Health Risks Associated with Alcohol and Drugs

The negative physical and mental effects of the use of alcohol and other drugs are well documented. Use of these drugs may cause: blackouts, poisoning, overdose and death; physical and psychological dependence; damage to vital organs such as the brain, heart, and liver; inability to learn and remember information; and psychological problems including depression, psychosis, and severe anxiety. Risks associated with specific drugs are described later in this section.

Impaired judgment and coordination resulting from the use of alcohol and other drugs are associated with acquaintance assault and rape; DUI/DWI arrests; hazing; falls, drowning and other injuries; contracting sexually-transmitted infections including AIDS; and unwanted or unplanned sexual experiences and pregnancy.

The substance abuse of family members and friends may also be of concern to individuals. Patterns of risk-taking behavior and dependency not only interfere in the lives of the abusers, but can also have a negative impact on the affected students' academic work, emotional wellbeing and adjustment to college life.

ALCOHOL - Alcohol abuse is a progressive disorder in which physical dependency can develop. Even low doses of alcohol impair brain function, judgment, alertness, coordination and reflexes. Very high doses cause suppression of respiration and death. Chronic alcohol abuse can produce dementia, sexual impotence, cirrhosis of the liver, and heart disease; and sudden withdrawal can produce severe anxiety, tremors, hallucinations, and life-threatening convulsions.

SOME OF THE NEGATIVE CONSEQUENCES THAT DRINKING ALCOHOL CAN HAVE, BOTH AS A RESULT OF YOUR DRINKING AND OTHERS' DRINKING:

- hangovers
- academic problems--missed classes, getting behind in school work
- arguing with friends
- engaging in unwanted and/or unprotected sexual activity
- weight gain-the "Freshman 15" isn't all due to campus dining!

- getting injured / assaulted / sexually assaulted
- damaging property or having your property damaged
- requiring treatment for alcohol poisoning
- trouble on campus or with police
- being insulted or humiliated
- having your study or sleep interrupted
- developing tolerance, dependence or addiction
- death from alcohol poisoning or alcohol-related injury

All of these things have happened to W&L students. Neuroscience research shows that alcohol impairs the formation of new memories and learning, especially in the developing brain--and as college-aged students, your brains are still developing. Alcohol use can cause both short term and long-term problems for those who choose to use it. Alcohol is a central nervous system depressant whose effects depend on how much you drink. These effects may range from loss of inhibition with only one drink to making someone "stumbling drunk" to acute alcohol poisoning with loss of consciousness and difficulty breathing. **Acute alcohol poisoning** usually occurs in situations of **rapid alcohol intake** such as shots, funneling, keg stands, and drinking games like beer pong. Even after someone passes out their BAC (blood alcohol concentration) can continue to rise from the alcohol still in their stomach. Medical attention is critical to prevent serious injury or death.

Women are affected by alcohol to a greater degree than men. They become more impaired than men when drinking the same amount of alcohol due to their higher percentage of body fat--alcohol is water soluble, so there is a greater concentration of alcohol in a woman's bloodstream after drinking. Because women tend to be smaller than men, alcohol is less diluted upon reaching the brain than in larger individuals. Women also become intoxicated more easily 1-3 days before their menstrual periods. Finally, women absorb more alcohol into their bloodstreams because they lack the enzyme alcohol dehydrogenase in their stomach, which in men breaks down some alcohol before it is absorbed.

Alcohol is addictive and regular use can lead to dependence and addiction/alcoholism, even in college-age students. People with a family history of substance abuse are 4 - 10 x more likely than the general population to develop substance abuse and addiction in their lifetime, and tend to do so at an earlier age. People who begin drinking before age 15 are 5x more likely to develop substance

abuse issues in their lifetime, as well. Some warning signs of dependence are: more frequent use; needing more and more to get the same effect (tolerance); spending time thinking about and planning for alcohol use; spending more money than you have on it; missing class or failing to finish assignments because of alcohol use; continuing to drink despite repeated negative consequences; making new friends who drink a lot and neglecting old friends who don't; finding it's hard to be happy without regular alcohol use, etc. Warning signs of addiction include all of the above and physical withdrawal symptoms after a drinking episode such as anxiety, tremors, sleep disturbances, hallucinations and seizures.

ALCOHOL ENERGY DRINKS are of particular concern because of the higher alcohol content when compared to beer (9% to 12% vs. 5%). In November 2010, the FDA and FTC took action saying that caffeine is not a safe additive in alcoholic beverages. New products have been marketed such as alco-pops, supersized malt beverage cans, and alcohol energy drinks containing guarana and ginseng. Mixing alcohol with energy drinks such as Red Bull are just as dangerous. Studies show that people who consume these beverages have a higher BAC and a higher rate of injury and other negative consequences than people who drink alcoholic beverages without stimulants. The bottom line is that these drinks are not safe and often lead to higher rates and levels of intoxication. The sweet taste covers the taste of alcohol, giving the false impression one can drink more without the intoxicating effects. BE CAREFUL, or better yet, avoid them.

Use of illegal drugs and misuse of prescription drugs can have social, academic, psychological, physical, financial and legal consequences. **Combining drugs and/or using them with alcohol can be extremely dangerous.** Information below references specific drugs or drug categories, but is not intended as a comprehensive listing of drugs and their associated health risks.

MARIJUANA - The concentration of THC in marijuana varies greatly, ranging from 1% to 9%. THC is a fat soluble substance and can remain in the lungs, liver, reproductive organs and brain tissue for up to 3 weeks. Smoking or ingesting marijuana can relax a person and elevate his/her mood. This can be followed by drowsiness and sedation. Other effects include heightened sensory awareness, euphoria, altered perceptions and feeling hungry ("the munchies"). High concentrations of THC may produce a more hallucinogenic response. The effects of marijuana may vary based on: expectations of the user; social setting; prior experience of the user; genetic vulnerability of the user (marijuana use may aggravate underlying mental health issues); method of use (inhaled

or ingested). Discomforts associated with smoking marijuana include dry mouth, dry eyes, increased heart rate, and visible signs of intoxication such as bloodshot eyes and puffy eyelids. Other problems include impaired memory and ability to learn; difficulty thinking and problem solving; anxiety attacks or feelings of paranoia; impaired muscle coordination and judgment; increased susceptibility to infections; dangerous impairment of driving skills. Combining marijuana and other drugs, including alcohol and prescription drugs, can cause unwanted reactions and/or increase the impact of both substances. Marijuana has addictive properties and about 10-14% of users will become dependent. Tolerance to marijuana develops rapidly. Physical and psychological withdrawal symptoms from marijuana include irritability, restlessness, insomnia, nausea and intense dreams. Warning signs of dependence are: more frequent use; needing more and more to get the same effect; spending time thinking about using marijuana; spending more money than you have on it; missing class or failing to finish assignments because of marijuana; making new friends who do it and neglecting old friends who don't; finding it's hard to be happy without it.

SYNTHETIC MARIJUANA AND BATH SALTS, - These are various psychoactive herbal and chemical products that mimic the effects of marijuana or other drugs. Since these products are largely created by individual sellers, it's anyone's guess what ingredients are the mix. That's why side effects, including heart palpitations, high blood pressure, hallucinations, seizures and breathing problems, are difficult to predict. The toxicity of active ingredients--not to mention the unknown ingredients in these products--is not well studied. In addition to the variable composition, these synthetic compounds are expensive, harsh on your lungs to smoke, may interact with other prescription or over the counter drugs in unpredictable and dangerous ways, do not mix well with alcohol, and often produce a very short "high" lasting no more than 30 minutes.

HALLUCINOGENS - This category includes phencyclidine (PCP or "angel dust"), ecstasy and other amphetamine variants which have mind-altering effects. Perception and cognition are impaired and muscular coordination decreases. Speech is blocked and incoherent. Chronic users of PCP may have memory problems and speech difficulties lasting 6 months to a year after prolonged daily use. Depression, anxiety, and violent behavior also occur. High psychological dependence on the drug may result in taking large doses of PCP. Large doses produce convulsions, comas, and heart and lung failure. Lysergic acid dyethylamine (L.S.D. or "acid"), mescaline and psilocybin (mushrooms) cause illusions, hallucinations and altered perception of time and space. Physical effects include dilated pupils, elevated body temperature, increased heart rate

and blood pressure, decreased appetite, insomnia and tremors. Psychological reactions include panic, confusion, paranoia, anxiety and loss of control. Flashbacks, or delayed effects, can occur even after use has ceased.

COCAINE - Cocaine prompts the release of dopamine, a neurotransmitter responsible for pleasure and movement, and inhibits the reabsorption of it, over stimulating the brain. Users report feelings of euphoria, hyper-stimulation, confidence, and alertness. Cocaine's pleasurable effects begin to wear off quickly leading to withdrawal symptoms including irritability, anxiety, restlessness, physical pain, insomnia, depression, paranoia, or aggression. Cocaine is extremely addictive and is considered one of the most powerful reinforcing drugs. Cocaine raises blood pressure, heart rate, and respiration increasing the risk of respiratory arrest, stroke, seizures, heart attacks, and death.

STIMULANTS - Amphetamines and other stimulants include ecstasy and "meth," as well as prescription drugs such as Adderall and Ritalin. The physical effects produced are elevated heart and respiratory rates, increased blood pressure, insomnia, and loss of appetite. Sweating, headaches, blurred vision, dizziness, and anxiety may also result from use. High dosage can cause rapid or irregular heartbeat, tremors, loss of motor skills and even physical collapse. Long-term use of higher doses can produce amphetamine psychosis which includes hallucinations, delusions and paranoia. Prescription stimulant drugs, dubbed "academic steroids," are used by some college students in an attempt to enhance their academic performance. These drugs are often prescribed to treat ADD/ADHD, and should be used only as prescribed and with ongoing medical supervision. It is against federal law to use these medications without an authorized prescription from a physician. Students who share or sell their prescription drugs are abusing a medical privilege, breaking the law, and face severe penalties if caught.

DEPRESSANTS - Barbiturates and benzodiazepines are two of the most commonly prescribed groups of depressant drugs. Barbiturates include Phenobarbital, Seconal and Amytal; benzodiazepines include Ativan, Dalmane, Librium, Xanax, Valium, Halcion and Restoril. These drugs are used for medical purposes to relieve anxiety and to induce sleep. Physical and psychological dependence can occur if the drugs are used for longer periods of time or at higher doses than prescribed. Benzodiazepine use can cause slurred speech, disorientation, and lack of coordination. If taken with alcohol, use can lead to coma and possible death.

NARCOTICS - Narcotics include heroin, methadone, morphine, codeine, OxyContin, Vicodin, Fentanyl and opium. Dextromethorphan in cough syrup is closely related. After an initial feeling of euphoria, narcotic use causes drowsiness, nausea, and vomiting. Effects of overdose include slow and shallow breathing, clammy skin, convulsions, coma and possible death. Physical and psychological dependence is high, and withdrawal symptoms include watery eyes, runny nose, loss of appetite, irritability, tremors, panic, abdominal cramps and diarrhea, nausea, chills, and sweating. Use of contaminated syringes/needles to inject drugs may result in serious blood borne infections such as HIV-AIDS and hepatitis. This family of drugs is the most frequent cause of drug-associated death from suppression of the life supporting functions of the brain, heart and lungs