

## APPENDIX A

### HEALTH RISKS

(Excerpted from National Institute on Drug Abuse, Alcohol's Effects on the Body  
<http://www.niaaa.nih.gov/alcohol-health/alcohols-effects-body>)

#### Alcohol's Effects on the Body

Drinking too much – on a single occasion or over time – can take a serious toll on your health. Here's how alcohol can affect your body:

**Brain:** 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.

**Heart:** Drinking a lot over a long time or too much on a single occasion can damage the heart, causing problems including:

- Cardiomyopathy – Stretching and drooping of heart muscle
- Arrhythmias – Irregular heart beat
- Stroke
- High blood pressure

Research also shows that drinking moderate amounts of alcohol may protect healthy adults from developing coronary heart disease.

**Liver:** 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
- Cirrhosis

**Pancreas:** 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.

**Cancer:** Drinking too much alcohol can increase your risk of developing certain cancers, including cancers of the:

- Mouth
- Esophagus
- Throat

- Liver
- Breast

**Immune System:** 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.

### **Drug's Affects on the Body**

For complete information on drug health risks, download the latest edition of 2017 Edition of Drugs of Abuse, DEA Resource Guide at:  
[https://www.dea.gov/pr/multimedia-library/publications/drug\\_of\\_abuse.pdf](https://www.dea.gov/pr/multimedia-library/publications/drug_of_abuse.pdf)

**Cocaine:** A powerfully addictive stimulant drug made from the leaves of the coca plant native to South America. Short term health risks include narrowed blood vessels; enlarged pupils; increased body temperature, heart rate, and blood pressure; headache; abdominal pain and nausea; euphoria; increased energy, alertness; insomnia, restlessness; anxiety; erratic and violent behavior, panic attacks, paranoia, psychosis; heart rhythm problems, heart attack; stroke, seizure, coma. Long term health risks include loss of sense of smell, nose bleeds, nasal damage and trouble swallowing from snorting; infection and death of bowel tissue from decreased blood flow; poor nutrition and weight loss from decreased appetite.

**Heroin:** An opioid drug made from morphine, a natural substance extracted from the seed pod of the Asian opium poppy plant. Short term health risks include euphoria; warm flushing of skin; dry mouth; heavy feeling in the hands and feet; clouded thinking; alternate wakeful and drowsy states; itching; nausea; vomiting; slowed breathing and heart rate. Long term health risks include collapsed veins; abscesses (swollen tissue with pus); infection of the lining and valves in the heart; constipation and stomach cramps; liver or kidney disease; pneumonia.

**Ketamine:** A dissociative drug used as an anesthetic in veterinary practice. Dissociative drugs are hallucinogens that cause the user to feel detached from reality. Short term health risks include problems with attention, learning, and memory; dreamlike states, hallucinations; sedation; confusion and problems speaking; loss of memory; problems moving, to the point of being immobile; raised blood pressure; unconsciousness; slowed breathing that can lead to death. Long term health risks include ulcers and pain in the bladder; kidney problems; stomach pain; depression; poor memory.

**LSD:** A hallucinogen manufactured from lysergic acid, which is found in ergot, a fungus that grows on rye and other grains. LSD is an abbreviation of the scientific name lysergic acid diethylamide. Short term health risks include rapid emotional swings; distortion of a person's ability to recognize reality, think rationally, or communicate with others; raised blood pressure, heart rate, body temperature;

dizziness and insomnia; loss of appetite; dry mouth; sweating; numbness; weakness; tremors; enlarged pupils. Long term health risks include frightening flashbacks (called Hallucinogen Persisting Perception Disorder [HPPD]); ongoing visual disturbances, disorganized thinking, paranoia, and mood swings.

**Marijuana:** Marijuana is made from the hemp plant, *Cannabis sativa*. The main psychoactive (mind-altering) chemical in marijuana is delta-9-tetrahydrocannabinol, or THC. Short term health risks include enhanced sensory perception and euphoria followed by drowsiness/relaxation; slowed reaction time; problems with balance and coordination; increased heart rate and appetite; problems with learning and memory; hallucinations; anxiety; panic attacks; psychosis. Long term health risks include mental health problems, chronic cough, frequent respiratory infections.

**MDMA (Ecstasy/Molly):** A synthetic, psychoactive drug that has similarities to both the stimulant amphetamine and the hallucinogen mescaline. MDMA is an abbreviation of the scientific name 3,4-methylenedioxymethamphetamine. Short term health risks include lowered inhibition; enhanced sensory perception; confusion; depression; sleep problems; anxiety; increased heart rate and blood pressure; muscle tension; teeth clenching; nausea; blurred vision; faintness; chills or sweating; sharp rise in body temperature leading to liver, kidney, or heart failure and death. Long term health risks include long-lasting confusion, depression, problems with attention, memory, and sleep; increased anxiety, impulsiveness, aggression; loss of appetite; less interest in sex.

**Mescaline (Peyote):** A hallucinogen found in disk-shaped “buttons” in the crown of several cacti, including peyote. Short term health risks include enhanced perception and feeling; hallucinations; euphoria; anxiety; increased body temperature, heart rate, blood pressure; sweating; problems with movement.

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

**PCP:** A dissociative drug developed as an intravenous anesthetic that has been discontinued due to serious adverse effects. Dissociative drugs are hallucinogens that cause the user to feel detached from reality. PCP is an abbreviation of the scientific name, phencyclidine. Short term health risks include delusions, hallucinations, paranoia, problems thinking, a sense of distance from one’s environment, anxiety. Low doses can cause slight increase in breathing rate; increased blood pressure and heart rate; shallow breathing; face redness and sweating; numbness of the hands or feet; problems with movement.

High doses can cause lower blood pressure, pulse rate, breathing rate; nausea; vomiting; blurred vision; flicking up and down of the eyes; drooling; loss of balance;

dizziness; violence; suicidal thoughts; seizures, coma, and death. Long term health risks include memory loss, problems with speech and thinking, depression, weight loss, anxiety.

**Prescription Opioids:** Pain relievers with an origin similar to that of heroin. Opioids can cause euphoria and are often used non-medically, leading to overdose deaths. Short term health risks include pain relief, drowsiness, nausea, constipation, euphoria, confusion, slowed breathing, death.

**Prescription Sedatives (Tranquilizers, Depressants):** Medications that slow brain activity, which makes them useful for treating anxiety and sleep problems. Short term health risks include drowsiness, slurred speech, poor concentration, confusion, dizziness, problems with movement and memory, lowered blood pressure, slowed breathing.

**Prescription Stimulants:** Medications that increase alertness, attention, energy, blood pressure, heart rate, and breathing rate. Increased alertness, attention, energy; increased blood pressure and heart rate; narrowed blood vessels; increased blood sugar; opened-up breathing passages. Short term health risks include dangerously high body temperature and irregular heartbeat; heart failure; seizures. Long term health risks include heart problems, psychosis, anger, paranoia.

**Psilocybin:** A hallucinogen in certain types of mushrooms that grow in parts of South America, Mexico, and the United States.

Short term health risks include hallucinations, altered perception of time, inability to tell fantasy from reality, panic, muscle relaxation or weakness, problems with movement, enlarged pupils, nausea, vomiting, drowsiness.

Long term health risks include risk of flashbacks and memory problems.

**Rohypnol® (Flunitrazepam):** A benzodiazepine chemically similar to prescription sedatives such as Valium® and Xanax®. Teens and young adults tend to abuse this drug at bars, nightclubs, concerts, and parties. It has been used to commit sexual assaults due to its ability to sedate and incapacitate unsuspecting victims. Short term health risks include drowsiness, sedation, sleep; amnesia, blackout; decreased anxiety; muscle relaxation, impaired reaction time and motor coordination; impaired mental functioning and judgment; confusion; aggression; excitability; slurred speech; headache; slowed breathing and heart rate.

**Steroids (Anabolic):** 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 and physical appearance. Short term health risks include headache, acne, fluid retention (especially in the hands and feet), oily skin, yellowing of the skin and whites of the eyes, infection at the injection site. Long term health risks include kidney damage or failure; liver damage; high blood pressure, enlarged heart, or changes in cholesterol leading to increased risk of stroke or heart attack, even in young people; aggression; extreme mood swings; anger (“roid rage”); paranoid jealousy; extreme irritability; delusions; impaired judgment.