

## Handout

### Physical and Psychological Effects of Substance Use

SUBSTANCE [and method of use]	PHYSICAL/PSYCHOLOGICAL EFFECTS
<p>Alcohol</p> <p><i>Alcohol abuse</i> is a pattern of problem drinking that results in health consequences, social problems, or both. However, <i>alcohol dependence</i>, or <i>alcoholism</i>, refers to a disease that is characterized by abnormal alcohol-seeking behavior that leads to impaired control over drinking</p>	<p><b>Short-term effects of alcohol use include:</b></p> <ul style="list-style-type: none"> <li>• distorted vision, hearing, and coordination</li> <li>• impaired judgment</li> <li>• altered perceptions and emotions</li> <li>• bad breath; hangovers</li> </ul> <p><b>Long-term effects of heavy alcohol use include:</b></p> <ul style="list-style-type: none"> <li>• loss of appetite, vitamin deficiencies; stomach ailments</li> <li>• skin problems</li> <li>• sexual impotence</li> <li>• liver damage</li> <li>• heart and central nervous system damage; memory loss</li> </ul>
<p>Methamphetamine</p> <p>Methamphetamine is a stimulant drug chemically related to amphetamine but with stronger effects on the central nervous system. Street names for the drug include "speed," "meth," and "crank."</p> <p>Methamphetamine is used in pill form, or in powdered form by snorting or injecting. Crystallized methamphetamine known as "ice," "crystal," or "glass," is a smokable and more powerful form of the drug.</p>	<p><b>The effects of methamphetamine use include:</b></p> <ul style="list-style-type: none"> <li>• euphoria</li> <li>• increased heart rate and blood pressure</li> <li>• increased wakefulness; insomnia</li> <li>• increased physical activity</li> <li>• decreased appetite; extreme anorexia</li> <li>• respiratory problems</li> <li>• hypothermia, convulsions, and cardiovascular problems, which can lead to death</li> <li>• irritability, confusion, tremors</li> <li>• anxiety, paranoia, or violent behavior</li> <li>• can cause irreversible damage to blood vessels in the brain, producing strokes</li> </ul> <p>Methamphetamine users who inject the drug and share needles are at risk for acquiring HIV/AIDS</p>
<p>Cocaine</p> <p>Cocaine is a white powder that comes from the leaves of the South American coca plant. Cocaine is either "snorted" through the nasal passages or injected intravenously. Cocaine belongs to a class of drugs known as stimulants, which tend to give a temporary illusion of limitless power and energy that leave the user feeling depressed, edgy, and craving more. Crack is a smokable form of cocaine that has been chemically altered. Cocaine and crack are highly addictive. This addiction can erode physical and mental health and can become so strong that these drugs dominate all aspects of an addict's life.</p>	<p><b>Physical risks associated with using any amount of cocaine and crack:</b></p> <ul style="list-style-type: none"> <li>• increases in blood pressure, heart rate, breathing rate, and body temperature</li> <li>• heart attacks, strokes, and respiratory failure</li> <li>• hepatitis or AIDS through shared needles</li> <li>• brain seizures</li> <li>• reduction of the body's ability to resist and combat infection</li> </ul> <p><b>Psychological risks:</b></p> <ul style="list-style-type: none"> <li>• violent, erratic, or paranoid behavior</li> <li>• hallucinations and "coke bugs"--a sensation of imaginary insects crawling over the skin</li> <li>• confusion, anxiety and depression, loss of interest in food or sex</li> <li>• "cocaine psychosis"--losing touch with reality, loss of interest in friends, family, sports, hobbies, and other activities</li> </ul>

	<p>Some users spend hundred or thousands of dollars on cocaine and crack each week and will do anything to support their habit. Many turn to drug selling, prostitution, or other crimes.</p> <p>Cocaine and crack use has been a contributing factor in a number of drownings, car crashes, falls, burns, and suicides.</p> <p>Cocaine and crack addicts often become unable to function sexually.</p> <p>Even first time users may experience seizures or heart attacks, which can be fatal.</p>
<p><b>Hallucinogens</b></p> <p>Hallucinogenic drugs are substances that distort the perception of objective reality. The most well-known hallucinogens include phencyclidine, otherwise known as PCP, angel dust, or loveboat; lysergic acid diethylamide, commonly known as LSD or acid; mescaline and peyote; and psilocybin, or "magic" mushrooms. Under the influence of hallucinogens, the senses of direction, distance, and time become disoriented. These drugs can produce unpredictable, erratic, and violent behavior in users that sometimes leads to serious injuries and death. The effect of hallucinogens can last for 12 hours.</p> <p>LSD produces tolerance, so that users who take the drug repeatedly must take higher and higher doses in order to achieve the same state of intoxication. This is extremely dangerous, given the unpredictability of the drug, and can result in increased risk of convulsions, coma, heart and lung failure, and even death.</p>	<p><b>Physical risks associated with using hallucinogens:</b></p> <ul style="list-style-type: none"> <li>• increased heart rate and blood pressure</li> <li>• sleeplessness and tremors</li> <li>• lack of muscular coordination</li> <li>• sparse, mangled, and incoherent speech</li> <li>• decreased awareness of touch and pain that can result in self-inflicted injuries</li> <li>• convulsions</li> <li>• coma; heart and lung failure</li> </ul> <p><b>Psychological risks associated with using hallucinogens:</b></p> <ul style="list-style-type: none"> <li>• a sense of distance and estrangement</li> <li>• depression, anxiety, and paranoia</li> <li>• violent behavior</li> <li>• confusion, suspicion, and loss of control</li> <li>• flashbacks</li> <li>• behavior similar to schizophrenic psychosis</li> <li>• catatonic syndrome whereby the user becomes mute, lethargic, disoriented, and makes meaningless repetitive movements</li> </ul> <p>Everyone reacts differently to hallucinogens--there's no way to predict if someone can avoid a "bad trip."</p>
<p><b>Marijuana</b></p> <p>Marijuana is the most widely used illicit drug in the United States and tends to be the first illegal drug teens use. It can be either smoked or swallowed.</p>	<p><b>Short-term effects of using marijuana:</b></p> <ul style="list-style-type: none"> <li>• sleepiness</li> <li>• difficulty keeping track of time, impaired or reduced short-term memory</li> <li>• reduced ability to perform tasks requiring concentration and coordination, such as driving a car</li> <li>• increased heart rate</li> <li>• potential cardiac dangers for those with preexisting heart disease</li> <li>• bloodshot eyes</li> <li>• dry mouth and throat</li> <li>• decreased social inhibitions</li> </ul>

- paranoia, hallucinations

**Long-term effects of using marijuana:**

- enhanced cancer risk decrease in
- testosterone levels for men; also lower sperm counts and difficulty having children
- increase in testosterone levels for women; also increased risk of infertility
- diminished or extinguished sexual pleasure
- psychological dependence requiring more of the drug to get the same effect

The physical effects of marijuana use, particularly on developing adolescents, can be acute. Marijuana blocks the messages going to your brain and alters your perceptions and emotions, vision, hearing, and coordination. A recent study of 1,023 trauma patients admitted to a shock trauma unit found that one-third had marijuana in their blood.

Source: National Institute on Drug Abuse, 2004