

# **CLINICAL PROTOCOLS TO REDUCE HIGH RISK DRINKING IN COLLEGE STUDENTS:**

## **THE COLLEGE DRINKING PREVENTION CURRICULUM FOR HEALTH CARE PROVIDERS**



**DEVELOPED FOR THE NIAAA TASK FORCE  
ON COLLEGE DRINKING  
OCTOBER, 2002**

**MICHAEL FLEMING, MD, MPH, PROFESSOR  
DEPARTMENT OF FAMILY MEDICINE,  
UNIVERSITY OF WISCONSIN-MADISON**



**CLINICAL PROTOCOLS TO REDUCE  
HIGH RISK DRINKING IN COLLEGE STUDENTS:  
THE COLLEGE DRINKING PREVENTION CURRICULUM  
FOR HEALTH CARE PROVIDERS**

Developed for the NIAAA Task Force on College Drinking  
October, 2002

Michael Fleming, MD, MPH  
Professor  
Department of Family Medicine  
University of Wisconsin Madison  
(mfleming@fammed.wisc.edu)

## TABLE OF CONTENTS

Forward .....	3
NIAAA Task Force on College Drinking Publications .....	5
Instructions for Trainers .....	7
Module 1: Epidemiology and Prevention Strategies .....	9
Module 2: Screening and Assessment .....	23
Module 3: Brief Intervention .....	40
Module 4: Motivational Interviewing .....	57
Appendix A: Brief Intervention Workbook .....	65
Appendix B: Role-play Scenarios .....	81
Appendix C: Attitude Exercise .....	85

## FORWARD

Campus-based health clinics offer an ideal setting in which to identify and intervene with students who drink above recommended limits or who are experiencing alcohol-related problems. Students seeking care in college health settings should be screened for at-risk alcohol use, in the same way they are screened for other health problems. Students who screen positive for high-risk drinking or alcohol-related problems can benefit from brief interventions delivered by a trained professional in the clinic setting. Those who are identified as having more serious problems, such as addiction, would benefit from a referral to a counselor and/or specialized alcohol treatment program.

The goal of this curriculum is to help all health care professionals -- physicians, nurses, nurse practitioners, physician assistants, social workers, health educators, counselors, psychologists, and others who work with college students -- identify and treat students who are at-risk or are having alcohol-related problems. The clinical methods presented in this curriculum are based on science and clinical experience and have been tested and used in a variety of settings. The protocols were specifically designed for busy high-volume practice.

The college drinking prevention curriculum for health care providers is part of a national effort sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to reduce high-risk drinking and alcohol-related problems among college students. The curriculum is divided into four teaching modules. Each module is based on current evidence and research and includes the essential information every clinician should know about the prevention and treatment of college drinking problems. The NIAAA has developed a number of other publications for scientists and college leaders. These publications provide a more comprehensive review of these areas. A list of these materials is included after the table of contents.

Module 1 focuses on the epidemiology and prevention of alcohol use and alcohol problems among college students. Module 2 reviews the screening and assessment of students in college health settings. Module 3 presents a number of clinical protocols used for brief intervention or brief talk therapy as well as the evidence that supports the use of these counseling

methods. Module 4 focuses on development of skills in motivational interviewing, an approach used in behavioral medicine that can enhance brief intervention.

In addition to the text and references, the curriculum contains a set of PowerPoint slides for each module. The curriculum also contains a brief intervention workbook that clinicians may want to copy for use with students (see Appendix A). This workbook is a step-by-step approach to conducting brief intervention therapy. Trainers and clinicians may want to use the role-plays included in Appendix B to practice screening, brief intervention, and motivational interviewing.

**RESOURCE LIST OF PUBLICATIONS AND WEBSITES**

Resource 1: [www.collegedrinkingprevention.gov](http://www.collegedrinkingprevention.gov)

Resource 2: [www.collegedrinkingprevention.gov/Reports](http://www.collegedrinkingprevention.gov/Reports)

Resource 3: “College Drinking, What It Is, and What to Do About It: A Review of the State of the Science;” Editors: Mark Goldman, Gayle Boyd and Vivian Faden. In Journal of Alcohol Studies. March 2002: Supplement No. 14.

Goldman, M.S.; “Introduction.”

Boyd, G.M. and Faden, V.; “Overview.”

Panel 1: The Contexts and Consequences of College Drinking

Dowdall, G.W. and Wechsler, H.; “Studying College Alcohol Use: Widening the Lens, Sharpening the Focus.”

O'Malley, P.M. and Johnston, L.D.; “Epidemiology of Alcohol and Other Drug Use Among American College Students.”

Baer, J.S.; “Student Factors: Understanding Individual Variation in College Drinking.”

Schulenberg, J.E. and Maggs, J.L.; “A Developmental Perspective on Alcohol Use and Heavy Drinking During Adolescence and the Transition to Young Adulthood.”

Spear, L.P.; “The Adolescent Brain and the College Drinker: Biological Basis of Propensity to Use and Misuse Alcohol.”

Presley, C.A., Meilman, P.W., and Leichliter, J.S.; “College Factors That Influence Drinking.”

Perkins, H.W.; “Surveying the Damage: A Review of Research on Consequences of Alcohol Misuse in College Populations.”

Cooper, M.L.; “Alcohol Use and Risky Sexual Behavior Among College Students and Youth: Evaluating the Evidence.”

Abbey, A.; “Alcohol-Related Sexual Assault: A Common Problem Among College Students.”

Giancola, P.R.; “Alcohol-Related Aggression During the College Years: Theories, Risk Factors, and Policy Implications.”

Panel 2: Prevention and Treatment of College Alcohol Problems

DeJong, W. and Langford, L.M.; “A Typology for Campus-Based Alcohol Prevention: Moving Toward Environmental Management Strategies.”

Larimer, M.E. and Cronce, J.M.; “Identification, Prevention, and Treatment: A Review of Individual- Focused Strategies to Reduce Problematic Alcohol Consumption by College Students.”

Perkins, H.W.; “Social Norms and the Prevention of Alcohol Misuse in Collegiate Contexts.”

Saffep, H.; “Alcohol Advertising and Youth.”

DeJong, W.; “The Role of Mass Media Campaigns in Reducing High-Risk Drinking Among College Students.”

Toomey, T.L. and Wagenaar, A.C.; “Environmental Policies to Reduce College Drinking: Options and Research Findings.”

Wagenaar, A.C. and Toomey, T.L.; “Effects of Minimum Drinking Age Laws: Review and Analyses of the Literature from 1960 to 2000.”

Hingson, R.W. and Howland, J.; “Comprehensive Community Interventions to Promote Health: Implications for College-Age Drinking Problems.”

Resource 4: “How to Reduce High-Risk College Drinking: Use of Proven Strategies, Fill Research Gaps; Final Report of the Panel on Prevention and Treatment.”  
[www.collegedrinkingprevention.gov](http://www.collegedrinkingprevention.gov).

## INSTRUCTIONS FOR TRAINERS

The curriculum provides materials and information that can be used by trainers for lectures, workshops, and courses for training health care providers to identify and treat college students at risk for alcohol-related problems. There is enough material for a full-day program, although parts of the curriculum can be delivered in a grand rounds session, a lecture, a seminar, or a half-day workshop. Each module contains a set of 25-30 PowerPoint slides that can be used for a didactic presentation. A trainer may elect to use some or all of the slides for a module, depending on the audience, time available, and focus of the teaching session.

In addition to the slides, each module contains a review of the literature and clinical protocols. Course participants should be asked to read this material prior to attending the course. The written test portion of the modules includes essential information every clinician should know about college drinking. Whenever possible, trainings should use demonstration role-plays in front of the whole group to illustrate the clinical protocols on screening, brief intervention, and motivational interviewing included in Modules 2, 3 and 4. If time allows, each participant should practice the protocols, using either a paired role-play or by breaking the participants into small groups of 4-8 participants.

There is also a brief intervention workbook contained in Appendix A which trainers may want to use for the brief intervention module. This workbook is based on a brief intervention trial - Project TrEAT (Fleming, 2002). It has been adapted for college students and for use in student health centers. The workbook provides a structured method for clinicians to deliver brief intervention and provides self-help exercises for students to use after they leave the clinician's office.

There are also scripted role-plays in Appendix B which trainers may want to use. We have included three student scenarios. The first is a young man being seen at the emergency department of a local hospital for an injury that occurred when he fell off a second-floor porch. The second is a young woman seen at the student health center for depression and Post Traumatic Stress Disorder (PTSD). The third scenario is a graduate student who is asking for help to control his alcohol use.



Appendix C contains a short exercise on attitudes and personal beliefs about alcohol use among college students. This exercise can create a stronger learning environment and facilitate risk-taking by course participants during role-plays. It is important for clinicians to recognize the value of treatment optimism. Clinicians need to treat students on the premise that students will change their drinking habits with clinician interventions.

## MODULE 1:

### EPIDEMIOLOGY AND PREVENTION STRATEGIES

#### I. Learning Objectives

- A. Participants will increase their knowledge in the epidemiology of alcohol use and alcohol-related problems among college students.
- B. Participants will increase their knowledge of risk factors associated with student alcohol use.
- C. Participants will increase their knowledge of prevention strategies that work.

#### II. Chronology

- A. 10-to 40-minute large-group lecture, using a sub-sample of about 30 slides.
- B. 10-to 20-minute large-group discussion on prevention of college drinking.

#### III. Training Materials

- A. 30 slides.
- B. Summary of the epidemiological data and evidence-based prevention strategies.

#### IV. CREDITS

The information included in the module is primarily derived from the position papers and publications associated with the National Advisory Council on Alcohol Abuse and Alcoholism Task Force on College Drinking of the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

A supplement to the Journal of Studies on Alcohol contains much of the original source data for this curriculum module. (“College Drinking, What It Is, and What To Do About it: A Review of the State of the Science,” *Journal of Studies on Alcohol*, Supplement No.14, March, 2002).

## MODULE 1:

### EPIDEMIOLOGY AND PREVENTION STRATEGIES

#### INTRODUCTION

The goal of this module is to provide staff and clinicians working in student health centers with information on prevention and treatment of alcohol problems among college students. The curriculum focuses on clinical methods directed at helping individual students reduce their level of alcohol use and the risks associated with heavy drinking. The curriculum is based on a harm reduction public health paradigm.

This model will review the epidemiology of alcohol use among college students, alcohol-related problems among this population, risk factors associated with alcohol use, and prevention strategies. The research presented in this module is intended to provide clinicians with new information to help in their work with students.

#### EPIDEMIOLOGY OF ALCOHOL USE AMONG COLLEGE STUDENTS

The epidemiological data presented in this module are derived from five sources: 1) College Alcohol Study conducted by the Harvard School of Public Health; 2) the Core Institute Alcohol and Drug Use Survey; 3) the National College Health Risk Behavior Study, conducted by the CDC; 4) the annual National Household Survey on Drug Abuse; and 5) the Monitoring the Future Study. The data are presented in Figures 1-3. These figures were obtained from O'Malley and Johnston (2002) and are reprinted with their permission.

The College Alcohol Study was conducted by the Harvard School of Public Health in 1993, 1997, 1999 and 2001, Weschler, Lee, Kuo, Seibring, Nelson & Lee (2002); [www.hsph.harvard.edu/cas](http://www.hsph.harvard.edu/cas). Longitudinal comparisons were made across 120 colleges that participated in the first three surveys. Over 10,000 students participated in the mailed surveys that focused on alcohol use, alcohol-related harm, attitudes, and beliefs.

A second study focused on college students is the Alcohol and Drug Use Survey by the Core Institute study of Southern Illinois University (Presley, Meilman & Cashin (1996); ([www.siu.edu](http://www.siu.edu))). The survey was conducted in those colleges funded by a Department of Education prevention grant program and represented a convenience sample. A study initiated in 2001 uses a representative sample of 300 colleges. The survey randomly selected over 142,500 students from these colleges. Like the Wechsler study, the Core Institute study focused on alcohol use, alcohol-related problems, attitudes and beliefs.

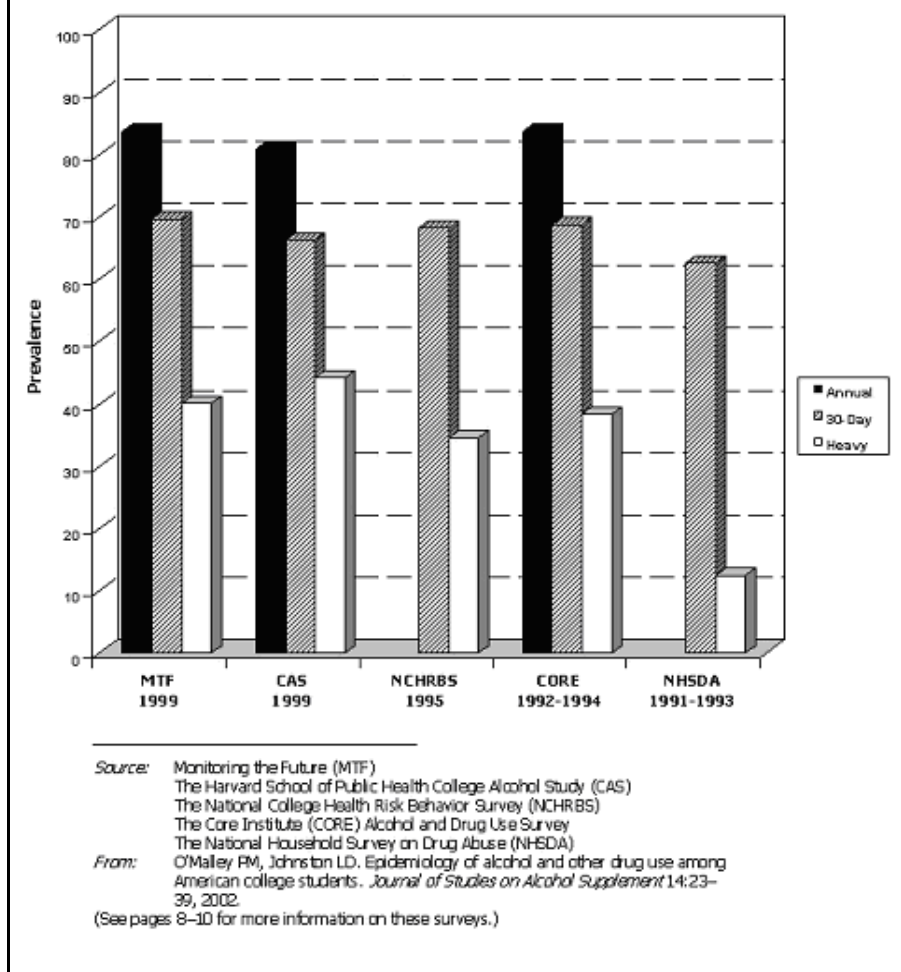
A third survey is the National College Health Risk Behavior Study (Center for Disease Control, 1997). The survey was conducted in 1995 at 136 two- and four-year colleges. A total of 4,838 students participated. The survey included questions on alcohol, tobacco, drugs, sexual behaviors, diet, and exercise.

The National Household Survey on Drug Abuse is the primary source of data used to estimate tobacco, alcohol, and illegal drug use in the U.S. (Gfroerer, Greenblatt & Wright (1997); [www.samhsa.gov](http://www.samhsa.gov)). The survey is conducted once a year utilizing an in-house interview procedure by researchers at the Research Triangle Institute in North Carolina. The survey focuses on civilian, non-hospitalized populations, including residents of student dormitories, shelters, and rooming houses. The study includes all age groups, including college-age students. One of the primary advantages of the survey is that it allows for comparison of college and non-college peers.

The Monitoring the Future study is an annual survey of high school students (Johnston, O'Malley & Bachman (2002); [www.monitoringthefuture.org](http://www.monitoringthefuture.org)). The survey began in 1976 and includes questions on alcohol, drugs, and substance-related adverse effects. Since 1980, the survey has also generated a longitudinal study that follows students into college and beyond graduation. This is the only national study that is following the same cohort over time. This survey is conducted by scientists at the University of Michigan.

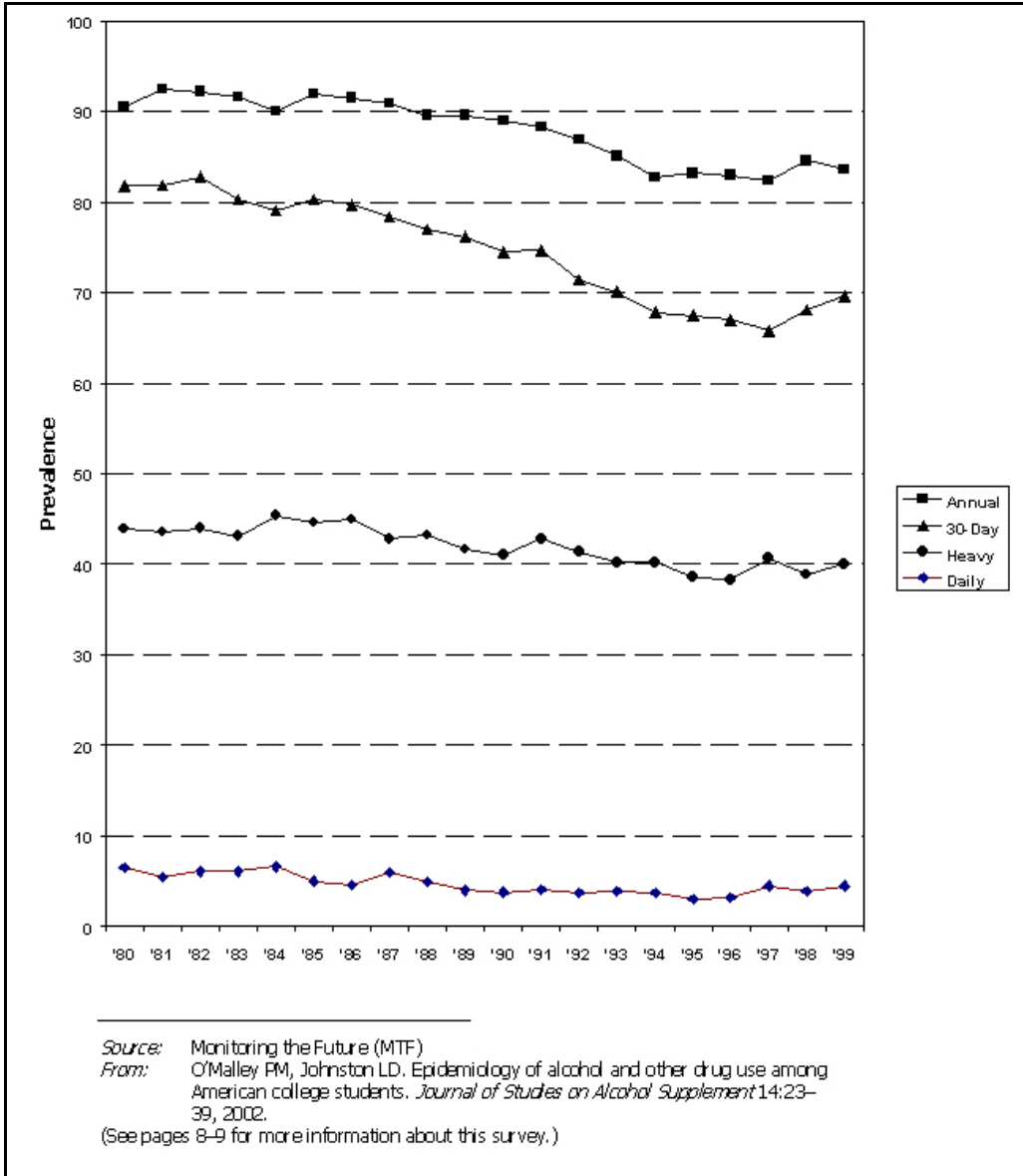
**Figure 1** estimates alcohol use among college students from the five data sources listed above. While the data are from different time sources, the 30-day prevalence for alcohol use was between 60-70%, with 30-40 % reporting abstinence. Four of the five studies reported that 40% of students participated in heavy drinking at least once in the previous 2 weeks. Heavy drinking was defined as five or more drinks in a row.

**Figure 1: Prevalence of Annual, 30-day, and Heavy Alcohol Use Among College Students**



**Figure 2** illustrates trends in alcohol use among college students between 1980 and 1999. These data were obtained from the Monitoring the Future Study. As one can see, there is little change in alcohol use during these years.

Figure 2: Trends in Annual, 30-day, Heavy, and Daily Alcohol Use Among College Students 1980 – 1999



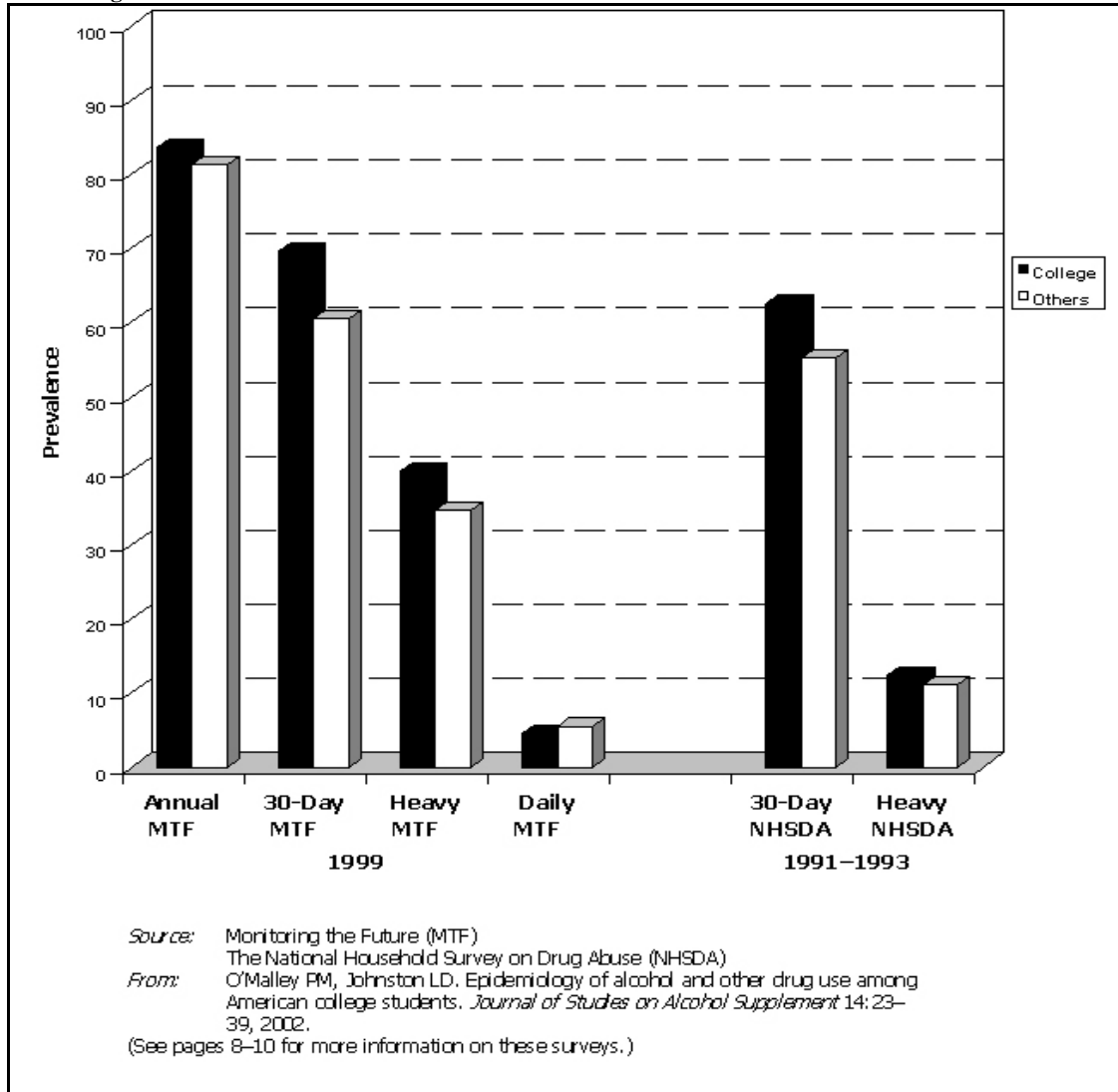
There is a slight downward trend in the rate of heavy drinking over the last two decades. Unfortunately, there are no data prior to 1980 that can be used for direct comparison.

Figure 3 compares college students and non-college peers\* of the same age. These data were again derived from the Monitoring the Future Study. College students appear more

likely to use alcohol and to drink more heavily than their non-college peers. The only difference is daily alcohol use, which may be higher in young adults who do not attend college. Longitudinal data from the annual survey suggest little change in this difference over the last 20 years. College students drink more than their peers who do not attend college.

\* “Non-college peers” does not include military personnel.

**Figure 3: Prevalence of Annual, 30-day, Heavy, and Daily Alcohol Use Among College Students and Non-College Peers**



As expected, all national surveys reported variation in alcohol use by gender, race and geographical region. The studies found that men drink at higher levels than women. The difference, however, is not as dramatic as might be expected. Four of the surveys

found 50-60% of college men in the samples reported heavy drinking episodes, with 34-40% of women reporting heavy drinking. Trends over time suggest fewer differences between men and women.

There are marked racial differences among student groups (Wechsler, Fulop, Padilla, Lee & Patrick, 1997). White students reported nearly three times as much heavy high-risk drinking as black students. Hispanic students reported approximately 25% less heavy drinking than white students.

Finally, regional variations were found. Alcohol use was less prevalent in Western colleges than in Northeastern or North Central colleges.

In summary, the frequency of heavy alcohol use on college campuses is high. The pattern and level of use have changed little over the past 20 years on most college campuses. College students are more likely to engage in high-risk drinking than their peers who do not attend college.

## **FREQUENCY OF ALCOHOL-RELATED PROBLEMS AMONG COLLEGE STUDENTS**

This section estimates the frequency of alcohol-related problems among college students. Individual problems include:

- Accidents and injuries;
- Alcohol poisoning;
- Driving under the influence of alcohol;
- Health problems aggravated by alcohol such as diabetes, hypertension, depression, anxiety;
- Tobacco and illicit drug use;
- STD infection including HIV infection;
- Unprotected sex and unwanted sexual encounters;
- Decreased academic and athletic performance;
- Fights and interpersonal violence;
- Legal issues and expulsion from college.

Using a number of national data sets, Hingson, Heeren, Zakos, Kopstein & Wechsler (2002) estimated that 1,400 U.S. college students aged 18-24 died from alcohol-related unintentional injuries in 1998. Of the 1,400 deaths, 307 were unintentional non-traffic deaths. These deaths were related to falls, burns, drowning,

---



alcohol poisoning, and other accidents. Mortality rates due to suicide or other related medical problems are not available. College student status is not included on death certificates or other fatality data sets.

Hingson et al. (2002) also estimated that 600,000 students were assaulted by other students who were drinking alcohol, and 500,000 students were injured as a result of their drinking. Estimates suggest that one in four college students (approximately two million students) drove a car under the influence of alcohol in the previous 12 months. One in three students reported getting in a car driven by someone who had been drinking alcohol.

Self-report surveys provide additional evidence of the multiple adverse effects of alcohol use among college students. Blackouts are one of the most common effects of heavy alcohol use, with a number of surveys finding that 25% of students report memory loss on at least one occasion after drinking (Perkins, 2002). Alcohol-related personal injuries are reported by 9-15% of students in the College Alcohol Study (Wechsler, 1998) and the Core Survey (Presley et al., 1996). Nearly 50% of college students who use alcohol report hangovers, abdominal pain, and vomiting during heavy drinking episodes (Presley et al., 1996).

Unintended and unprotected sexual activity are of great concern. HIV infection continues to occur at an alarming rate among various U.S. populations, including college students. While more effective treatment is available, HIV infection is a serious life-threatening illness. The social stigma associated with HIV infection, as well as its possible effect on future children, are other components that impact affected individuals. Self-report surveys (Weschler, 1999; Anderson, 1996) have found that as many as 10% of students report having unprotected sex as a result of alcohol use. These surveys also suggest that 20-40% of women report unintended sex associated with alcohol use (Mielman, 1993; Wechsler, 1998; Gross & Billingham, 1998; Fisher, Cullen & Turner, 2000).

The effect of high-risk alcohol use on roommates and other members of a college community is another aspect of alcohol use on college campuses (Fisher, Sloan, Cullen & Lu, 1998). Nearly 30% of students report being involved in a fight or argument while drinking in the previous 12 months. Data collected from the College Drinking Survey (Wechsler, 1998) found that 13 to 27% of students reported being assaulted, hit or pushed by another student who was drinking. In the same study, 8% reported damaging university property or setting off a fire alarm. Five to ten percent of the students reported being involved with campus or community police for incidents involving alcohol.

In summary, alcohol problems among college students are common. These problems are serious and can result in death and serious injury. The study conducted by Hingson and colleagues suggests that 14,000 students have died in the past 10 years as a result of their drinking. Interpersonal violence and high-risk sexual behavior are strongly associated with alcohol use. Alcohol use is also strongly associated with tobacco and other drug use.

### **RISK FACTORS ASSOCIATED WITH HIGH-RISK DRINKING**

Clinicians may want to consider a number of factors that contribute to high-risk alcohol use and alcohol-related adverse events. Some of these factors can be modified or changed. Others are more resistant to prevention efforts.

Individual factors that may play an important role in alcohol use and risk-taking behavior include a number of pre-college variables. These include

- Family history of alcoholism;
- Parental alcohol use;
- Age at first drink;
- Use of tobacco and marijuana in high school or middle school;
- Regular church attendance prior to college;
- Personality factors;
- Untreated depression, anxiety, bipolar disorders and Post Traumatic Stress Disorder;
- Alcohol and drug use among peers and the student's home community.

*(Baer, 2002; Dowdall & Weschler, 2002; Clapper, Martin & Clifford, 1994; Corbin, McNair & Carter, 1996).*

Individual risk factors that can be addressed by clinicians include:

- Untreated mental health disorders;
- Current tobacco, marijuana or other drug use;
- Untreated medical problems such as chronic pain, GI problems, sexually transmitted diseases (STDs), etc;
- Lack of knowledge about the risks of heavy drinking, such as accidents, STDs, relationship issues, risk of being asked to leave the university;
- Risk of alcohol problems following college;
- Misconception of normative levels and patterns of alcohol use on campus;
- Severe academic stress due to heavy academic load, poor study habits etc;
- College expectations;
- Lack of awareness of alcohol-free activities on campus.

*(Haines, 1996; Dowdall & Weschler, 2002).*

Clinicians may want to use these individual risk factors to screen, assess, and develop a plan for each student they encounter at the student health center. For example, students who have a strong family history of alcohol problems, a history of impulsive or deviant behavior, or chronic depression should be counseled to be abstinent from alcohol use. Others with less immediately threatening risk factors should be informed about low-risk drinking limits and how to avoid alcohol use in high-risk situations.

Modules 2, 3 and 4 are designed to provide clinicians with methods to screen, assess, and intervene with individual students.

What follows is a list of interventions that have been tested and evaluated in research studies. While many of these interventions are beyond the immediate scope of work of clinic-based health care professionals, providers may want to volunteer time and expertise to work with campus and community groups who are involved in broader-based efforts.

### **INTERVENTIONS THAT SEEM TO WORK TO REDUCE ALCOHOL USE AND ALCOHOL-RELATED PROBLEMS**

- Clinician-delivered screening and brief interventions;
- Changing university norms;
- Reducing the number of liquor licenses in campus area;
- Increasing penalties for alcohol use in college settings;
- Having the active support of parents and alumni;
- Administrative leadership.

### **INTERVENTIONS THAT MAY WORK**

- Work with the Greek system;
- Provide alternative social activities;
- Train drink servers;
- Mass media campaigns;
- Increase taxes on alcohol.

Some strategies have been shown in research studies to be ineffective. Health care professionals need to be aware of them in order to insure that time, energy, and funding are directed to more promising approaches.

### **INTERVENTIONS THAT DON'T WORK**

- Just say “no”;
- Educational programs not linked to other methods;
- Inconsistent policies and procedures;
- Required courses.

One strategy that is within the scope of work of most student health clinicians is to promote healthy behaviors through individual and group interventions. Module 2 of this curriculum describes the role of the college health clinic in screening students for at-risk and problem drinking in order to discern who needs what type of health message and to identify the small percentage of students who should be referred to an addiction treatment program. Modules 3 and 4 focus on the skills needed to deliver effective office-based brief interventions for those students who would benefit from reducing their drinking.

It is important to have screening and outreach programs on campus that identify those students who may not seek care in student health centers. Opportunities include dormitories, the Greek system, student unions, or student health fairs. Having incoming students complete a health habit survey that includes alcohol use is a system-wide screening method that has worked in some campus settings (Marlatt et al., 1998). Another option is National Alcohol Screening Day, an annual event sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Substance Abuse and Mental Health Services Administration (SAMHSA). The program provides free, anonymous screening, alcohol and health information, and the opportunity to speak with a health professional about alcohol concerns. It takes place every April on college

---

campuses and in community and private practice settings around the country. (For more information go to [www.niaaa.nih.gov](http://www.niaaa.nih.gov).)

## SUMMARY

High-risk alcohol use among college students is a major problem. There are many adverse effects with high levels of mortality and serious morbidity. While we need additional research, there are a number of proven prevention strategies that can be implemented immediately. In addition to implementing screening and intervention protocols in student health centers, clinicians have the opportunity to participate in a variety of campus and community intervention activities. The key is to base all interventions on proven and tested strategies

## REFERENCES

Anderson, P.B. & Mathieu, D.A. (1996); "College Students' High-Risk Sexual Behavior Following Alcohol Consumption;" Journal of Sex & Marital Therapy, 22: 259-264.

Baer, J.S. (2002); "Student Factors: Understanding Individual Variation in College Drinking;" Journal of Studies on Alcohol, Supplement No. 14, 40-54.

Centers for Disease Control and Prevention, (1997); Youth Risk Behavior Surveillance: National College Health Risk Behavior Survey – United States. MMWR 46 (SS-6): 1-56.

Clapper, R.L., Martin, C.S. & Clifford, P.R. (1994); "Personality, Social Environment, and Past Behavior as Predictors of Late Adolescent Alcohol Use;" Journal of Substance Abuse 6, 305-313.

Corbin, W.R., McNair, L.D. & Carter, J. (1996); "Self-Esteem and Problem Drinking Among Male and Female College Students;" Journal of Alcohol and Drug Education, 42, 1-14.

Dowdall, G.W., Wechsler, H. (2002); "Studying College Alcohol Use: Widening the Lens, Sharpening the Focus;" Journal of Studies on Alcohol, Supplement No. 14, 14-22.

Fisher B.S., Sloan J.J., Cullen, F.T. & Lu, C. (1998); "Crime in the Ivory Tower: The Level and Sources of Student Victimization;" Criminology 36, 671-710.

Fisher, B.S., Cullen, F.T. & Turner, M.G. (200); The Sexual Victimization of College Women, NCJ 182369, Washington: Bureau of Justice Statistics, National Institute of Justice, Department of Justice.

Gfroerer, J.C., Greenblatt, J.C. & Wright, D.A. (1997); "Substance Use in the U.S. College-Age Population: Differences According to Educational Status and Living Arrangement;" American Journal of Public Health, 87, 62-65.

Gross, W.C. & Billingham. (1998); "Alcohol Consumption and Sexual Victimization Among College Women;" Psychology Report, 82, 80-82.

Haines, M. & Spear, S.F. (1996); "Changing the Perception of the Norm: A Strategy to Decrease Binge Drinking Among College Students;" Journal of American College Health, 45, 134-140, 1996.

Haines, M.P. (1996); A Social Norms Approach to Preventing Binge Drinking at Colleges and Universities; Newton, MA: Higher Education Center for Alcohol and Other Drug Prevention, Department of Education.

Hingson, R.W., Heeren, T., Zakocs, R.C., Kopstein, A., & Wechsler, H. (2002); "Magnitude of Alcohol Related Mortality and Morbidity Among U.S. College Students Ages 18-24;" Journal of Studies on Alcohol, 63, 136-144.

Johnston, L.D., O'Malley, P.M. & Bachman, J.G. (2000); National Survey Results on Drug Use From the Monitoring the Future Study, 1975-1999, Vol. 2. NIH Publication No. 00-4803, Bethesda, MD: Department of Health and Human Services.

Marlatt, G.A., Baer, J.S., Kivlahan, D.R., Dimeff, L.A., Larimer, M.E., Quigley, L.A., Somers, J.M., & Williams, E. (1998); "Screening and Brief Intervention for High-Risk College Student Drinkers: Results From a 2-Year Follow-Up Assessment;" Journal Consult Clinical Psychology, 66, 604-615.

Meilman, P.W. (1993); "Alcohol-Induced Sexual Behavior on Campus;" Journal of American college health, 42, 27-31.

O' Malley, P.M., & Johnston, L.D. (2000); "Epidemiology of Alcohol and Other Drug Use Among American College Students;" Journal of Studies on Alcohol, Supplement 14, 14-23.

Perkins, H.W. (2002); "Surveying the Damage: A Review of Research on Consequences of Alcohol Misuse in College Populations;" Journal of Studies on Alcohol, Supplement No. 14, 91-101.

Presley, C.A. Meilman, P.W. & Cashin J.R. (1996); Alcohol and Drugs on American College Campuses: Use, Consequences, and Perceptions of the Campus Environment, Volume IV: 1992-94; Carbondale, IL: Core Institute, Southern Illinois University.

Substance Abuse and Mental Health Services Administration. (1999); National Household Survey on Drug Abuse Main Findings 1997; DHHS Publication No. (SMA) 99-3295, Rockville, MD: Office of Applied Studies.

Wechsler, H. & Austin, S.B. (1998); "Binge Drinking: The Five/Four Measure;" Journal of Studies on Alcohol, 59, 122-4.

Wechsler, H., Dowdall, G.W., Maenner, G., Gledhill-Hoyt, J., & Lee, H. (1998); "Changes in Binge Drinking and Related Problems Among American College Students Between 1993 and 1997. Results of the Harvard School of Public Health College Alcohol Study;" Journal of American College Health, 47: 57-68.

---

Wechsler, H., Lee, J.E., Kuo, M., & Lee, H. (2000); College Binge Drinking in the 1990s: A Continuing Problem: Results of the Harvard School of Public Health 1999 College Alcohol Study;" Journal of American College Health, 48, 199-210.

Wechsler, H., Moeykens, B., Davenport, A., Castillo, S., & Hansen, J. (1995); "The Adverse Impact of Heavy Episodic Drinkers on Other College Students;" Journal of Studies on Alcohol, 56, 628-634.

Wechsler, H. (2001); Binge Drinking on America's College Campuses: Findings From the Harvard School of Public Health College Alcohol Study (monograph), Boston, MA: Harvard School of Public Health.

Wechsler, H., Davenport, A., Dowdall, G., Moeykens, B., & Castillo, S. (1994); "Health and Behavioral Consequences of Binge Drinking in College. A National Survey of Students at 140 Campuses;" Journal of the American Medical Association, 272, 1672- 1677.

Wechsler, H., Fulop, M., Padilla, A., Lee, H., & Patrick, K. (1997); "Binge Drinking Among College Students: A Comparison of California With Other States;" Journal of American College Health, 45, 273-277.

## **MODULE 2:**

### **SCREENING AND ASSESSING**

#### **I. Learning Objectives**

- A. Participants will increase their knowledge of screening college students for high-risk drinking.
- B. Participants will increase their knowledge of assessing students for alcohol-related problems.
- C. Participants will increase their skills in screening and assessment.

#### **II. Chronology**

- A. 20- to 30-minute large group lecture using a sub-sample of about 25 slides.
- B. 10- to 20-minute demonstration role-play to demonstrate how to conduct screening and assessment.
- C. 20- to 30-minute paired role-play to give all participants the opportunity to practice screening and assessment.

#### **III. Training Materials**

- A. 28 slides.
- B. A summary of clinical protocols and current evidence.
- C. A copy of the AUDIT contained at the end of this module.
- D. Role-play scenarios. See Appendix B.

#### **IV. Credits**

This module is based on the work of a number of scientists and clinicians. The clinical recommendations are based on science and the author's clinical experience.



## **MODULE 2:**

### **SCREENING AND ASSESSING**

#### **INTRODUCTION**

Alcohol-related problems are a leading cause of morbidity in college students. Student health services provide an ideal opportunity to identify and advise young people who are using alcohol above recommended limits. This module reviews what we know about screening and assessment for alcohol problems. The goal of this module is to provide clinicians with protocols and specific questions to detect at-risk, problem, and dependent alcohol use in college students. The information may also be helpful to persons working in college residential settings and for student advisors.

The goal of screening in student health or other college settings is to reduce alcohol-related harm. Abstinence is an unrealistic expectation for many college campuses. Screening students goes beyond simply identifying and referring students who are alcohol-dependent and require referral to a specialized alcohol treatment program. For example, there is a direct dose-response relationship between drinking and a number of alcohol-related consequences. Persons drinking 3-4 drinks per day have a 2- to 3-fold risk for accidents, stroke, liver disease, cancer, and hypertension (Anderson, 1993). This effect is independent of the presence or absence of alcoholism.

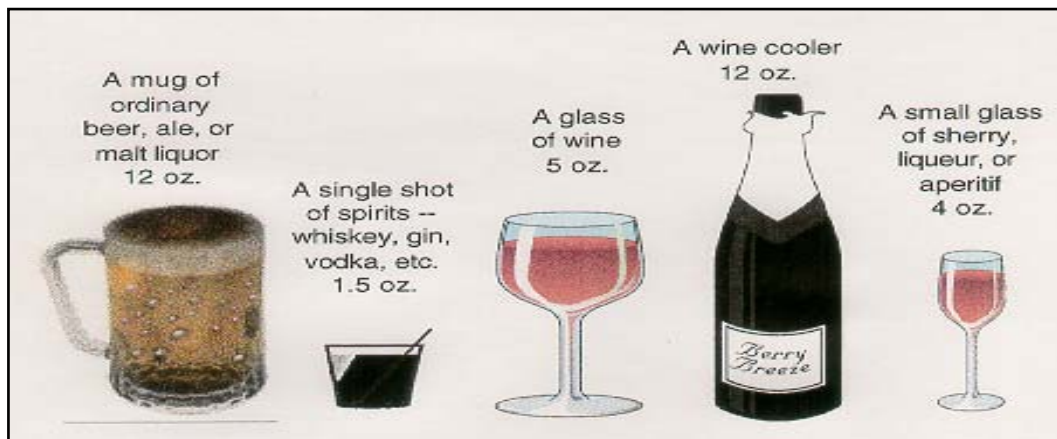
One need not be alcohol-dependent to experience a serious life-threatening problem. Examples of such situations include college students who binge drink enough to become comatose and develop fatal respiratory events, students who are involved in motor vehicle crashes, and students who fall off walls or roofs. If we can identify students at greatest risk for alcohol-related harm, we may be able to reduce the estimated 1,400 deaths and 500,000 serious injuries each year (Hingson, 2002).

#### **DEFINITIONS AND CRITERIA**

---

Alcohol use disorders include three categories of drinkers: a) at-risk or hazardous drinkers; b) problem drinkers (synonymous terms are alcohol abuse and harmful drinkers); and c) dependent drinkers (synonymous terms are alcoholic or addicted drinkers). The definitions of these terms vary by clinician, scientist, and country, but for the purpose of this paper, we will use the definitions incorporated in the NIAAA publication *The Physicians' Guide to Helping Patients with Alcohol Problems* (NIAAA, 1995).

At-risk drinkers are defined as: a) young men who drink more than 14 standard drinks per week; b) young women who drink more than 7 standard drinks per week; or c) students who drink more than 3-4 drinks per occasion one or more times per week. At-risk drinkers usually do not have serious alcohol-related problems and are not alcohol-dependent. Rather, students who drink at these levels are at risk for an alcohol-related adverse event such as an accident, injury, unwanted sexual experience, academic problems, relationship issues, and mental health disorders such as depression. A standard drink in the U.S. contains 14 grams of alcohol and is equivalent to a 12-ounce can or bottle of beer, a 5-ounce glass of wine, or one-and-one half ounces of hard liquor.



Problem drinkers (synonymous terms are alcohol abusers and harmful drinkers) are persons who have experienced repeated alcohol-related problems or adverse events (e.g., accident, injury, problems in school, behavioral problems, blackouts, abusive behavior, fines by campus police, and visits to the emergency departments or urgent care.) Many students who abuse alcohol have a series of alcohol-related problems in high

school and college. Many of these students are at risk for alcohol dependence and often require counseling and treatment. Problem drinking is common among college students where heavy drinking is the social norm. There is a direct relationship between quantity and frequency of drinking and the development of problem and dependent alcohol use. Up to 60% of students on some college campuses are at-risk drinkers or problem drinkers (O'Malley and Johnston, 2002).

Dependent drinkers are defined as those who are unable to control their alcohol use, have experienced repeated adverse consequences, are pre-occupied with alcohol use, and have evidence of tolerance or withdrawal. Students who are alcohol-dependent usually have difficulty staying in school and frequently drop out for academic and personal reasons. Students at greatest risk for alcohol dependence are those with very high tolerance, those with a family history of alcoholism, students who use alcohol to deal with stress and mental health issues, and those who drink on a daily basis. Alcohol dependence can occur in college students, but in general, students seen for alcohol problems more often meet the criteria for alcohol abuse rather than alcohol dependence as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV).

It is important to understand the differences between conducting screening and doing a diagnostic addiction assessment. The goal of screening is to detect possible alcohol problems, or identify those at risk of developing such problems. Screening procedures are usually brief and can be conducted by persons with limited experience in the alcohol and drug area. Screening can occur in any health care setting or as part of a community-based health program. A diagnostic assessment, on the other hand, is used to establish a diagnosis and develop a specific treatment plan. Assessments are generally conducted over multiple visits by an alcohol and drug abuse specialist in a treatment center. Assessments may also be performed at the request of the legal system for persons arrested for drunk driving or other criminal acts. The material presented in this chapter focuses on screening, biological measures, and brief assessment methods clinicians can use in general clinical settings.

---

<b>Clinical Opportunities: Screening</b>
<b>Health maintenance visits</b> <ul style="list-style-type: none"> <li>• School and sports physicals</li> <li>• Travel consultation</li> </ul>
<b>Possible alcohol-related symptoms</b> <ul style="list-style-type: none"> <li>• Headaches</li> <li>• Depression</li> <li>• Anxiety</li> </ul>
<b>Acute care visits for trauma</b>

## SCREENING FOR ALCOHOL USE DISORDERS

Alcohol screening methods for use in clinical settings include: a) direct questioning by a health care professional; b) self-administered questionnaires using pencil and paper, computer or telephone; and c) laboratory tests. Many of these methods have excellent psychometric properties that are comparable to a single measurement of blood pressure as a screening test for hypertension or a fasting blood glucose test to detect diabetes. While there is limited research on the extent of underreporting of alcohol use among college students, denial and minimization appear to be less common in this population (Harrison and Hughes, 1997). The reliability and validity of screening methods to detect alcohol and drug use varies by the method of administration of the test, the clinical setting, and the student population. There is limited information on the psychometric properties of alcohol screening tests in college populations. Most of the information presented is based on adult samples.

Alcohol screening tests with high specificity and sensitivity in general adult populations include consumption questions, questions on binge drinking, and two instruments called the CAGE and the Alcohol Use Disorders Identification Test (AUDIT.) Please see page 33 to view a copy of the AUDIT. A number of alcohol screening tests designed for specific populations such as adolescents, women, and emergency department subjects are also included. This module also includes a section on assessing students for alcohol-related harm. Students who drink above recommended limits should complete a brief assessment so the clinician can develop a treatment plan.

### Consumption Questions

Consumption questions that focus on frequency, quantity, and binge drinking are widely recommended as initial screening questions for use in clinical settings (NIAAA, 1995; Canning & Kennell-Webb, 1999; Fleming & Graham, 2001).

**Frequency:** *“How many days per week do you drink alcohol?”*

**Quantity:** *“On a typical day when you drink alcohol, how many standard drinks do you have?”*

**Binge drinking:** *“How many times per month do you drink more than 3-4 drinks on a single occasion?”*

A positive screen would include students who drink alcohol every day, men who drink more than 14 drinks per day, women who drink more than 7 drinks per week, and men and women who drink more than 3-4 drinks per occasion.

*\* Note: While one binge drinking episode may seem normative and part of the college experience, a single event can have serious adverse consequences. The goal of screening is to identify students at risk, even if it means identifying the majority of students on some campuses.*

These questions can be incorporated into routine patient care. They are sensitive and specific for the detection of at-risk and problem drinkers. These questions may be less useful in identifying students who are alcohol-dependent. Studies in adult samples suggest persons who are dependent may minimize alcohol use. Consumption questions can help determine the level of risk of alcohol-related health effects in individual students. For example, young men who drink more than 400 grams of alcohol per week (30 standard drinks) have a 5-fold increase of dying from an alcohol-related problem compared to young men who drink less than 100 grams per week (Andreasson, Allebeck, & Romelsjo, 1988). The risk for an alcohol-related adverse event appears dose-related.

### **CAGE, CUGE and TWEAK**

Indirect behavioral questions such as those contained in the CAGE (Ewing, 1984) or its variants, the CUGE and TWEAK (Sokol, Martier & Ager, 1989; Russell, Martier, & Sokol, 1994), were developed to detect alcohol dependence (Saitz, Lepore, Sullivan, Amaro, & Samet, 1999; Chan, Pristach, Welte, & Russell, 1993). The CAGE assesses four areas related to lifetime alcohol use. One or two positive responses is considered a positive test, and you may want to ask additional questions or refer these patients to an alcohol and drug treatment specialist. The CAGE has been found to have poor

psychometric properties in African-American and Mexican-American populations (Volk, Steinbauer, & Cantor, 1997).

<b>C</b>	Have you ever felt the need to <b>C</b> ut down on your drinking?
<b>A</b>	Have you ever felt <b>A</b> nnoyed by someone's criticizing your drinking?
<b>G</b>	Have you ever felt bad or <b>G</b> uilty about your drinking?
<b>E</b>	Have you ever needed a drink first thing in the morning to steady your nerves and get rid of a hangover? ( <b>E</b> ye-opener)

Like most of the screening instruments reviewed, the sensitivity and specificity of the CAGE varies in different studies, ranging from 60 to 95% in one study to 40 to 95% in another study. The variability of these reports may be related to: (a) different criterion measures used as the "gold standard" for alcoholism; (b) assessment of lifetime use as compared to current use; (c) varying the cutoff score from 1-4 positive responses; and (d) differences in population samples. Its major deficiencies are that it does not assess current problems, levels of alcohol consumption, or binge drinking. Another concern is that women are more likely to answer positively to the "guilt" question, even at lower consumption levels (Cherpital, 2000). Consequently, we recommend that you only use the CAGE along with questions on quantity, frequency, and binge drinking.

A new instrument called the CUGE was developed to detect alcohol use disorders in young adults. The "annoyed" question in the CAGE was replaced by "driving **U**nder the influence". This substitution resulted in a significantly greater sensitivity and area under the curve (ROC analysis) in a sample of 3,564 college students at a Catholic university in Belgium (Aertgeerts et al., 2000).

The TWEAK is a modification of the CAGE that was developed for young women of childbearing age. It substituted a question on tolerance for the question on guilt, modified the question on annoyed, and added a question about amnesia. Using a criteria standard based on a seven-day drinking report of two or more drinks per day around the time of conception, these five items proved more sensitive than the CAGE or the Michigan Alcoholism Screening Test (MAST) in a population of 4,000 primarily inner-city African-American women (Russell et al., 1994).

<b>T</b>	How many drinks can you hold? (3+ drinks suggests <b>Tolerance</b> )
<b>W</b>	Have close friends or relatives <b>Worried</b> or complained about your drinking in the past year?
<b>E</b>	Do you sometimes take a drink in the morning when you first get up? ( <b>Eye-opener</b> )
<b>A</b>	Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember? ( <b>Amnesia or blackouts</b> )
<b>K</b>	Do you sometimes feel the need to <b>K/cut</b> down on your drinking?

**Single Screening Questions**

Simplicity, low cost, and accuracy are important characteristics of effective screening tools. Numerous researchers have tried to develop 1- or 2-question alcohol screening tests. The single question - *“How often in the past month have you had 5 or more drinks on one occasion?”* was found to have a sensitivity of 62% and a specificity of 92%. This study by Taj, Devera-Sales, and Vinson (1998) used NIAAA criteria for at-risk drinking and DSM-IV criteria for alcohol dependence or abuse as the standard. This may be the best question to use for screening college students.

In another study, Brown, Leonard, and Saunders (1997) found that two questions had a sensitivity of 79% in a large primary care sample: *“In the last year, have you ever drank or used drugs more than you meant to?”* and *“Have you felt you wanted or needed to cut down on your drinking or drug use in the last year?”* Another pair of questions with high psychometric properties is: *“Have you had a drink in the past 24 hours?”* and *“Have you ever had a problem with your drinking?”* (Cyr & Wartman, 1988). Cherpitel (1997, 2000) developed a four-question alcohol screening questionnaire, the RAPS4 (Rapid Alcohol Problems Screen) for use in emergency department settings.

**Interview Techniques To Increase the Accuracy of Self-Report in College Students**

While some patients will minimize their alcohol use, especially those who are alcohol-dependent, a number of interview techniques can minimize underreporting. These include asking about alcohol use in the context of other health behaviors, such as smoking, exercise, stress, and depression. Clinicians who ask questions with empathy and interest will illicit more accurate responses about sensitive areas like alcohol use.

Other techniques include asking direct questions in a non-judgmental manner and observing non-verbal cues. Asking about family experience with alcohol and parental use may lead to more accurate responses. Specific questions that may elicit more accurate responses at the higher end of alcohol use include:

*“While I know you probably don’t drink this much every time, what is the most alcohol you ever drank on a single occasion?”*

*“How much do you drink on a very heavy drinking day?”*

*“How often do you drink more than 20 drinks at a party?”*

***Remember: Your approach should...***

*Be sincere*

*Be respectful*

*Establish trust*

*Emphasize confidentiality*



### **Screening Alcohol Use Disorders in Special Populations**

A number of authors have reported that current alcohol screening tests are less sensitive in women. A review of the alcohol screening literature by Bradley, Badrinath, and Bush (1998) found that the CAGE, AUDIT, Skinner’s trauma scale (Skinner, Holt, & Schuller, 1984), and the MAST had poorer psychometric properties in women than in men. A series of studies have examined the psychometric properties of screening instruments in special settings and with special populations. Saitz et al. (1999) found the CAGE a useful screening test in a Latino population.

The CRAFFT alcohol-screening test was developed for adolescents. This 9-question test showed strong psychometric properties in a sample of 99 young people between the ages of 14 and 18 (Knight, Shrier, & Bravender, 1999).

### **Self-Administered Pencil and Paper Alcohol Screening Questionnaires**

Another screening approach is the use of self-administered questionnaires. These include the AUDIT (Babor & Grant, 1989; Volk et al., 1997; Steinbauer, Cantor, &

---



Holzer, 1998), the MAST (Selzer, 1971), the SAAST (Self-Administered Alcohol Screening Test) (Swenson, 1975), and instruments that embed alcohol use questions in the context of other health behaviors such as smoking, exercise, and weight (Health Screening Survey) (Fleming, Barry & MacDonald, 1991). The Prime-MD (Spitzer, Williams, & Kroenke, 1994) combines alcohol questions in the context of a screening test to detect depression. These pencil and paper tests can also be used as an adjunct to questions administered by a clinician or administered by a computer in the waiting room. The AUDIT is the test most frequently recommended as a screening test.

A working group of the World Health Organization created the AUDIT as a brief multi-cultural screening tool for the early identification of problem drinkers (rather than persons who would meet criteria for alcohol dependence). They chose questions that discriminated high-risk drinkers in a six-nation study (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993). The AUDIT contains a series of ten questions that include three questions on alcohol consumption, four questions on alcohol dependence symptoms, and three questions about alcohol-related problems. A cut-off score of six to eight is recommended for at-risk drinking in college students and young adults. (Fleming et al, 1991; Barry & Fleming, 1993; Reinert and Allen, 2002).

### **Laboratory Markers**

The sensitivity and specificity of laboratory tests such as the gamma-glutamyl transferase (GGT), Mean Corpuscular Volume (MCV), and Carbohydrate-Deficient Transferrin (CDT) in college students are not known. In general, these lab markers are correlated with daily sustained drinking for a number of years. Fewer than 20% of heavy drinkers in general adult samples have elevated MCV, GGT, and CDT levels. These markers are more sensitive in men than women.

Blood Alcohol Levels (BAL) can be useful in all students seen for trauma or accidents, especially in an acute care setting. All student health centers may want to obtain a breathalyzer to assess BAL. This procedure is inexpensive and provides an immediate result. Urine drug toxicology screens can also provide useful information, as many students who drink above recommended limits also use other substances.

**ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)**

The following questions are about **the past year**.

1. How often do you have a drink containing alcohol?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> 2 to 3 times a week	(3)
<input type="checkbox"/> Monthly or less	(1)	<input type="checkbox"/> 4 or more times a week	(4)
<input type="checkbox"/> 2 to 4 times/month	(2)		
2. How many drinks containing alcohol do you have on a typical day when you are drinking?			
<input type="checkbox"/> None	(0)	<input type="checkbox"/> 5 or 6	(3)
<input type="checkbox"/> 1 or 2	(1)	<input type="checkbox"/> 7 or 9	(4)
<input type="checkbox"/> 3 or 4	(2)	<input type="checkbox"/> 10 or more	(5)
3. How often do you have six or more drinks on one occasion?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
4. How often during the last year have you found that you were unable to stop drinking once you had started?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
5. How often during the last year have you failed to do what was normally expected from you because of drinking?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
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?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
7. How often during the last year have you had a feeling of guilt or remorse after drinking?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
9. Have you or someone else been injured as the result of your drinking?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		
10. Has a relative, friend, or a health worker been concerned about your drinking or suggested you cut down?			
<input type="checkbox"/> Never	(0)	<input type="checkbox"/> Weekly	(3)
<input type="checkbox"/> Less than monthly	(1)	<input type="checkbox"/> Daily or almost daily	(4)
<input type="checkbox"/> Monthly	(2)		

**\*\*A score of 8 or more is suggestive of at-risk drinking. Patients who score positive on the AUDIT should be assessed for potential alcohol-related problems.**

**AUDIT Reference:** Babor TF, de la Fuente JR, Saunders J, Grant M. *AUDIT: The Alcohol use Disorders Identification Tests: Guidelines for use in Primary health Care*. Geneva, Switzerland: World Health Organization, 1992.

## Recommendations On the Use of Alcohol Screening Questions and Tests

1. We recommend starting with questions on frequency and quantity of drinking, and frequency of binge drinking. Direct questions by a clinician should be asked in the context of routine care. Asking alcohol questions along with questions on smoking, safety, exercise, nutrition, and sexual activity appears to reduce patient resistance. The following cut-off levels are based on risk. A positive screen is as follows:
  - Male college students: *more than 2 drinks per day, or more than 14 drinks per week, or more than 4 drinks per occasion.*
  - Women college students: *more than 1-2 drinks per day, or more than 9 drinks per week, or more than 3 drinks per occasion.*
  - Women college students who are pregnant or who are trying to conceive or who are not using birth control methods: *any alcohol use.*
  - Young men and women with serious health problems that may be affected by alcohol use (e.g., diabetes, depression, anxiety, and hypertension): *any alcohol use.*
  - Men and women who take medication that may interact with alcohol: *any alcohol use.*
2. If the person is drinking above recommended limits or if the clinician has additional time, clinicians should ask the CAGE questions to screen for alcohol dependence. A positive CAGE is usually defined as two or more positive responses. Clinicians may want to use the TWEAK for young female students.
3. The AUDIT is recommended for clinicians and health care systems that want to use a self-administered questionnaire by pencil and paper or computer (Fleming et al., 1991; Daepfen, Yersin, Landry, Pecoud, & Decrey, 2000). The AUDIT contains three questions on frequency, quantity, and binge drinking; three of the four CAGE questions on control, guilt and eye-opener; and four additional questions on blackouts, alcohol-related injury, physician/family advice, and expectation failure. A positive score is between 6 and 8. The AUDIT is more sensitive at a cut-off of 6, but there will be more false positives. Persons with an AUDIT score over 15 may be alcohol-dependent.

4. A number of methods are under investigation to find the best and least expensive way to administer an alcohol- or drug-screening test. One alternative is the use of computers in the clinic waiting room or pharmacy to provide immediate feedback. Some health care systems are including alcohol and drug questions on mailed questionnaires as part of an annual health check. Others are setting up web-based systems. These alternative methods have many advantages for student health centers that are setting up routine screening procedures.

### **ASSESSMENT FOR ALCOHOL ABUSE OR DEPENDENCE**

There is limited information available on how to conduct an assessment in a general clinical setting once a patient screens positive for a possible alcohol or drug use disorder. This critical issue has received limited attention from researchers and educators. While clinicians may want to refer a patient who screens positive to an alcohol and drug treatment specialist for a full assessment, it is important to try to classify patients as low-risk, at-risk, problem, or dependent drinkers before making a decision on this step.

The NIAAA publication *The Physicians' Guide to Helping Patients with Alcohol Problems* (NIAAA, 1995) recommends that an alcohol assessment include a brief review of alcohol-related medical and mental health issues, legal or social problems, behavioral effects, and symptoms of physical dependence.

- Examples of alcohol-related medical problems in a student population may include accidents and injuries, depression or suicide ideation, chronic headaches, blackouts, and sexually transmitted diseases (STDs).
- Social and legal effects may include contact with the university police for disorderly conduct, arrests for drunk driving, failing grades, employment difficulties, and inability to maintain long-term relationships.
- Behavioral effects include preoccupation with use, inability to control drinking, and loss of interest in hobbies or other activities due to drinking.

- Symptoms of physical dependence include drinking in the morning to get over a hangover, sweats or shakes if the student stops drinking, a history of alcohol withdrawal, lack of evidence of intoxication with BALs over .10%, and prolonged periods of intoxication.

A number of self-administered pencil and paper assessment instruments can be used to get a better idea of the extent of the alcohol problem and to develop a treatment plan. These include the 25-question MAST, the 12-question Alcohol Dependence Scale (ADS) (Skinner, 1982), and the 35-question Self-Administered Alcohol Screening Test (SAAST) (Swenson & Morse, 1975). These assessment tools can be completed by the patient independently; the physician then reviews the assessment with the patient. Diary cards are another method that may provide more accurate information on recent alcohol use (Watson, 1999). Diary cards have also been widely used in brief intervention studies as a self-monitoring method (Wallace, Cutler, & Haines, 1988; Fleming, Barry & Manwell, 1997; Ockene, Adams, Hurley, Wheeler, & Hebert, 1999).

### **Recommendations For An Alcohol Assessment**

- Consider asking a few questions focused on medical, social, family, and physical effects.
- Ask patients to complete a self-administered assessment test such as the MAST or ADS.
- Perform biological tests such as BAL, GGT, MCV, or CDT to confirm an alcohol problem.
- Refer to an alcohol specialist for a complete assessment.

---

**REFERENCES**

Aertgeerts, B., Buntinx, F., Bande-Knops, J., Vandermeulen, C., Roelants, M., Ansoms, S., & Fevery, J. (2000); "The Value of CAGE, CUGE, and AUDIT in Screening for Alcohol Abuse and Dependence Among College Freshmen;" Alcohol Clinical and Experimental Research, *4*, 53-57.

Anderson, P. Cremona, A., Paton, A., Turner, C., Wallace, P. (1993); "The Risk of Alcohol;" Addiction, *88*, 1493-1508.

Andreasson, S., Allebeck, P., & Romelsjo, A. (1988); "Alcohol and Mortality Among Young Men: Longitudinal Study of Swedish Conscripts;" British Medical Journal, *296*, 1021-1025.

Babor, T.F., & Grant, M. (1989); "From Clinical Research to Secondary Prevention: International Collaboration in the Development of the Alcohol Use Disorders Identification Test (AUDIT);" Alcohol Health and Research World, *13*, 371-374.

Barry, K.L., & Fleming, M.F. (1993); "The Alcohol Use Disorders Identification Test (AUDIT) and the SMAST-13: Predictive Validity in a Rural Primary Care Sample;" Alcohol and Alcoholism, *8*, 33-42.

Bradley, K.A., Badrinath, S., Bush, K., Boyd-Wickizer, J., & Anawalt, B. (1998); "Medical Risks for Women Who Drink Alcohol;" Journal of General Internal Medicine, *13*, 627-639.

Brown, R.L., Leonard, T., Saunders, L.A., & Pappasoulotis O. (1997); "A Two-Item Screening Test for Alcohol and Other Drug Problems;" Journal of Family Practice, *44*, 151-160.

Canning, U.P., Kennell-Webb, S.A., Marshall, E.J., Wessely, S.C., & Peters, T.J. (1999); "Substance Misuse in Acute General Medical Admissions;" QJM: Monthly Journal of the Association of Physicians, *92*, 310-326.

Chan, A.W., Pristach, E.A., Welte, J.W., & Russell, M. (1993); "Use of the TWEAK Test in Screening for Alcoholism/Heavy Drinking in Three Populations;" Alcohol Clinical Experimental Research, *17*, 1188-1192.

Cherpitel, C.J. (1997); "Alcohol and Injury: A Comparison of Three Emergency Room Samples in Two Regions;" Journal of Studies on Alcohol, *58*, 323-331.

Cherpitel, C.J. (2000); "A Brief Screening Instrument for Problem Drinking in the Emergency Room: the RAPS4, Rapid Alcohol Problems Screen;" Journal of Studies on Alcohol, *61*, 447-449.

Cyr, M.G., & Wartman, S.A. (1988); "The Effectiveness of Routine Screening Questions in the Detection of Alcoholism;" Journal of the American Medical Association, *259* (10), 51-54.

Daepfen, J.B., Yersin, B., Landry, U., Pecoud, A., & Decrey, H. (2000); "Reliability and Validity of the Alcohol Use Disorders Identification Test (AUDIT) Imbedded Within a General Health Risk

Screening Questionnaire: Results of a Survey in 332 Primary Care Patients;” Alcohol, Clinical and Experimental Research, 24, 659-665.

Ewing, J.A. (1984); “Detecting Alcoholism: The CAGE Questionnaire;” Journal of the American Medical Association, 252, 1905-1907.

Fleming, M.F., & Graham, A.W. (2001); “Screening and Brief Interventions for Alcohol Use Disorders in Managed Care Settings;” Recent Developments in Alcohol, 15, 393-416.

Fleming M.F. (2000); Screening and Brief Intervention in the U.S. Health Care System. In: 10th Special Report to the US Congress From the Secretary of Health and Human Services. Washington DC: US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism.

Fleming, M.F., Barry, K.L., Manwell, L.B., Johnson, K., & London, R. (1997); “Brief Physician Advice for Problem Alcohol Drinkers. A Randomized Controlled Trial in Community-Based Primary Care Practices;” Journal of the American Medical Association, 277, 1039-1045.

Fleming, M.F., & Barry, K.L. (1991); “A Three-Sample Test of a Masked Alcohol Screening Questionnaire;” Alcohol and Alcoholism, 26, 81-91.

Fleming, M.F., Barry, K.L., MacDonald, R. (1991); “The Alcohol Use Disorders Identification Test (AUDIT) in a College Sample;” International Journal of Addictions, 26, 1173-1185.

Harrison, L., & Hughes. (1997); “The Validity of Self-Reported Drug Use: Improving the Accuracy of Estimates;” NIDA Research Monograph No 167, NIH pub 97-4147, Washington DC p. 1-16.

Hingson, R.W., Heeren, T., Zakocs, R.C., Kopstein, A., & Wechsler, H. (2002); “Magnitude of Alcohol-Related Mortality and Morbidity Among U.S. College Students Ages 18-24;” Journal of Studies on Alcohol, 63, 136-144.

Knight, J.R., Shrier, L.A., & Bravender, T.D. (1999); “A New Brief Screen for Adolescent Substance Abuse;” Archives of Pediatric & Adolescent Medicine, 153, 591-596.

National Institute on Alcohol Abuse and Alcoholism (1995); The Physicians' Guide to Helping Patients with Alcohol Problems. (DHHS NIH Pub No. 95-3769), Washington, DC: U.S. Government Printing Office.

Ockene, J.K., Adams, A., Hurley, T.G., Wheeler, E.V., & Hebert, J.R. (1999); “Brief Physician- and Nurse Practitioner-Delivered Counseling for High-Risk Drinkers: Does it Work?” Archives of Internal Medicine, 159, 2198-2205.

O’Malley, P.M., & Johnston, L.D. (2002); “Epidemiology of Alcohol and Other Drug Use Among American College Students;” Journal of Studies on Alcohol, Supplement 14, 14-23.

Reinert, D.F., & Allen, J.P. (2002); “The Alcohol Use Disorders Identification Test (AUDIT): A Review of Recent Research;” Alcoholism, Clinical and Experimental Research, 26, 272-279.

---

Russel, M., Martier, S.S., Sokol, R.J., Mudar, P., Bottoms, S., Jacobson, S., & Jacobson, J. (1994); "Screening for Pregnancy Risk-Drinking;" Alcoholism, Clinical and Experimental Research, *18*, 1156-1161.

Saitz, R., Lepore, M.F., Sullivan, L.M., Amaro, H., & Samet, J.H. (1999); "Alcohol Abuse and Dependence in Latinos Living in the United States: Validation of the CAGE (4M) Questions;" Archives of Internal Medicine, *159*, 718-24.

Saunders, J.B., Aasland, O.G., Babor, T.F., de la Fuente, J.R., & Grant, M. (1993). "Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption—II;" Addiction, *88*, 791-804.

Selzer, M.L. (1971); "The Michigan Alcoholism Screening Test: The Quest for a New Diagnostic Instrument;" American Journal of Psychiatry, *127*, 1653-1658.

Skinner, H.A. (1982); Drug Use Questionnaire (DAST-20). Toronto, Canada: Addiction Research Foundation.

Skinner, H.A., Holt, S., Schuller, R., Roy, J., & Israel, Y. (1984); "Identification of Alcohol Abuse Using Laboratory Tests and a History of Trauma;" Annals of Internal Medicine, *101*, 847-851.

Sokol, R.J., Martier, S.S., & Ager, J.W. (1989); "The T-ACE Questions: Practical Prenatal Detection of Risk-Drinking;" American Journal of Obstetrics and Gynecology, *160*, 863-870.

Spitzer, R.L., Williams, J.B., Kroenke, K., & Linzer, M. (1994); "Utility of a New Procedure for Diagnosing Mental Disorders in Primary Care: The PRIME MD 1000 Study;" Journal of the American Medical Association, *272*, 1749-1756.

Steinbauer, J.R., Cantor, S.B., Holzer, C.E. 3<sup>rd</sup>, & Volk, R.J. (1998); "Ethnic and Sex Bias in Primary Care Screening Tests for Alcohol Use Disorders;" Annals of Internal Medicine, *129*, 353-362.

Swenson, W.M., & Morse, R.M. (1975); "The Use of a Self-Administered Alcoholism Screening Test (SAAST) in a Medical Center;" Mayo Clinical Proceedings, *50*, 204-208.

Taj, N., Devera-Sales, A., Vinson, D.C. (1998); "Screening for Problem Drinking: Does a Single Question Work?;" Journal of Family Practice, *46*, 328-335.

Volk, R.J., Steinbauer, J.R., Cantor, S.B., Holzer, C.E. 3<sup>rd</sup>. (1997); "The Alcohol Use Disorders Identification Test (AUDIT) as a Screen for At-Risk Drinking in Primary Care Patients of Different Racial/Ethnic Backgrounds;" Addiction, *92*, 197-206.

Wallace, P., Cutler, S., & Haines, A. (1988); "Randomized Controlled Trial of General Practitioner Intervention in Patients With Excessive Alcohol Consumption;" British Medical Journal, *297*, 663-668.

Watson, H.E. (1999); "Problem Drinkers in Acute Care Settings: Validation of an Assessment Instrument;" International Journal of Nursing Studies, *36*, 415-423.

---



## **MODULE 3:**

### **BRIEF INTERVENTION**

#### **I. Learning Objectives**

- A. Participants will increase their knowledge of brief intervention treatment.
- B. Participants will increase their knowledge of the evidence that supports the use of brief intervention in student health settings.
- C. Participants will increase their skills in conducting brief talk therapy.

#### **II. Chronology**

- A. 20-to 40-minute large group lecture using a sub-sample of about 30 slides.
- B. 10- to 20-minute demonstration role-play.
- C. 10- to 20-minutes for participants to practice role-plays.

#### **III. Training Materials**

- A. 25 slides.
- B. A summary of clinical protocols and current evidence.
- C. Brief intervention workbook (see Appendix A).
- D. Role-play scenarios (see Appendix B).

## **MODULE 3:**

### **BRIEF INTERVENTION**

#### **OVERVIEW**

Brief alcohol interventions are time-limited counseling strategies that focus on changing behavior and increasing treatment compliance. Brief interventions are primarily used to reduce alcohol use in non-dependent, non-addicted drinkers. The goal of brief intervention is to help students reduce their alcohol use to low-risk levels or to facilitate referral to alcohol treatment programs for students who are not able to reduce or stop drinking on their own. This module is designed for busy primary care clinicians with limited time to work with students. These interventions are designed for use in high-volume settings such as student health clinics, urgent care settings, and general primary care settings.

Brief intervention is a specific clinical protocol that is primarily clinician-directed and focused on convincing patients in one or two brief visits to reduce their drinking. Based on motivational interviewing techniques (see Module 4 of this curriculum) and a harm reduction paradigm, clinicians focus on helping students cut down and reduce their alcohol use. Studies have found that as many as 50% of persons are willing to work with their physician or health care provider to reduce their alcohol use (Fleming, 2002).

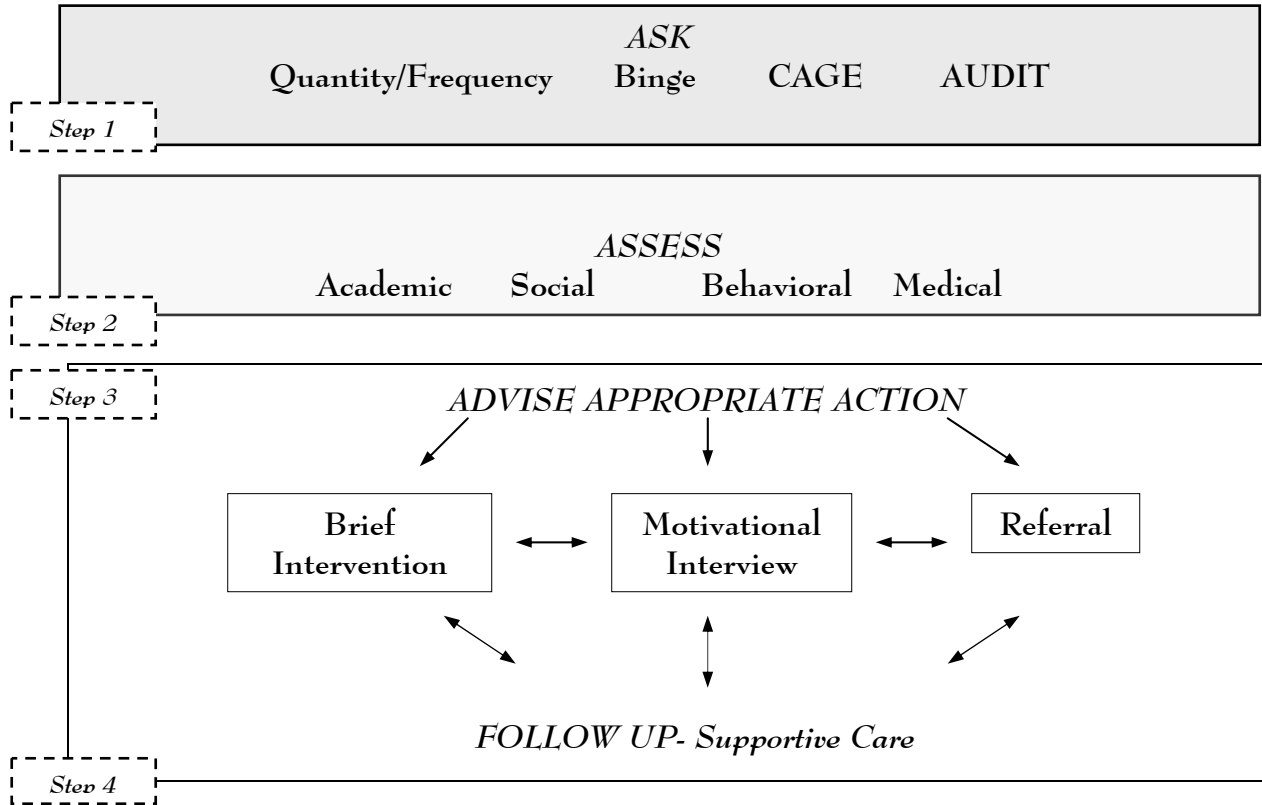
Brief intervention is not used exclusively for the treatment of alcohol problems; in fact, these counseling strategies are widely used by primary care providers, counselors, and other health care professionals to alter patient behavior. This method is routinely used to help individuals change dietary habits, stop smoking, reduce HIV risk, and take medications as prescribed. The following information is a very brief review of the evidence that supports the implementation of brief intervention in student health settings. Reports in the NIAAA *10<sup>th</sup> Special Report to the U.S. Congress on Alcohol and Health* (Fleming, 2000), the NIAAA journal *Alcohol Research & Health* (Fleming, 1997), and an

---

article prepared for the NIAAA college drinking committee (Larimer and Cronce, 2002) provide a more comprehensive review of the subject.

**WHAT IS BRIEF INTERVENTION?**

This curriculum recommends the utilization of the following protocol to conduct brief interventions with college students:



**1. Conduct an assessment:**

*“Tell me about your drinking.” “What do you think about your drinking?” “What do your friends think about your drinking?” “Have you ever done something you regret while you were drinking?” “Have you had any problems at school or with your friends related to your alcohol use?” “Have you ever been concerned about how much you drink?” “Are you interested in changing how much you drink?”*

**2. Provide direct, clear feedback:**

*“As your clinician/provider/therapist, I am concerned about how much you drink and how it is affecting you.” “The car*

*accident was probably a direct result of your alcohol use.” “You reported an unwanted sexual encounter the last time you got drunk.” “You reported to me that you flunked an exam because you were so hung over.” “While you may think you drink less than your friends, you are drinking at a high-risk level that could cause serious health problems if you continue.” “Contrary to common belief, most students do not drink the way you do.”*

**3. Establish a treatment contract through negotiation and goal setting:**

*“You need to reduce your drinking. What do you think about cutting down to three to four drinks 1-2 times per week?” “If you can cut down, you can still have fun and go to parties. However, cutting down to 3-4 drinks over an evening will significantly reduce your risk of getting into trouble with your alcohol use.” “If you can’t cut down, then you may have a very serious problem with your drinking. I would like you to use these diary cards to keep track of your drinking over the next two weeks. We will review these at your next visit.”*

**4. Apply behavioral modification techniques (optional if time allows):**

*“Here is a list of situations when people drink and sometimes lose control of their drinking. Let’s talk about ways you can avoid these situations.”*  
(See the intervention workbook at the end of this module for examples).

**5. Ask patients to review a self-help booklet (optional but very helpful):**

*“I would like you to review this booklet and bring it with you at your next visit. It would be very helpful if you could complete some of the exercises in the book.”* (See workbook)

**6. Set up a continuing care plan for nurse/health educator/social worker reinforcement phone calls and clinic visits:**

*“I would like you to schedule a follow-up appointment in one month so we can review your diary cards and I can answer any questions you might have. I will also ask one of the nurses to call you in two weeks. When is a good time for the nurse to call?”*

In addition to the above six steps, there are a number of techniques that clinicians can use to increase the efficacy of brief intervention:

- A. Provider empathy and body language are powerful change agents. Many studies have shown that one of the strongest predictors of change is related to the empathy of the counselor or therapist.

- B. Creating a safe protective environment is another key element, especially for women. Many students drink to relieve stress, anxiety and fears. Students are reluctant to share these fears and concerns with clinicians, especially if they have had embarrassing or dangerous experiences while drinking or at parties.
- C. Developing mutual trust and respect is an important aspect of the clinician-patient relationship that can lead to risk-taking in terms of revealing sensitive or painful memories.
- D. Creating cognitive dissonance and dealing with a patient's ambiguity toward change is another effective strategy. Students want to be accepted and to be cool. However, throwing up all over one's friends is not a pleasant experience for anyone. Being loud and abusive does not lead to respect or acceptance among other students. Pointing out the obvious adverse effects associated with heavy drinking can lead to students questioning their use of alcohol.
- E. Other tools include self-monitoring diary cards. Monitoring alcohol use can surprise students as to their level of use.
- F. Self-help booklets and referring patients to reading materials can lead to behavioral change. These booklets may be useful to some students who are ready to change. While information alone is not an effective change agent, specific methods on how to change can be very helpful.
- G. Many patients respond to stories about persons who have changed their alcohol use, especially if delivered by a recovering peer. Peer counseling can be an effective method to help students change their behavior in a student health center. Having a peer counselor available in the student health center can greatly facilitate the ability of a primary care provider to effect behavioral change.
- H. Asking a patient to bring his/her roommate, partner, or close friend with them is another technique that can supplement brief intervention.

### **DOES BRIEF INTERVENTION WORK?**

There have been over 70 studies reported in the literature testing the efficacy of brief intervention. Brief intervention studies to reduce alcohol use and alcohol-related

---

harm have been one of the most active areas of research in the alcohol field. These studies have primarily been conducted in Western Europe and North America. Six of these brief intervention motivational interview trials have focused on college-aged populations. Three of these studies were conducted in medical care settings—one in a student health center, one in the emergency department, and one in an alcohol treatment program. One study conducted in primary care settings included a large sample of young adults and is included in this review.

In addition to the classic brief motivational intervention studies, there have been a number of studies focused on reducing alcohol use in individual students, utilizing a number of techniques that overlap with brief intervention and motivational interviewing. Other interventions with college students have included:

- Educational/information interventions;
- Values clarification programs;
- Normative education programs;
- Cognitive-behavioral skills-based programs;
- Alcohol focused skills training programs; and
- Intensive treatment programs.

For information on these other interventions, the author refers readers to Larimer and Cronce (2002) which can be found in Supplement 14 of the Journal of Alcohol Studies.

Below is a detailed review of 7 brief intervention studies that are applicable to student health settings.

### **Study 1**

*Baer (1992) conducted a study with 132 college students at the University of Washington. Subjects were assigned to one of three groups: alcohol skills group therapy, alcohol skills self-help booklet, and one-hour feedback. There was significant pre-post-reduction in alcohol use in all three groups. Limitations of the study included the absence of a no-intervention control group and poor follow-up rates. The study was conducted in a research setting rather than in a clinical setting.*

### **Study 2**

*Marlatt (1998) conducted a trial with a sample of 348 high-risk*

---

*freshman identified prior to starting school. Students willing to participate were either assigned to a no-intervention control group or the intervention group. The intervention group received written feedback, personalized feedback one-year post-randomization, and written feedback two years post-randomization. Students assigned to the intervention group reported lower levels of alcohol use and fewer alcohol-related adverse events. The study used the Rutgers Alcohol Problem Index to measure alcohol events. While the study was not conducted in a student health center, the methods may be applicable to clinical settings.*

### **Study 3**

*Borsari and Carey (2000) replicated portions of the work of Marlatt in a sample of 60 students recruited from a psychology class. Students received a similar intervention as the one developed at the University of Washington (Dimeff, 1999,) with the difference that the intervention was delivered over a few weeks rather than over 2 years. Students (n=29) assigned to the intervention group reported lower levels of alcohol use 6 weeks post-intervention compared to the no-intervention control group.*

### **Study 4**

*Larimer and colleagues (2000) recruited 296 students from 12 fraternities and sororities and randomly assigned these students to brief motivational intervention or no-intervention control group. The intervention was conducted by a research therapist. The intervention group reported reduced alcohol use from 15.5 to 12 standard drinks per week, while the control group increased alcohol use from 14.5 to 17 drinks per week. There were minimal differences reported in women sorority members. This lack of effect in the women may be related to the small sample size. The generalizability of this study to primary care student health settings is not clear.*

### **Study 5**

*A study conducted in a student health setting recruited a sample of 41 students in a college center waiting room (Dimeff, 1997). Seventeen students were randomly assigned to a computerized personalized feedback report that was reviewed with the students by their student health clinicians. The 24 subjects in the control group received a brief computerized assessment without feedback.*

*The subjects exposed to the computerized feedback reported decreased drinking and had fewer negative consequences at follow-up. This is the only study reported in the literature that was conducted in a student health clinic where a primary care provider participated in the intervention.*

### **Study 6**

*Monti and colleagues (1999) tested the efficacy of brief intervention in the emergency department setting with young adults ages 18 and 19. Ninety-four subjects were randomized to an intervention group or usual emergency department care. The intervention consisted of a single counseling session delivered by a research therapist. Subjects were followed for three months. The intervention group reported a reduction in alcohol-related injuries, traffic violations, and drinking and driving events. However, there was no difference in alcohol use between the control and intervention groups at the follow-up. While the model requires the presence of a counselor or therapist available to the emergency department staff on short notice, the intervention model may work in a student health center.*

### **Study 7**

*The largest brief intervention trial conducted in primary care settings with a large sample of young adults was Project TrEAT – A Trial of Early Alcohol Treatment (Fleming 1997, 2002). Project TrEAT was started in 1992 with 48-month follow-up interviews completed in the fall of 1998. Subjects were recruited in the office waiting rooms of sixty-four family physicians from 17 clinics located in Southern Wisconsin. Over 17,695 adults ages 18-64 completed a screening instrument while waiting to see their primary care physician for a routine appointment. Twenty-four hundred and fifty subjects screened positive for high-risk problem drinking. A total of 774 patients remained eligible following a research interview and were randomized to “usual care” or “brief intervention.” A total of 225 young adults (ages 18-30) participated in the trial.*

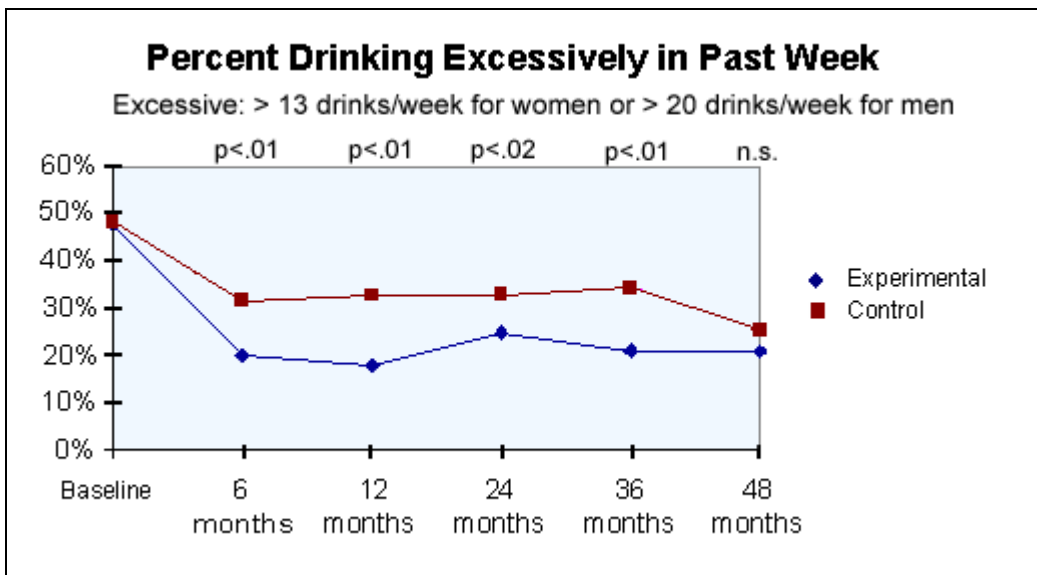
*The intervention was delivered by the patient’s family physician in the context of a general office visit. This is in contrast to the majority of the trials list above where a research therapist delivered the intervention. The intervention consisted of four parts. There were two face-to-face brief interventions and two nurse follow-up phone calls. The face-to-face physician intervention utilized a scripted workbook that the patient worked on at home between visits (a modified version of this workbook is*

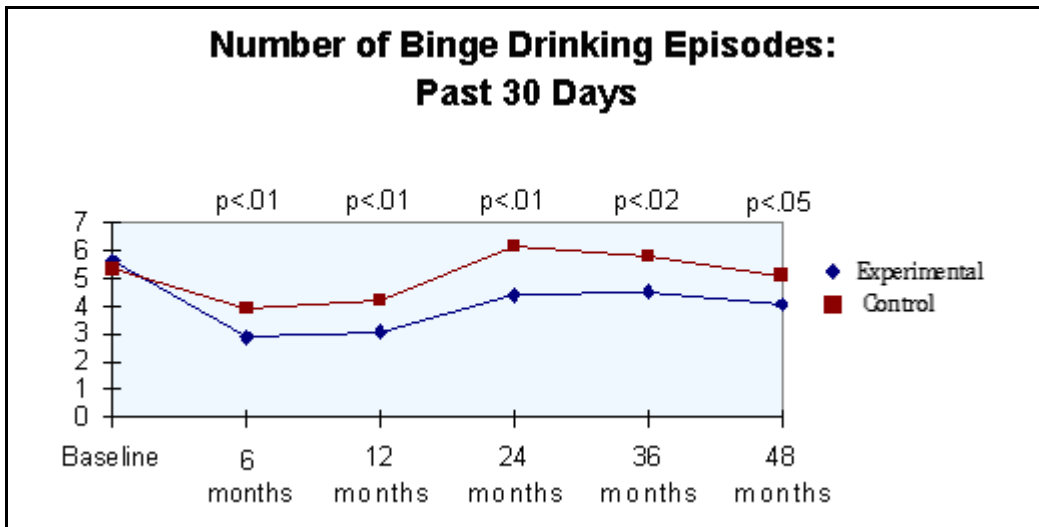
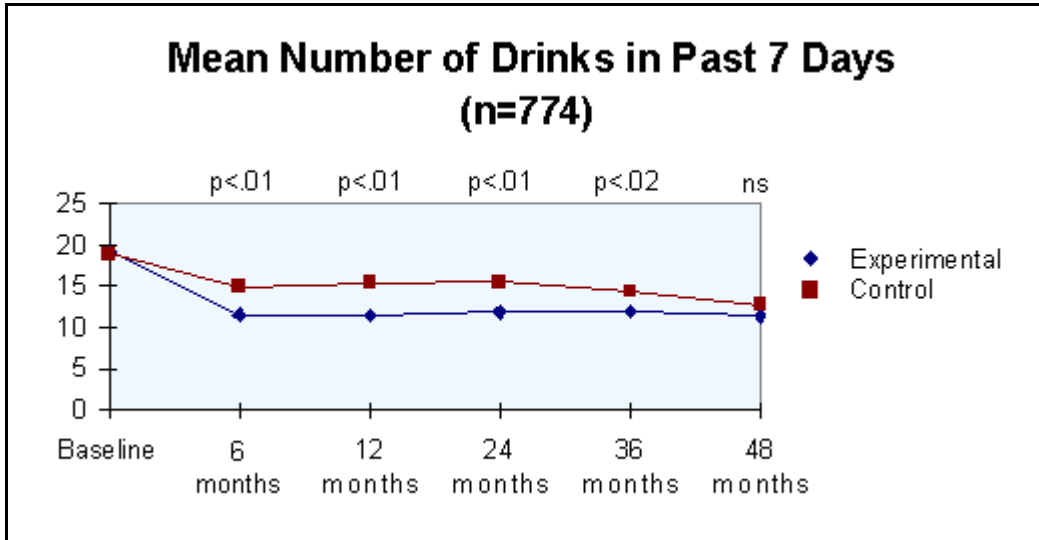


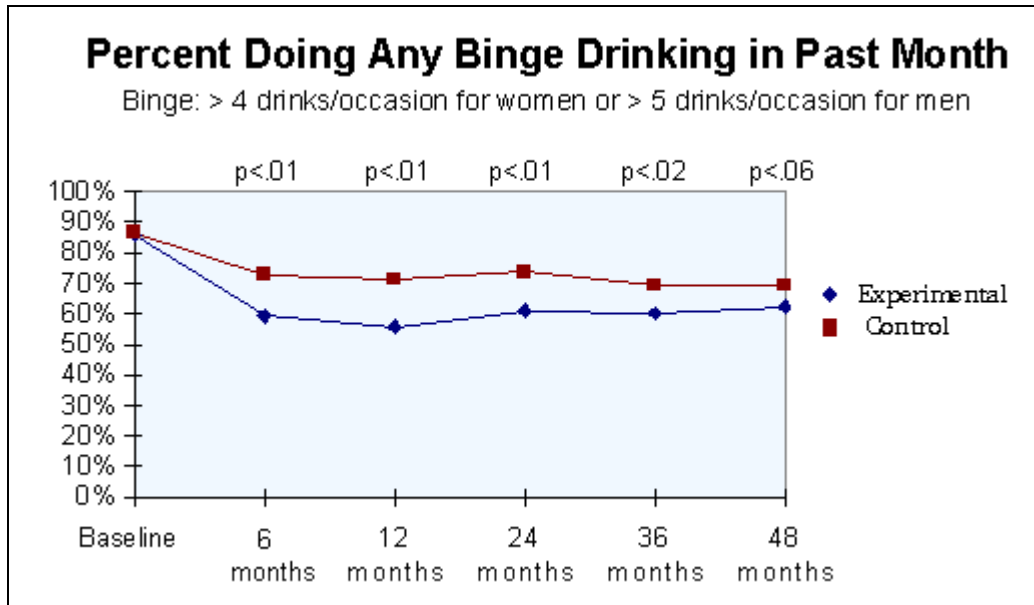
contained in Appendix A). Diary cards were used to monitor the patient’s alcohol use. The workbook included a review of their overall health factors, a list of alcohol-related adverse effects, a graph of the prevalence of alcohol use disorders, contracting methods using a prescription blank, and cognitive behavioral exercises. The face-to-face interventions were conducted in 10-15 minutes, depending on the physician and the patient’s responsiveness to the intervention.

Of the 774 subjects enrolled in the trial, 723 completed the 12-month follow-up interview (93.4% follow-up rate) and 83% completed the 48-month follow-up. The trial had complete or partial follow-up data on 98% of the subjects. The major alcohol use outcome variables were average drinks per week, binge drinking, excessive drinking, hospital days, emergency department visits, legal events, and costs. Patient self-report, family member report, medical records, claims data, and Department of Transportation and arrest data were used to assess the major outcomes of interest.

Project TrEAT found large decreases in all alcohol-use variables in all groups at 6, 12, 24, 36 and 48-month follow-up. There were significant differences between the experimental and control groups at each follow-up period. The intervention group reduced its alcohol use 20-40% more than the control group. There were also significant reductions in utilization events, legal events, and costs. These differences were similar across all age groups, including the young adults in the sample.







## SUMMARY

There are a number of positive conclusions, listed below, that can be reached about the use of brief interventions in college clinics and other health settings from these studies. However, many important questions remain for research. These include whether the observed effects last beyond 12 months, and whether they diminish over time. Brief interventions have also not yet been proven to be effective in various ethnic groups.

### Conclusion 1: Changes in Alcohol Use

Brief intervention talk therapy delivered by primary care providers, nurses, therapists, and research staff can decrease alcohol use for at least one year in non-dependent drinkers in primary care clinics, managed care settings, hospitals, and research settings (Bien, 1993; Kahan, 1995; WHO, 1996; Wilk, 1997; Fleming, 1997, 1999, 2000, 2002; Marlatt, 1998; Ockene, 1999; Gentilello, 1999). In positive trials, reductions in alcohol use varied from 10-30% between the experimental and control groups. One trial demonstrated sustained reductions in alcohol use over 48 months.

### Conclusion 2: Effects by Gender

The effect size for men and women is similar (Wallace, 1988; WHO, 1996;

Fleming, 1997; Ockene, 1999). A recent 48-month follow-up study of 205 women ages 18-40 who participated in Project TrEAT found sustained reductions in alcohol use (Manwell, 2000). This study also found significant reductions by women who received brief intervention and became pregnant during the 48-month follow-up period compared to women from the control group who became pregnant. There remains insufficient evidence on the efficacy of brief intervention with pregnant women (Chang, 1999).

### **Conclusion 3: Effects by Age**

The effect size for persons over the age of 18 is similar for all age groups including students (Wallace, 1988; WHO, 1996; Fleming, 1997, 1999b; Marlatt, 1998; Ockene, 1999; Monti, 1999).

### **Conclusion 4: Reductions in Health Care Utilization**

Brief intervention can reduce health care utilization (Kristenson, 1983; Israel, 1996; Fleming, 1997, 2000, 2002; Gentilello, 1999). Fleming's Project TrEAT and Kristenson found reductions in emergency room visits and hospital days. Gentilello found reductions in hospital readmissions for trauma. Israel reported reductions in physician office visits.

### **Conclusion 5: Reductions in Alcohol-Related Harm**

Brief intervention can reduce alcohol-related harm. A number of studies found a reduction in laboratory tests such as GGT levels (Kristenson, 1983; Wallace, 1988; Nilssen, 1991; Israel, 1996), sick days (Kristenson, 1983; Chick, 1985), drinking and driving (Monti, 1999); and accidents and injuries (Gentilello, 1999; Fleming, 2000).

### **Conclusion 6: Reductions in Cost**

Brief intervention may reduce health care and societal costs. An analysis of 48-month outcome data for Project TrEAT indicated a benefit-cost ratio of 3.8 to 1 for health care costs and 39 to 1 for societal costs (Fleming, 2002). Cost estimates performed by Holder (1995) using indirect data reported a cost savings

of 1.5 to 1.

**Conclusion 7: Intervention Delivered by a Patient’s Physician May be More Powerful**

Brief intervention may have a more powerful effect if delivered by the patient’s personal physician or provider. While there have been no direct comparisons between type of provider, the strongest trials had the patient’s personal physician and nurse deliver the intervention (Wallace, 1988; Anderson, 1992; Fleming, 1997, 1999, 2002; Ockene, 1999).

**Conclusion 8: Three to Four Contacts Minimum For Reduction in Alcohol Use**

Based on a number of trials, the minimum number of brief intervention contacts required to achieve a reduction in alcohol use is 3-4. These can include screening and assessment, a 10-15 minute counseling session, and a follow-up phone call. The length of the intervention appears to be less important than the number of contacts (Cordoba, 1998).

**Conclusion 9: Non-traditional Settings Offer Promise**

Non-traditional settings such as the workplace, dental offices, adult education centers, social service agencies and pharmacies offer significant promise for screening and brief intervention. A study conducted in 67 work sites in Australia suggests that employees will participate in alcohol screening and brief intervention if they are incorporated into lifestyle-based interventions (Richmond, 1995).

As stated earlier, while many questions remain, brief intervention is an important tool for the health professional working with college students. Trained personnel should be available to administer this intervention to college students in need on campus and in community clinic settings.

**GUIDELINES FOR USING BRIEF INTERVENTION**

1. All students who drink above recommended limits of alcohol use should receive brief intervention.
2. Students who are resistant or who fail brief intervention may have a more serious problem than first suspected and should be referred to an alcohol treatment specialist.
3. Change is a long-term process, not a single event. Physicians may have to speak with students on many occasions before they are ready to change behavior.

Appendix A of this module contains an intervention workbook based on Project TrEAT specifically designed for college students.

**REFERENCES**

- Anderson, P., & Scott E. (1992); "The Effect of General Practitioners' Advice to Heavy Drinking Men;" British Journal of Addiction, *87*, 891-900.
- Baer, J.S., Marlatt, G.A., Kivlahan, D.R., Fromme, K., Larimer, M.E., & Williams, E. (1992); "An Experimental Test of Three Methods of Alcohol Risk Reduction With Young Adults;" Journal of Clinical Psychology, *60*, 974-979.
- Bien, T.H., Miller, W.R., & Tonigan, J.S. (1993); "Brief Interventions for Alcohol Problems: A Review;" Addiction, *88*, 315-335.
- Bosari, B., & Carey, K.B. (2000); "Effects of a Brief Motivational Intervention With College Student Drinkers;" Journal of Clinical Psychology, *68*, 728-733.
- Burge, S.K., Amodei, N., Elkin B., Catala, S., Andrew, S.R., Lane, P.A., & Seale, J.P. (1997); "An Evaluation of Two Primary Care Interventions for Alcohol Abuse Among Mexican-American Patients;" Addiction, *92*, 1705-1716.
- Chang, G., Wilkins-Haug, L., Berman, S., & Goetz, M.A. (1999); "Brief Intervention for Alcohol use in Pregnancy, Randomized Trial;" Addiction, *94*, 1499-1508.
- Chick, J., Lloyd, G., & Crombie, E. (1985); "Counseling Problem Drinkers in Medical Wards: A Controlled Study;" British Medical Journal of Clinical Research Education, *290*, 965-967.
- Cordoba, R., Delgado, M.T., Pico, V., Altisent, R., Fores, D., Monreal, A., Frisas, O., & Lopez del Val, A. (1998); "Effectiveness of Brief Intervention on Non-Dependent Alcohol Drinkers (EBIAL): A Spanish Multi-Centre Study;" Journal of Family Practice, *15*, 562-568.
- Dimeff, L.A. (1997); "Brief Intervention for Heavy and Hazardous College Drinkers in a Student Primary Care Setting;" Ph.D. dissertation, Seattle, WA: University of Washington.
- Dimeff, L.A., Baer, J.S., Kivlahan, D.R., & Marlatt, G.A. (1999); Brief Alcohol Screening and Intervention for College Students (BASICS): A Harm Reduction Approach, New York: Guilford Press.
- Fleming MF. (1997); "Strategies to Increase Alcohol Screening in Health Care Settings;" Alcohol Health & Research World, *21*, 340-347.
- Fleming, M.F., Barry, K.L., Manwell, L.B., Johnson, K., & London, R. (1997); "Brief Physician Advice for Problem Alcohol Drinkers. A Randomized Controlled Trial in Community-Based Primary Care Practices;" Journal of the American Medical Association, *277*, 1039-1045.
- Fleming, M.F., Manwell, L.B., Barry, K.L., Adams, W., & Stauffacher, E.A. (1999); "Brief Physician Advice for Alcohol Problems in Older Adults: A Randomized Community-Based Trial;" The Journal of Family Practice, *48*, 378-384.
-

Fleming, M.F., & Manwell, L.B. (1999); "Brief Intervention in Primary Care Settings. A Primary Treatment Method for At-Risk, Problem, and Dependent Drinkers;" Alcohol Research Health, 23, 128-137.

Fleming M.F. (2000); "Screening and Brief Intervention in the U.S. Health Care System;" In: 10th Special Report to the U.S. Congress on Alcohol & Health, from the Secretary of Health and Human Services. Washington DC: US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism.

Fleming, M.F., Mundt, M.P., French, M.T., Manwell, L.B., Stauffacher, E.A., & Barry, K.L. (2000); "Benefit-Cost Analysis of Brief Physician Advice With Problem Drinkers in Primary Care Settings;" Medical Care, 38, 7-18.

Fleming, M.F., Mundt, M.P., French, M.T., Manwell, L.B., & Stauffacher, E.A. (2002); "Project TrEAT, A Trial for Early Alcohol Treatment: 4-Year Follow-Up;" Alcohol, Clinical and Experimental Research, 26, 36-43.

Gentilello, L.M., Rivara, F.P., Donovan, D.M., Jurkovich, G.J., Daranciang, E., Dunn, C.W., Villaveces, A., Copass, M., & Ries, R.R. (1999); "Alcohol Interventions in a Trauma Center as a Means of Reducing the Risk of Injury Recurrence;" Annals of Surgery, 230, 473-480.

Holder, H.D., Miller, T.R., & Carina, R.T. (1995); Cost Savings of Substance Abuse Prevention in Managed Care; Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention (CSAP) Publication. Rockville, MD

Israel, Y., Hollander, O., Sanchez-Craig, M., Booker, S., Miller, V., Gingrich, R., & Rankin, J.G. (1996); "Screening for Problem Drinking and Counseling by the Primary Care Physician-Nurse Team;" Alcoholism, Clinical and Experimental Research, 20, 1443-1450.

Kahan, M., Wilson, L., & Becker, L. (1995); "Effectiveness of Physician-Based Interventions With Problem Drinkers: A Review;" Canadian Medical Associate Journal, 152, 851-859.

Kristenson, H., Ohlin, H., Hulten-Nosslin, M.B., Trelle, E., & Hood, B. (1983); "Identification and Intervention of Heavy Drinking in Middle-Aged Men: Results and Follow-Up of 24-60 Months of Long-Term Study With Randomized Controls;" Alcoholism, Clinical and Experimental Research, 7, 203-209

Larimer, M.E., Anderson, B.K., Baer, J.S., & Marlatt, G.A. (2000); "An Individual in Context: Predictors of Alcohol Use and Drinking Problems Among Greek and Residence Hall Students;" Journal on Substance Abuse; 11, 53-68.

Larimer, M., & Cronce, J. (2002); "Identification, Prevention and Treatment: A Review of Individual-Focused Strategies to Reduce Problematic Alcohol Consumption by College Students;" Journal of Alcohol Studies, Supplement 14, 148-163.

Manwell, L.B., Fleming, M.F., Mundt, M.P., Stauffacher, E.A., & Barry, K.L. (2000); "Treatment of Problem Alcohol Use in Women of Childbearing Age: Results of a Brief Intervention Trial;" Alcohol Clinical and Experimental Research, 24, 1517-1524.

---



Marlatt, G.A., Baer, J.S., Kivlahan, D.R., Dimeff, L.A., Larimer, M.E., Quigley, L.A., Somers, J.M., & Williams, E. (1998); "Screening and Brief Intervention for High-Risk College Student Drinkers: Results From a 2-Year Follow-Up Assessment;" Journal Consult Clinical Psychology, *66*, 604-615.

Monti, P.M., Colby, S.M., Barnett, N.P., Spirito, A., Rohsenow, D.J., Myers, M., Wollard, R., & Lewander, W. (1999); "Brief Intervention for Harm Reduction With Alcohol-Positive Older Adolescents in a Hospital Emergency Department;" Journal Consult Clinical Psychologist, *67*, 989-994.

Nilssen O. (1991); "The Tromso Study: Identification of and a Controlled Intervention on a Population of Early-Stage Risk Drinkers;" Preventive Medicine, *20*, 518-528.

Ockene, J.K., Adams, A., Hurley, T.G., Wheeler, E.V., & Hebert, J.R. (1999); "Brief Physician- and Nurse Practitioner-Delivered Counseling for High-Risk Drinkers: Does it Work?" Archives of Internal Medicine, *159*, 2198-2205.

Richmond, R., Heather, N., Wodak, A., Kehoe, L., & Webster, L. (1995); "Controlled Evaluation of a General Practice-Based Brief Intervention for Excessive Drinking;" Addiction, *90*, 119-132.

Wallace, P., Cutler, S., & Haines, A. (1988); "Randomized Controlled Trial of General Practitioner Intervention in Patients With Excessive Alcohol Consumption;" British Medical Journal, *297*, (6649), 663-668.

Wilk, A.L., Jensen, N.M., & Havighurst, T.C. (1997); "Meta-Analysis of Randomized Control Trials Addressing Brief Interventions in Heavy Alcohol Drinkers;" Journal of General Internal Medicine, *12*, 274-283.

World Health Organization Brief Intervention Study Group. (1996); "A Cross-National Trial of Brief Interventions With Heavy Drinkers;" American Journal of Public Health, *86*, 948-955.

## **MODULE 4:**

### **MOTIVATIONAL INTERVIEWING**

#### **I. Learning Objectives**

- A. Participants will increase their knowledge of motivational interviewing.
- B. Participants will increase their skills in conducting motivational interviewing.

#### **II. Chronology**

- A. 20 - 40 minute large group lecture using a sub-sample of about 30 slides.
- B. 10 - 20 minute demonstration role-play.
- C. 10 - 20 minutes participants practice role-play.

#### **III. Training Materials**

- A. 27 slides.
- B. Summary of clinical protocols.
- C. Role-play scenarios; see Appendix B.

## MODULE 4:

### MOTIVATIONAL INTERVIEWING



**Behavior A** → **Behavior B**

#### INTRODUCTION

Motivational interviewing (MI) is a technique designed to help students and others change a specific health behavior such as alcohol use. William Miller (1983) is given credit as the first person to describe MI as a counseling technique. MI is client-centered as opposed to clinician-centered. The focus is on helping students arrive at the conclusion that they need to change a behavior. These behaviors may be reducing their alcohol use, stopping smoking, increasing exercise, changing dietary habits, decreasing risk for STDs, etc.

MI is similar to many of the basic skills taught in doctor/nurse/social work training on basic patient communication. Many elements of MI are identical to what physicians, nurses, social workers, and other health care professionals have used for centuries to convince patients to take their medications, change a health behavior, or follow through on completing a test or procedure.

MI is based on a number of assumptions. These assumptions include: a) the theory that most people move through a series of steps prior to changing their behavior; b) change comes from within rather than from without; c) confrontation and negative messages are ineffective; d) knowledge alone is not helpful; and e) reducing ambivalence is the key to change. This is an active area of research in which all of these assumptions are being studied and tested.

While there is much to learn about its effectiveness with college students, many clinicians have found that skill in MI techniques enhances the delivery of brief intervention.

## **WHAT IS MOTIVATIONAL INTERVIEWING?**

Miller (1995) defines MI as follows:

*“Motivational interviewing is a directive, client-centered counseling style of eliciting behavior change by helping clients to explore and resolve ambivalence. Compared with non-directive counseling, it is more focused and goal-directed. The examination and resolution of ambivalence is its central purpose, and the counselor is intentionally directive in pursuing this goal.”*

MI is a way to help students recognize they have a problem and need to make a change. Many students seeking care in a student health center are already concerned about their drinking, tobacco use, or some other behavior. They just don't know where to start. MI attempts to “unstick” students, so they can begin to change. MI techniques create an openness and readiness to change. Some students will change after one or two MI encounters, while others may require more intensive counseling.

### **Key Elements of MI**

#### **1. Express Empathy**

Empathy is based on respect, an acknowledgement of the student's perspective, and acceptance of the student's point of view. The clinician tries to understand without criticizing, judging, or blaming. Reluctance to give up a behavior such as high-risk drinking is a normal psychological process. It is not pathological. However MI does not give the student permission to continue his/her high-risk behavior. Acceptance of a student's position is not the same thing as agreeing with the student's position or condoning high-risk alcohol use. The next principle is designed to change the student's position by developing discrepancy.

#### **2. Develop Discrepancy**

Many students understand their alcohol use is having an adverse effect on many aspects of their lives. They understand they are at risk for alcohol-related accidents, injuries, and academic problems, especially if they are under 21 years of age. While they like to drink and party, they also recognize many of the negative things associated with high-risk drinking.

Discrepancy seeks to amplify, intensify, and accentuate these negative thoughts and ambiguous feelings about their alcohol use. Discrepancy tries to help students set personal goals such as academic success, health, and strong personal relationships above their desire to use alcohol. MI tries to identify specific examples of how the drinking resulted in an experience that conflicted with the students' personal goals, values, and internal beliefs about themselves.

### **3. Avoid Argumentation**

Direct argumentation often evokes resistance and hardening of the student's position. MI uses low-key persuasion. MI tries to start from the student's position and to work from that point. Strong statements such as "You are in denial." or "You are alcoholic." - often lead to an increase in student resistance. From a harm-reduction paradigm, clinicians will help more students reduce their alcohol use by spending two minutes with 10 patients using MI techniques than arguing with one student for 20 minutes.

### **4. Roll with Resistance**

Jay Haley, who is an expert on family therapy, coined the term "psychological judo". As with judo and martial arts, one can use a student's own momentum to move them into a fall or a different position. MI can move students such that they say, "How did I get here?" Reluctance to change is acknowledged by the therapist as normative, based on the students' perception of their alcohol use and its relationship to their peers and environment.

### **5. Support Self-Efficacy**

A fifth MI principle is self-efficacy. Students need to believe they can change and successfully reduce their alcohol use. Hope and faith are important elements of change. Clinicians can use positive statements to facilitate the sense that students can alter their behavior. The other element of self-efficacy is taking personal responsibility for change.

## **MI TECHNIQUES**

- Use open-ended rather than closed-ended questions.
  - *"Tell me about your drinking."*
  - *"What concerns do you have about your drinking?"*
  - *"How can I help you with your drinking?"*
  
- Use reflective listening to focus on students' concerns and ambivalence toward their alcohol use.
  - *"I hear you."*
  - *"I'm accepting, not judging you."*

- *“ Please say more.”*
- Use affirmative statements in order to gain students’ trust and confidence.
  - *“You are very courageous to be so revealing about this.”*
  - *“You’ve accomplished a lot in a short time.”*
  - *“I can understand why drinking feels good to you.”*
- Use summary statements.
  - *“What you said is important. I value what you say. Here are the salient points.”*
  - *“Did I hear you correctly?”*
  - *“We covered that well. Lets talk about ...”*
- Elicit self-motivational statements - these statements fall into four categories.
  - Problem recognition – *“I never realized how much I am drinking.” “Maybe I have been taking foolish risks.”*
  - Expression of concern – *“I am really worried about my grades and how alcohol may be affecting them.”*
  - Intention to change – *“I don’t know how but I want to try.”*
  - Theme about optimism – *“I think I can do it. I am going to overcome this problem.”*

Additional points that may be helpful to primary care providers utilizing MI:

1. The primary goal of MI is to resolve ambivalence and resistance and move students into a commitment to change their alcohol use.

Move student **From** the following position:

*“I am not interested in reducing my alcohol use. I drink less than my friends.” “ I see no reason to change how much I drink. It is part of the college experience. I am not having problems so why should I cut down?”*

**To:**

*“If I stop drinking I will feel better and maybe do better in school. However I am not sure what my friends will think. I am not sure how I can party and have fun if I don’t drink so much.”*

**To:**

*“Maybe I do drink too much. I am willing to try to cut down. How much do you think it is safe for me to drink?”*

2. Motivation to change is elicited from the student from within. It is not imposed from without. MI does not involve the use of external threats.

**Provider statements not based on MI:**

*“If you don’t stop drinking, you will be expelled.”*

*“If you don’t stop drinking, you will lose your job.”*

*“If you don’t stop drinking, you will never get into graduate school.”*

*“If you don’t stop drinking now, you will turn into an alcoholic.”*

3. In MI, the clinicians are not passive agents or mirrors. They direct and facilitate change with a number of methods. Clinicians utilize empathy, summarization, reflective listening, and other techniques. MI is not 100% clinician-directed or 100% client-centered but rather someplace in between. It is meant to be interactive, with both sides giving and taking. In this way, it is similar to developing a relationship based on mutual respect, trust, and acceptance.
4. MI avoids arguments, coercion, and labels. While a therapist using MI techniques may not agree with a student, he/she respects the student’s perspective. A counselor can disagree. For example:

**Student:** *“Doc, I don’t think I have a problem or need to cut down.”*

**Provider:** *“John, I have to respectfully disagree. You had a serious accident after you were drinking. You are not doing well in your classes. Your girlfriend left you. I am not sure how serious things are, but I think you should consider how alcohol is contributing to these problems.”*

5. MI does not use negative comments or scare tactics. MI reframes consequences and negative aspects of student drinking. Here is an example of provider statements that use MI techniques:

*“The X-ray on your arm that we took today suggests your broken arm is healing well. Based on the extent of your injuries, it sounds like you had a serious accident. Your medical record says you had*

*a blood alcohol level of 0.16. How about telling me about the accident and the role of alcohol in that accident?"*

6. MI insists that students take an active role in the decision to change their alcohol use.

**Provider:** *"Only you can decide to reduce your alcohol use. This is your decision. I am here to treat your medical problems and to hopefully prevent you from getting into trouble with your drinking. What do you think about agreeing to cut down for a month or two and seeing how it goes?"*

7. MI is not necessarily used when clinicians conduct brief talk therapy or brief intervention (BI). While the most effective way to conduct BI is to utilize MI techniques, BI can be 100% provider-directed. Provider-directed BI does, however, appear to be less effective with students. The following is an example of a 100% provider-directed scenario.

**An example of brief intervention without the use of MI**

**principles:** *"John, you drink too much. It is bad for you. It will affect your grades and you may have a serious accident. You may forget to use a condom and acquire an HIV infection. As your doctor, I am recommending that you to cut down to 3 or 4 drinks when you go to party with your friends."*

This type of interaction is clinician-directed; it does not take into account the student's readiness to change or other factors (e.g., untreated depression, anxiety, tobacco addition, other drug use, or stress) that may make change very difficult for John.

8. MI is not the same as cognitive behavioral therapy (CBT). CBT is designed to teach skills. MI is designed to deal with ambivalence. If necessary, CBT can occur after MI has convinced students they need to change their alcohol use. CBT offers very specific strategies students can use to successfully reduce their alcohol use. However, in order to use CBT, a student must first be motivated to change.

## REFERENCES

Fleming, M.F., Mundt, M.P., French, M.T., Manwell, L.B., & Stauffacher, E.A. (2002); "Project TrEAT, a Trial for Early Alcohol Treatment: 4-Year Follow-Up;" Alcohol, Clinical and Experimental Research, 26, 36-43.

---



Handmaker, N.S. & Wilbourne, P. (2001); "Motivational Interventions in Prenatal Clinics;" Alcohol & Research Health, 25, 219-21-9.

Miller, W.R. (1983); "Motivational Interview With Problem Drinkers;" Behavioral Psychotherapy 11, 147-172.

Miller, W.R. (1985); "Motivation for Treatment: A Review With Special Emphasis on Alcoholism;" Psychological Bulletin. 98, 84-107.

Miller, W.R., Benefield, R.G., & Tonigan, J.S. (1993); "Enhancing Motivation for Change in Problem Drinking: A Controlled Comparison of Two Therapist Styles;" Journal of Consulting and Clinical Psychotherapy, 61, 455-461.

Marlatt, G.A., Baer, J.S., Kivlahan, D.R., Dimeff, L.A., Larimer, M.E., Quigley, L.A., Somers, J.M, & Williams, E. (1998); "Screening and Brief Intervention for High-Risk College Student Drinkers: Results From a 2-Year Follow-Up Assessment;" Journal Consult Clinical Psychology, 66, 604-615.

Monti, P.M., Colby, S.M., Barnett, N.P., Spirito, A., Rohsenow, D.J., Myers, M., Wollard, R., & Lewander, W. (1999); "Brief Intervention for Harm Reduction With Alcohol-Positive Older Adolescents in a Hospital Emergency Department;" Journal Consult Clinical Psychologist, 67, 989-994.

**APPENDIX A:**

**WOOBOOK FOR CHANGING  
COLLEGE STUDENT  
DRINKING HABITS**

Workbook for  
Changing College Student  
Drinking Habits

This workbook is based on research protocols tested in  
Project TrEAT (NIH#AA 08512).

For more information email [mflaming@fammed.wisc.edu](mailto:mflaming@fammed.wisc.edu)

## INITIAL VISIT

### INTRODUCTION

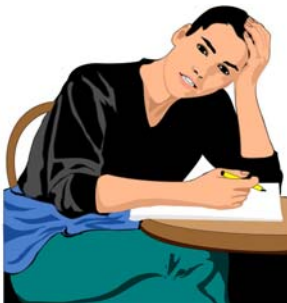
This workbook will guide the discussion between you and your health provider. It describes 6 steps to help you change your health behavior. While you will have the opportunity to talk about many health topics, the workbook focuses on alcohol use. Your physician or nurse will talk with you about each of the steps.



The workbook is yours to keep.

Write in the workbook as you complete each of the steps.

Bring the workbook with you when you return for a follow-up visit with your provider.



**Let's begin...**

---

---

## Step 1: SUMMARIZING CURRENT HEALTH HABITS

### Exercise

How many days per week do you exercise? \_\_\_\_\_

**On a day when you exercise, how many minutes do you exercise?** \_\_\_\_\_

### Tobacco Use

Do you currently smoke cigarettes or use tobacco products?  Yes  No

If yes, how many cigarettes per day do you smoke? \_\_\_\_\_

### Alcohol Use

How many days per week do you drink alcohol? \_\_\_\_\_

**How many days per week do you drink more than 4-5 drinks?** \_\_\_\_\_

How many drinks do you have in an average week? \_\_\_\_\_

Have you had any problems related to your alcohol use, such as accidents, injuries, or falls? \_\_\_\_\_

### Depression

Have you currently felt like things are hopeless?  Yes  No

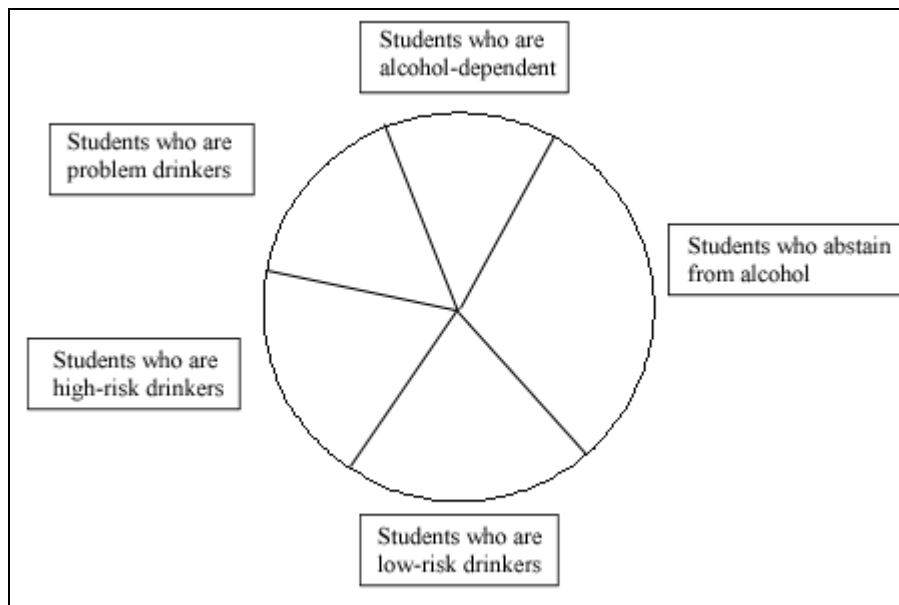
Do you currently feel sad and blue every day?  Yes  No

## Step 2: TYPES OF DRINKERS

There are five different types of college drinkers. We define them by levels of alcohol consumption and problems related to drinking:

- |                    |  |
|--------------------|--|
| Abstainers         | <ul style="list-style-type: none"> <li>● Drink no alcohol or have less than 1 drink per month.</li> <li>● Alcohol use does not affect health or result in problems.</li> </ul>   |
| Low-risk drinkers  | <ul style="list-style-type: none"> <li>● Fewer than 5 drinks per occasion for men and fewer than 14 drinks per week.</li> <li>● Fewer than 4 drinks per occasion for women and fewer than 7 drinks per week.</li> <li>● At times will consume NO alcohol, such as before driving, while operating machinery, or while pregnant.</li> </ul> |
| High-risk drinkers | <ul style="list-style-type: none"> <li>● Men who drink 14 or more drinks per week.</li> <li>● Women who drink 7 or more drinks per week</li> <li>● Men who drink 5 or more drinks in a row, women who drink 4 or more drinks in a row.</li> <li>● Men and women who drink in high-risk situations.</li> </ul>                              |
| Problem drinkers   | <ul style="list-style-type: none"> <li>● Students with one or more alcohol-related problems.</li> </ul>  |
| Alcohol-dependent  | <ul style="list-style-type: none"> <li>● Cannot stop drinking once started.</li> <li>● Drinking level has led to a physical need for alcohol.</li> <li>● Experiences problems related to alcohol use.</li> </ul>   |

**Where would you place yourself on this chart?**



### Step 3: REASONS TO QUIT OR CUT DOWN ON DRINKING

Think of reasons why you might want to quit or cut down on your drinking. Here are ideas other students have had. Mark any box that describes why you would want to change your drinking habits.

- To do better in school
- To decrease the chance of falls or other injuries
- To reduce chances of dying in a car crash
- To prevent blackouts
- To decrease the chances of unwanted sexual experiences
- To save money
- To feel better
- To have more energy
- To be nicer to my friends
- To reduce my weight
- To reduce the number of headaches
- To reduce stomach pain
- To reduce my risk of developing an addiction to alcohol
- To help me stop smoking
- To decrease my chance of developing medical problems related to my drinking

Can you think of any other reasons why you might want to quit or cut down your drinking?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

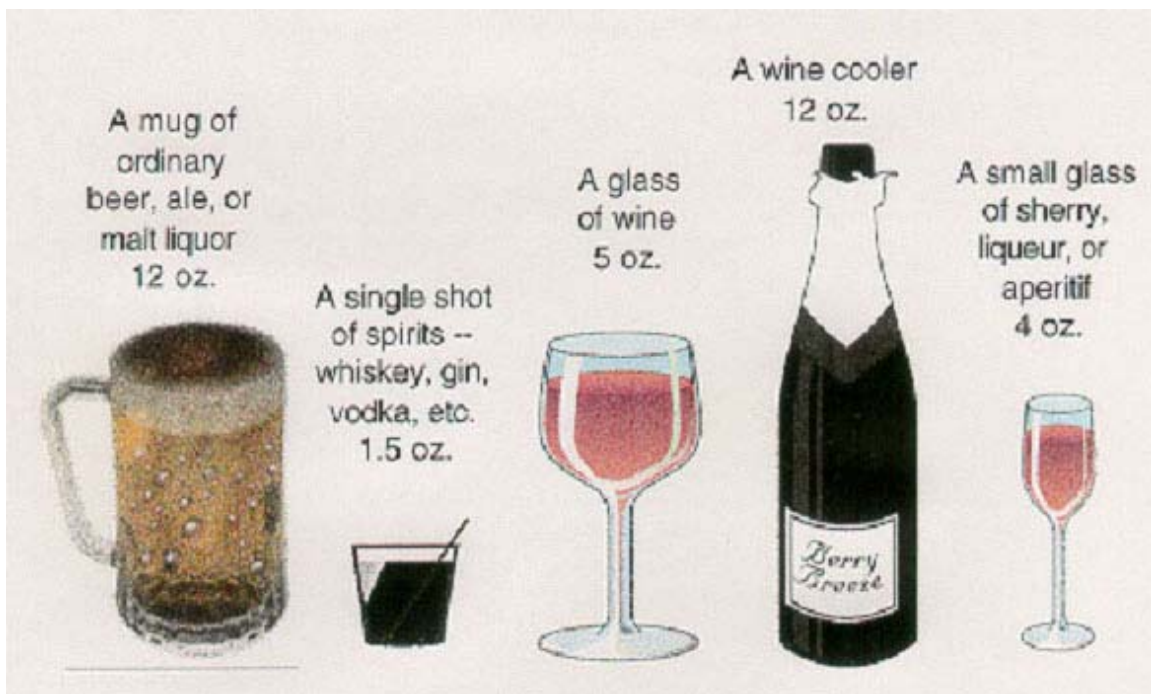
## Step 4: HOW MUCH SHOULD I DRINK

This step will help you to decide on a drinking limit for yourself for a particular period of time. Talk with your primary care provider so you both agree on a reasonable goal.

As you develop this drinking limit agreement, or contract, answer the following questions:

- How many standard drinks should I have?
- How frequently should I drink?
- When should I return for a follow-up visit?

As you talk about this drinking limit, keep in mind the amount of alcohol that counts as a standard drink. The picture below explains a standard drink.





We will use two tools to help you change your drinking practices:

**DRINKING LIMIT AGREEMENT**

This agreement should clearly state your drinking limit and when to return for a follow-up visit with your primary care provider.

*Fill out this DRINKING LIMIT AGREEMENT, or contract, with your primary care provider.* A reasonable goal for some students is abstinence — not drinking any alcohol.

<b>DRINKING AGREEMENT</b>
<p>Date _____</p> <p>I, _____, agree to the following drinking goal:</p> <p><input type="checkbox"/> Number of drinks and frequency:</p> <p>_____</p> <p>_____</p> <p style="text-align: center;">or</p> <p><input type="checkbox"/> Abstinence (zero drinks)</p> <p>Period of time to cut down or quit: _____</p> <p>Return visit in _____ week(s)</p> <p>Student signature: _____</p> <p>Clinician signature: _____</p>

## DRINKING DIARY CARDS

These cards are a way of keeping track of how much, and when, you drink. Use one card per week. Each day, record the number of drinks you consume. At the end of the week, add up the total number of drinks you consumed during the week. You and your health care provider will review these cards at your follow-up visit.

*Keep a record of what you drink over the next 7 days*

Date \_\_\_\_\_

	Beer/Ale Malt Liquor	Spirits Hard Liquor (e.g. Vodka Whisky)	Wine	Wine Cooler	Liqueur or Sherry	 TOTAL
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Weeks TOTAL: \_\_\_\_\_

*Keep a record of what you drink over the next 7 days*

Date \_\_\_\_\_

	Beer/Ale Malt Liquor	Spirits Hard Liquor (e.g. Vodka Whisky)	Wine	Wine Cooler	Liqueur or Sherry	 TOTAL
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Weeks TOTAL: \_\_\_\_\_

*Keep a record of what you drink over the next 7 days*


Date \_\_\_\_\_

	Beer/Ale Malt Liquor	Spirits Hard Liquor (e.g. Vodka Whisky)	Wine	Wine Cooler	Liqueur or Sherry	 TOTAL
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Weeks TOTAL: \_\_\_\_\_

*Keep a record of what you drink over the next 7 days*

Date \_\_\_\_\_

	Beer/Ale Malt Liquor	Spirits Hard Liquor (e.g. Vodka Whisky)	Wine	Wine Cooler	Liqueur or Sherry	 TOTAL
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Weeks TOTAL: \_\_\_\_\_

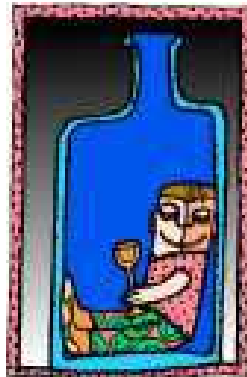
## FIRST VISIT SUMMARY

We've covered a great deal of information. Changing your lifestyle, especially your drinking patterns, can be a challenge.

Before your next visit, please do the following:

- Make an appointment for your second visit next month BEFORE leaving.
- Remember your drinking limit goal:  
\_\_\_\_\_
- Use the diary cards to track your drinking.
- Congratulate yourself every time you are tempted to drink heavily and are able to resist.
- DON'T GIVE UP!** Some people have days during which they drink too much.
- Bring this workbook AND the diary cards with you to the next visit.
- A clinic nurse will telephone you in two weeks to see how you're doing.

**Remember that you are changing your behavior and it can be hard work. It becomes easier with time.**



## SECOND VISIT

Thank you for coming today. Changing your lifestyle, including your drinking patterns, can be difficult. The purpose of this follow-up visit is to talk about the successes and difficulties you have had since your previous visit. We will cover the following topics:

- ◆ Review of your alcohol use since the previous visit.
- ◆ Step 5: Risky situations.
- ◆ Step 6: Ways to cope with risky situations.

**Let's begin . . .**



## REVIEWING YOUR ALCOHOL USE AND DRINKING GOAL

You and your health care provider will begin by talking about how you have been doing since your last visit. If you kept track of your alcohol use on the drinking diary cards, please review them together.

If you didn't complete the diary cards, please go back to page 7 and complete them now for the previous two weeks.

### Drinking Limit Agreement

Your drinking limit goal at your last visit was: \_\_\_\_\_  
\_\_\_\_\_

From a review of your diary cards, were you able to meet this goal?

- YES
- SOMEWHAT
- NO

Whether you were able to stick to your drinking limit or not, it is likely that you encountered some difficult situations. The next steps focus on some of these situations.

### Step 5: IDENTIFY RISKY SITUATIONS

Your desire to drink may change according to your mood, the people you are with or if you are alone, and the availability of alcohol. Think about when and where you drink. Try to identify situations that make you want to drink.

The following list may help you remember situations or moods that make you want to drink. Please check the boxes that apply to you...

SITUATIONS		MOODS
<input type="checkbox"/> After classes or work	<input type="checkbox"/> Sleeplessness	<input type="checkbox"/> Anger, resentment
<input type="checkbox"/> Certain places	<input type="checkbox"/> Sporting events	<input type="checkbox"/> Anxiety, fear
<input type="checkbox"/> Social events	<input type="checkbox"/> TV or magazine ad	<input type="checkbox"/> Boredom, loneliness
<input type="checkbox"/> Family stresses	<input type="checkbox"/> Use of tobacco	<input type="checkbox"/> Criticism
<input type="checkbox"/> Friends	<input type="checkbox"/> Watching television	<input type="checkbox"/> Feelings of failure
<input type="checkbox"/> Other people drinking	<input type="checkbox"/> Weekends	<input type="checkbox"/> Joy, happiness
<input type="checkbox"/> Weddings	<input type="checkbox"/> Frustration	<input type="checkbox"/> Exhaustion
<input type="checkbox"/> Parties	<input type="checkbox"/> Holidays	<input type="checkbox"/> Tension
<input type="checkbox"/> Summer time/ semester break	<input type="checkbox"/> Exams	<input type="checkbox"/> Frustration

Identify the three situations or moods when you are most likely to be tempted to drink. Write them below:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## Step 6: HOW TO HANDLE RISKY SITUATIONS

In certain situations, especially if you are having a bad day, you will find that you are tempted to drink. It is important to figure out ahead of time how to make sure you will not drink when you are tempted. Here are some tips from other students about ways to cope without drinking when life gets you down.

- Think of something pleasant you can do for yourself or for a friend.
- Ask a friend to play cards or another game or talk about something totally different.
- Telephone a sober friend or visit a sober neighbor.
- Exercise: go for a walk, play a sport, or go to the gym.
- Take a hot bath or shower.
- Watch a movie or read a book or magazine.
- Drink a soda or some other drink without alcohol.
- Write your feelings down in a notebook.
- Listen to music.
- Surround yourself with positive people.

Some of the ideas may not work for you, but maybe you can think of other ideas that might work well. If so, write them down here.

---

---

---



## SUMMARY

Any lifestyle change is challenging. When you start to see progress, reward yourself. Rewards can help to balance the feeling that you're depriving yourself of something. In fact, what you're gaining is important to you, your family, your studies, and your friends.

Can you think of a way in which you can reward yourself for drinking less? Just **DON'T** use an alcoholic drink as a reward!

I'm going to reward myself by:

---

---

---

---

A great deal of information has been covered in this guide and during your visits.

- ❖ Remind yourself that changing behavior can be difficult and that this is normal.
- ❖ Remember to reward yourself for successes.
- ❖ And when things don't work as well... **Don't Give Up!**

## APPENDIX B: ROLE PLAY SCENARIOS

## **Role-Play Case Scenario #1**

Michael Smith is a 19 year-old student attending a large university in the Midwest. He is seen at a local emergency department for an injury. Michael fell off a second floor balcony while partying with his friends.

He had a fracture to his right wrist and a 3-inch laceration on his forehead. His blood alcohol level was 0.16. His toxicology screen showed marijuana use. He reported having a few drinks but doesn't remember how many. He parties most weekends with his friends and generally drinks 8-10 drinks at a party.

He denies any prior problems with alcohol. He doesn't think he has an alcohol problem. He is surprised that you are concerned about his drinking. He says he drinks less than his friends. He says that his dad is an alcoholic and he knows all about alcohol problems.

We suggest that participants role play screening, assessment, brief intervention, and motivational interviewing techniques. The participant playing the role of Michael Smith should add additional information based on their own experiences with students. The patient is meant to have a moderate amount of resistance.

## **Role-Play Case Scenario #2**

Mary Jones is a 21 year-old senior at a small 4-year college in the Northeast. She is being seen at the student health center for a urinary tract infection. The nurse practitioner seeing her is struck by her affect and sadness. The provider begins to ask Mary questions about why she appears to be depressed.

Patient reveals moderate to severe symptoms of depression. Patient also reveals having a number of unpleasant sexual experiences over the past couple of years while partying. Further questions reveal a history of sexual abuse by a family member when she was in middle school.

Mary reports using alcohol 3-4 times/week to relax and relieve stress. She parties 2-3 times a month with friends and often becomes intoxicated. Patient is concerned about her drinking but doesn't know what else to do about the stress and sadness in her life. She also begins to talk about chronic headaches. She has a past history of suicidal thoughts but no current suicidal ideation.

Participants may want to do a more comprehensive assessment of Mary's alcohol and drug use. They also may try to facilitate referral to a student health counselor.

### **Role-Play Case Scenario #3**

Paul is a 25 year-old graduate student in biochemistry at a large southern university. He was told by his senior professor to get some help with his drinking problem. Paul is coming into the student health center for the first time. Paul's presenting illness is fatigue and not feeling well.

The physician who is seeing Paul begins to ask some questions about fatigue, depression and stress. After some initial discussion, Paul tells the physician that he is really there to talk about a drinking problem. Paul reports that he drinks alcohol most days. He drinks beer or scotch when he can afford it. He usually drinks in the evening or in the early morning hours when he's trying to go to sleep. He says he generally drinks alone and does not usually go to parties. He sometimes socializes with other graduate students, but he spends most of the time working in his professor's research lab.

Paul has limited insurance and can't afford to take time off to go into an alcohol treatment program. He is also not sure he wants to stop drinking because it helps him relax and sleep.

Participants may want to focus on office-based motivational interviewing with this case scenario. Person playing the role of the patient should show mild to moderate resistance.

## APPENDIX C: ATTITUDE EXERCISE

---

---

## A Personal View...

List up to 3 memories from your personal life (recently, or from your childhood or adolescence) that have shaped the way you feel about alcohol consumption.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

How have these experiences shaped the way that you approach alcohol with your family, friends, and patients?

For example:

- Are you more tolerant?
- Less tolerant?
- Do you think in terms of health risks and/or personal safety?
- Do you avoid discussions about alcohol use?