

U.S. Department of Health & Human Services

National Institutes of Health National Institute on Alcohol Abuse and Alcoholism

# ALCOHOL ALERT

Number 66 July 2005

### **Brief Interventions**

Unlike traditional alcoholism treatment, which focuses on helping people who are dependent on alcohol, brief interventions—or short, one-on-one counseling sessions—are ideally suited for people who drink in ways that are harmful or abusive. Unlike traditional alcoholism treatment, which lasts many weeks or months, brief interventions can be given in a matter of minutes, and they require minimal followup.

The goals of brief interventions differ from formal alcoholism treatment. Brief interventions generally aim to moderate a person's alcohol consumption to sensible levels and to eliminate harmful drinking practices (such as binge drinking<sup>1</sup>), rather than to insist on complete abstinence from drinking—although abstinence may be encouraged, if appropriate (1). Reducing levels of drinking or changing patterns of harmful alcohol use helps to reduce the negative outcomes of drinking, such as alcohol-related medical problems, injuries, domestic violence, motor vehicle crashes, arrests, or damage to a developing fetus.

Exactly what constitutes a "brief intervention" remains a source of debate (2). Brief interventions typically consist of one to four short counseling sessions with a trained interventionist (e.g., physician, psychologist, social worker). Moyer and colleagues (2) looked at 34 different studies and found that people who received brief interventions when they were being treated for other conditions consistently showed greater reductions in alcohol use than comparable groups who did not receive an intervention.

People seeking treatment specifically for alcohol abuse appeared to reduce their alcohol use about the same amount, whether they received brief interventions or extended treatments (five or more sessions). These findings show that brief interventions can be an effective way to reduce drinking, especially among people who do not have severe drinking problems requiring more intensive treatment.

The appropriate intervention depends on the patient—that is, on the severity of his or her problems with alcohol and whether he or she uses tobacco or other drugs, or has a co-occurring medical or psychiatric problem. The choice of intervention also is based on the clinical setting, the clinician's skills and interest, and time constraints. A brief intervention usually includes personalized feedback and counseling based on the patient's risk for harmful drinking. Often, simply providing this feedback is enough to encourage those at risk to reduce their alcohol intake (1).

Brief interventions may include approaches—such as motivational interviewing—that are designed to persuade

1 A "binge" is a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 gram percent or above. For a typical adult this pattern corresponds with consuming five or more drinks (male), or four or more drinks (female) in about 2 hours.

"Brief interventions are ideally suited for people who drink in ways that are harmful or abusive."

people who are resistant to moderating their alcohol intake or who do not believe they are drinking in a harmful or hazardous way.

Motivational interviewing (3) encourages patients to decide to change for themselves by using empathy and warmth rather than confrontation. Clinicians also can assist patients by helping them establish specific goals and build skills for modifying their drinking behavior.

#### SCREENING: THE FIRST STEP

People who would benefit from brief interventions may be identified through routine medical screenings, such as during a visit to a primary care physician. Standardized screening instruments exist that are specifically designed to identify alcohol use disorders. Though not as common, a person also might be identified during a hospital stay when lab tests reveal he or she has an alcohol-related health problem (such as liver disease). Screening might take place after an arrest for driving under the influence or during a visit to an emergency department (ED) as a result of alcohol-related injuries. Or screening might identify a woman who could benefit from a brief intervention during a prenatal visit to her obstetrician. All of these settings represent opportunities for clinicians and others who offer brief interventions to work with people who may be particularly receptive to advice to alter their drinking. (For specific information on screening in a variety of settings, see Alcohol Alert, Number 65, "Screening for Alcohol Problems.")

## ADMINISTERING THE INTERVENTION

Seeking treatment for problems with alcohol can be potentially embarrassing, stigmatizing, and inconvenient, taking time away from work or family responsibilities. Brief interventions give patients a simple way to receive care in a comfortable and familiar setting. Because they are brief, they can be easily incorporated into a variety of medical practices. Moreover, these approaches offer a lower cost alternative to more formal, specialist-led, alcoholism treatment (1).

Typically a nonspecialist authority figure who the patient may already trust or feel comfortable being treated by—such as a physician, a nurse, or physician's assistant in a primary care setting, or nurse or physician's assistant on a medical unit—delivers the brief intervention (1).

Supplemental handouts may be provided to patients during the intervention, including pamphlets, manuals,

or workbooks to reinforce the strategies offered during the session. Clinicians also can follow up at a later date, either in person or through the mail, to provide additional assessment and further motivate the patient to achieve the goals set during the initial meeting. If the brief intervention does not motivate the patient to reduce alcohol consumption, clinicians can recommend more intensive treatment.

Many of the challenges involved in administering brief interventions—such as finding the time to administer them in busy doctors' offices, obtaining the extra training that helps staff become comfortable providing interventions, and managing the cost of using interventions—may be overcome through the use of technology. Patients may be encouraged to use computer programs in the doctor's waiting room or at home, or to access the intervention through the Internet, which offers privacy and the ability to complete the program at any time of day (4,5).

#### An Update—New Clinician's Guide

In 2005, NIAAA released Helping Patients Who Drink Too Much: A Clinician's Guide, featuring new guidelines on screening and brief intervention for primary care and mental health practitioners. It offers a simple screening method—a single question about heavy drinking days—and includes the AUDIT screening tool, both in English and Spanish, as a self-report option. To order, see page 8.

Another potential tool for administering interventions is "video doctor technology," in which an actor–doctor asks health questions in an interactive computer program. Pilot results of this program indicate that although users reported they would be most comfortable consulting with a doctor in person, they responded positively to the "virtual" doctor intervention, which was accessible even to those with little computer experience (6).

## PUTTING RESEARCH INTO PRACTICE

Research shows that brief interventions can decrease alcohol consumption, and they work in a variety of populations—younger and older adults, men and women

Brief interventions give patients a simple way to receive care in a comfortable, familiar setting."

(7). Interventions that involve repeated contact generally are more effective

than single-contact interventions (7). A review of studies reported that intervention participants reduced their alcohol consumption an average of 13 percent to 34 percent compared with a control group (8). In addition, a recent analysis concluded that brief interventions may reduce mortality rates among problem drinkers by an estimated 23 to 26 percent (9).

The following sections examine the use of brief interventions in a variety of settings. Although the basic interventions may be similar, there are specific things to keep in mind when tailoring interventions to specific audiences and settings.

**Primary Care Settings**—In one study, about 20 percent of primary care patients reported levels of consumption that exceeded the limits recommended by the National Institute on Alcohol Abuse and Alcoholism (10). Simple interventions offer clinicians an ideal strategy for getting these patients the help they need.

Brief intervention in primary care can be simple and short—ranging from only a few questions (with appropriate responses)—or more extensive, including referral to a substance abuse specialist (11,12). Clinicians with limited time may want to use a basic intervention for all patients who use alcohol above the recommended limits; patients who do not respond to the basic intervention can be referred to an alcohol treatment specialist at the followup visit.

The most basic level of brief intervention consists of a simple statement or two. The clinician states that he or she is concerned about the patient's drinking, that it exceeds recommended limits and could lead to alcohol-related problems, and the clinician advises the patient to cut down or stop drinking.

Another brief intervention, which was studied extensively in Project TrEAT (Trial for Early Alcohol Treatment, a large-scale clinical trial conducted in primary care practices), involves two brief face-to-face sessions scheduled 1 month apart, with a followup telephone call 2 weeks after each session. Patients participating in this intervention reported reduced alcohol use, fewer days of hospitalization, and fewer emergency department visits compared with control-group patients. This intervention may be especially useful with patients who are experiencing alcohol-related problems but who do not necessarily need to be referred to an addiction treatment specialist and may not need to stop drinking completely. This intervention was found to be effective up to 4 years later (13).

Patients who have clear symptoms of alcohol abuse or dependence also may benefit from brief interventions in the primary care setting. Referral to a specialist for alcoholism treatment is a key component of this type of intervention. These interventions typically are more intense; the goal is abstinence from alcohol, not merely cutting down on drinking (11).

Despite evidence that brief interventions are useful in primary care settings, these short counseling sessions are not routine practice. One survey of primary care physicians found that although most (88 percent) reported asking their patients about alcohol use, only 13 percent used standard screening instruments (14). A survey of primary care patients revealed that more than 50 percent said their primary care physician did nothing about their substance abuse; 43 percent said their physician never diagnosed their condition (15).

A number of strategies have been suggested to help physicians make use of screening and brief interventions in their practices, including using group education strategies to hone clinicians' skills with role-playing and other counseling tactics (16); providing performance feedback (17); offering training to all clinic members (18,19); providing financial incentives to staff (20); and offering training using credible experts (21).

#### **How Much Is Too Much**

Men may be at risk for alcohol-related problems if their alcohol consumption exceeds 14 standard drinks\* per week or 4 drinks per day, and women may be at risk if they have more than 7 standard drinks per week or 3 drinks per day.

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

\*A standard drink is defined as one 12-ounce bottle of beer, one 5-ounce glass of wine, or 1.5 ounces of distilled spirits.

The Emergency Department—Up to 31 percent of all patients who are treated in an ED and as many as 50 percent of severely injured trauma patients (i.e., patients who require hospital admission, usually to an intensive care unit) test positive when screened for alcohol problems (22).

Younger people, in particular, are more likely to seek treatment in an ED. These patients tend to be uninsured and to use the ED as their primary source of medical care (23).<sup>2</sup> Young adults also have the highest prevalence of binge or hazardous drinking in the United States (24), putting them at particular risk for alcohol-related injuries, often in conjunction with driving. According to the 2001 National Household Survey on Drug

 $<sup>^2</sup>$  The terms "older" and "younger" are defined differently among various studies. Most commonly, "younger people" are defined as those age 25 and younger.

Abuse (25), 3 million people ages 16 to 20 had driven under the influence of alcohol at least once in the previous year, including 600,000 16- and 17-year-olds. Motor vehicle crashes are the number one cause of death for people ages 1 to 35 (26).



Chafetz and colleagues (27) were the first to report on the use of brief interventions in the ED, demonstrating that the interventions could motivate alcohol-dependent patients to begin alcoholism treatment. In a recent survey (28), ED practitioners reported that they considered performing a brief intervention for harmful and hazardous drinkers feasible and acceptable in their everyday practice. Other investigators have demonstrated that ED residents who receive training in screening and brief intervention in a skills-based workshop increase their knowledge and practice of these procedures. Fifty-eight percent of medical records of patients treated by trained residents contained evidence of screening and intervention, compared with 17 percent of records of patients treated by a control group of similar residents who did not receive training (29).

Many clinicians consider situations in which a patient receives acute medical care for an alcohol-related injury to be "teachable moments"—situations in which the patient may be particularly open to an alcohol intervention. Brief interventions delivered while patients are receiving trauma care may reduce those patients' alcohol consumption and risk of subsequent alcohol-related injuries.

In a study by Longabaugh and colleagues (30), patients receiving emergency care who screened positive for harmful drinking were given a brief intervention, a brief intervention plus a booster session 7 to 10 days later, or standard ED care. The booster session was designed to help overcome time limitations and distractions, such as pain, treatment for injuries, waiting family members, or the influence of alcohol, all of which could affect the patients' ability to benefit from the intervention.

One year later, patients who received the booster session along with the brief intervention, but not the brief intervention alone, had fewer alcohol-related problems and alcohol-related injuries compared with patients who received standard ED care. The booster sessions particularly may be useful for ED patients, as people being treated in EDs tend to leave quickly after they are treated for their injuries.

Patients who are admitted to medical wards for longer term care may have an even better outcome from brief interventions and, because they already are admitted to the hospital, they do not need to return for additional booster sessions (1).

Lack of time has been cited as the main obstacle to screening and intervention in the ED. As a result, a brief intervention that can be performed in less than 10 minutes has been developed specifically for emergency practitioners (31).

Innovative methods for screening and intervention are being developed for use in the ED, including the use of computer-based approaches (32). These interventions are intended to help physicians use the patients' waiting time for health promotion and to target patients at risk for various health problems.

**Prenatal Care Settings**—Approximately 14 to 22.5 percent of women report drinking some alcohol during pregnancy (33), and an estimated 1 percent of all newborns experience some prenatal alcohol-related damage (34). Routine screening in obstetrical offices may prove to be vital in preventing drinking during pregnancy—the leading cause of preventable birth defects.

Brief interventions have been recommended as the first step in approaching people with mild-to-moderate

> alcohol problems. Because pregnant women generally are motivated to change their behaviors and only infrequently

"Lack of time has been cited as the main obstacle to screening and intervention."

have severe alcohol problems (35), they may be especially receptive to brief interventions. In addition, studies show that the people who change their drinking behavior do so within 6 months of receiving the brief intervention (2,36). Because most pregnant women seek prenatal care during their first trimester, this is an opportune time to help them to make the changes necessary for a healthy pregnancy.

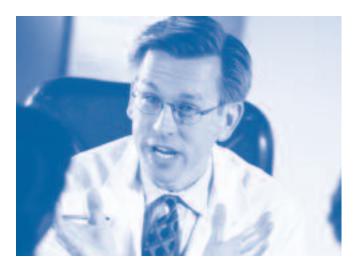
Research also shows that these interventions are effective. In a recent study, 304 pregnant women were assigned to receive an intervention or to be in a control group. Some of these women tested positive for prenatal alcohol use, whereas others were selected randomly to participate in the study. A unique twist to this investigation was that women received the intervention along with their partners (usually their husbands or the fathers of their unborn children). Results indicated that the women with the highest levels of drinking had the greatest reductions in drinking when they received the brief intervention. The effects of the brief intervention were much greater when a partner participated (37).

An innovative approach in the prenatal setting, the Protecting the Next Pregnancy Project involves intervening with women who have been identified as drinking during their last pregnancy. The goal of this approach is to reduce alcohol use during the women's future pregnancies. Following the intervention, these women not only drank significantly less than those in a control group during their later pregnancies, they also had fewer low-birth-weight babies and fewer premature deliveries (35,38). Moreover, children born to women in the brief intervention group had better neurobehavioral performance at 13 months when compared with control group children (39).

The Criminal Justice System—Alcohol use is closely linked to crime. According to the 2002 National Crime Victimization Survey, 21.6 percent of victims of violent crimes thought or knew the offender had consumed alcohol (40). Approximately 40 percent of offenders on probation reported that they had been using alcohol at the time of their offense (41). In 2001, 1.4 million driving-while-impaired (DWI³) arrests were made, making this the number one crime related to alcohol and other drug (AOD) use other than drug possession (42).

Few studies have evaluated the impact of brief interventions in criminal justice populations. Davis and colleagues (43) examined whether brief motivational feedback helped to increase offenders' participation in treatment after they completed their jail sentences. They found

that offenders receiving feedback were more likely to schedule and keep appointments for followup treatment than were offenders in a control group. However, a study of DWI offenders found that brief individual interventions reduced recidivism only among offenders who showed evidence of depression, but not among offenders who were not depressed (44). This study suggests that brief interventions may be particularly useful in certain subgroups of DWI offenders. More research is needed to evaluate the effectiveness of brief interventions within the criminal justice system, especially considering the large number of people arrested each year for AOD-related offenses and the high recidivism rates among them.



College Settings—Alcohol use and the resulting problems among young adults have been widely documented (45,46). Of particular concern is the pattern of alcohol use among college students; in one survey, approximately 39 to 44 percent of students reported binge drinking within the previous 2 weeks (47,48).

Larimer and Cronce (49) reviewed individual intervention efforts among college students between 1984 and 1999 and found strong evidence to support the use of brief motivational interventions. These interventions are especially useful in college settings because they often focus on moderating a person's alcohol consumption to sensible levels and eliminating harmful drinking practices (such as binge drinking). Brief interventions may be used in campus health centers, counseling centers, or local hospital emergency rooms. Incorporating these interventions into campus judicial systems has several advantages: Many campuses already have policies in place that require students cited for alcohol policy violations to complete an assessment and intervention (50), and trained staff usually are available to respond to policy violators.

Two key questions to consider when implementing brief interventions in college populations are: Who

<sup>&</sup>lt;sup>3</sup> "DWI," or driving while impaired, is used generically to refer to the impaired driving offense and includes impairment by alcohol and/or other drugs.

should deliver the interventions—peer or professional counselors? And how can students be encouraged to participate in the interventions?

Peer counseling has a long history on college campuses and generally has been found to be effective for solving both academic and health problems (51). Although few studies have looked at the effectiveness of brief interventions for alcohol problems, research indicates that trained peer counselors (i.e., college undergraduates) are as effective as professionals in encouraging drinking changes among college students (52–54). A disadvantage is that peer providers require considerable training and supervision; most research protocols recommend weekly individual or group supervision by a trained therapist.



Studies have found that students who most need alcohol-related interventions may be least likely to participate in these sessions (55). So motivating students to receive brief interventions, especially interventions delivered outside the health center and mandated contexts, is key to reducing alcohol consumption on campus. One solution may be to treat students as consumers of brief intervention services and then to market the intervention "product" accordingly. Larimer and Cronce (49) reviewed research suggesting that social marketing techniques may improve recruitment of students to alcoholism prevention and intervention services. Calling students when they miss appointments and using other program reminders may increase participation by heavier drinkers (56).

Support also is emerging for the use of mailed or computerized feedback in place of personalized, individual feedback. Such approaches have been successful in producing at least short-term reductions in students' alcohol consumption (57).

Another approach to implementing brief interventions is to use different levels or steps of care (58), perhaps

starting with assessing and providing feedback through the Internet (59), then moving to in-person interventions for those students who have more severe alcoholrelated problems or those who do not respond to the initial intervention.

#### Conclusion

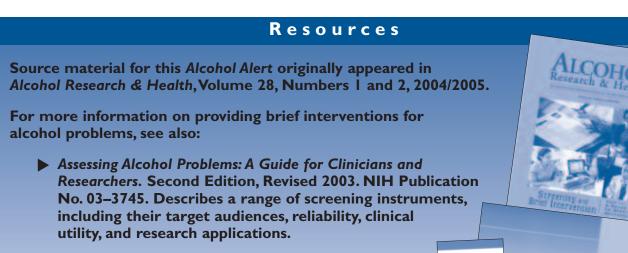
Brief interventions can be useful in a variety of settings and are potentially cost-effective in reducing hazardous or harmful alcohol consumption. Medical settings such as emergency departments or trauma centers also may provide opportunities, or "teachable moments," when people may be open to making changes in their alcohol consumption. New technology, such as computerized interventions, may offer an effective means for implementing brief interventions, especially in settings in which time constraints or lack of resources or training in intervention techniques are issues.

Research is yielding new information on the efficacy of various brief interventions at a rapid pace; practitioners, clinicians, college administrators, and others responsible for initiating screening and brief interventions should consider this new scientific evidence when deciding which strategies best fit their situations.

#### REFERENCES

(1) Moyer, A., and Finney, J.W. Brief interventions for alcohol problems: Factors that facilitate implementation. Alcohol Research & Health 28(1):44-50, 2004/2005. (2) Moyer, A.; Finney, J.W.; Swearingen, C.E.; and Vergun, P. Brief interventions for alcohol problems: A meta-analytic review of controlled investigations in treatment-seeking and non-treatmentseeking populations. Addiction 97:279-292, 2002. (3) Miller, W.R., and Rollnick, S. Motivational Interviewing: Preparing People for Change. New York: Guilford Press, 2002. (4) Butler, S.F.; Chiauzzi, E.; Bromberg, J.I.; et al. Computer-assisted screening and intervention for alcohol problems in primary care. *Journal of Technology in Human Services* 21:1–19, 2003. **(5) Squires, D.D.,** and Hester, R.K. Using technological innovations in clinical practice: The Drinker's Check-Up Software Program. Journal of Clinical Psychology 60:159-169, 2004. (6) Gerbert, B.; Berg-Smith, S.; Mancuso, M.; et al. Using innovative video doctor technology in primary care to deliver brief smoking and alcohol intervention. Health Promotion and Practice 4:249-261, 2003. (7) Whitlock, E.P.; Polen, M.R.; Green, C.A.; et al. Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults: A summary of the evidence for the U.S. Preventive Services Task Force. Annals of Internal Medicine 140:557-568, 2004. (8) U.S. Preventive Services Task Force (USPSTF). Screening for hepatitis C virus infection in adults: Recommendation statement. Annals of Internal Medicine 140:462-464, 2004. (9) Cuijpers, P.; Riper, H.; and Lemmers, L. The effects on mortality of brief interventions for problem drinking: A meta-analysis. Addiction 99:839-845, 2004. (10) Fleming, M.F.; Manwell, L.B.; Barry, K.L.; and Johnson, K. At-risk drinking in an HMO primary care sample: Prevalence and health policy implications. American Journal of Public Health 88:90-93, 1998. (11) Fleming, M.F. Screening and brief intervention in primary care settings. Alcohol Research & Health 28(2):57-62, 2004/2005. (12) National Institute on Alcohol Abuse and Alcoholism (NIAAA). Helping Patients With Alcohol Problems: A Clinician's Guide. NIH Pub No. 05-3769. Bethesda, MD: the Institute, 2005. (13) Fleming, M.F.; Mundt, M.P.;

French, M.T.; et al. Brief physician advice for problem drinkers: Long-term efficacy and benefit-cost analysis. Alcoholism: Clinical and Experimental Research 26:36-43, 2002. (14) Friedmann, P.D.; McCullough, D.; Chin, M.H.; and Saltz, R. Screening and intervention for alcohol problems: National survey of primary care physicians and psychiatrists. Journal of General Internal Medicine 15:84-91, 2000. (15) National Center on Addiction and Substance Abuse (CASA). Missed Opportunity: CASA National Survey of Primary Care Physicians and Patients on Substance Abuse. New York: Columbia University, CASA, 2000. (16) Ockene, J.K.; Wheeler, E.V.; Adams, A.; et al. Provider training for patient-centered alcohol counseling in a primary care setting. Archives of Internal Medicine 157:2334-2341, 1997. (17) Greco, P.J., and Eisenberg, J.M. Changing physicians' practices. New England Journal of Medicine 329:1271-1273, 1993. (18) U.S. Department of Health and Human Services (USDHHS). Tenth Special Report to the U.S. Congress on Alcohol and Health: Highlights From Current Research. Washington, DC: USDHHS, 2000. (19) Fleming, M.F., and Graham, A.W. Screening and brief interventions for alcohol use disorders in managed care settings. In: Galanter, M., ed. Recent Developments in Alcoholism, Vol. 15: Services Research in the Era of Managed Care. New York: Kluwer Academic/Plenum Publishers, 2001.pp. 393-416. (20) Hickson, G.B.; Altemeier, W.A.; and Perrin, J.M. Physician reimbursement by salary or fee-for-service: Effect on physician practice behavior in a randomized prospective study. Pediatrics 80:344-350, 1987. (21) Fleming, M.F.; Barry, K.L.; Manwell, L.B.; et al. Brief physician advice for problem alcohol drinkers. A randomized controlled trial in community-based primary care practices. JAMA: Journal of the American Medical Association 277:1039-1045, 1997. (22) D'Onofrio, G., and Degutis, L.C. Preventive care in the emergency department: Screening and brief intervention for alcohol problems in the emergency department: A systematic review. Academic Emergency Medicine 9:627-638, 2002. (23) McCarthy, M.L.; Hirshon, J.M.; Ruggles, R.L.; et al. Referral of medically uninsured ED patients to primary care. Academic Emergency Medicine 9:639-642, 2002. (24) Substance Abuse and Mental Health Services Administration (SAMHSA). Overview of Findings From the 2002 National Survey on Drug Use and Health. NHSDA Series H-21, DHHS Pub. No. SMA 03-3774. Rockville, MD: Office of Applied Studies, 2003. (25) Substance Abuse and Mental Health Services Administration (SAMHSA). Alcohol Use by Persons Under the Legal Drinking Age of 21. NHSDA Series H-13, DHHS Pub. No. SMA 01-3549. Rockville, MD: Office of Applied Studies, 2003. (26) Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. 10 Leading Causes of Death. Available at: http://www.cdc.gov/ncipc/osp/charts.htm. Accessed September 26, 2004. (27) Chafetz, M.E.; Blane, H.T.; Abrams, H.S.; et al. Establishing treatment relations with alcoholics. Journal of Nervous and Mental Disease 134:395-409, 1962. (28) D'Onofrio, G., and Degutis, L. Screening and brief intervention in the emergency department. Alcohol Research & Health 28(2):63–72, 2004/2005. (29) D'Onofrio, G.; Nadel, E.S.; Degutis, L.C.; et al. Improving emergency medicine residents' approach to patients with alcohol problems: A controlled educational trial. Annals of Emergency Medicine 40:50-62, 2002. (30) Longabaugh, R.; Woolard, R.F.; Nirenberg, T.D.; et al. Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department. Journal of Studies on Alcohol 62:806-816, 2001. (31) D'Onofrio, G.; Bernstein, E.; Bernstein, J.; et al. Patients with alcohol problems in the emergency department. Part 2: Intervention and referral. Academic Emergency Medicine 5:1210-1217, 1998. (32) Rhodes, K.V.; Lauderdale, D.S.; Stocking, C.B.; et al. Better health while you wait: A controlled trial of a computer-based intervention for screening and health promotion in the emergency department. Annals of Emergency Medicine 37:284-291, 2001. (33) Bearer, C.F. Markers to detect drinking during pregnancy. Alcohol Research & Health 25(3):210–218, 2001. (34) May, P.A., and Gossage, J.P. Estimating the prevalence of fetal alcohol syndrome: A summary. Alcohol Research & Health 25(3):159-167, 2001. (35) Hankin, J.; McCaul, M.E.; and Heussner, J. Pregnant, alcohol abusing women. Alcoholism: Clinical and Experimental Research 24:1276-1286, 2000. (36) Wutzke, S.E.; Conigrave, K.M.; Saunders, J.B.; et al. The long-term effectiveness of brief interventions for unsafe alcohol consumption: A 10-year follow-up. Addiction 97:665-675, 2002. (37) Chang, G.; McNamara, T.K.; Orav, E.J.; et al. Brief interventions for prenatal alcohol use: A randomized trial. Obstetrics and Gynecology 105:991-998, 2005. (38) Hankin, J.R., and Sokol, R.J. Identification and care of problems associated with alcohol ingestion in pregnancy. Seminars in Perinatology 19:286-292, 1995. (39) Hankin, J.R. Fetal alcohol syndrome prevention research. Alcohol Research & Health 26(1):58-65, 2002. (40) Bureau of Justice Statistics. Crime Victimization in the United States, 2002. Statistical Tables. NJC 200561. Washington, DC: U.S. Dept. of Justice, Bureau of Justice Statistics, 2003. (41) Bureau of Justice Statistics. Alcohol and Crime. Washington, DC: U.S. Dept. of Justice, Office of Justice Programs, 1998. Available at: http://www.ojp.usdoj.gov/bjs/pub/pdf/ac.pdf. (42) National Highway Traffic Safety Administration (NHTSA). Traffic Safety Facts 2002-Alcohol. DOT HS-809-606. Washington, DC: NHTSA, National Center for Statistics and Analysis, 2003. (43) Davis, T.M.; Baer, J.S.; Saxon, A.J.; and Kivlahan, D.R. Brief motivational feedback improves post-incarceration treatment contact among veterans with substance use disorders. Drug and Alcohol Dependence 69:197-203, 2003. (44) Wells-Parker, E., and Williams, M. Enhancing the effectiveness of traditional intervention with drinking drivers by adding brief individual intervention components. Social Science Research 63:655-664, 2002. (45) O'Malley, P.M., and Johnston, L.D. Epidemiology of alcohol and other drug use among American college students. Journal of Studies on Alcohol (Suppl. 14):23-39, 2002. (46) Perkins, H.W. Surveying the damage: A review of research on consequences of alcohol misuse in college populations. Journal of Studies on Alcohol (Suppl. 14):91–100, 2002. (47) Johnston, L.D.; O'Malley, P.M.; Bachman, J.G.; and Schulenberg, J.E. Monitoring the Future, National Survey Results on Drug Use, 1975-2003. Volume II: College Students and Adults Ages 19-45. NIH Pub. No. 04-5508. Bethesda, MD: National Institute on Drug Abuse, 2004. (48) Wechsler, H.; Lee, J.E.; Kuo, M.; et al. Trends in college binge drinking during a period of increased prevention efforts. Findings from 4 Harvard School of Public Health College Alcohol Study surveys: 1993-2001. Journal of American College Health 50:203-217, 2002. (49) 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. Journal of Studies on Alcohol (Suppl. 14):148-163, 2002. (50) Anderson, D.S., and Gadaleto, A. Results of the 2000 College Alcohol Survey: Comparison with 1997 Results and Baseline Year. Fairfax, VA: Center for the Advancement of Public Health, George Mason University, 2001. (51) Cuijpers, P. Peer-led and adult-led school drug prevention: A meta-analytic comparison. Journal of Drug Education 32:107–119, 2002. (52) Larimer, M.E.; Turner, A.P.; Anderson, B.K.; et al. Evaluating a brief alcohol intervention with fraternities. Journal of Studies on Alcohol 62:370-380, 2001. (53) O'Leary, T.A.; Brown, S.A.; Colby, S.M.; et al. Treating adolescents together or individually? Issues in adolescent substance abuse interventions. Alcoholism: Clinical and Experimental Research 26:890-899, 2002. (54) Fromme, K., and Corbin, W. Prevention of heavy drinking and associated negative consequences among mandated and voluntary college students. Journal of Consulting and Clinical Psychology 72:1038–1049, 2004. (55) Black, D.R., and Coster, D.C. Interest in a stepped approach model (SAM): Identification of recruitment strategies for university alcohol programs. Health Education Quarterly 23:98-114, 1996. (56) Black, D.R., and Smith, M.A. Reducing alcohol consumption among university students: Recruitment and program design strategies based on Social Marketing Theory. Health Education Research 9:375-384, 1994. (57) Larimer, M.E.; Cronce, J.M.; Lee, C.M.; and Kilmer, J.R. Brief interventions in college settings. Alcohol Research & Health 28(2):94-104, 2004/2005. (58) Breslin, F.C.; Sobell, M.B.; Sobell, L.C.; et al. Problem drinkers: Evaluation of a stepped-care approach. Journal of Substance Abuse 10:217-232, 1999. (59) Kypri, K.; Saunders, B.; and Gallagher, S.J. Acceptability of various brief intervention approaches for hazardous drinking among university students. Alcohol and Alcoholism 38:626-628, 2003.



- ► Helping Patients Who Drink Too Much: A Clinician's Guide. 2005 Edition. NIH Publication No. 05–3769. Provides useful materials for screening, assessing, and administering brief interventions. Includes medication information and handy pocket guide.
- ► For these and other resources, visit NIAAA's Web site, www.niaaa.nih.gov

Full text of this publication is available on NIAAA's World Wide Web site at http://www.niaaa.nih.gov

All material contained in the Alcohol Alert is in the public domain and may be used or reproduced without permission from NIAAA. Citation of the source is appreciated.

Copies of the Alcohol Alert are available free of charge from the National Institute on Alcohol Abuse and Alcoholism Publications Distribution Center, P.O. Box 10686, Rockville, MD 20849–0686.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

NIAAA Publications Distribution Center Attn.: Alcohol Alert

P.O. Box 10686

Rockville, MD 20849-0686

Official Business

Penalty for Private Use \$300

PRSRT STD POSTAGE AND FEES PAID NIH/NIAAA PERMIT NO. G-824

Helping

2000

Patients Who Drink Too Much