IV. Health Risks of Alcohol and Drugs

Alcohol.

Drinking too much on a single occasion or over time can take a serious toll on a person’s health. Overdoses of alcohol can result in respiratory arrest and death. Prolonged alcohol abuse can cause bleeding from the intestinal tract, damage to nerves and the brain, psychotic behavior, loss of memory and coordination, impotence, and damage to the bone marrow, testes, ovaries, and muscles. Damage to the nerves and organs is usually irreversible.

Alcohol interferes with the brain’s communication pathways, and can affect the way the brain looks and works. These disruptions can change mood and behavior, and make it harder to think clearly and move with coordination. Drinking a lot over a long time or too much on a single occasion can damage the heart, causing problems such as cardiomyopathy (stretching and drooping of heart muscle), arrhythmias, (irregular heart beat), stroke, and high blood pressure. Heavy drinking takes a toll on the liver, and can lead to a variety of problems and liver inflammations including, steatosis, or fatty liver, alcoholic hepatitis, fibrosis, and cirrhosis. Alcohol causes the pancreas to produce toxic substances that can eventually lead to pancreatitis, a dangerous inflammation and swelling of the blood vessels in the pancreas that prevents proper digestion. Drinking too much alcohol can increase your risk of developing certain cancers, including cancers of the mouth, esophagus, throat, breast, and liver. Cancer is the second leading cause of death in alcoholics and is 10 times more frequent than in non-alcoholics.

Drinking too much can weaken your immune system, making your body a much easier target for disease. Chronic drinkers are more liable to contract diseases like pneumonia and tuberculosis than people who do not drink too much. Drinking a lot on a single occasion slows your body’s ability to ward off infections – even up to 24 hours after getting drunk. Drinking during pregnancy can cause fetal alcohol syndrome.

Drugs.

The use of illicit drugs usually causes the same general type of physiological and mental changes as alcohol, though frequently those changes are more severe and more sudden. Death or coma resulting from overdose of drugs is more frequent than from alcohol. Commonly abused drugs and their detrimental effects on the human body are found below:

Amphetamines.

Patterns of use and associated effects are similar to cocaine (described below). Severe intoxication may produce confusion, rambling or incoherent speech, anxiety, psychotic behavior, ringing in the ears, hallucinations, and irreversible brain damage. Intense fatigue and depression resulting from use can lead to severe depression. Large doses may result in convulsions and death from cardiac or respiratory arrest.
Cocaine.
Cocaine is a stimulant that is most commonly inhaled as a powder. It can be dissolved in water and used intravenously. The cocaine extract (crack) is smoked. Users can progress from infrequent use to dependence within a few weeks or months. Psychological and behavioral changes resulting from use include over-stimulation, hallucinations, irritability, sexual dysfunction, psychotic behavior, social isolation, and memory problems. An overdose produces convulsions and delirium and may result in death from cardiac arrest. Discontinuing the use of cocaine requires considerable assistance, close supervision and treatment.

Hallucinogens and Dissociative Drugs.
These drugs have street names like acid, angel dust, and vitamin K. They distort the way a user perceives time, motion, colors, sounds, and self. These drugs can disrupt a person's ability to think and communicate rationally, or even to recognize reality, sometimes resulting in bizarre or dangerous behavior. Hallucinogens such as LSD, psilocybin, peyote, DMT, and ayahuasca cause emotions to swing wildly and real-world sensations to appear unreal, sometimes frightening. Dissociative drugs like PCP, ketamine, dextromethorphan, and Salvia divinorum may make a user feel out of control and disconnected from their body and environment. In addition to their short-term effects on perception and mood, hallucinogenic drugs are associated with psychotic-like episodes that can occur long after a person has taken the drug, and dissociative drugs can cause respiratory depression, heart rate abnormalities, and a withdrawal syndrome.

Heroin and other opiates.
These drugs are usually taken intravenously. In addition to the adverse effects associated with the use of a specific drug, intravenous drug users who use unsterilized needles or who share needles with other drug users can develop HIV, hepatitis, tetanus (lock jaw), and infections in the heart. Long-term use of heroin and other opiates could result in collapsed veins, abscesses (swollen tissue with pus), infection of the lining and valves in the heart, constipation and stomach cramps, liver or kidney disease, and pneumonia. Addiction and dependence develop rapidly. Use is characterized by impaired judgment, slurred speech, and drowsiness. Overdose is manifested by coma, shock, and depressed respiration, with the possibility of death from respiratory arrest. Withdrawal problems include sweating, diarrhea, fever, insomnia, irritability, nausea and vomiting, and muscle and joint pains.

Inhalants.
Examples include solvents, aerosols, and gases found in household products such as spray paints, markers, glues, and cleaning fluids as well as nitrites (e.g., amyl nitrite), which are prescription medications for chest pain. Short-term effects include confusion, nausea, slurred speech, lack of coordination, euphoria, dizziness, drowsiness, disinhibition, lightheadedness, hallucinations/delusions, headaches, sudden sniffing death due to heart failure (from butane, propane, and other chemicals in aerosols), death from asphyxiation, suffocation, convulsions or seizures, coma, or choking. Effects from abusing nitrites include enlarged blood vessels, increased heart rate, brief sensation of heat and excitement, dizziness, and headache. Long-term effects from solvent abuse include liver and kidney damage, bone marrow damage, limb spasms due to nerve damage, and brain damage from lack of oxygen that can cause problems with thinking, movement, vision, and hearing.

Marijuana (Cannabis).
Marijuana is usually smoked/inhaled. Marijuana abuse can cause mental health problems such as anxiety, panic attacks, and psychosis. Some physical health issues include chronic cough, frequent respiratory infections, disconnected ideas or problems with learning and memory, alteration of depth perception and sense of time, impaired judgment, slowed reaction time and problems with balance and coordination. Prolonged use can lead to psychological dependence.
MDMA (Molly, Ecstasy).
These amphetamine-based hallucinogens are sold in powder, tablet, or capsule form and can be inhaled, injected, or swallowed. They cause similar, but usually milder, hallucinogenic effects than those of LSD. Because they are amphetamines, tolerance can develop quickly and overdose can happen. Exhaustion and possible liver damage can occur with heavy use. In high doses, these drugs can cause anxiety, paranoia and delusions. While rare, these drugs have been associated with deaths in users with known or previously undiagnosed heart conditions.

Methamphetamines.
An extremely addictive stimulant amphetamine drug. Short-term concerns with use include increased wakefulness and physical activity, decreased appetite, increased breathing, heart rate, blood pressure, and temperature, and irregular heartbeat. Long-term effects from use include anxiety, confusion, insomnia, mood problems, violent behavior, paranoia, hallucinations, delusions, weight loss, severe dental problems (“meth mouth”), and intense itching leading to skin sores from scratching.

Rhohypnol (rophies, roofies, rope).
This drug is in the same category of drugs as Valium and Xanax, a benzodiazepine, but has higher potency. Initially, it causes a sense of relaxation and reduction of anxiety. At higher doses, light-headedness, dizziness, lack of coordination and slurred speech occur. The drug affects memory and, in higher doses or if mixed with other drugs or alcohol, can result in amnesia for the time period the user is under the influence. Because of this amnesia effect, Rhohypnol has been given intentionally to others to facilitate sexual assault and other crimes. Combining this drug with other sedating drugs, including alcohol, will increase the intensity of all effects of the drug and, in sufficient doses, can cause respiratory arrest and death. Dependency can occur.

Steroids.
Man-made substances used to treat conditions caused by low levels of steroid hormones in the body and abused to enhance athletic and sexual performance as well as physical appearance. Use of anabolic steroids could result in kidney damage or failure, liver damage, high blood pressure, enlarged heart, or changes in cholesterol leading to increased risk of stroke or heart attack, aggression, extreme mood swings, anger (“roid rage”), paranoid jealousy, extreme irritability, delusions, and impaired judgment. Other health-related issues for males include shrunken testicles, lowered sperm count, infertility, baldness, development of breasts, and increased risk for prostate cancer. For females, additional concerns include the development of facial hair, male-pattern baldness, menstrual cycle changes, and deepened voice.

Synthetic Cannabinoids.
A wide variety of herbal mixtures containing man-made cannabinoid chemicals related to THC in marijuana but often much stronger and more dangerous. Sometimes misleadingly called “synthetic marijuana” and marketed as a natural, safe and legal alternative to marijuana. Effects from use include increased heart rate, vomiting, agitation, confusion, hallucinations, anxiety, paranoia, increased blood pressure and reduced blood supply to the heart, as well as heart attack. Withdrawal symptoms include headaches, anxiety, depression, and irritability.

Tobacco.
Products include cigars, cigarettes, hookahs, and smokeless tobacco products. Using tobacco products greatly increases risk of cancer, especially lung cancer when smoked and oral cancers when chewed. Additional health concerns include chronic bronchitis, emphysema, heart disease, leukemia, cataracts, and pneumonia.