

What Is Alcohol

Alcohol is produced through a process called fermentation in which yeast changes a sugar into alcohol. The sugar comes from plants such as fruits, grains or even potatoes. Alcohol is a drug. It depresses the central nervous system and has many affects on the body.

A standard drink is considered to be one 12 ounce beer or wine cooler, one five ounce glass of wine or one 1.5 ounce shot of 80 proof liquor. Each of these drinks contains approximately one half ounce of pure alcohol.

According to the CDC, over sixty percent of the population drinks alcohol. Of those people that drink, forty-eight percent of them drink regularly. Thirty-three percent drank more than 5 drinks in one day. <http://www.cdc.gov/nchs/data/hus/hus07.pdf#068>

What happens when alcohol enters the body? Alcohol needs no digestion and starts entering the body immediately. About twenty percent of the alcohol crosses the walls of the stomach and reaches the brain within one minute. In the stomach, the enzyme alcohol dehydrogenase begins to break down the alcohol reducing the amount of alcohol reaching the bloodstream by about twenty percent. Women have less of this enzyme which may be one reason why women become intoxicated on less alcohol than men. Another ten percent of the alcohol is expelled in the breath and urine. The remaining alcohol passes into the small intestines. This can be slowed down by the presence of food in the stomach, especially fatty foods. Once in the intestines, the alcohol is absorbed into the bloodstream and travels to the liver. When alcohol is present in the liver, the liver must metabolize it first letting the fatty acids, which it prefers, accumulate. Alcohol permanently changes the liver cell structure impairing the liver's ability to metabolize fats which can lead to a disease known as fatty liver. The liver detoxifies the alcohol and passes it out of the body. Until all the alcohol is metabolized, it circulates around the body affecting the brain and other tissues.

The liver can only metabolize a certain amount of alcohol in an hour. This rate of metabolism is affected by the amount of enzymes in the liver which differs among individuals, the presence of food in the stomach and the type of food, and gender. In general, after consuming one drink the amount of alcohol in the blood (blood alcohol concentration or BAC) peaks in about 30 to 45 minutes. Since the body absorbs alcohol faster than it can metabolize it, a person should drink slowly to prevent overloading the body resulting in intoxication.

Affects of alcohol at differing BACs:

- 0.05 -- reduced inhibitions
- 0.10 -- slurred speech
- 0.20 -- euphoria and motor impairment
- 0.30 -- confusion
- 0.40 -- stupor
- 0.50 -- coma
- 0.60 -- respiratory paralysis and death

How does alcohol affect the body? Alcohol depresses your breathing rate, heart rate, and the control mechanisms in your brain. The person will be less able to drive and do complex tasks. A person may have reduced inhibitions and do things they would not usually do including having unprotected sex or sex with people they do not know. The attention span is reduced and short term memory loss is noted. Motor coordination is impaired and reaction time is prolonged. If a woman is pregnant the alcohol can have serious effects in the developing fetus. Alcohol increases the risks of motor vehicle accidents, falls and drownings. It also increases the risk of suicide and murder.

What is alcoholism and alcohol abuse?

Alcohol abuse means using alcohol in dangerous or unhealthy ways. This can include drinking every day or drinking too much at one time. It can lead to problems in your relationships, cause you to miss work and lead to legal problems such as drinking while

intoxicated. When a person has an abuse problem, he or she will continue to drink even though the person knows the drinking is causing problems.

If a person continues to abuse alcohol, it can lead to alcoholism. This is when the person is addicted physically and/or mentally to alcohol. The person experiences a strong need or craving to drink. If a person experiences three or more of the following problems in a year, he may be dependent on alcohol and should see his doctor.

1. Can not control the amount of drinking.
2. Needs increasing amounts of alcohol to get the same effect.
3. Experiences withdrawal symptoms when not drinking such as upset stomach, sweating, shakiness and anxiety.
4. Gives up activities to have more time to drink or recover from drinking.
5. Tried to cut back on the amount of drinking or tried to quit and can not.
6. Continue to drink even though it causes physical problems or relationship problems.

If you have questions or need more information, call the Eddy County DWI office at 234-9963 or email Ms. Sharif at csharif@co.eddy.nm.us.