

HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter
www.clt.astate.edu/wellness



What is Alcohol?

Alcohol is created when grains, fruits, or vegetables are fermented. Fermentation is the process that uses yeast or bacteria to change sugars in foods into alcohol. Alcohol has different forms and can be used as a cleaner or antiseptic. The type of alcohol people drink is ethanol, which is a sedative. When consumed, alcohol is absorbed into a person's bloodstream. Once in the bloodstream, alcohol affects the central nervous system, the brain and spinal cord, which controls virtually all body functions. Alcohol blocks some of the messages trying to get to the brain. Alcohol alters a person's perceptions, emotions, movement, vision, and hearing.

Risks Associated with Alcohol Use

There are a number of risks associated with overindulging in alcohol including:

- Vomiting
- Blacking out
- Passing out, sometimes in an unfamiliar or unsafe place
- Decreased inhibitions
- Hangover: nausea, fatigue, upset stomach, headache, sore muscles, cotton mouth, and lack of motivation
- Alcohol-related injuries resulting from loss of

Alcohol Awareness

inhibition and coordination

- Death by nervous system failure, injury and choking.

With loss of inhibition and blackout episodes, individuals are more likely to take part in high risk behaviors, such as drunk driving or unprotected sex.

Alcohol Use Statistics

DWI: Driving While Intoxicated refers to a person who has been charged with driving with a Blood Alcohol Content (BAC) over the legal limit. The legal limit in the U.S. states is 0.8 for persons 21 years or older. The severity of punishment varies from state-to-state and depends on the number of DWI charges received. The following link has a concise overview of Arkansas DWI policies, along with all other states: <http://www.duiattorneyhome.com/DUI/Statistics-and-Laws/Arkansas>

Underage: While rates have declined over the last two decades, underage drinking has remained at an alarming level. More than 10 million youth, ages 12-20, in the U.S. report they have consumed alcohol in the past 30 days. The rate of current alcohol consumption increases with increasing age according to the 2009 National Survey on Drug Use

and Health from 2.4% at age 12 to 22.4% at age 16, and 56.7% at age 20. In a survey done during the years of 2007 and 2008, 24.1% of Arkansas youths between the ages of 12 and 20 reported consuming alcohol in the past month and 15.3% reported binge drinking in the past month.

Deaths: According to the CDC, 64% of Americans drink alcohol, with 50% being regular drinkers. The consequences of this are 22,073 alcohol caused deaths a year. These are deaths unrelated to accidents, suicides or homicides. About half of these deaths are from liver disease from alcoholism.

According to the National Highway Traffic Safety Administration 33,808 people died in traffic crashes in 2009 in the U.S., including an estimated 10,839 who died in alcohol-impaired driving crashes. Drunken driving fatalities accounted for 32% of all traffic deaths in 2009. Of the alcohol related driving fatalities, 13% occurred in drivers under the age of 21, 1,398 deaths in 2009. Although there has been a decline in the number of young people involved in alcohol-impaired driving fatalities, more than 3 people under the age of 21 die each day in alcohol-impaired driving crashes.

Alcohol Poisoning

BAC and Blood Alcohol Level (BAL) are measurements of

the amount of alcohol in a person's blood. A BAC of 0.1 means that 1/1000 of the fluid in the blood is alcohol. This may seem small, but it does not take much for you to achieve this level. A 150 pound male who consumes five drinks over the course of two hours will have a BAC near 0.1. A 115 pound female who consumes four drinks over the course of two hours will also have a BAC near 0.1. A BAC around 0.2 is associated with some symptoms of alcohol poisoning, but alcohol poisoning can occur at much lower levels depending on the person.

Alcohol poisoning is a very serious condition that should be taken very seriously. It is important that the signs and symptoms of alcohol poisoning be understood. The following are critical signs and symptoms of alcohol poisoning:

- Mental confusion, stupor, coma, or the person cannot be roused
- Vomiting seizures
- Slow breathing (fewer than eight breaths per minute)
- Irregular breathing (10 seconds or more between breaths)
- Hypothermia, bluish skin color, paleness

If any of these signs are visible, action should be taken. If there is any suspicion of alcohol overdose, 911 should be contacted. It is important to remember that passing out may lead to death. If alcohol poisoning goes untreated the following serious situations may occur:

- Victim chokes on his or her own vomit
- Breathing slows, becomes irregular, or stops
- Heart beats irregularly or stops
- Hypothermia

- Hypoglycemia leads to seizures
- Untreated severe dehydration from vomiting can cause seizure, permanent brain damage, or death.

Even if the victim lives, an alcohol overdose can lead to irreversible brain damage.

Alcoholism

Alcoholism is a disease that occurs when a person shows physical signs of addiction to alcohol and continues to drink, despite problems with physical health, mental health, and social, family, or job responsibilities. Alcoholism includes the following four symptoms:

- Craving: strong need to drink.
- Impaired control: the inability to limit or control your drinking on a particular occasion.
- Physical dependence: withdrawal symptoms, such as nausea, sweating, shakiness, and anxiety, when alcohol use is stopped after a period of heavy drinking.
- Tolerance: the need for increasing amounts of alcohol in order to feel its effects.

The following are common health problems associated with alcoholism:

- Increased risk of gouty arthritis.
- Increased risk of cancer in the liver, pancreas, rectum, breast, mouth, pharynx, larynx, and esophagus.
- Increased risk of heart disease
- Diabetes
- Kidney disease
- Liver disease
- Nervous system disorders.

These are just a few possible health side effects of alcoholism and alcohol abuse.

Resources

The following are the resources used to write this article and can be used to gain more information about alcohol use and alcohol abuse programs.

- http://www.abovetheinfluence.com/facts/drugs-alcohol.aspx?utm_campaign=paid-search&utm_source=google&utm_medium=search&utm_content=alcohol#
- <http://www.centurycouncil.org/learn-the-facts/statefacts/states/AR>
- <http://www.pamf.org/teen/risk/alcohol/risks.html>
- <http://www.collegedrinkingprevention.gov/otheralcoholinformation/factsaboutalcoholpoisoning.aspx>
- <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001940/>
- <http://www.pamf.org/teen/risk/alcohol/alcoholism.html>
- http://www.brad21.org/effects_at_specific_bac.html
- <http://www.healthchecksyste.ms.com/alcohol.htm>

Other News:

- April 16-17, 2011
HMG Health Expo-ASU
Convocation Center:
<http://www.facebook.com/hmg.md>

**If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at hanrahan@astate.edu.

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or hanrahan@astate.edu. Produced by Helen Grimes, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.