











This publication was produced under U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA) Cooperative Agreement DTNH22-02-H-05108 with The BACCHUS Network.

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### Introduction

mpaired driving is a serious problem in the United States, killing thousands every year. Significant reductions in alcohol-related traffic deaths occurred in the 1980s to mid 1990s. Although subsequent progress has been slow, each year more than 16,000 lives are lost in alcohol-related crashes. In an effort to improve progress, the National Highway Traffic Safety Administration (NHTSA) has been focusing on top priority initiatives to help reduce driving while impaired. Specifically, NHTSA is encouraging implementation of high-visibility enforcement, support for prosecutors and driving while under the influence (DWI) courts, screening and brief intervention, and primary seat belt use laws. This toolkit focuses on screening and brief intervention as a strategy that can aid in addressing impaired driving.

Impaired driving is often a symptom of a larger problem: alcohol misuse. There is compelling evidence, detailed in scientific and medical literature, that screening and brief intervention is effective in reducing drinking and subsequent impaired driving behaviors among problem drinkers.

NHTSA entered a cooperative agreement with The BACCHUS Network to develop a toolkit specifically for colleges and universities. The BACCHUS Network designed the toolkit to assist college and universities to implement programs for conducting screening and brief intervention.

The BACCHUS Network, a nonprofit charitable organization, is a university- and community-based network focusing on comprehensive health and safety initiatives. It is the mission of the organization to actively promote student and young-adult-based campus and community-wide leadership on healthy and safe lifestyle decisions concerning alcohol abuse, tobacco use, illegal drug use, unhealthy sexual practices, and other high-risk behaviors. For more information on The BACCHUS Network, please see Appendix H.









### What Is Screening and Brief Intervention?

Screening and Brief Intervention (SBI) is a structured set of questions and a brief follow-up discussion between a person and a counselor or health care provider designed to address alcohol use problems.

A screening instrument is used to ask people (after they agree to be questioned) how much and how often they drink. Counselors and health care providers (and others trained in SBI techniques) evaluate answers to see if they indicate an alcohol misuse or abuse problem. If the subject screens positively, the counselor or health professional can share the screening results and their significance with the subject.

Brief interventions are short, 10- to 15-minute motivational interviews that encourage people to create a plan of action, from reducing their drinking to seeking substance abuse treatment, based on their willingness to change their drinking behavior.

Screening and brief intervention:

- Is designed for use by counselors and health care professionals who do not specialize in addiction treatment;
- Is a self-centered methodology that uses motivational techniques based on the person's readiness to change; and
- Gives feedback and recommendations respectfully, without judgment or accusations, in the form of useful information.

### Supporting Research

The National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2002) has identified motivational interviewing and cognitive behavior

intervention strategies as showing clear evidence of effectiveness with college students. Fiellin, Carrington, and O'Connor (2000) and Wilk, Jensen, and Havighurst (1997) are just two examples of research that support the use of alcohol screening and brief intervention. As this has shown SBI's effectiveness in the medical setting, other settings such as schools and the workplace are being explored.

### Why Promote SBI on College and University Campuses

The effects of alcohol abuse on college students have been well documented. It is estimated that 1,700 college students between the age 18 and 24 die each year from alcohol-related unintentional injuries, including motor vehicle crashes. Additionally, nearly 600,000 students are unintentionally injured under the influence of alcohol (Hingson et al., 2005). High-risk drinking behaviors also contribute to negative academic consequences (Engs et al., 1996; Presley et al., 1996a, 1996b; Wechsler et al., 2002), alcohol related health problems (Hingson et al., 2002) and students' suicide attempts (Presley et al., 1998).

The BACCHUS Network and the National Highway Traffic Safety Administration (NHTSA) promote SBI as a tool for reducing high-risk drinking and subsequent impaired driving behaviors by college students. While the majority of college students choose not to drink and drive, over two million students between 18 and 24 drove under the influence of alcohol last year (Hingson et al., 2002). SBI can be used as part of a comprehensive, year-round, campus impaired-driving prevention program. There is compelling evidence in scientific and medical literature that SBI is effective in reducing drinking among problem drinkers and in motivating dependent drinkers to seek treatment (Wilk et al., 1997).

#### What Is in This Kit

The SBI Kit for College and University Campuses contains the following items:

- Instructions for conducting a brief screening;
- The AUDIT instrument for screening;
- Handouts on the effects of alcohol, lower-risk drinking strategies and recommended drinking guidelines;
- Kit evaluation form to provide feedback for future improvement; and
- Flyer to advertise free screening events.

### **SBI Tool for Campuses**

The Alcohol Use Disorders Identification Test (AUDIT) was developed by the World Health Organization to identify people whose alcohol consumption has become hazardous or harmful. It has been evaluated on many different populations including college students (Walters and Baer, 2006). The AUDIT contains 10 questions scored from 0 to 4 points (maximum score = 40): three questions on the amount and frequency of drinking, three questions regarding alcohol dependence, and four questions on alcohol-related problem behaviors.

The AUDIT can be used to identify people who might be having difficulties with their drinking and/or might benefit from a brief intervention or referral. It is also an educational tool to help students learn about their drinking and provides an opportunity to introduce them to strategies to lower their risk of negative consequences from consuming alcohol.

The AUDIT is not a diagnostic instrument. No formal diagnosis of alcohol dependency can be concluded from the questionnaire. Walters and Baer (2006) recommend using a score of 6 or more as an indicator of high-risk drinking and 8 or more as an indicator of hazardous or harmful alcohol consumption with college students. See Appendix A for a copy of the AUDIT and scoring instructions. Additionally, in this population, anonymous online screening may be a helpful way for students to begin to examine their drinking. Join Together, a project of the Boston University School of Public Health, offers a free online screening tool (www.alcoholscreening.org) which can be customized and incorporated into your institution's Web site.









### **Conducting SBI**

Screening tests are a first-line defense in the prevention of disease. Screening for alcohol problems can take place in a wide variety of populations and settings. Research shows that a number of good screening instruments are available that can be tailored to specific audiences and needs. Detecting alcohol abuse and dependence early in the course of disease enables people to get the help they need through a brief intervention or by a referral to treatment. (NIAAA, 2005)

#### Who Can Conduct an SBI

On college campuses, screening and brief interventions can be conducted by any number of staff.

- As primary care givers, nurses and doctors can include screening and brief interventions as part of each patient's visit to the student health center.
- Counseling center staff can use the screening tool during intake sessions with students.
- Residence Life Department staff will find the SBI process helpful when dealing with residents who experience trouble adjusting to college life or who violate campus alcohol policies.
- Judicial officers or peer courts can require a student to complete the screening process as part of campus sanctions for alcohol policy violations.
- Academic advisors and faculty who meet with students who are having difficulty in their classes may use the SBI toolkit to help students assess whether alcohol abuse is interfering with their academic success.
- The SBI toolkit can be incorporated into wellness and health risk appraisal programs conducted by wellness, fitness, or recreation center staff.

Athletic coaches and trainers can use the SBI toolkit to discuss alcohol issues when a student athlete violates campus and athletic policies or simply does not achieve their full athletic potential.

#### When to Conduct an SBI

Ideally, screening can be used as a standard procedure for all visits to college health and counseling centers. Screening can also be done as a special event, such as National Alcohol Screening Day, which takes place in early April each year. Students can also be referred for screening as a result of an alcohol-related policy violation. First-year students can be screened as they enter college to encourage non-drinkers to continue their abstinence until they are legally of age and to encourage students who have initiated alcohol use prior to arriving to carefully consider the consequences of alcohol consumption. All screening activities should take place in a confidential setting and results should be treated as confidential information.

It is important to conduct an SBI is when students begins to talk about negative events they are experiencing that may be related to alcohol abuse. A student may talk to a campus professional or another student about how the student is missing classes, failing tests, got into a fight, is feeling depressed, is in trouble with the law or the campus administration. Relationship problems with roommates, friends, or significant others can indicate an alcohol problem. Students may visit the health center with injuries from falls or fights or with health problems that may indicate that students are not properly caring for their health.

Before you offer SBI, be sure to review all material in this kit. Create a list of campus and community resources for students who are experiencing alcohol abuse issues. If your campus does not offer substance abuse

counseling, contact local substance abuse treatment agencies to find out what they offer and how students can access their services. Include local mutual help groups, such as Alcoholics Anonymous, in the list of resources. Check your campus confidentiality procedures to see if students need to fill out additional forms before they are screened.

### SBI Steps

The SBI process is a non-judgmental, non-threatening approach that provides feedback in a respectful manner. It is not your job to change the students; it is the students' job to decide if and how they will change. Your job is to ask questions and express concerns you may have in a nonjudgmental manner. Here are steps you can follow:

- 1. Administer the AUDIT: If it is during a formal meeting or appointment, have the student complete the AUDIT screening tool, preferably before meeting with the counselor or health care professional. The questionnaire takes about two minutes to complete. If the issue of alcohol use surfaced during a more casual conversation, ask the students if they would be willing to complete a short questionnaire and talk with you about the good and not-so-good aspects of their drinking.
- 2. Invite the student to discuss the results: Thank the student for filling out the AUDIT. Ask the student's permission to discuss the results of the questionnaire. Clearly explain your level of confidentiality, what information will be reported or recorded, and any limitations to confidentiality.
- 3. Score the AUDIT: Scoring the AUDIT takes about a minute. Each of the 10 questions receives a score of 0 to 4. The maximum possible score is 40. For college students, a score of 6 or more is an indicator of risky

- drinking while a score of 8 or more is a strong indication of hazardous or harmful drinking in adult populations (Walters and Baer, 2006). See Appendix A for more scoring information.
- 4. Discuss Scoring: If the AUDIT results indicate heavy drinking or drinking-related problems, discuss your concerns with the student and ask him/her about their own concerns. Walters and Baer (2006) suggest using the elicit-provide-elicit (E-P-E) format:

Elicit readiness and interest: "Tell me what you enjoy about drinking," and "What are some of the not-so-good things about drinking?"

Provide clear information or feedback: "The questionnaire you completed suggests that you may be putting yourself at risk for problems. Would it be all right for me to provide you with some information about alcohol and its effects?"

Elicit the student's interpretation or reaction: "What do you think you'd like to do about this? On a scale of 1 to 10, with 1 being not ready and 10 being very ready, how ready are you to make a change?"

It is not unusual for students to resist talking about their alcohol use or discussing how they might change their use. In SBI, it is important to roll with the resistance and not directly confront the student. "Ultimately, it is your decision whether or not to make changes to your drinking. I can share with you some ideas to decrease the not-so-good outcomes of drinking."

5. Develop a Plan: If the student indicates interest in making a change, provide options for lower-risk alcohol consumption and discuss a plan of action. You can mention that the dietary guidelines for Americans define moderate drinking as no more than one drink







a day for most women and no more than two drinks a day for most men (USDA, 2000). If the student is under 21, discuss the legal consequences of consuming alcohol underage. You can put the emphasis on the student's personal choice by using statements and questions such as, "Some students have found these suggestions helpful. Which of these do you think might work for you?"

If the student doesn't indicate a desire to change, use a reflection statement to elicit further information and discussion with the student: "Sounds like you don't feel the need to make any changes to your drinking right now. What would have to happen for you to consider making a change? If you were to decide to make a change, what strategies do you think you would try?" If the student chooses not to talk about change, provide him or her with a resource sheet and ask if you can follow up with them in a week or two.

6. Schedule a Follow-Up: Summarize for the student what has been discussed during the session and encourage him or her to review the handouts (see Appendices C, D, and E) you have provided. Let the student know that you and others are available to provide assistance and support. Tell the student that you want to follow up either in person or by phone and set a specific time to do so. When you do follow up, be sure to support the student's efforts to cut down or abstain and offer additional support.

### When to Make a Referral

The AUDIT is a screening tool that can be used to educate students about the effects of their drinking. It is not designed to be a diagnostic tool and cannot determine alcohol dependence. Each student is unique and each screening

session will be different. Counselors and health providers are encouraged to rely on their clinical judgment and expertise when deciding to refer a student for further evaluation. Babor and Higgins-Biddle (2001a, 2001b) recommend considering a referral for further evaluation and treatment if any of the following are present:

- The student scores 20 or more on the AUDIT screening test
- The student scores below 20 on the AUDIT but they are not appropriate for brief intervention because:
  - The student is strongly suspected of having an alcohol dependence syndrome;
  - The student has a prior history of alcohol or drug dependence or liver damage;
  - The student has prior or current serious mental illness; or
  - The student has failed to achieve his or her goals despite counseling.

### Providing Feedback

The BACCHUS Network is interested in your comments and suggestions on this tool kit. Your feedback will be used to improve the kit and our services to college and university campuses. Please complete the short feedback form in Appendix C and fax it to 303-871-0907 or send it to:

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Your responses are greatly appreciated.

### References

Babor, T.F., and Higgins, J.C. *The alcohol use disorders identification test: Guidelines for use in primary care. Second edition.* World Health Organization, 2001a.

Babor, T.F., and Higgins, J.C. *Brief intervention for hazardous and harmful drinking: A manual for use in primary care.* World Health Organization, 2001b.

Engs, R.C., Diebold, B.A., and Hansen, D.J. The drinking patterns and problems of a national sample of college students, 1994. *Journal of Alcohol and Drug Education* 41(3):13-33, 1996.

Fiellin, D.A., Reid, M.C., and O'Connor, P.G., *Screening for Alcohol Problems in Primary Care: A Systematic Review*, Archives of Internal Medicine, 2000; Volume 160, (13) pp. 1977-1989.

Hingson, R.W., Heeren, T., Zakocs, R.C., Kopstein A., and Wechsler H. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24. *Journal of Studies on Alcohol* 63(2):136-144, 2002.

Hingson, R., et al. Magnitude of Alcohol-Related Mortality and Morbidity Among U.S. College Students Ages 18-24: Changes from 1998 to 2001. Annual Review of Public Health, vol. 26, 259-79; 2005

Knight, J.R., Wechsler, H., Kuo, M., Seibring, M., Weitzman, E.R., and Schuckit, M. Alcohol abuse and dependence among U.S. college students. *Journal of Studies on Alcohol*, 2002, in press.

Kokotailo, P.K., Gangnon, R., Brown, D., Mundt, M., and Fleming, M. Validity of the alcohol use disorders identification test in college students. *Alcoholism: Clinical and Experimental Research*, 28, 914 –920, 2004.

National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health, U.S. Department of health & Human Services. *Alcohol Alert* 65. April 2005. Available at http://pubs.niaaa.nih.gov/publications/aa65/AA65.htm. Accessed 2006.

NIAAA. Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism. *A Call to Action: Changing the Culture of Drinking at U.S. Colleges* (NIH Publication No. 02-5010). National Institute on Alcohol Abuse and Alcoholism, 2002.

Presley, C.A., Meilman, P.W., and Cashin, J.R. Alcohol and Drugs





on American College Campuses: Use, Consequences, and Perceptions of the Campus Environment, Vol. IV: 1992–1994. Carbondale, IL: Core Institute, Southern Illinois University, 1996a.

Presley, C.A., Meilman, P.W., Cashin, J.R., and Lyerla, R. *Alcohol and Drugs on American College Campuses: Use, Consequences, and Perceptions of the Campus Environment, Vol. III: 1991–1993.*Carbondale, IL: Core Institute, Southern Illinois University, 1996b.

Presley, C.A., Leichliter, M.A., and Meilman, P.W. *Alcohol and Drugs on American College Campuses: A Report to College Presidents: Third in a Series*, 1995, 1996, 1997. Carbondale, IL: Core Institute, Southern Illinois University, 1998.

NHTSA, 2005. Toward a comprehensive strategy to stop impaired driving: alcohol screening and brief intervention overview. DOT HS 809 935, September 2005. National Highway Traffic Safety Administration, Washington, D.C.

U.S. Department of Agriculture/U.S. Department of Health and Human Services (2000). Home and garden bulletin no. 232. Fifth edition.

Wechsler, H., Lee, J.E., Kuo, M., Seibring, M., Nelson, T.F., Lee, H.P. Trends in college binge drinking during a period of increased prevention efforts: Findings from four Harvard School of Public Health study surveys, 1993-2001. *Journal of American College Health* 50(5): 203-217, 2002.

Walters, S.T., and Baer, J.S. *Talking with college students about alcohol: Motivational strategies for reducing abuse.* The Guildford Press, NY, NY, 2006.

Wilk, A. I., Jensen, N. M., and Havighurst, T. C.. Meta-analysis of randomized control trials addressing brief intervention in heavy alcohol drinkers. *Journal of Internal Medicine*, 1997; Volume 12 (5) pp. 274.





### Appendix A







### Screening and Brief Intervention Steps: Quick Guide

Steps	Procedures and Discussion
1. Have student complete the AUDIT test.	
2. Introduce yourself and establish rapport.	"Thank you for filling out our questionnaire. Would it be all right if we spend a few minutes talking about your alcohol use?"
3. Score the AUDIT	Share the results with the student
4. Discuss any concerns.	"Tell me what you enjoy about drinking. What are some of the not- so-good things about drinking?"
Elicit readiness and interest.	
Provide clear information or feedback.	"The questionnaire you completed suggests that you may be putting yourself at risk for problems. Would it be all right for me to
Elicit the student's interpretation or reaction.	provide you with some information about alcohol and its effects?" (see How Alcohol Affects Us handout)
	"What do you think you'd like to do about this? On a scale of 1 to 10, with 1 being not ready and 10 being very ready, how ready are you to make a change?"
5. Develop a plan. Put the emphasis on the student's personal choice. Provide	"Here are some things other students have found helpful."
handout with lower-risk drinking options.	Have you tried any of these before? How did that work for you?
	Which of these do you think will work for you now?"
If the student doesn't indicate a desire to change	"Sounds like you don't feel the need to make any changes to your drinking habits right now. If you were to decide to make a change, what strategies do you think you would try? What would have to happen for you to consider making a change?"
6. Schedule a Follow-Up:	"Here's what we discussed today: (summarize)"
	"I would like to follow up with you and see how you are doing. Would you like to make an appointment to come back in about two weeks or may I call you?"
	"We are here to support you. Please contact us if you have additional questions or need more information."

### Appendix B







### **AUDIT Screening Test and Scoring**

Please place an X in the square with the answer for each question that is correct for you. Remember, one drink equals one 12ounce beer, one 5-ounce glass of wine, or a 1.5-ounce shot of 80 proof liquor.

	0	1	2	3	4	
How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Scoring: Each response is scored using the numbers at the top of each response column. Write the appropriate number associated with each answer in the column at the right. Then add all numbers in that column to obtain the Total Score. A score of 6 or more is an indicator of possible risky drinking among college students. Eight or more indicates a strong likelihood of hazardous or harmful alcohol consumption in adult populations.



### Appendix C







### Screening and Brief Intervention Toolkit

for College and University Campuses

#### How Alcohol Affects Us

Almost all of us have heard that alcohol is a drug, but many of us don't think of the act of drinking alcohol as putting a drug into our bodies. It is important for people to understand that alcohol impairs their judgment and their peripheral and central nervous system.

Alcohol also affects different people in different ways. Some of the characteristics that determine the way alcohol affects you include:

- Gender
- Mood
- Body Weight
- Type of Alcohol
- Full/Empty Stomach
- Speed of Consumption
- Use of Medication or Other Drugs

But for most people, the effects of alcohol are determined by simple volume.

#### How does impairment happen? Let's take a look.

When a person drinks alcohol, it can enter the bloodstream as soon as you begin to drink. The molecular structure of alcohol (chemically known as ethanol) is small, so the alcohol can be absorbed or transferred into the blood through the mouth, the walls of the stomach, and the small intestine.

The stomach actually has a relatively slow absorption rate; it is the small intestine that absorbs most of the alcohol. That's why we want to keep the alcohol in the stomach as long as possible by eating food, which dilutes the alcohol and keeps it from entering the small intestine so quickly. Once alcohol gets into the bloodstream it moves through the body and comes into contact with virtually every organ. However, some of the highest concentrations, and certainly the highest impact, are caused by the alcohol that reaches the brain.

We need to know that the body is quite efficient when it comes to dealing with alcohol. The liver is designed to metabolize the alcohol as we drink it. Enzymes break down the alcohol into harmless products and then it is excreted. However, the liver can only handle so much alcohol at a time. For a person of average weight and body type, the liver and small intestine can handle alcohol at a rate of about one drink per hour.

If a person drinks at a faster rate than one drink per hour, the alcohol simply stays in the body, waiting its turn to be metabolized. Since there is more alcohol in the body than can be metabolized, the result is increasing levels of intoxication.

### Blood Alcohol Concentration (BAC) Level Information and Chart

Of course, it's important to define what we mean by a drink. Normally we think in terms of:

- One beer;
- One mixed drink;
- One glass of wine; or
- One shot of alcohol.

But it is important to understand that "one drink" equals:

- a 12-ounce beer;
- a 5-ounce glass of wine; or
- 1.5 ounces of 80 proof (40% Ethanol) distilled spirits.

In other words, a 20-ounce mug of beer is considered more than a drink; it's actually closer to a drink and a half. And, if a person ordered a mixed drink at a bar or at a party, it may be possible that whoever mixed the drink may have put in two or three ounces of alcohol.

All of these factors will determine the amount of alcohol in your body, which is measured by your BAC, or blood alcohol concentration. This is measured in grams per deciliter (g/dL).

### $Appendix \ C \ ({\tt continued})$







# Screening and Brief Intervention Toolkit for College and University Campuses

### How Alcohol Affects Us (continued)

The following chart contains some of the more common symptoms people exhibit at various BAC levels, and the probable effects on driving ability.

Blood Alcohol Concentration (BAC) <sup>1</sup>	Typical Effects	Predictable Effects on Driving
.02 g/dL	<ul><li>Judgment impaired</li><li>Muscles relaxed</li><li>Slight body warmth</li><li>Mood altered</li></ul>	Brain's ability to control eye muscles declines     Ability to perform two tasks at the same time declines
.05 g/dL	Behavior/emotions exaggerated Small loss of muscle control (e.g., focusing your eyes) Judgment Impaired Alertness lowered	<ul> <li>Coordination reduces</li> <li>Ability to track moving objects reduces</li> <li>Ability to respond to emergency situations declines</li> <li>Ability to steer vehicle declines</li> </ul>
.08 g/dL	Muscle coordination diminished (e.g., balance, speech, vision, reaction time, and hearing)     Increased difficulty in detecting danger     Judgment, self-control, reasoning, and memory impaired	<ul> <li>Ability to concentrate reduces</li> <li>Short-term memory loss</li> <li>Ability to control speed reduces</li> <li>Recognition of traffic signals and signs slows</li> <li>Ability to perceive traffic hazards diminishes</li> </ul>
.10 g/dL	<ul><li>Reaction time delayed</li><li>Speech slurred, coordination is poor</li><li>Thinking slowed</li></ul>	Ability to maintain lane position and braking reduces
.15 g/dL	<ul><li>Loss of normal muscle control</li><li>Vomiting may occur</li><li>Major loss of balance</li></ul>	Ability to process information from sight and hearing slows     Substantial impairment and loss of vehicle control

<sup>&</sup>lt;sup>1</sup> Information in this table shows the BAC level at which the effect usually is first observed, and has been gathered from a variety of sources including NHTSA, the National Institute on Alcohol Abuse and Alcoholism, the American Medical Association, the National Commission Against Drunk Driving, and www.webMD.com.

It's nearly impossible for a person to gage their BAC level without diagnostic testing. Before choosing to drink, individuals should understand the effects of alcohol and the associated risks of misuse.



### Appendix D







### Screening and Brief Intervention Toolkit for College and University Campuses

### Lower-Risk Drinking Strategies

- Designate a non-drinking driver before you go out or arrange for a sober ride home.
- Engage in activities that do not involve drinking.
- Arrange to safely stay at your party host's home or nearby hotel.
- Drink no more than one drink per hour.
- Eat a full meal shortly before you start drinking.
- Drink non-alcoholic drinks between alcoholic drinks to slow the rate of consumption.
- Do not mix alcohol with other drugs, prescription, over-the-counter, or illegal.
- Do not let others pressure you to drink.
- Know your limits and stick to them.
- Avoid drinking games, doing shots, and guzzling drinks.
- Leave any drinking situation that is out of control before you become involved.
- Always wear your seat belt --- it's your best defense against impaired drivers.

### Appendix E







#### Screening and Brief Intervention Toolkit

for College and University Campuses

### **Drinking Guidelines**

#### A Drink Defined



8-9 oz. of Malt Liquor

8.5 oz. shown in a 12 oz. glass that, if full, would hold about 1.5 standard drinks of malt liquor



5 oz. of Table Wine

3-4 oz. of Fortified Wine (such as sherry or port) 3.5 oz. shown



2-3 oz. of Cordial, Liqueur, or Aperitif



1.5 oz. of Brandy (a single jigger)



1.5 oz. of Spirits

(a single jigger of 80-proof gin, vodka, whiskey. etc.) Shown straight and in a highball glass with ice to show level before adding mixer



1.5 c

**Note:** People buy many of these drinks in containers that hold multiple standard drinks. For example, malt liquor is often sold in 16-, 22-, or 40 oz. containers that hold between two and five standard drinks, and table wine is typically sold in 25 oz. (750 ml.) bottles that hold five standard drinks.

#### 2005 USDA Guidelines on Alcoholic Beverages

- Those who choose to drink alcoholic beverages should do so sensibly and in moderation—defined as the consumption of up to one drink per day for women and up to two drinks per day for men.
- Alcoholic beverages should not be consumed by some people, including those who cannot restrict their alcohol intake, women of childbearing age who may become pregnant, pregnant and lactating women, children and adolescents, individuals taking medications that can interact with alcohol, and those with specific medical conditions.
- Alcoholic beverages should be avoided by individuals engaging in activities that require attention, skill, or coordination, such as driving or operating machinery.

#### NIAAA Guidelines for maximum drinking limits

For healthy men up to age 65-

- no more than 4 drinks in a day AND
- no more than **14** drinks in a **week**

For healthy women (and healthy men over age 65)—

- no more than 3 drinks in a day AND
- no more than 7 drinks in a week

National Institute on Alcoholism and Alcohol Abuse. Helping Patients Who Drink Too Much: A Clinician's Guide NIH Pub. No, 05-3769. Rockville, MD: 2005.

#### NIAAA Guidelines for Moderate Drinking

For most adults, moderate alcohol use--up to two drinks per day for men and one drink per day for women and older people--causes few if any problems.

However certain people should not drink at all:

- Women who are pregnant or trying to become pregnant;
- People who plan to drive or engage in other activities that require alertness and skill;
- People taking certain over-the-counter or prescription medications;
- People with medical conditions that can be made worse by drinking;
- Recovering alcoholics; and
- People younger than 21.

Updated: March 2003 http://www.niaaa.nih.gov/FAQs/General-English/FAQs13.htm (See also "Publications" Alcohol Alert No. 16: Moderate Drinking; Alcohol Alert No. 27: Alcohol-Medication Interactions; and Alcohol Alert No. 52: Alcohol and Transportation Safety)



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### Appendix F







#### Screening and Brief Intervention Toolkit

for College and University Campuses

### **Evaluation Form**

Please complete and fax to 303-871-0907 or mail to:

Ann Quinn-Zobeck, Ph.D. The BACCHUS Network PO Box 100430 Denver, CO 80250-0430

Thank you for participating in this program. Your feedback is important to us. Your honest opinion on the following questions about the program is greatly appreciated.

Circle the most appropriate number for your answer to each of the following statements

About the kit	Poor	Below Average	Average	Above Average	Excellent
1. Kit Contents	1	2	3	4	5
2. Organization of the kit	1	2	3	4	5
3. Handouts/resources	1	2	3	4	5
4. Overall Rrating	1	2	3	4	5
Reactions to the kit	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5. The kit contents are easy to use to conduct screening and brief intervention sessions with students.	1	2	3	4	5
6. Using the kit increased my confidence in conducting screening and brief intervention sessions with students.	1	2	3	4	5
7. Overall, I felt that students who participated in a screening and brief intervention sessions responded positively to the information provided.	1	2	3	4	5
8. I plan to use the kit contents in the future with students.	1	1	2	3	4

<sup>9.</sup> What additional information would you like to see included in the kit.

10. Any additional comments about the kit?

General Information						
Your position on campus						
Prior experience with conduction alcohol screenings	None	Very little	Moderate	Extensive		
Number of screenings and brief interventions you have conducted using this kit						



### Appendix G







Screening

### **How You Doin'?**

### **Find out!**

Here's your chance to get a guick, confidential assessment of how you are doing with your choices about your social life and your alcohol use. Take a few minutes to see how you are doing.

#### To schedule a confidential screening call or e-mail

Put Your Contact Information Here

#### Visit our Screening Table at

Put Your Event Information Here

### **No Preaching No Judging Just Feedback**

You might find out you're healthy. You might find out you have some areas of concern. You might find out how to make a change in your life. The key is you will find out.

What you choose to do with the information is up to you.

### Appendix H







# Screening and Brief Intervention Toolkit for College and University Campuses



The BACCHUS Network, a non-profit charitable organization, is a university- and community-based network focusing on comprehensive health and safety initiatives. It is the mission of the organization to actively promote student- and young-adultbased, campus and communitywide leadership on healthy and safe lifestyle decisions concerning alcohol abuse, tobacco use, illegal drug use, unhealthy sexual practices and other high-risk behaviors.

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- Advocate for effective and sensible policies and practices for campus and community health and safety issues.

For more information about The BACCHUS Network, please visit www.bacchusnetwork.org. For more information about the BACCHUS impaired driving prevention programs, please visit www. friendsdrivesober.org.

Notes:













### Screening and Brief Intervention Steps: Quick Guide

Steps	Procedures and Discussion
1. Have student complete the AUDIT test.	
2. Introduce yourself and establish rapport.	"Thank you for filling out our questionnaire. Would it be all right if we spend a few minutes talking about your alcohol use?"
3. Score the AUDIT	Share the results with the student
4. Discuss any concerns.  Elicit readiness and interest.	"Tell me what you enjoy about drinking. What are some of the not- so-good things about drinking?"
Provide clear information or feedback.  Elicit the student's interpretation or reaction.	"The questionnaire you completed suggests that you may be putting yourself at risk for problems. Would it be all right for me to provide you with some information about alcohol and its effects?" (see How Alcohol Affects Us handout)
	"What do you think you'd like to do about this? On a scale of 1 to 10, with 1 being not ready and 10 being very ready, how ready are you to make a change?"
5. Develop a plan. Put the emphasis on the student's personal choice. Provide handout with lower-risk drinking options.	"Here are some things other students have found helpful."  Have you tried any of these before? How did that work for you?
If the student doesn't indicate a desire to change	Which of these do you think will work for you now?"  "Sounds like you don't feel the need to make any changes to your drinking habits right now. If you were to decide to make a change, what strategies do you think you would try? What would have to happen for you to consider making a change?"
6. Schedule a Follow-Up:	"Here's what we discussed today: (summarize)"  "I would like to follow up with you and see how you are doing. Would you like to make an appointment to come back in about two weeks or may I call you?"  "We are here to support you. Please contact us if you have additional questions or need more information."







### **AUDIT Screening Test and Scoring**

Please place an X in the square with the answer for each question that is correct for you. Remember, one drink equals one 12-ounce beer, one 5-ounce glass of wine, or a 1.5-ounce shot of 80 proof liquor.

	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
<ol><li>How many drinks containing alcohol do you have on a typical day when you are drinking?</li></ol>	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Scoring: Each response is scored using the numbers at the top of each response column. Write the appropriate number associated with each answer in the column at the right. Then add all numbers in that column to obtain the Total Score. A score of 6 or more is an indicator of possible risky drinking among college students. Eight or more indicates a strong likelihood of hazardous or harmful alcohol consumption in adult populations.







### How Alcohol Affects Us

Almost all of us have heard that alcohol is a drug, but many of us don't think of the act of drinking alcohol as putting a drug into our bodies. It is important for people to understand that alcohol impairs their judgment and their peripheral and central nervous system.

Alcohol also affects different people in different ways. Some of the characteristics that determine the way alcohol affects you include:

- Gender
- Mood
- Body Weight
- Type of Alcohol
- Full/Empty Stomach
- Speed of Consumption
- Use of Medication or Other Drugs

But for most people, the effects of alcohol are determined by simple volume.

### How does impairment happen? Let's take a look.

When a person drinks alcohol, it can enter the bloodstream as soon as you begin to drink. The molecular structure of alcohol (chemically known as ethanol) is small, so the alcohol can be absorbed or transferred into the blood through the mouth, the walls of the stomach, and the small intestine.

The stomach actually has a relatively slow absorption rate; it is the small intestine that absorbs most of the alcohol. That's why we want to keep the alcohol in the stomach as long as possible by eating food, which dilutes the alcohol and keeps it from entering the small intestine so quickly. Once alcohol gets into the bloodstream it moves through the body and comes into contact with virtually every organ. However, some of the highest concentrations, and certainly the highest impact, are caused by the alcohol that reaches the brain.

We need to know that the body is quite efficient when it comes to dealing with alcohol. The liver is designed to metabolize the alcohol as we drink it. Enzymes break down the alcohol into harmless products and then it is excreted. However, the liver can only handle so much alcohol at a time. For a person of average weight and body type, the liver and small intestine can handle alcohol at a rate of about one drink per hour.

If a person drinks at a faster rate than one drink per hour, the alcohol simply stays in the body, waiting its turn to be metabolized. Since there is more alcohol in the body than can be metabolized, the result is increasing levels of intoxication.

### Blood Alcohol Concentration (BAC) Level Information and Chart

Of course, it's important to define what we mean by a drink. Normally we think in terms of:

- One beer;
- One mixed drink;
- One glass of wine; or
- One shot of alcohol.

But it is important to understand that "one drink" equals:

- a 12-ounce beer;
- a 5-ounce glass of wine; or
- 1.5 ounces of 80 proof (40% Ethanol) distilled spirits.

In other words, a 20-ounce mug of beer is considered more than a drink; it's actually closer to a drink and a half. And, if a person ordered a mixed drink at a bar or at a party, it may be possible that whoever mixed the drink may have put in two or three ounces of alcohol.

All of these factors will determine the amount of alcohol in your body, which is measured by your BAC, or blood alcohol concentration. This is measured in grams per deciliter (g/dL).







### How Alcohol Affects Us (continued)

The following chart contains some of the more common symptoms people exhibit at various BAC levels, and the probable effects on driving ability.

Blood Alcohol Concentration (BAC) <sup>1</sup>	Typical Effects	Predictable Effects on Driving
.02 g/dL	<ul><li>Judgment impaired</li><li>Muscles relaxed</li><li>Slight body warmth</li><li>Mood altered</li></ul>	<ul> <li>Brain's ability to control eye muscles declines</li> <li>Ability to perform two tasks at the same time declines</li> </ul>
.05 g/dL	<ul> <li>Behavior/emotions exaggerated</li> <li>Small loss of muscle control (e.g., focusing your eyes)</li> <li>Judgment Impaired</li> <li>Alertness lowered</li> </ul>	<ul> <li>Coordination reduces</li> <li>Ability to track moving objects reduces</li> <li>Ability to respond to emergency situations declines</li> <li>Ability to steer vehicle declines</li> </ul>
.08 g/dL	<ul> <li>Muscle coordination diminished (e.g., balance, speech, vision, reaction time, and hearing)</li> <li>Increased difficulty in detecting danger</li> <li>Judgment, self-control, reasoning, and memory impaired</li> </ul>	<ul> <li>Ability to concentrate reduces</li> <li>Short-term memory loss</li> <li>Ability to control speed reduces</li> <li>Recognition of traffic signals and signs slows</li> <li>Ability to perceive traffic hazards diminishes</li> </ul>
.10 g/dL	<ul><li>Reaction time delayed</li><li>Speech slurred, coordination is poor</li><li>Thinking slowed</li></ul>	Ability to maintain lane position and braking reduces
.15 g/dL	<ul><li>Loss of normal muscle control</li><li>Vomiting may occur</li><li>Major loss of balance</li></ul>	<ul> <li>Ability to process information from sight and hearing slows</li> <li>Substantial impairment and loss of vehicle control</li> </ul>

<sup>&</sup>lt;sup>1</sup> Information in this table shows the BAC level at which the effect usually is first observed, and has been gathered from a variety of sources including NHTSA, the National Institute on Alcohol Abuse and Alcoholism, the American Medical Association, the National Commission Against Drunk Driving, and www.webMD.com.

It's nearly impossible for a person to gage their BAC level without diagnostic testing. Before choosing to drink, individuals should understand the effects of alcohol and the associated risks of misuse.







### Lower-Risk Drinking Strategies

- Designate a non-drinking driver before you go out or arrange for a sober ride home.
- Engage in activities that do not involve drinking.
- Arrange to safely stay at your party host's home or nearby hotel.
- Drink no more than one drink per hour.
- Eat a full meal shortly before you start drinking.
- Drink non-alcoholic drinks between alcoholic drinks to slow the rate of consumption.
- Do not mix alcohol with other drugs, prescription, over-the-counter, or illegal.
- Do not let others pressure you to drink.
- Know your limits and stick to them.
- Avoid drinking games, doing shots, and guzzling drinks.
- Leave any drinking situation that is out of control before you become involved.
- Always wear your seat belt --- it's your best defense against impaired drivers.





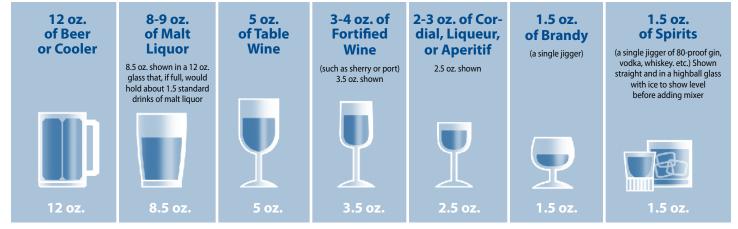


### Screening and Brief Intervention Toolkit

### for College and University Campuses

### **Drinking Guidelines**

#### A Drink Defined



**Note:** People buy many of these drinks in containers that hold multiple standard drinks. For example, malt liquor is often sold in 16-, 22-, or 40 oz. containers that hold between two and five standard drinks, and table wine is typically sold in 25 oz. (750 ml.) bottles that hold five standard drinks.

#### 2005 USDA Guidelines on Alcoholic Beverages

- Those who choose to drink alcoholic beverages should do so sensibly and in moderation—defined as the consumption of up to one drink per day for women and up to two drinks per day for men.
- Alcoholic beverages should not be consumed by some people, including those who cannot restrict their alcohol intake, women of childbearing age who may become pregnant, pregnant and lactating women, children and adolescents, individuals taking medications that can interact with alcohol, and those with specific medical conditions.
- Alcoholic beverages should be avoided by individuals engaging in activities that require attention, skill, or coordination, such as **driving** or operating machinery.

### NIAAA Guidelines for maximum drinking limits

For healthy men up to age 65—

- no more than 4 drinks in a day AND
- no more than **14** drinks in a **week**

For healthy women (and healthy men over age 65)—

- no more than 3 drinks in a day AND
- no more than 7 drinks in a week

National Institute on Alcoholism and Alcohol Abuse. Helping Patients Who Drink Too Much: A Clinician's Guide NIH Pub. No, 05-3769. Rockville, MD: 2005.

### NIAAA Guidelines for Moderate Drinking

For most adults, moderate alcohol use--up to two drinks per day for men and one drink per day for women and older people--causes few if any problems.

However certain people should not drink at all:

- Women who are pregnant or trying to become pregnant;
- People who plan to drive or engage in other activities that require alertness and skill;
- People taking certain over-the-counter or prescription medications;
- People with medical conditions that can be made worse by drinking;
- Recovering alcoholics; and
- People younger than 21.

Updated: March 2003 http://www.niaaa.nih.gov/FAQs/General-English/FAQs13.htm (See also "Publications" Alcohol Alert No. 16: Moderate Drinking; Alcohol Alert No. 27: Alcohol-Medication Interactions; and Alcohol Alert No. 52: Alcohol and Transportation Safety)









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7. Overall, I felt that students who participated in a screening and brief intervention sessions responded	1	2	3	4	5		

1

1

2

3

4

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positively to the information provided.

students.

8. I plan to use the kit contents in the future with

General Information						
Your position on campus						
Prior experience with conduction alcohol screenings	None	Very little	Moderate	Extensive		
Number of screenings and brief interventions you have conducted using this kit						



<sup>9.</sup> What additional information would you like to see included in the kit.







### Screening

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### B The BACCHUS Network Saving Lives Since 1975

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