

Dartmouth College Alcohol Handbook



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Dartmouth and Alcohol

While there is a popular misconception that all college students binge drink, national survey statistics show that most college students drink moderately. Dartmouth's own evaluation and research team has found the same general results.

**A majority of Dartmouth students
drink 0-4 drinks when they party
and
There is also a contingency of students who choose not to drink**

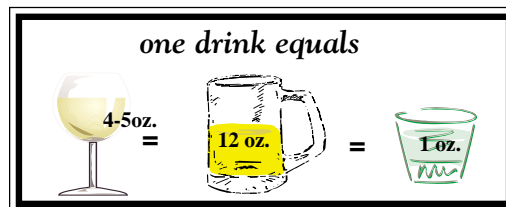
However, there are also some students who drink in high quantities and/or drink frequently. This behavior is often referred to as high-risk use due to quantity, frequency, and subsequent negative consequences. These students could be your friends, classmates, teammates, roommates or housemates. Research at Dartmouth shows that students who drink frequently and heavily experience more problems on a wide continuum, from missing class and hangovers to fights and physical injuries.

This resource is designed to give you an understanding of the properties of alcohol, health risks related to its use, impairment problems, and how to help yourself or someone else, whether you're here or anywhere.

About Alcohol

Alcohol is a drug. Although many people do not think of it as such, alcohol is a powerful mood-altering substance. This drug falls under the category of "depressants." Its effects depend on its dosage.

With alcohol, **dosage is measured** in terms of **standardized drinks**, or "drink equivalents." For the purpose of this discussion, a "drink" is a 12 ounce beer, a 3 ounce glass of fortified wine, a 5 ounce glass of wine, a standard sized mixed drink, one 80 proof mixed drink or one shot of liquor. All of these units contain the same amount of alcohol--one half ounce of pure alcohol.



Alcohol Absorption and Interaction

Tolerance: Tolerance is a measure of the body's physical response to alcohol at any particular blood alcohol level. Tolerance means that a drug becomes less effective with repeated administration, and that higher and higher doses are needed to obtain the desired effect. It is the body's way of adapting to having a foreign substance in the system.

People develop a high tolerance to alcohol when they drink a great deal over an extended period of time (weeks, months, etc.). Genetic factors may also account for any given individual's level of tolerance. While tolerance may seem to some to be a desirable state, it significantly increases the risk of alcoholism and long-term health problems. In addition, a person with high tolerance may not feel or look intoxicated when consuming large amounts of alcohol, but his or her cognitive and psychomotor skills are nevertheless impaired. For example, a heavy drinker could still be lucid at a BAL of 0.25, whereas the average person would be severely impaired. Even still, the heavy drinker would be extremely dangerous if driving.

Impairment: Impairment is any slowing of mental and physical functions beyond the initial relaxation effect of a drink. This refers to the deficits in performance, judgment, memory, and motor skills which occur because of alcohol consumption. Impairment becomes noticeable at blood alcohol levels of 0.05, which can be reached when as few as 2 drinks are consumed in an hour by a 160-pound male, or less than 1 1/2 drinks by a 120-pound female.

The deceptive part about impairment is that, by definition, one cannot recognize one's own diminished capacities. The individual thinks that they are functioning well, when actually they are not. At higher blood alcohol levels, memory is impaired.

Impairment can be a group process. If a group of individuals is drinking heavily, members may reassure one another that they are each functioning well when, in fact, each of them has significant mental and behavioral impairments that would be obvious to an outside observer.

Rate of Consumption: The faster one drinks, the quicker they become intoxicated and the more impaired they become, the faster one drinks the faster the blood alcohol level rises. If a student drinks 1 drink an hour for 3 hours then their peak blood level will be lower than if they drink the same amount all at once. For example, if a person funnels, chugs or consumes multiple rapid shots of liquor, their peak blood level would be higher even though the total alcohol consumed is the same. If the BAL rises too fast, it increases the chances of getting alcohol poisoning (a dangerous medical condition).

The following can influence your impairment on any given day.

Gender: In terms of alcohol effects there are three important biological differences that exist between males and females. They are as follows:

1. Females have more body fat and correspondingly lower amounts of water. Alcohol is not very fat-soluble. Consequently, women will have a higher blood alcohol level than a man of the same body weight after consuming the same amount of alcohol. The woman has proportionately less water in which to dilute the alcohol than the man.

2. A female's menstrual cycle and birth control use also influence blood alcohol levels. During the premenstrual phase of her cycle, or when she is taking birth-control pills, a woman absorbs alcohol more rapidly; thus leading to higher blood alcohol levels.

3. Men have higher levels of the enzyme responsible for alcohol metabolism in their stomachs, which means that up to 25% of the alcohol consumed by men never enters their bloodstream.

Food: The presence and type of food in the system influence the alcohol absorption process. The rate of absorption is based on how quickly the stomach empties its contents into the intestine. The higher the dietary fat content, the more time this emptying process will take. However, don't let that swindle you into thinking that as long as you keep on eating, you can keep on drinking! Food only slows down the absorption of alcohol and once your blood becomes saturated, it doesn't stop alcohol's effects on the body or your behavior.

Body Weight: The effects of alcohol may be influenced by one's body weight. A person weighing 250 pounds is likely to be less impaired than someone consuming the same amount of alcohol and weighing 1/2 as much.

Biological Predisposition: Genetic factors also account for differences in alcohol's effects. People may be more susceptible to the effects of alcohol due to genetic predispositions to alcoholism or other related diseases.

Illnesses: If a person is feeling ill due to any health issues, they will be more sensitive to the effects of alcohol.

Experience: Prior drinking experiences allow the body to adapt to alcohol and thereby increases tolerance.

Mood: Your mood, whether positive or negative (or in-between) influences the effects of alcohol. Stress, fatigue, and depression, when combined with alcohol, can increase one's impairment level.

Strength of Drink: What is in your drink? Sometimes when untrained servers pour alcohol, they pour more than what is considered the correct proportion for a standard drink. Be aware of mixed drinks. Is the drink really two drinks in one glass? Be aware of the mixers used too! Carbonization speeds up the absorption of alcohol.

Other Drugs: If an individual is taking other medications, then it makes medical sense to avoid alcoholic beverages. Other "downers" such as tranquilizers, painkillers, and sleeping pills are dangerous when mixed with other depressants such as alcohol. This can be fatal.

If an individual mixes alcohol with uppers (cocaine, speed, Ritalin), there can be a variety of reactions, with the least dangerous being an "awake" drunk and the most dangerous being an out-of-control, violent and intoxicated person.

If an individual mixes hallucinogens with alcohol, there can be sensory distortions from the hallucinogens in combination with the effects of the alcohol.

Alcohol and marijuana should not be combined. Marijuana suppresses the "gag" reflex that causes one to vomit. If a person experiences alcohol poisoning (overdose of alcohol) and needs to vomit but can't they are in a dangerous medical situation.

Long-Term Health Risks & Health Problems

For the most part, this brochure focuses on the short-term effects of alcohol consumption. However, it is important to note some of the long-term consequences of excessive alcohol use.

Some long term health problems of heavy alcohol consumption (large quantities and high frequency of drinking):

**Alcohol-related Liver Disease, Heart Disease, Cancer,
Pancreatitis, Alcoholism and Depression.**

Please consult a qualified professional for further information about long-term medical problems associated with alcohol use.

Refer to **ALCOHOL: What You Don't Know Can Harm You.**
NIH Publication No. 99-4323. 1999.

Available on the web at:

<http://www.health.org/pubs/qdocs/alcohol/what.htm>

Blood Alcohol Levels and Effects

The following tables are provided to assist you in understanding the effects of varying dosages of alcohol. The first table will help you assess blood alcohol level for males, the second for females. The charts of predictable effects on the following page will help you interpret what a particular blood alcohol level means for inexperienced drinkers.

**Research indicates that at .05,
there is a level of impairment**

DIRECTIONS FOR USING CHART: In order to determine blood alcohol level, use the proper chart (male or female), and find the number of drinks (across the top) and total body weight (in the column on the left). The chart gives the blood alcohol level. (Note: Calculations are for people with a normal body weight for their height, under the influence of no other drug, and neither unusually thin nor obese.)

This table assumes that all drinks are consumed in one hour. If drinking takes place over a longer time period, subtract .02 from the chart for each additional hour. For example, if a person were drinking over a three-hour period, you would subtract .04 from the chart reading to correct for the additional two hours.

Individual effects may vary depending on tolerance and factors that effect absorption rates discussed on the previous pages. Use the table that follows to determine the predictable effects on the average individual's behavior and mental state

Calculation of Estimated Blood Alcohol Concentration (BAC)

Males										
		Number of Drinks								
Average Body Weight (lbs)	1	2	3	4	5	6	7	8	9	10
100	.043	.087	.130	.174	.217	.261	.304	.348	.391	.435
125	.034	.069	.103	.139	.173	.209	.242	.278	.312	.346
150	.029	.058	.087	.116	.145	.174	.203	.232	.261	.290
175	.025	.050	.075	.100	.125	.150	.175	.200	.225	.250
200	.022	.043	.065	.087	.108	.130	.152	.174	.195	.217
225	.019	.039	.058	.078	.097	.117	.136	.156	.175	.195
250	.017	.035	.052	.070	.087	.105	.122	.139	.156	.173

Females										
		Number of Drinks								
Average Body Weight (lbs)	1	2	3	4	5	6	7	8	9	10
100	.050	.101	.152	.203	.253	.304	.355	.406	.456	.507
125	.040	.080	.120	.162	.202	.244	.282	.324	.364	.404
150	.034	.068	.101	.135	.169	.203	.237	.271	.304	.338
175	.029	.058	.087	.117	.146	.175	.204	.233	.262	.292
200	.026	.050	.076	.101	.126	.152	.177	.203	.227	.253
225	.022	.045	.068	.091	.113	.136	.159	.182	.204	.227
250	.020	.041	.061	.082	.101	.122	.142	.162	.182	.202

From THE ENCYCLOPEDIA OF ALCOHOLISM by Glen Evans and Robert O'Brien. Copyright © 1991 by Facts on File and Greenspring, Inc.

Predictable effects of Blood Alcohol on the average, non-tolerant person's behavior & mental state

0.02	Slight mood changes.
0.05-0.06	Impairment starts at .05 Lowered inhibition, impaired judgement, decreased rational decision making ability. (This can be the effects of two STANDARD drinks for an "average" male).
0.08	Legally drunk, deterioration of reaction time and control. Driving is dangerous. In New Hampshire, it is illegal for any driver with a blood alcohol level of .08 or more to operate a motor vehicle.
0.10-0.12	Memory and judgment are markedly impaired; motor skills are markedly im- paired; lack of coordination and balance; recognition of impairment is lost; impotence can occur; increasing belligerence in some. Driving is extremely dangerous.
.15	Impaired balance, movement and coordina- tion. Difficulty standing, walking or talking. Blackouts (periods of amnesia for all or part of drinking episode) occur for some at the .14-.17 level.
.20	Decreased pain and sensation. Erratic emotions. Nausea and vomiting may occur. Risk for asphyxiation on own vomit. (A person who is vomiting should be turned on his/her side so that the vomit doesn't clog air passages).
.30	Semi-conscious. Diminished reflexes.
.40	Loss of consciousness (comatose). Very limited reflexes. Anesthetic effects. Death possible due to respiratory arrest.
.50	Deep coma and death due to anesthesia of nerve centers controlling respiration and heartbeat.
>.50	Half the people who reach this level die.

College Policy on Alcohol

Students are accountable for their own decisions regarding alcohol use. They are also responsible for knowing, understanding and complying with College policies and state and local laws related to alcohol. Please refer to the STUDENT HANDBOOK and the annual Safety and Security report for policies, laws and regulations. You can also contact the Alcohol and Other Drug Education office by emailing *aoded* or calling 650-1427.

Alcohol laws of the State of New Hampshire

The summary of state law below may not be complete, and some of the laws will undoubtedly change. If students have questions concerning applications of the law, they should consult legal counsel. All students are reminded that under New Hampshire Law, it is illegal to:

- * Sell or give away any alcoholic beverage to a person under the age of 21 or to any intoxicated person regardless of age (misdemeanor: up to one year in jail and/or \$2,000 fine);
- * If under 21, falsely represent one's age for the purpose of procuring alcohol (misdemeanor: up to \$500 fine);
- * If under 21, possess any alcoholic beverage (fine of up to \$1,000);
- * If under 21, operate a motor vehicle in which alcoholic beverages are found (suspension of license or right to drive for three months);
- * Operate a motor vehicle while under the influence of alcohol or any controlled drug (fine of up to \$1,000 and suspension of license or right to drive for 90 days to two years);
- * If operating a motor vehicle, be found with .08 (zero tolerance if under 21) or more alcohol in one's blood (fine of up to \$1,000 and suspension of license or right to drive for up to two years);
- * As of January 1, 2003: a person under the age of 21 is guilty of a violation if he or she is intoxicated due to consumption of an alcoholic beverage.

In New Hampshire, the presentation of a false identification by a minor in order to secure alcohol is not, by itself, a defense to a charge of furnishing alcohol to a minor; the under-age person must represent in writing that he/she is of legal age, must support that statement with a reliable means of identification, and must appear to a reasonable person to be over 21, and the server must reasonably believe that the person is in fact 21 or older.

State law also requires a state-issued permit for the sale of alcoholic beverages. Charging admission at the door of an event at which alcohol is served may be considered by State officials to be a "sale" requiring a permit.

Self Assessment

Check off the statements that are true for you.

- When you're in a social situation and no alcohol is provided, you feel uncomfortable
- Drinking has caused you to be late for class or work
- You sometimes have a drink to help you fall asleep
- When you drink, you often wind up drunk
- You use alcohol as an escape when you're angry, disappointed, or otherwise upset
- You turn to certain "drinking buddies" or a specific environment when you drink
- You crave a drink at a specific time every day, like after class or after work
- When you're out with friends, you sneak a few drinks without their knowledge
- You've promised yourself to slow down or stop drinking, but you can only keep the promise for a few days or weeks at a time
- Your family and friends have expressed concern about your drinking
- It is difficult for you to stop drinking after you have one or two drinks
- You eat very little or irregularly when you are drinking
- The day after drinking, you have trouble remembering what you did while you were under the influence
- You sometimes feel guilty about your drinking
- Even after your friends say they've had enough alcohol, you want to continue drinking
- You get irritated when your family and friends want to discuss your drinking
- Your performance at school or work has suffered because of your drinking
- You've done something sexual that you later regretted while you were under the influence of alcohol
- A significant part of your day is spent obtaining, consuming, recovering from the effects of alcohol
- You have been arrested for intoxicated behavior, driving under the influence or had an alcohol policy violation
- You often have a hangover or headache after you've been drinking
- Have ever driven while impaired or been a passenger with a driver who has been drinking
- You have gotten into an argument or a fistfight while you were drinking
- You have lost a friend or created a rift with a family member based on their feelings about your drinking
- When you're sober, you regret things you said or did while you were drinking
- You have tried switching from one kind of alcohol to another in an effort to cut down on, or remain in control of, your drinking or to try to avoid getting drunk
- Your drinking has led to financial difficulty
- You sometimes stay drunk for several days
- You have neglected your classes, job, family, or other obligations for two or more days in a row because you were drinking
- Have a family history of alcohol problems

The check off list are symptoms and behaviors related to drinking; "red flags" indicating that you have seriously overindulged in alcohol.

If you checked three or more you may have a problem with alcohol or are at risk of developing one. Examine your use honestly.

If you checked 5 or more you probably are having problems with alcohol. If you are concerned about your own use or a friend who has problems with alcohol, it is recommended that you seek assistance. You can contact Dick's House at 650-1442 for a confidential appointment.

Suggestions for Drinkers Who Want to Avoid Impairment Problems

- Say, “No thank you,” if you *do not* want to drink. If you would feel more comfortable with *something* in your hand, drink a non-alcoholic beverage such as ginger ale or carry an alcoholic drink but *don’t* consume it.
- Count the number of drinks you consume and *pace* your drinking.
- **EAT!** Food slows down the absorption of alcohol.
- Avoid drinking games. Many of these promote the abuse of alcohol as well as the abuse of one’s body.
- Dilute mixed drinks, or add ice cubes, and drink slowly.
- Avoid carbonated mixers, they accelerate absorption.
- Stop drinking well before the end of a social event in order to allow time for your body to metabolize the alcohol you have consumed. In males, the liver can process approximately one drink per hour. In an average female, this rate is less than 1/2 drink per hour.
- Alcohol mixed with other drugs, prescription or non-prescription, can be extremely hazardous and in some cases lethal.
- Dress warmly in cold weather. Because alcohol may make you feel warm, there is an increased risk of frostbite and hypothermia from exposure to the elements after drinking.
- **Never drink and drive, or drive with someone who has been drinking, even if they have been drinking less than you and appear “okay.”** (People with tolerance to alcohol may appear “fine,” but may be too drunk to navigate the roads and other vehicles.)

Points to consider

- Anyone who uses alcohol can experience impairment.
- People can move from impairment into abusive use of alcohol. With continued abusive use and ignoring the signs of negative consequences, abuse can progress into addiction.
- While genetic factors and tolerance put one at higher risk, anyone can develop alcoholism.
- It’s not whether or not you will be (or are) an alcoholic, it’s your drinking behavior and its consequences that indicate where you are on the continuum between non-problem drinker and alcoholic. If you continue to drink in spite of negative consequences, you have a problem with drinking.

EMERGENCIES

The table of predictable effects described some symptoms of alcohol overdose. If you suspect that someone needs medical attention, it is important that you call for help immediately. You should call the Department of Safety and Security (646-2234), the Emergency Department at Dartmouth Hitchcock Medical Center (650-7000), or an ambulance (911).

Generally speaking, medical attention is warranted whenever there is a serious injury or illness related to alcohol consumption. In the absence of injury or illness, some individuals may need medical attention for intoxication at blood alcohol levels as low as 0.05%. How alcohol affects the individual will largely depend on the drinker's tolerance level; a heavy drinker may not be at medical risk at 0.05, but a novice drinker could be at risk of impairment problems at that level.

The following situations are indicators that the individual needs **IMMEDIATE** professional evaluation or assistance:

- is unable to stand or walk, or can do so only with difficulty.
- is only poorly aware of his/her surroundings
- has difficulty breathing (8 breaths a minute).
- is passed out or in a stupor.
- has a fever or chills.
- has difficulty speaking.
- has an injury.
- is paranoid, confused, or disoriented.
- is violent or threatening.
- appears to be a risk to himself/herself or others.

If you are unsure as to whether an individual needs professional assistance, err on the side of caution and call for help. With respect to this issue, please note that the Student Alcohol Policy reads as follows:

The health and safety of the Dartmouth community are the primary concerns of the College. As members of the community, students are expected to contact Safety and Security when they believe that assistance for an intoxicated/impaired student is needed. The Department of Safety and Security (DOSS) will assist those individuals who abuse alcohol by providing or facilitating transport to emergency facilities at Dick's House (the College health service), the hospital, or by taking other protective measures.

In case of medical emergency, students should call 911 for assistance by local police, fire safety or medical professionals. Students and organizations that seek assistance from these sources will not be subject to College disciplinary action for either: (1) being the intoxicated person; or (2) having provided that person with alcohol. This guideline does not excuse or protect those individuals or organizations whose behavior flagrantly or repeatedly violates the College alcohol policy. Because of the College's concern about health and safety, names of intoxicated students will be recorded by Safety and Security to enable any follow-up that may be deemed necessary to ensure the student's well-being. Information about the time and location of contact will also be recorded to enable any necessary follow-up to address issues of health and safety, vandalism, poor event management, or chronic abuse of the alcohol policy.

WHERE TO GET HELP AT DARTMOUTH and beyond.

There are a number of offices that can provide confidential information and consultation regarding alcohol issues. For those individuals who are interested in education about—or help with—alcohol/other drug related issues; the following is a list of resources both on and off campus:

- ❖ Safety and Security—offers assistance for alcohol and other emergencies and assists with concerns of safety (646-2234); Emergencies: 646-3333 or 911 (Hanover police and ambulance)
- ❖ Director of Health Resources—offers information about treatment and recovery (650-1414)
- ❖ Coordinator of Alcohol and Other Drug Education—offers prevention and education workshops, sessions, materials, and resources (650-1427)
- ❖ Sexual Assault Awareness Coordinator—offers resources and help around sexual assault education, assistance, and care (650-1414)
- ❖ Office of Counseling and Human Development—offers assessment, counseling and mental health and substance abuse treatment (650-1442)
- ❖ Inpatient Program—offers inpatient care for students experiencing alcohol poisoning and other health related issues (650-1440)
- ❖ Outpatient Clinic—offers medical care and attention (650-1401)
- ❖ Faculty/Employee Assistance Program—offers alcohol and other drug abuse and mental health resources (650-1165)
- ❖ Upperclass Deans Office—offers assistance and referral support for upper-class students with academic, personal, social, and psychological concerns (646-2243)
- ❖ First Year Deans Office—offers assistance and referral support for first-year students with academic, personal, social, and psychological concerns (646-2681)

BEYOND THE DARTMOUTH CAMPUS:

- ❖ Alcoholic's Anonymous (448-6655) Alcoholics Anonymous stresses abstinence and the achievement of sobriety with the help of the therapeutic framework of the Twelve Step process
- ❖ Al-Anon (802-295-7611) Provides support for spouses, children, other family members, and friends of alcoholics
- ❖ Headrest -a 24-hour hotline (448-4000) services the Upper Valley. It offers crisis counseling over the phone and can refer individuals to medical, counseling, and legal resources
- ❖ National Association for Children of Alcoholics (NACOA) 301-468-0985 support for children of alcoholics
- ❖ Narcotics Anonymous (802-773-5575) Support group for recovering drug addicts.
- ❖ National Clearing House for AOD Information (800-729-6686) Educational resources and information (<http://www.health.org>)
- ❖ Quitting Time (802-25-1311) an intensive, evening outpatient alcohol & other drug treatment program

This brochure is intended as a general guide. While every effort has been made to insure the accuracy of the medical and legal information included, the reader should consult qualified professionals for answers to specific questions and should be aware that parts of the information may become inaccurate in light of new medical research and periodic changes in the law.