

Alcohol Screening and Brief Intervention (SBI) for Trauma Patients

COT Quick Guide



AMERICAN COLLEGE OF SURGEONS
Committee on Trauma

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control
National Institute on Alcohol Abuse and Alcoholism

Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

A Note about Terms

In this document, we try to use terms in ways that focus on at-risk behaviors rather than individuals. Therefore, rather than referring to at-risk or problem drinkers, we refer to at-risk or problem drinking. Using language this way does not disparage our patients, and it also reminds us that behavior can change.

Throughout the document, we use hazardous, excessive, unhealthy, or at-risk drinking interchangeably. All these terms refer to the middle section of the triangle in Figure 1.

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The Problem

Addiction to alcohol is not the country's only problem with alcohol. For every U.S. adult who is dependent on alcohol, more than 6 other adults who are *not* dependent are at risk of or have already experienced problems from their drinking.^{1,2} Many of these at-risk drinkers incur injuries that require trauma center services.

The triangle on the right (Figure 1) shows that even if we were able to “cure” the 4% who are dependent,¹ we would not have addressed the largest portion of the U.S. alcohol problem: the 25% who are not dependent but have experienced problems or have significant risks related to their drinking.² For the purposes of this document, these individuals engage in “at-risk drinking.” They drink at levels that place them at elevated risk for future alcohol-related problems, and some may already have suffered injuries (e.g., ended up in a trauma center). However, they are not dependent on alcohol.

Not surprisingly, a high proportion of these at-risk drinkers find their way to trauma centers, where almost 50% of patients can have positive blood alcohol concentrations (BAC).³ Despite the prevalence of alcohol-related risk and problems, trauma centers do not currently provide screening and effective brief intervention as part of routine care.

Because excessive drinking is a significant risk factor for injury, it is vital for trauma centers to have protocols in place to identify and help patients. Trauma centers are in an ideal position to take advantage of the teachable moment generated from an injury by implementing screening and brief intervention (SBI) for at-risk and dependent drinkers.

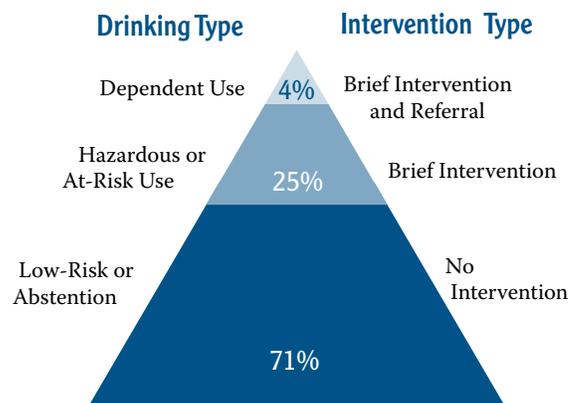
Brief alcohol interventions conducted in trauma centers have been shown to reduce trauma recidivism by as much as 50%.³ Such interventions also reduce rates of arrest for driving under the influence⁴ and cut health care costs.⁵ For these reasons, routine care in trauma centers should include screening patients for alcohol misuse, providing brief interventions for patients who screen positive, and—when needed—referring patients to specialty assessment and treatment.

The Response

In its publication *Resources for Optimal Care of the Injured Patient: 2006*, the American College of Surgeons Committee on Trauma (COT) includes the following essential criteria for trauma centers. “Trauma centers can use the teachable moment generated by the injury to implement an effective prevention strategy, for example, alcohol counseling for problem drinking. Alcohol is such a significant associated factor and contributor to injury that it is vital that trauma centers have a mechanism to identify patients who are problem drinkers. Such mechanisms are essential in Level I and II trauma centers. In addition, Level I centers must have the capability to provide an intervention for patients identified as problem drinkers. These have been shown to reduce trauma recidivism by 50%.”

Although this guide is intended to help Level I and II trauma centers implement SBI, the COT recommends that all trauma centers incorporate alcohol screening and brief intervention as part of routine trauma care.

Figure 1: Pyramid of Alcohol Problems^{1,2}



Note: The prevalence estimates in this figure are for non-institutionalized U.S. population, not trauma patients.

Alcohol Screening and Brief Intervention in Trauma Centers: A Simple Three-Step Process

Step 1

Screen Patients

Screening for alcohol use identifies whether patients' drinking places them and others at risk and hence warrants brief interventions. Some screening instruments can also provide information about the severity of patients' problems and the likelihood of their being dependent on alcohol. This information is essential to delivering an appropriate intervention. If not obtained during screening, it can be acquired during the intervention itself.

Step 2

Conduct Brief Intervention

In trauma centers, brief interventions capitalize on the fact that patients' injuries help motivate behavior change. Most people undergoing behavior change do not require formal treatment. Brief interventions are a way to help this large group of patients reduce or eliminate their at-risk drinking. Brief interventions typically use three components.

- a. **Information or feedback** about screening results, BAC upon admission, the link between drinking and injury, guidelines for low-risk alcohol consumption, methods for reducing or stopping drinking, etc.
- b. **Understanding the patient's view of drinking and enhancing motivation.** This part of the intervention encourages patients to think about and express how drinking may have contributed to their injury, what they like and dislike about their current drinking pattern, and how they might want to change to reduce their risks. This process engages patients in the conversation so that they can come to their own decisions about drinking.
- c. **Clear and respectful professional advice** about the need to reduce risk by cutting down or quitting drinking and to avoid high-risk alcohol-related situations. The patient/clinician interaction is also likely to require **negotiating** between what the clinician thinks is best and what the patient is willing and able to do. The optimal result is for patients to establish and articulate their own goals and a plan to achieve them.

Step 3

Follow Up

Research indicates that patient outcomes improve when some follow up is provided. Trauma centers with sufficient resources can consider:

- Providing follow-up visits or telephone contact to reinforce the intervention.
- Recommending that patients consult their primary care providers or hospital specialists.
- Discussing options for additional services as needed, such as Alcoholics Anonymous or a local treatment organization.

Planning: Before Implementing a Program*

Identify Program Staff.

Trauma centers are required to identify at least one member of the trauma staff to receive training in how to administer SBI and to monitor and evaluate program activities. It is not necessary that the trained trauma staff member deliver all of the interventions, but he or she should provide SBI program oversight.

Define the Target Population of patients who will be screened.

Recognizing that it might not be feasible to screen every patient, trauma centers are, nevertheless, expected to screen the majority of their patients—not just those who appear to be intoxicated. Because problem drinking is very common among trauma patients, many who are not intoxicated at admission will screen positive for problem drinking and therefore be at risk for future alcohol-related injury.

Develop a Protocol for Screening.

Trauma centers must select one (or more) evidence-based screening instrument(s), identify who will administer the screening method, and decide when and where patients will be screened. See page 7 for recommended instruments and procedures.

Develop a Protocol to Provide Brief Interventions.

To meet this criterion, Level I trauma centers must, at a minimum, develop a plan to deliver brief interventions to screen-positive patients. The intervention can be provided by a trauma team member or other hospital staff (e.g., psychologist or social worker) who should be specially trained in providing a brief intervention to the full severity spectrum of at-risk drinkers. See page 9 for information about delivering brief interventions.

Advise Patients NOT to Drink:

- When operating a vehicle or machinery
- When pregnant or considering pregnancy
- If a contraindicated medical condition is present
- After using certain medications, such as sedatives, analgesics, and selected antihypertensives

Develop a Record-Keeping Protocol.

The Verification Review Committee may ask for information on the screening instrument used, the percentage of patients screened, and who provides the interventions. Other measures useful for evaluating SBI include the percentage of patients who screen positive, the percentage of screen-positive patients who receive an intervention, and any records of follow up on patients, such as referral to treatment.

Establish a Mechanism to Ensure Patient Protection and Confidentiality.

The following article provides valuable guidance on issues and options relating to patient confidentiality: Gentilello L. Alcohol screening and intervention in trauma centers: confidentiality concerns and legal considerations. *J Trauma*. 2005;59:1-1.

Develop a Reimbursement Strategy.

Some billing codes for SBI already exist, and new, more specific ones are being developed. Negotiation with payers unaccustomed to reimbursing for these codes may be necessary.

Drinking Guidelines	
Healthy men up to age 65:	<ul style="list-style-type: none">• No more than 4 drinks in a day AND• No more than 14 drinks in a week
Healthy adult women; healthy men over age 65:	<ul style="list-style-type: none">• No more than 3 drinks in a day AND• No more than 7 drinks in a week
Lower limits or abstinence for patients who:	<ul style="list-style-type: none">• Take medications that interact with alcohol• Have a health condition exacerbated by alcohol

Source: National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism

*Note: In the near future, the Substance Abuse and Mental Health Services Administration (SAMHSA) will provide an online step-by-step guide to assist trauma centers in their planning and implementation process.

Screening Methods

Because subjective judgment is an unreliable means of identifying at-risk drinking, the COT is requiring that an evidence-based screening process be administered to as many admitted trauma patients as feasible. Many factors should be taken into consideration in implementing a screening protocol, in addition to the choice of screening instruments that will be used.

First, each center should identify the target population it will screen. This group should include the largest possible portion of patients, but some groups may be excluded based on the likelihood of their not having a drinking problem (e.g., pre-adolescents) or the difficulty of conducting screening (e.g., those with significant traumatic brain injury). Most importantly, since alcohol misuse is pervasive among all adolescent and adult segments of society, no groups or individuals should be excluded based upon an assumption that they are not likely to be at risk.

Screening for alcohol use *may serve more than one purpose within an SBI system*. At a minimum, screening procedures must determine whether a brief intervention should be offered to a patient. Any of the screening procedures described below will provide this information. However, delivering an appropriate intervention also requires determining the severity of a patient's drinking problem, including the likelihood of dependence. This information is critical to guiding the patient to an appropriate decision about how to reduce alcohol-related risks.

Various alternatives are available to obtain the information necessary to know both (a) whether an intervention is appropriate and (b) how best to advise the patient, based on the severity of his or her drinking problem. Some screening instruments, such as the AUDIT and Consumption + CAGE, provide sufficient information for *deciding both questions* before one begins the intervention. (See page 7.) The BAC or the single-

question binge drinking screen, however, offer sufficient cause to begin an intervention but require that additional information about severity and dependence be obtained either by further screening or by asking questions during the intervention.

A screening protocol should also take into account the possibility of patients underreporting their alcohol use in response to questions. Even though research shows that patients in most medical settings answer questions with sufficient honesty to provide reliability, some patients in trauma settings may have overriding reasons to underreport their drinking. Although a patient who underreports drinking may still screen positive, careful probing and confirmation of drinking patterns is advised during the intervention. A BAC can be used to verify patient-reported information about current intoxication.

Thus, the selection of an instrument and determination of screening procedures must be decided in light of the entire SBI protocol being established. It may make sense to use a screening instrument that provides all the information needed before the intervention begins. On the other hand, a center may decide to use only a BAC or very short screening questionnaire to identify patients in need of an intervention, and gather additional information about severity and dependence during the intervention itself. Both systems can work with equal effectiveness.

Introducing the screening process as part of the trauma center's normal routine helps the patient feel as though he or she has not been singled out or already labeled as a person with a drinking problem. Some introduction to set the patient at ease is advisable, such as "Hi, I work with the trauma team; we like to ask all patients a few questions about their alcohol use. Would now be a good time?"

Description of Screening Instruments

1. Alcohol Use Disorders Identification Test (AUDIT)

Description: This 10-item screening instrument was developed through international testing by the World Health Organization. The AUDIT asks questions about alcohol consumption during the past year, symptoms of alcohol dependence, and alcohol-related problems. It identifies 4 different groups of people—those unlikely to be at risk, those at risk because they drink excessively, those who have already experienced problems related to their drinking, and those who are likely to have alcohol dependence syndrome. (See page 12 for the full instrument.)

Use: The AUDIT can be administered in 2-3 minutes, through an interview, by the patient on paper, or by computer.

Cutoff Scores: Patients meeting or exceeding the following cut off scores should be offered a brief intervention.

Adult men under age 66: 8 or above

All adult women; men over age 65: 7 or above

Adolescents under age 18: 4 or above

The AUDIT can be used to evaluate the severity of a patient's drinking problem. Therefore, it can be helpful in deciding what advice to give patients during an intervention.

An AUDIT score of 16–19 suggests severe alcohol-related problems. The patient should be encouraged to seek additional help.

An AUDIT score of 20 or more suggests alcohol dependence syndrome, which may require specialized treatment.

Advantages: AUDIT is sensitive to a broad spectrum of drinking problems, from early excessive use to severe dependence. It has been extensively validated, including in trauma centers, and performs well with a wide variety of ethnic and cultural groups. It is available in Spanish and many other languages. It provides information about the three major domains of alcohol problems—alcohol consumption, alcohol-related problems, and alcohol dependence symptoms, all of which are valuable in conducting an appropriate intervention.

2. Consumption + CAGE Questions

Description: This screening method combines 3 alcohol consumption questions that identify a patient's current drinking pattern with the CAGE questionnaire. The CAGE utilizes 4 questions to identify patients with alcohol dependence syndrome; 1) Have you ever felt you should **C**ut down on your drinking? 2) Have people **A**nnoyed you by criticizing your drinking? 3) Have you ever felt bad or **G**uilty about your drinking? 4) Have you ever had an **E**ye opener first thing in the morning to steady nerves or get rid of a hangover? Together, the consumption questions and the CAGE identify patients whose drinking puts them at risk of having alcohol problems in addition to identifying the likelihood of dependence.

The consumption questions are:

1. On average, how many days per week do you have a drink containing alcohol?
2. On a typical day when you drink alcohol, how many drinks do you have?
3. How many times in the past year have you had x (x=5 for men; x=4 for women) or more drinks in a day?

Use: This method can be administered in about 2 minutes by an interviewer or completed by the patient on paper or by computer. In interview or computer format, questioning can stop if the first question is 0 or none and if the response to question 3 is 0. Preface the screening by explaining that the consumption questions relate to drinking in the prior month and what constitutes a drink, i.e., one beer, one glass of wine (5 oz.), or one standard mixed drink (one shot or 1.5 oz. of 80 proof spirits). Note that the four CAGE questions refer to the patient's lifetime drinking experience.

Cutoff Scores: The patient is considered positive if:

- The product of responses to questions 1 and 2 produces a total number of drinks per week exceeding the recommended weekly guidelines (7 for women and anybody older than 65; 14 for men under age 66); **OR**
- The response to question 3 is more than 0; **OR**
- The patient answers “yes” to 2 or more of the 4 CAGE questions.

Advantages: Many medical personnel have been taught the CAGE questions and may therefore be more comfortable using them. This method provides information on both consumption and possible dependence making it useful in delivering an appropriate intervention.

3. CRAFFT

Description: This instrument was specifically designed to screen for alcohol and drug problems in adolescents. Rather than asking direct questions about quantities and frequencies of alcohol and drug consumption, it asks 6 questions about behaviors that are reliable indicators of consumption and risk.

Use: No prior explanation to the patient is required.

Cutoff Scores: Two or more positive answers indicate a possible problem.

Advantages: The instrument was designed especially for adolescent screening. It includes drug as well as alcohol use.

4. Blood Alcohol Concentration (BAC)

Description: Alcohol concentration is determined by the weight of ethanol (ethyl alcohol) in a volume of blood. The typical measure is grams of ethanol in 100 milliliters of blood and is reported as 0.10 g/dl or 100 mg/dl. Thus, it detects the presence of intoxication rather than regular weekly or occasional excessive use. However, intoxication accompanied by trauma is sufficient reason to conclude that drinking behavior was related to the risk that produced injury.

Use: If the blood sample was not drawn near the time of the injury, BAC may underestimate the patient's drinking. In order to calculate the BAC at the time of injury, add 15 mg/dl for each hour that has elapsed between the time of the injury and when the blood sample was drawn.

Cutoff Scores: The BAC threshold for impaired driving is 80 mg/dl (0.08 g/dl) in all 50 U.S. states. This threshold was set because research shows that driving ability is impaired at this level for everyone. Because most people's ability to drive is impaired at lower BAC levels, many other countries have set the threshold at 0.05 g/dl for adults and lower for adolescent drivers, generally between .00 g/dl and .02 g/dl.

Advantages: BAC is a quick, simple, and objective screening method. If the majority of patients are routinely tested, it requires no new personnel or functions other than acting upon the results. It provides sufficient initial information if the subsequent counseling session identifies typical consumption patterns, other related problems, and signs of dependence, which are important in guiding the intervention in an appropriate direction.

5. Binge Drinking Question

Description: A single screening question about whether a patient has recently consumed more than 5 drinks in one day (more than 4 drinks for females) has been found to be effective in identifying at-risk drinking among patients who have injuries.

Use: The question can be included on an intake questionnaire. If it is asked in the context of collecting other patient information, efforts must be made to assure it is asked of the majority of patients.

Cutoff Scores: Patients who report having exceeded the requisite number of drinks within the past 3 months are considered positive.

Advantages: This is a simple, quick, and easy method of screening injured patients to identify those likely to benefit from brief alcohol counseling.

Brief Interventions

The overall aim of a brief intervention is to help patients decide to lower their risk for alcohol-related problems. Clinicians can use the following types of components to achieve this end.

Three Components of Brief Interventions

- **Giving information/feedback** can include telling patients something specific to their unique situation, such as their scores on a screening questionnaire or their BAC results from a laboratory test administered upon admission. Giving information might include telling patients that drinking soon after surgery can lead to further injuries. It might also include educating patients about recommended drinking limits or how abstaining or cutting down can greatly reduce the risk of future injuries.
- **Understanding patients' views of drinking and enhancing motivation** means asking about and understanding their perceptions about drinking. This might include asking them if they think that drinking played a role in their injuries. It might entail asking patients their views of the good and less than good things about drinking. How important do patients think it is to change? How confident are they that they could change if they decided to? Such questions engage patients in a conversation so that they can think themselves to a decision about their drinking. This conversation should be conducted in a collaborative, non-confrontational manner. Understanding patients' views about drinking not only demonstrates respect for patients, it is likely to elicit information that will improve rapport and can be used during the intervention.
- **Giving advice and negotiating** may include advising patients to cut down or quit, to avoid driving after drinking, or perhaps even to seek professional help or self help such as Alcoholics Anonymous. This often involves a compromise between what the clinician thinks is safest and what the patient is willing to do. Topics typically covered in this component include goal setting (quitting drinking versus cutting down) and forming a plan (telling a girlfriend about one's goal, avoiding certain people or places, etc.). While providing advice, it is important to convey respectful concern for the patient and not to be sarcastic, judgmental, or authoritarian.

Brief Intervention FAQs

Are brief interventions only used for dealing with alcohol issues?

In fact, brief interventions are widely used by physicians and other medical staff to address an array of patient behaviors including dietary habits, weight loss, smoking, and taking medications as prescribed. Research evidence clearly shows that brief interventions for at-risk drinking result in health, social, and economic benefits for the individual and society.

Are all types of alcohol interventions the same?

Traditionally, hospital psychiatry, social work, and substance abuse consultation teams have focused their work on treating patients with the most severe alcohol problems, primarily those with dependence. However, research has shown (see Figure 1) that the majority of patients with alcohol problems, in particular those in trauma settings, do not meet the criteria for dependence. Therefore, brief interventions were developed to address this larger group of patients with mild-to-moderate alcohol problems. This new approach requires staff who, in the past, worked primarily with alcohol dependent patients to acquire additional skills that are appropriate for addressing the needs of patients with less severe problems.

How long should a brief intervention last?

A brief intervention can range from a simple advice session of 5 minutes to 1-hour counseling session. Both very short and longer interventions have been shown to be effective. The length of the intervention should depend on the type of advice or counseling that would most benefit the patient and the willingness of the patient to receive it.

What types of patients can benefit most from brief interventions?

Screening and brief intervention was designed to help patients who are not severely addicted to alcohol and who still have enough control over their drinking that they can cut down or quit with little or no professional help. Many patients in trauma centers are likely to fit these criteria, so trauma centers are ideally positioned to deliver a brief intervention during a teachable moment that in itself motivates many patients to change. The respectful concern of the clinician can result in many patients avoiding subsequent injuries or turning away from a path toward alcohol dependence. Like many other clinical functions, brief intervention does not work for everyone all of the time. However, if provided for the majority of at-risk drinkers, it will over time result in less drinking and a large reduction in future injuries.

Does this mean that trauma centers should withhold brief intervention from more severely afflicted patients?

No. Although patients with the most severe drinking problems (e.g., extreme withdrawal symptom, multiple medical sequelae, and organic brain damage) might benefit from help beyond a brief intervention, a brief intervention is much better than nothing. Often, a brief intervention can motivate patients to seek help in professional treatment or a self-help program such as Alcoholics Anonymous. Providing a brief intervention to these patients will result in more of these patients seeking help sooner.

Who can perform the brief intervention?

Brief intervention does not have to be administered by a state-certified substance abuse counselor or by other clinicians with advanced training in substance abuse treatment. After relatively little training, brief intervention can be performed by anyone capable of showing respect and concern for injured patients. In addition to mental health or substance abuse counselors, the COT believes that there are multiple people in each trauma center who can meet these criteria, including surgeons or other MDs, psychologists, physician assistants, nurses, social workers, and spiritual care workers.

How does one learn to provide a brief intervention?

Although “live training” may be superior to self teaching and online computer learning, the COT believes that not all trauma centers can afford a live trainer. Live training in SBI can vary from a 1-hour visit by a trauma nurse trainer to a four-day workshop in more advanced techniques of motivational counseling. Trauma centers are encouraged to start by using any of the online training Web sites listed on page 14.

Sample Brief Intervention

The patient has positive screening results. However, because the AUDIT indicates that the patient has an early, and relatively mild, drinking problem, only simple advice is needed. This intervention takes about 3 minutes.

<p>Transition statement to move from screening to brief intervention</p>	<p>CLINICIAN: Thank you for answering those questions. Would you be interested to find out how your score on this questionnaire compares with other people?</p> <p>PATIENT: Sure, I guess.</p>
<p>Giving information/feedback</p>	<p>CLINICIAN: Okay. Well those 10 questions have been given to thousands of people around the world so that people can find out whether it would be good for them to change their drinking. Scores can range from 0–40. Scores between 0–6 (women)/0–7(men) are considered low-risk drinking; scores between 8–15 are considered hazardous drinking, and scores above 15 likely indicate more serious alcohol problems. Your score was 9, which puts your drinking in the hazardous range.</p> <p>PATIENT: Oh wow.</p>
<p>Understanding patients' views of drinking and enhancing motivation</p>	<p>CLINICIAN: Surprised?</p> <p>PATIENT: Yeah. I figured I'd be, you know, in the lowest range.</p> <p>CLINICIAN: So you thought your drinking was less than average...</p> <p>PATIENT: Yeah, I mean my friends drink more than me. I'm not an alcoholic or anything like that.</p> <p>CLINICIAN: Well, let's not worry so much about labels here. I'm more concerned about whether your drinking is going to hurt you in the future or not.</p> <p>PATIENT: Yeah.</p> <p>CLINICIAN: Many of our patients are surprised to learn what their scores are, and it's just an opportunity to think about making a change. If you were to do that, your chances of avoiding another injury in the future would be much better.</p> <p>PATIENT: I don't know about quitting, that seems like way overkill for me. But maybe I could cut down.</p>
<p>Giving advice and negotiating</p>	<p>CLINICIAN: Many patients can successfully cut down so they reduce their risk of injury and other problems. Men who are successful in cutting down are able to drink no more than 4 standard drinks per occasion and no more than 14 drinks per week. What do you think you'll do?</p> <p>PATIENT: Well, I guess I could give it a try. It's not like it's a big deal to me or anything...</p> <p>CLINICIAN: That's really great. You sound determined. So your limit would be no more than 4 drinks per occasion (beers, 5 oz. of wine or a mixed drink with 1.5 oz of spirits), and no more than 14 drinks per week. It's a good opportunity for you to test your control over alcohol. Just remember that this guideline means you can't have all of your weekly drinks in one day! (both laugh) And most important of all, no drinks at all if you're driving.</p> <p>PATIENT: Yeah, well I think I can stay under those limits pretty easily. And also, I never drink and drive anyway.</p> <p>CLINICIAN: Really? That's great to hear. How do you avoid that?</p> <p>PATIENT: If I take my car out, I just don't drink anything, period, end of story. And if I know I'm going to drink, I use a designated driver.</p>
<p>Closing on good terms</p>	<p>CLINICIAN: Good for you, and thanks for talking with me.</p>

Appendix A: Recommended Screening Instruments

AUDIT: Self-Report Version

Instructions to patients: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest. Place an x in one box that describes your answer to each. Please think about your drinking in the past year and remember that a drink means one beer, one small glass of wine (5 oz.), or one mixed drink containing one shot (1.5 oz.) of spirits.

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

Available for clinical use without permission from the World Health Organization. The international version has been slightly altered here to adjust it partially to the 14 g. standard drink in the U.S.A. by changing “six” to “five” in Question 3. A manual on the use of the AUDIT and another on brief interventions are available at http://www.who.int/substance_abuse/publications/alcohol/en/index.html. In interview or computer format, questioning can stop if the first question receives a negative answer or if the score of questions 2 and 3 are zero. Note that women who drink somewhat above recommended guidelines of 7 drinks per week may score zero on question 2 and not receive a positive screening result.

Consumption + CAGE

Consumption

1. On average, how many days per week do you have a drink containing alcohol?
2. On a typical day when you drink alcohol, how many drinks do you have?
3. How many times in the past year have you had x ($x=5$ for men; $x=4$ for women) or more drinks in a day?

CAGE

4. Have you ever felt you should **C**ut down on your drinking?
5. Have people **A**nnoyed you by criticizing your drinking?
6. Have you ever felt bad or **G**uilty about your drinking?
7. Have you had an **E**ye opener first thing in the morning to steady nerves or get rid of a hangover?

Source: Ewing JA. Detecting alcoholism, the CAGE questionnaire. Journal of the American Medical Association. 252(14): 1905-1907, 1984.

CRAFFT

1. Have you ever ridden in a **C**ar driven by someone (including yourself) who was high or had been using alcohol or drugs?
2. Do you ever use alcohol or drugs to **R**elax, feel better about yourself, or fit in?
3. Do you ever use alcohol or drugs while you are by yourself **A**lone?
4. Do you ever **F**orget things you did while using alcohol or drugs?
5. Do your **F**amily or **F**riends ever tell you that you should cut down on your drinking or drug use?
6. Have you ever gotten into **T**rouble while you were using alcohol or drugs?

Source: Knight JR, Sherritt L, Shrier LA, Harris SK, Chang G. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. Archives of Pediatrics & Adolescent 156(6) 607-614, 2002.

Binge Drinking Question

1. When was the last time you had more than x ($x=5$ for men; $x=4$ for women) drinks in 1 day?

Sources: Canagasaby A, Vinson DC. Screening for hazardous or harmful drinking using one or two quantity-frequency questions. Alcohol Alcohol. 2005;40(3):208-213.

Williams RH, Vinson DC. Validation of a single question screen for problem drinking. Journal of Family Practice. 50(4):307-312, 2001.

Appendix B: Additional Resources

Note: Additional resources will be provided in the forthcoming online SAMHSA Toolkit.

Self Training

Helping Patients Who Drink Too Much. A Clinician's Guide

U.S. Department of Health & Human Services, National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism. NIH Publication No. 05-3769. 2005. http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians_guide.htm

AlcoholCME

This is an NIAAA-funded online continuing education course for intervening with alcohol problems (fee applies for CEU; registration and learning are free). It includes an introduction to the FRAMES model of brief intervention. <http://www1.alcoholcme.com/PageReq?id=1:8029>

Alcohol Clinical Training (ACT)

This project disseminates research-based information and provides training to increase screening and brief intervention for alcohol problems. <http://www.bu.edu/act/index.html>

Lifestyle Change (Rapid Reference Series)

By Chris Dunn and Stephen Rollnick. Published by C.V. Mosby, London, England, 2003. 88 p. Price \$27.95 (pocket sized, softcover).

Health Behavior Change: A Guide for Practitioners

By Stephen Rollnick, Pip Mason, and Christopher Butler. Published by Churchill Livingstone, Robert Stevenson House, 1–3 Baxter's Place, Edinburgh, Scotland EH1 3AF, 1999. 240 p. Price \$29.95 (paperback).

Practice Guidelines and General Information

The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care (Second Edition)

By Thomas F. Babor, John C. Higgins-Biddle, John B. Saunders and Maristela G. Monteiro. Published by the Department of Mental Health and Substance Dependence, World Health Organization, 2001. http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf

Brief Intervention for Hazardous and Harmful Drinking: A Manual for Use in Primary Care

By Thomas F. Babor and John C. Higgins-Biddle. Published by the Department of Mental Health and Substance Dependence, World Health Organization, 2001. http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6b.pdf

Alcohol and Other Drug Screening of Hospitalized Trauma Patients

Treatment Improvement Protocol (TIP) Series 16. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, Rockville, MD 20857. DHHS Publication No. (SMA) 95-3041, 1995. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.36481>

Brief Interventions and Brief Therapies for Substance Abuse Treatment

Treatment Improvement Protocol (TIP) Series 34. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Rockville, MD 20857. DHHS Publication No. (SMA) 99-3353, 1999. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.59192>

Guide to Substance Abuse Services for Primary Care Physicians

Treatment Improvement Protocol (TIP) Series 24. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. DHHS Publication No. (SMA) 97-3139, 1997. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.45293>

Motivational Interviewing

The Mid-Atlantic Addiction Technology Transfer Center maintains a Web site of resources on motivational training. <http://www.motivationalinterviewing.com>

References

¹Grant BF, Dawson DA, Stinson FS et al. The 12-month prevalence and trends in DSM-IV alcohol abuse and dependence: United States, 1991–1992 and 2001–2002. *Drug Alcohol Depend.* 2004;74:223–234.

²Dawson DA, Grant BF, Stinson FS et al. Toward the Attainment of Low-Risk Drinking Goals: A 10-Year Progress Report. *Alcohol Clin Exp Res* 2004;28:1371-1378.

³Gentilello LM, Rivara FP et al. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Ann Surg.* 1999;230:473-80.

⁴Schermer CR, Moyers TB et al. Trauma center brief interventions for alcohol disorders decrease subsequent driving under the influence arrests. *J Trauma.* 2006;60:29-34.

⁵Gentilello LM, Ebel BE et al. Alcohol interventions for trauma patients treated in emergency departments and hospitals: a cost-benefit analysis. *Ann Surg.* 2005;241(4):541-55.

