



ABC

Alcohol Brief Counseling

Alcohol Education Module (AEM)

**Air Force
Alcohol and Drug Abuse
Prevention and
Treatment Tier II**



October 2007

CULTURE OF RESPONSIBLE CHOICES

Do You Know

...it's your choice whether you drink...or not?

We realize that no one makes decisions for you – except you. The choice of whether or not to drink is yours and yours alone. Of course we also realize that most decisions usually result in some type of impact on your life, either positive or negative, so let's talk about the facts. As a member of our society you know that drinking under the age of 21 is a violation of the law. Not only does it carry a severe penalty in the civilian world, but in the Air Force world as well.

Speaking of the Air Force, what is the Air Force's view on the use of alcohol? The Air Force doesn't want your use of alcohol to interfere with your job, your personal life, your interpersonal relationships, or in any way endanger your life or the life of someone else. If it becomes apparent that alcohol is creating one of these situations, you will be offered help to put you back on track.

A good place to start is in knowing what the civilian laws, Air Force policy and local base policies are in regard to proper use of alcohol. You should do your very best not to allow alcohol to have a negative impact on your job, life or career in the Air Force. Also, any use of illicit drugs is incompatible with Air Force standards and will automatically place your continued service in jeopardy. Once again, it's your decision...it's your choice.

For more specific information on Air Force Policy refer to AFI 44-121. The following is an excerpt from this Instruction: "The Air Force policy recognizes that alcohol abuse negatively affects public behavior, duty performance, and/or physical and mental health. The Air Force provides comprehensive clinical assistance to eligible beneficiaries seeking help for an alcohol problem."

Also in AFI 44-121: "The Air Force does not tolerate the illegal or improper use of drugs by Air Force personnel."

Q.

- What are your thoughts about the fairness of the Air Force's policy on alcohol consumption?

It's okay to drink underage if you're in your dorm room on base.

True___ or False___

- How much you drink on your own time is your business as long as you don't come to work still drunk and your use of alcohol doesn't affect how you do your job.

True___ or False___

Alcohol and Violence

- Alcohol availability is closely related to violent assaults.
- Communities and neighborhoods that have more bars and liquor stores per capita experience more assaults.
- Alcohol consistently "emerges as a significant predictor of marital violence."
- Alcohol use is frequently associated with violence between intimate partners. Two-thirds of victims of intimate partner violence reported that alcohol was involved in the incident.

Myth: "Alcohol abuse causes domestic violence."

Fact: Although there is a high correlation between alcohol, or other substance abuse, and battering, it is not a causal relationship. Batterers use drinking as one of many excuses for their violence and as a way to place the responsibility for their violence elsewhere. Stopping the abusers' drinking will not stop the violence. Both battering and substance abuse need to be addressed separately as overlapping yet independent problems.

Alcoholism and child abuse, including incest, seem tightly intertwined as well.

At least one-half of all violent crimes involve alcohol consumption by:

- the perpetrator
- the victim
- or both

In 2002, more than 70,000 students between the ages of 18 and 24 were victims of alcohol-related sexual assault in the U.S.

Rape is never the victim's fault. No one ever asks, wants, or deserves to be raped. Being under the influence of alcohol is never an excuse. If the victim is too drunk to say no, it's still rape. If the perpetrator is too drunk to know what he or she is doing, it's still rape.

While alcohol does not cause violence, it definitely decreases inhibitions in perpetrators and victims, making associated issues far worse.

Do You Know

...what a drink is?

It's important to know what a "drink" is, or more accurately what a "standard drink" is. As you probably know, not everyone uses the same size glass. ☺ It's important to understand how the alcohol you are drinking is affecting your body. In order to do that you must know how much you're drinking.



The bottom line is that each of the "standard" drinks above contains **one-half ounce of pure ethyl alcohol**. Remember, regardless of what type or brand of alcohol you're drinking, it is the amount of alcohol in the drink (1/2 ounce) that makes it a "standard drink."

Q.

Which of the following is a standard drink?

- a. ____ Water glass full of wine
- b. ____ Depends on your tolerance
- c. ____ Any drink that contains ½ ounce of ethyl alcohol
- d. ____ Varies from state to state

Keep in mind that some specialty drinks such as a Long Island Iced Tea or a Martini usually contain more than one shot of liquor. Be sure to ask about how much alcohol is in what you choose to drink so that you can accurately track your alcohol consumption.

Do You Know

...that a man and woman, both the same height and weight, can drink the same amount of alcohol, yet the woman will have a 30% higher blood alcohol concentration (BAC)?

You probably know that your body mass (how tall you are and how much you weigh) determines how much you are affected by alcohol, but did you know that a woman is affected a lot more than a man even when she is the same height and weight? So what is this BAC and what is it all about? Blood Alcohol Concentration is (just like it sounds) the amount of alcohol that you have in your blood. The more you drink and the faster you drink, the higher your BAC will be. For example, each standard drink that the average size man (180 lbs) drinks will increase his BAC by approximately .02 per drink.

Each drink that the average size woman (120 lbs) drinks will increase her BAC by approximately .03 per drink.

Q.

So with that in mind:

- How many standard drinks can the average size (180 lbs) man drink in one hour before he is legally intoxicated? Legal intoxication in most states is .08. Of course legal intoxication for anyone under the age of 21 is any traceable amount of alcohol in the blood at all.

of drinks _____ X _____ (BAC) = _____ (Overall BAC)

- How many standard drinks can the average size woman (120 lbs) drink in one hour before she is legally intoxicated?

of drinks _____ X _____ (BAC) = _____ (Overall BAC)

The following charts illustrate the BAC effects of alcohol on the human body. Keep in mind the differences between men and women. Remember: men = .02 per drink, women = .03 per drink.

Men: B.A.C. Estimation Chart

Weight⇒	100	120	140	160	180	200	220	240	
Drinks ↓									
0	.00	.00	.00	.00	.00	.00	.00	.00	Only Safe Driving Limit
1	.04	.03	.03	.02	.02	.02	.02	.02	Driving Skills Impaired
2	.08	.06	.05	.05	.04	.04	.03	.03	
3	.11	.09	.08	.07	.06	.06	.05	.05	
4	.15	.12	.11	.09	.08	.08	.07	.06	
5	.19	.16	.13	.12	.11	.09	.09	.08	Legally Intoxicated
6	.23	.19	.16	.14	.13	.11	.10	.09	
7	.26	.22	.19	.16	.15	.13	.12	.11	
8	.30	.25	.21	.19	.17	.15	.14	.13	Possible Death
9	.34	.28	.24	.21	.19	.17	.15	.14	
10	.38	.31	.27	.23	.21	.19	.17	.16	

Women: B.A.C. Estimation Chart

Weight⇒	100	120	140	160	180	200	220	240	
Drinks ↓									
0	.00	.00	.00	.00	.00	.00	.00	.00	Only Safe Driving Limit
1	.05	.04	.03	.03	.03	.02	.02	.02	Driving Skills Impaired
2	.09	.08	.07	.06	.05	.05	.04	.04	
3	.14	.11	.10	.09	.08	.07	.06	.06	
4	.18	.15	.13	.11	.10	.09	.08	.08	
5	.23	.19	.16	.14	.13	.11	.10	.09	Legally Intoxicated
6	.27	.23	.19	.17	.15	.14	.12	.11	
7	.32	.27	.23	.20	.18	.16	.14	.13	
8	.36	.30	.26	.23	.20	.18	.17	.15	Possible Death
9	.41	.34	.29	.26	.23	.20	.19	.17	
10	.45	.38	.32	.28	.25	.23	.21	.19	

1 drink equals roughly 1 shot, 1 12oz. beer, or 1 5oz. glass wine.

By the way, in case you're still wondering why a woman the same height and weight as a man is affected more by the same amount of alcohol than the man is, there are two reasons. First, women generally have less water in their body to dilute the alcohol—so the alcohol is stronger and they are affected more; second, women have less of the specific enzyme (enzymes break things down in the body) that the body uses to metabolize alcohol. This increased effect from less alcohol is one of the reasons why women who become alcohol dependent have a 50% greater chance of dying from alcohol disease than alcohol dependent men.

So what is this metabolism thing all about?

Do You Know

...how long it takes your body to process/metabolize each standard drink?

Here's where men and women are the same. We all metabolize (breakdown and dispose of) alcohol at about the same rate regardless of gender, height or weight. **It takes approximately one and a half to two hours to metabolize each standard drink that you consume.** To be on the safe side, and to make it easier to remember, figure it takes two hours for your body to get rid of each drink. Regardless of whether you're male or female, if you drink two drinks, it will take your body four hours to once again become alcohol free. If you drink three drinks, it will take your body six hours to return to an alcohol-free state.

Remember those word problems you hated in 7th grade Algebra class? Well here's one that is a little easier. It demonstrates a skill that anyone who chooses to drink needs to master and use before going out to party or starting to drink.

Q.

It's two o'clock in the morning (0200). You had your last drink at 0130 so it's safe to assume that all of the alcohol you've consumed is now in your bloodstream. (It takes 20 to 30 minutes for all of the alcohol in a drink to enter your bloodstream.) You blow into a breathalyzer and blow a BAC of .10. Wow! That's a lot, right? Well, let's see:

- That's the equivalent of how many drinks in a man's system _____
Hint: .02 per drink
- How many drinks in a woman's system? _____ *Hint: .03 per drink*
- How many hours until the man is alcohol free? _____
Hint: 2 hrs to process each drink
- How many hours until the woman is alcohol free? _____
Hint: 2 hrs to process each drink
- What time the next day will it be for the man before he is alcohol free?

- What time the next day will it be for the woman before she's alcohol free? _____

When is the best time to develop a plan for how much you are going to drink?

- a. ____ Who needs a plan? Just go by how you feel.
 - b. ____ Once you start drinking and get a feel for how you're being affected.
 - c. ____ Before the first drink.
 - d. ____ Varies from drinking situation to drinking situation.
-

Alcohol has “empty” calories

- All calories provide energy but alcohol calories have no added nutritional value
- Calories in typical drinks:

Beer: A typical 12-ounce beer has about 150 calories. Light beer has about 100 calories

Wine: Typically about 100 calories in every 5-ounce glass of red or white table wine or champagne. There are about 225 –calories in a 5-ounce glass of sweet dessert wine.

Hard Liquor/Spirits: All hard liquors – gin, rum, vodka or whiskey contain the same amount of calories—100 per 1.5 ounces. Mixers can add additional calories to drinks.

Nutrition and drinking

1. Excess calories (3500 excess calories = 1 pound gained).
 - a. If you drink two beers (150 calories per beer) every day for a week, these 14 beers will add 2,100 calories to your weekly calorie count. This adds up to **15 pounds of body fat per year**.
 - b. Two glasses (100 calories per 5-ounce glass) of red wine every day will add about **10 pounds of body fat per year**.
2. Drinking can trigger you to eat more and less healthy.
3. Drinking too much can make you less likely to exercise the next day.
4. Calories from alcohol are used by the body before calories from fat.
5. Not eating enough—when 30% or more of your daily calories come from alcohol, you are likely to skip meals and not get adequate nutrition.
6. Alcohol is an irritant to the digestive tract. It increases output of hydrochloric acid which irritates the stomach lining and can produce heartburn, nausea, and ulcers.

Do You Know

...how each drink affects your ability to perform normally?

Now that we know how quickly alcohol can go in (for some of us) and how slowly it leaves the body (for all of us), let's look at what happens in the meantime – while it's still in your body. We've already discovered that if we drink alcohol faster than our body can get rid of it, our BAC will go up. So let's look at the normal responses most men and women have to alcohol at various BAC levels.

BAC	Changes in Feelings and Personality	Physical and Mental Impairments
0.01 – 0.06	Relaxation Sense of Well-being Loss of Inhibition Lowered Alertness	Thought Judgment Coordination Concentration
0.06 – 0.10	Blunted Feelings Disinhibition Extroversion Impaired Sexual Pleasure	Reflexes Reasoning Depth Perception Distance Acuity Peripheral Vision Glare Recovery
0.11 – 0.20	Over-Expression Emotional Swings Angry or Sad Boisterous	Reaction Time Gross Motor Control Staggering Slurred Speech
0.21 – 0.29	Stupor Loss of Understanding Impaired Sensations	Severe Motor Impairment Loss of Consciousness Memory Blackout
0.30 – 0.39	Severe Depression Unconsciousness Death Possible	Bladder Function Shallow Breathing Decreased Heart Rate
= > 0.40	Unconsciousness Death	Shallow Breathing/Respiratory Arrest Decreased Heart Rate/Cardiac Arrest

Do You Know

...that approximately half of all people who reach a BAC of .40 or above die as a result?

FACTOID

The lethal dose for 50% of the population (or LD50) is calculated for all psychoactive drugs including alcohol. The LD50 for alcohol is 0.40 BAC.

Q.

- How many standard drinks would an average male have to drink to reach a BAC of .40? _____

- How many standard drinks for the average female? _____

Do You Know

...why some people can drink a lot more than others and not seem to get as drunk?

It's a little word that affects people in a big way. It's called tolerance. Tolerance affects the way a person seems to respond to greater amounts of alcohol. Even though some people have had a lot to drink, they may seem to still be able to talk clearly without slurring their words, or walk straighter without weaving or stumbling. Does that mean their body gets rid of alcohol faster? That they have a lower BAC? The answer is "No." The body, regardless of tolerance, eliminates alcohol at a steady rate for both men and women. Even though someone with a high tolerance seems less affected, they still have the same BAC as they would if they didn't have a high tolerance. It's a matter of physics; the more alcohol you put in your body, the higher the concentration of alcohol in your body – regardless of your tolerance.

Below are two decisional balance charts on tolerance. The idea is to look at each "condition"; high or low tolerance, and determine what you think the potential benefits are of each compared with the potential risks. Try to list as many factors on both sides as you can. There are no "correct" answers here, but it's good material for discussion with your ADAPT counselor when you return for your follow up appointment.

Q.**High Tolerance****Benefits****Risks**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Low Tolerance**Benefits****Risks**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Here are some things everyone should consider in relation to tolerance:

1. The higher your tolerance, the more alcohol you have to drink to try to get the same buzz that you used to get from a lesser amount of alcohol before you built your tolerance up.
2. Alcohol is hard on your liver and other major body organs. The more you drink; the harder (possibly damaging) it is to your liver and other body systems. Also, by drinking more, it takes your body longer to recuperate or heal itself after each (possibly frequent) drinking session. (see box on the next page for more on this).
3. Some would say having a high tolerance equates to more money spent on alcohol, more potential damage to your liver and other body organs, more potential to get in trouble with the law and the Air Force, and more potential to hurt yourself, strangers and loved ones.

The Ups and Downs of Alcohol

When a person consumes moderate amounts of alcohol slowly, the alcohol produces a mild “up” feeling—some refer to this as a “good buzz”. There is a point during a drinking experience—the point of diminishing returns, which coincides with a BAC no higher than .06—when the buzz will not get better with more alcohol. In fact, drinking more alcohol at this point can lead to more negative feelings such as fatigue. This “up” feeling, followed by a “down” feeling if you drink too much, is known as the Biphasic Response to alcohol.

Do you know

The Myths, Misconceptions and Misgivings about Alcohol?

Myth: "Alcohol affects all people the same."

Fact: Alcohol affects different people in vastly different ways. For example, you may have noticed that some people become aggressive when they drink while others become withdrawn and passive. Additionally, alcohol affects the developing brain (up to age 25) in some alarming ways. For example, the hippocampus, which is the tiny area largely responsible for memory, is 10% smaller in people who drank heavily as adolescents.

Myth: "A blackout is the same as passing out."

Fact: A blackout is a type of amnesia. The person is functioning, but has no recall of events. Passing out is more akin to falling asleep or more accurately going into a semi-comatose state.

Myth: "Beer before liquor, never sicker. Liquor before beer, you're in the clear."

Fact: Since ethyl alcohol is the active ingredient in both liquor and beer, the order in which it is consumed doesn't matter.

Myth: "Alcohol improves sexual performance."

Fact: Heavy alcohol use causes marked decrease in testosterone levels for men (resulting in shrinking testes, reduced face and chest hair, enlarged breasts, and impotence), and irregular menstrual cycles and early menopause in women.

Responsible Drinking

Why do we drink? Typical answers are:

- "I like the taste."
- "It helps me to relax."
- "I like to have a good time at parties."
- "I need a drink after a hard days work."
- "It helps me meet and talk with other people."
- "All my other friends drink."
- "Super Bowl!"

Alcohol is a part of our culture. Most of us drink at special occasions, sporting events, barbeques, etc. Drinking alcohol normally does not lead to any harm. However, there are times when drinking too much or even drinking at all can cause problems.

Facts about alcohol:

- Alcohol is a depressant drug.
- Alcohol can have an adverse reaction when taken with certain medications (check the labels or consult with a doctor if unsure).
- Drinking too much can lead to health or other problems.
- Gender differences:
 - The male body consists of 66% fluids, compared to about 55% for females. As a result, women tend to get drunk faster than men drinking the same amount of alcohol.
 - Men can drink three to four standard drinks per sitting without significant risks to their health. Most women can drink two to three standard drinks per sitting without significant health risks. Drinking more than these recommendations is considered binge drinking.
 - Consistently drinking more than four drinks for men and more than three drinks for women is strongly discouraged.

DON'T...

- Drink and drive. Alcohol affects your mind. It reduces your inhibitions and makes you feel more confident. You are more likely to take risks and act violently. You are less likely to make a sensible decision about whether to drive or not. Alcohol affects your concentration, ability to judge speed, reaction time, vision and awareness, and muscle control, making a drunken driver a serious road hazard.
- Operate heavy machinery, use electrical equipment, or work at heights.
- Drink before sports or other physical activities.
- Binge drink. Binge drinking is dangerous, and your body can only process one standard drink per one and a half to two hours.
- Give into pressure from friends or family to drink, or to drink past your known limits.
- Drink if you are under the age of 21, IT'S THE LAW!

DO...

- Set limits if you are planning to drink, and stick to those limits.
- Take a break. Give your body at least 48 hours after a night of heavy drinking to recover.
- Listen to those close to you who have a concern about your drinking habits.
- Seek help from a doctor or a specialist agency if you are worried about your drinking.
- Make the responsible choice; your life and someone else's life depends on it!

Tips to safe, responsible drinking

If you do decide to drink, here are a few tips to help keep you safe.

1. Show up to the bar or party later to minimize your drinking time, or start off with a non-alcoholic drink.
2. Alternate alcoholic and non-alcoholic drinks.

3. Set your limits, and stick to them. Setting your limits can also include drinking only on special occasions, on weekends, or scheduled events. But remember to stick to your limits.
4. Come up with a plan on getting home; have a non-drinking designated driver or arrange for alternatives methods of getting home safely. It should never be an option to drive after drinking alcohol.

**Remember, it's your choice whether or not you decide to drink,
just do it safely and responsibly.**

Responsible drinking exercise

Q.

Instructions: In the table below, please list the things you like and dislike about drinking and the number and type of drinks associated with those things.

Things I Like about Drinking	#/type of drinks	Negative things that can happen when Drinking	#/type of drinks

You and your friends make plans to go out and celebrate the promotion of a co-worker. The consensus is to go to a club with a few friends, have a few drinks and dance a little. You probably will not be coming back to the base dorms until late that night.

Given the scenario on the previous page, what can you do to ensure safe, responsible drinking? Give at least three (3) specific examples.

1. _____

2. _____

3. _____

Other(s) _____

If your drinking has led to negative consequences, what could you have done different?
How would you change the decisions you made that night?

Knowledge Assessment: "Do You Still Know?"

Answer the following questions and share your answers with your ADAPT counselor during your follow-up meeting.

Don't forget to bring this Alcohol Education Module (AEM) back with you too.

1. The Air Force has a "zero tolerance" policy regarding illicit drug use.
True___ False___

2. Which of the following is true?
 - a. ___ 10 ounces of wine has the same amount of pure ethyl alcohol as two shots of vodka.
 - b. ___ 24 ounces of beer has the same amount of alcohol as 10 ounces of wine.
 - c. ___ Three shots of liquor contain about one and a half ounces of pure ethyl alcohol.
 - d. ___ All of the above.
 - e. ___ None of the above.

3. Napoleon Dynamite is an average size male and his friend Deb is an average size female. Napoleon drank three beers over the past hour while Deb drank two beers. Which of the following is **not** true?
 - a. ___ Napoleon's peak BAC is about .06.
 - b. ___ Napoleon and Deb have about the same peak BAC level.
 - c. ___ If Napoleon's tolerance is higher, then his BAC will be lower.
 - d. ___ Each beer will increase Deb's BAC more than it will increase Napoleon's BAC.

4. The liver of a 240 pound man will metabolize two beers much more quickly than that of a 110 pound woman.
True___ False___

5. It's okay for the Designated Driver to have one or two drinks throughout the course of an evening.
True___ False___
6. Which of the following is a **true** statement?
- a. ___ An individual with a BAC of .33 has about a 50% chance of dying.
 - b. ___ A driver is not impaired unless his/her BAC is above .08.
 - c. ___ An individual with high tolerance requires more alcohol to achieve a "buzz" than an individual with low tolerance.
 - d. ___ An average size man will be legally intoxicated if he drinks four beers within an hour.
 - e. ___ Both C and D are true.
7. Which of the following is **NOT** true regarding the biphasic response to alcohol?
- a. ___ The "point of diminishing returns" is usually around .06 BAC for most people.
 - b. ___ The more you drink, the better the "buzz."
 - c. ___ Drinking beyond the "point of diminishing returns may cause negative feelings like fatigue.
 - d. ___ Drinking moderate amounts of alcohol slowly will produce the best "buzz."
8. Based on the BAC chart in this handbook, a 140 pound female's driving skills are impaired after having how many drinks?
- a. ___ 1
 - b. ___ 2
 - c. ___ 3
 - d. ___ 4
 - e. ___ 5
9. Which of the following statements is true?
- a. ___ Alcohol affects all people the same.
 - b. ___ Alcohol improves sexual performance.
 - c. ___ A blackout is the same as passing out.
 - d. ___ The order in which you drink alcoholic beverages (i.e. Liquor after beer) makes no difference.

ABC

**Air Force Alcohol and Drug Abuse
Prevention and Treatment Tier II**

