Handout Physical and Psychological Effects of Substance Use

SUBSTANCE	PHYSICAL/PSYCHOLOGICAL EFFECTS
Alcohol Alcohol abuse is a pattern of problem drinking that results in health consequences, social, problems, or both. However, alcohol dependence, or alcoholism, refers to a disease that is characterized by abnormal alcohol-seeking behavior that leads to impaired control over drinking	Short-term effects of alcohol use include: • distorted vision, hearing, and coordination • impaired judgment • altered perceptions and emotions • bad breath; hangovers Long-term effects of heavy alcohol use include: • loss of appetite, vitamin deficiencies; stomach ailments • skin problems • sexual impotence • liver damage • heart and central nervous system damage; memory loss
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." 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.	 The effects of methamphetamine use include: euphoria increased heart rate and blood pressure increased wakefulness; insomnia increased physical activity decreased appetite; extreme anorexia respiratory problems hypothermia, convulsions, and cardiovascular problems, which can lead to death irritability, confusion, tremors anxiety, paranoia, or violent behavior can cause irreversible damage to blood vessels in the brain, producing strokes Methamphetamine users who inject the drug and share needles are at risk for acquiring HIV/AIDS
Cocaine 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.	Physical risks associated with using any amount of cocaine and crack: • increases in blood pressure, heart rate, breathing rate, and body temperature • heart attacks, strokes, and respiratory failure • hepatitis or AIDS through shared needles • brain seizures • reduction of the body's ability to resist and combat infection Psychological risks: • violent, erratic, or paranoid behavior • hallucinations and "coke bugs"a sensation of imaginary insects crawling over the skin • confusion, anxiety and depression, loss of interest in food or sex • "cocaine psychosis"losing touch with reality, loss of interest in friends, family, sports, hobbies, and other activities 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.

Cocaine and crack use has been a contributing factor in a number of drownings, car crashes, falls, burns, and suicides.

Cocaine and crack addicts often become unable to function sexually.

Even first time users may experience seizures or heart attacks, which can be fatal.

Hallucinogens

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.

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.

Physical risks associated with using hallucinogens:

- increased heart rate and blood pressure
- sleeplessness and tremors
- lack of muscular coordination
- sparse, mangled, and incoherent speech
- decreased awareness of touch and pain that can result in selfinflicted injuries convulsions
- coma; heart and lung failure

Psychological risks associated with using hallucinogens:

- a sense of distance and estrangement
- · depression, anxiety, and paranoia
- · violent behavior
- confusion, suspicion, and loss of control
- flashbacks
- behavior similar to schizophrenic psychosis
- catatonic syndrome whereby the user becomes mute, lethargic, disoriented, and makes meaningless repetitive movements

Everyone reacts differently to hallucinogens--there's no way to predict if you can avoid a "bad trip."

Inhalants

Inhalants refer to substances that are sniffed or huffed to give the user an immediate head rush or high. They include a diverse group of chemicals that are found in consumer products such as aerosols and cleaning solvents. Inhalant use can cause a number of physical and emotional problems, and even one-time use can result in death.

Using inhalants even one time cause:

- sudden death
- suffocation
- visual hallucinations and severe mood swings
- numbness and tingling of the hands and feet

Prolonged use can result in:

- headache, muscle weakness, abdominal pain
- decrease or loss of sense of smell
- nausea and nosebleeds
- hepatitis
- · violent behaviors
- irregular heartbeat
- liver, lung, and kidney impairment
- irreversible brain damage

- nervous system damage
- · dangerous chemical imbalances in the body
- involuntary passing of urine and feces

Short-term effects of inhalants include:

- · heart palpitations
- · breathing difficulty
- dizziness
- headaches

According to medical experts, death can occur in at least five ways:

- asphyxia--solvent gases can significantly limit available oxygen in the air, causing breathing to stop;
- suffocation--typically seen with inhalant users who use bags;
- choking on vomit;
- careless behaviors in potentially dangerous settings; and
- sudden sniffing death syndrome, presumably from cardiac arrest.

Marijuana

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.

Short-term effects of using marijuana:

- sleepiness
- difficulty keeping track of time, impaired or reduced short-term memory
- reduced ability to perform tasks requiring concentration and coordination, such as driving a car
- increased heart rate
- potential cardiac dangers for those with preexisting heart disease
- bloodshot eyes
- dry mouth and throat
- · decreased social inhibitions
- · 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.

Source: National Institute on Drug Abuse, 2004