Research also shows that motivation and cognition may be altered, making the acquisition of new information difficult. When marijuana contains 2 percent Tetrahydrocannabinol (THC), it can cause severe psychological damage, including paranoia and psychosis. Since the early 1980s, most marijuana has contained from 4 to 6 percent THC - two or three times the amount capable of causing serious damage.

Because users often inhale the unfiltered smoke deeply and then hold it in their lungs as long as possible, marijuana is damaging to the lungs and pulmonary system. Marijuana smoke contains more cancer-causing agents than tobacco smoke. Long-term users of marijuana may develop psychological dependence and require more of the drug to get the same effect. The drug can become the center of their lives.

Narcotics

Narcotics such as heroin, codeine, methadone, opium and morphine often cause drowsiness, nausea, and vomiting. Users also may experience constricted pupils, watery eyes, and itching. An overdose may produce slow and shallow breathing, clammy skin, convulsions, coma, and possible death. Tolerance to narcotics develops rapidly and dependence is likely. The use of contaminated syringes may result in diseases such as AIDS, endocarditis, and hepatitis. For pregnant women, addiction can lead to premature, stillborn, or addicted infants who experience severe withdrawal symptoms.