

## EDUCATE YOURSELF: ALCOHOL

### An overview of Alcohol:

Alcohol is a central nervous system depressant. In alcoholic beverages, ethyl alcohol is the main ingredient. It is fermented from sugar or other carbohydrates found in grapes, other fruits, vegetables, and grains.

A single standard drink consists of: one 12 ounce bottle of beer, one 4-5 ounce glass of wine, 1.5 ounces of 80 proof liquor.



12 oz bottle of beer



4-5 oz of wine/ A bottle of wine typically holds 5 glasses



1.5 oz of 80 proof liquor

How it all adds up!!!



What is in your cup?



DO YOU KNOW THAT?

- A Solo cup is equal to 1 1/3 beers.
- 4-5 ounces of wine is equal to one beer. A large glass of wine can hold 8-10 ounces of wine: a Solo cup can hold 15-16 ounces of wine.
- A Long Island Ice Tea typically contains vodka, tequila, rum, gin and triple sec, and can be equal to 4-5 beers.
- A Solo cup of jungle juice or punch can equal 4-6 drinks. If Everclear is used it can double the effect of 4-6 drinks.
- Mixing a drink in a Solo cup by pouring alcohol to the first indentation line (4 ounces) is the equivalent of 3 drinks. A more generous pour can equal 4 or more drinks.
- A rum and coke made with a shot of Bacardi 151 is equal to almost two

Content from : <http://oade.nd.edu/educate-yourself-alcohol/dietary-guidelines-on-alcohol/>

During a typical drinking occasion, how many alcoholic drinks do you consume? Get an idea of what your blood alcohol content (BAC) after two drinks? three drinks? four drinks?

BAC Calculator at:

<http://mcwell.nd.edu/your-well-being/physical-well-being/alcohol/blood-alcohol-concentration/bac-calculator/>

BLOOD ALCOHOL CONTENT (BAC)										
Table for Male (M) / Female (F)										
Number of Drinks		Body Weight in Pounds							Driving Condition	
		100	120	140	160	180	200	220		240
0	M	.00	.00	.00	.00	.00	.00	.00	.00	Only Safe Driving Limit
	F	.00	.00	.00	.00	.00	.00	.00	.00	
1	M	.06	.05	.04	.04	.03	.03	.03	.02	Driving Skills Impaired
	F	.07	.06	.05	.04	.04	.03	.03	.03	
2	M	.12	.10	.09	.07	.07	.06	.05	.05	
	F	.13	.11	.09	.08	.07	.07	.06	.06	
3	M	.18	.15	.13	.11	.10	.09	.08	.07	
	F	.20	.17	.14	.12	.11	.10	.09	.08	
4	M	.24	.20	.17	.15	.13	.12	.11	.10	Legally Intoxicated
	F	.26	.22	.19	.17	.15	.13	.12	.11	
5	M	.30	.25	.21	.19	.17	.15	.14	.12	
	F	.33	.28	.24	.21	.18	.17	.15	.14	

Subtract .01% for each 40 minutes of drinking.  
1 drink = 1.5 oz. 80 proof liquor, 12 oz. 5% beer, or 5 oz. 12% wine.  
Fewer than 5 persons out of 100 will exceed these values.

How does alcohol move through the body?

Once swallowed, a drink enters the stomach and small intestine, where small blood vessels carry it to the bloodstream. Approximately 20% of alcohol is absorbed through the stomach and most of the remaining 80% is absorbed through the small intestine. Alcohol is metabolized by the liver, where enzymes break down the alcohol. ***In general, the liver can process one ounce of liquor (or one standard drink) in one hour.*** If you consume more than this, your system becomes saturated, and the additional alcohol will accumulate in the blood and body tissues until it can be metabolized. This is why pounding shots or playing drinking games can result in high blood alcohol concentrations that last for several hours.

**What are some common effects of drinking alcohol? Alcohol may:**

- o Cause mood swings.
- o Make you less patient.
- o Give you a false sense of confidence.
- o Make you more aggressive.
- o Impede your ability to make responsible decisions.
- o Make you less cautious

**Alcohol may impair: \*\***

- o Memory
- o Muscle coordination
- o Balance
- o Sense of touch
- o Hearing
- o Sense of Control
- o Your ability to react and form judgments
- o Vision by decreasing
  - Peripheral (side) vision
  - Frontal vision and focusing
  - Ability to recover from glare
  - Number and speed of scans
  - Depth perception
  - Color sensitivity

## What is binge drinking?

Binge drinking is a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 grams percent or above. This typically happens when men consume 5 or more drinks, and when women consume 4 or more drinks, in about 2 hours. For these young people, getting drunk is usually the main goal of drinking. Are you drinking just to get drunk?

- About 90% of the alcohol consumed by youth under the age of 21 in the United States is in the form of binge drinks
- The prevalence of binge drinking among men is twice the prevalence among women.
- Binge drinkers are 14 times more likely to report alcohol-impaired driving than non-binge drinkers.

Content adapted from information found on [CDC.gov](http://CDC.gov) and [University of Rochester Medical Center](http://University of Rochester Medical Center)



## What are the short-term risks of drinking?

When you're drinking, one of the first things to go is your judgment. So, celebrating with friends can quickly turn into embarrassing yourself, getting hurt, throwing up or nursing a hangover. These statistics\* show the very real risks of drinking in college:

- o 70% of college students admit to engaging in unplanned sexual activity primarily as a result of drinking or to having sex they wouldn't have had if they had been sober.
- o At least 1 out of 5 college students abandons safer sex practices when they're drunk, even if they do protect themselves when they're sober.
- o Heavy drinkers consistently have lower grades.
- o One night of heavy drinking can impair your ability to think abstractly and grasp difficult concepts for as long as a month.

\*Content adapted from information found at [Foundation for a DrugFreeWorld.org](http://Foundation for a DrugFreeWorld.org) and [Delgado CC Drug and Alcohol Prevention Program](http://Delgado CC Drug and Alcohol Prevention Program)\*

## What is Alcohol Poisoning

When a person drinks a large amount of alcohol over a short period of time, his/her blood alcohol level becomes so high that it is considered toxic (poisonous). High levels of alcohol in the bloodstream cause areas of the brain controlling basic life-support functions—such as breathing, heart rate, and temperature control—begin to shut down.

There are 4 signs of alcohol poisoning. If an individual sees any one of these signs, 911 should be called immediately.

- Cold, clammy, pale or bluish skin
- Unconscious or unable to be roused
- Puking repeatedly
- Slow or irregular breathing - less than 8 breaths per minute, more than 10 seconds between breaths

### What do you do?

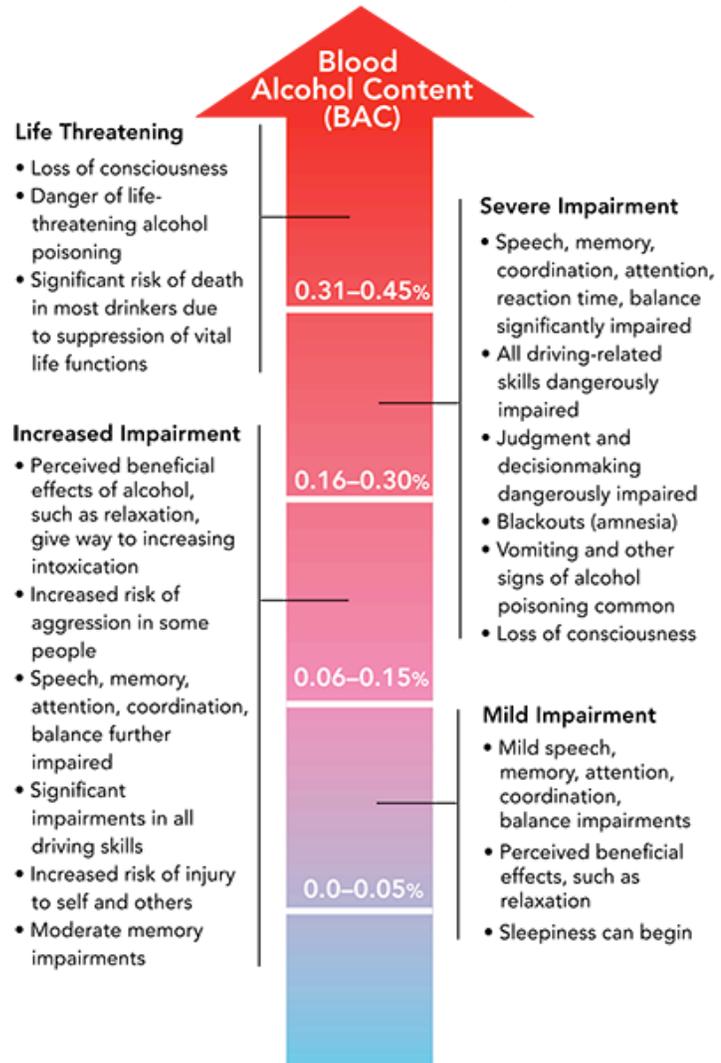
- o **Call 911 immediately.**
- o **Do not let them "sleep it off".** Even though the person may have stopped drinking, alcohol continues to be released into the bloodstream and alcohol levels continue to rise. If left alone, the person's symptoms could get worse.
- o **Do not try to make the person vomit.** Someone who is very drunk has an impaired gag reflex and may choke on their vomit or accidentally inhale vomit into their lungs.
- o **Turn the person on their side or help them sit up** to prevent choking while vomiting.
- o **Stay calm and be prepared** to give pertinent information to emergency personnel the kind and amount of alcohol the person drank and when

### What Happens If I Don't Do Anything?

If someone with alcohol poisoning is left untreated, he or she can:

- choke his or her own vomit
- have breathing that slows, becomes irregular, or stops
- have a heart that beats irregularly or stops
- suffer from hypothermia (low body temperature)
- develop seizures
- suffer from severe dehydration
- die

## As BAC Increases, So Does Impairment



Even if the person lives, an alcohol overdose can cause irreversible brain damage.

### ***Not Sure? Call 911.***

Do not wait for someone to have all the symptoms. If you suspect or are not sure:

- o **Just Call 911.** Let the medical professionals make the educated decision.
- o **Serious medical repercussions or death** are obviously worse than a hospital bill.

### **BLACK OUTS**

A blackout is a loss of memory caused by excessive alcohol intake or drug use. These substances cause disruption to the ability of the brain to form long-term memories. The loss of memory can be fragmentary or complete. It does not damage previous long-term memories. The occurrence of this type of memory loss is usually associated with a rapid rise in blood alcohol levels.



This amnesia caused by alcohol and other substances can lead to all sorts of problems. The individual may feel troubled because they are unable to remember their actions the night before. They may even wake up with a complete stranger in the bed beside them. There are also many instances of people committing criminal acts during these lost hours. It is hard for the individual to defend their actions if they can't remember them.

#### ***How can I prevent a blackout?***

- Drinking within safe limits. This means two drinks per day for men and one drink per day for women.
  - o Drink slowly. Drinking quickly leads to a rapid rise in blood alcohol content (BAC) increasing the chances of memory loss.
- Never drink on an empty stomach.
- Avoid **chugging** or **gulping** alcoholic beverages.
- **Eat a meal** before you begin drinking.

#### ***Types of Blackouts***

True blackout:

- No details are remembered
- People tend to fall asleep before it's over
- Conversations and behaviors are only stored for 2 minutes or less
- Memory is intact for 2 minutes or less

Partial blackouts (brown-out)

- More common than full blackouts
- Partial blockade of memory function
- Missing information but some memory recall

## HANG OVERS

Hangovers are most associated with alcohol but can occur with other types of drugs. Many social drinkers will experience the occasional hangover after a special occasion. Overindulgence in alcohol is never recommended, but so long as it does not occur too frequently there are usually no long-term health consequences. Hangovers are the body's withdrawal symptoms from alcohol use and the body's reaction to the toxicity of alcohol. The severity of symptoms varies according to the individual and the quantity of alcohol consumed.

### Symptoms may include

- Diarrhea
- Body aches
- Impaired thinking and inability to concentrate
- Irritability and moodiness
- Lack of energy
- Nausea and Vomiting



- Loss of appetite
- Headaches
- Dizzy spells
- Sensitivity to light or sound
- Excessive thirst
- Body tremors
- Anxiety
- Depression

There are many myths about and many different approaches after, but the only safe way to prevent a hangover is to drink in moderation:

how to prevent or alleviate hangovers, to relieve the effects of "the morning

- Eat a good dinner and continue to snack throughout the night.
- Alternate one alcoholic drink with one non-alcoholic drink. (Water is a GREAT choice)
- Avoid drinking games or shots. Drinking a large amount of alcohol in a short amount of time is the most likely way to become dangerously intoxicated.

### Here are some of the things that *WON'T* help a hangover:

- Simply drinking more alcohol in your body the next day only makes the effects of alcohol intoxication last longer.
- Having caffeine while drinking will not counteract the intoxication of alcohol; you simply get a more alert drunk person. Excessive caffeine will continue to lower your blood sugar and dehydrate you even more than alcohol alone.
- Hangovers are not helped by cold showers.
- The stomach is already irritated enough to cause vomiting so drinking more water will not help someone who is throwing up -- it's going to come back up. Any liquid will cause a spasm reaction and more vomiting.
- Tylenol(Acetaminophen) may help with a headache but it will only make the liver work harder to process the alcohol and the additional Tylenol and may become deadly.

**Here are some things that MIGHT help a hangover:**

- Hydrate, Hydrate, HYDRATE!! Drink plenty of water and juice. Some individuals swear by coconut water because it is more flavorful which is helpful for people who have a hard time getting water down when they are hungover. This adds potassium and natural sugar which are key nutrients to feeling better.
- Eat a healthy meal. The drop in blood sugar caused by the processing of alcohol by the liver can contribute to headaches.
- An over-the-counter antacid (Tums, Pepto Bismol or Maalox) may relieve some of the symptoms of an upset stomach.
- Eat complex carbohydrates like breads, cereals or pasta because the simple sugars from soft drinks and candy get used up quickly

Are you concern about the role of alcohol or drugs in your life? A simple self-test can help you determine if you or someone you know needs to find out more about alcoholism or drug addiction.

Am I an alcoholic? <https://ncadd.org/learn-about-alcohol/alcohol-abuse-self-test>

Am I drug addicted? <https://ncadd.org/learn-about-drugs/drug-abuse-self-test>

Refer to Emergency and Counseling Information page for counseling and referral information.  
(need link)