



# Alcohol Screening and Brief Intervention (SBI) for Trauma Patients

AMERICAN COLLEGE OF SURGEONS  
Committee on Trauma

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

## A Note about Terms

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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.

## Acknowledgments

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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.<sup>1,2</sup> 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,<sup>1</sup> 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.<sup>2</sup> 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).<sup>3</sup> 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.

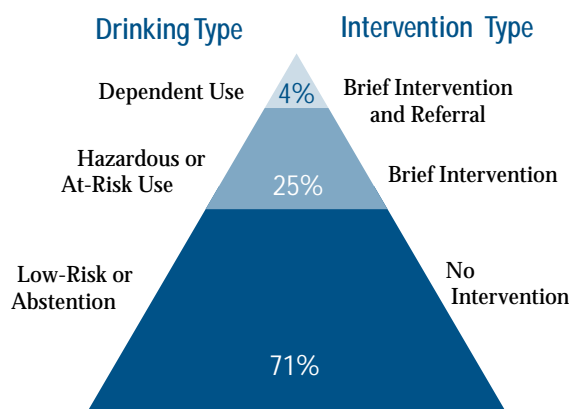
Brief alcohol interventions conducted in trauma centers have been shown to reduce trauma recidivism by as much as 50%.<sup>3</sup> Such interventions also reduce rates of arrest for driving under the influence<sup>4</sup> and cut health care costs.<sup>5</sup> For these reasons, routine care in trauma 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<sup>1,2</sup>**



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

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## 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.

## 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.

## Follow Up

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

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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.

## Screening Methods

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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

# Description of Screening Instruments

## 1. Alcohol Use Disorders Identification Test (AUDIT)

**Description:** is 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.

**Cuto 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:** is 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:** is 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.

**Cuto 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





## Brief Interventions

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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?*

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

# 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.

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| <p><b>Transition statement to move from screening to brief intervention</b></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><b>Giving information/ feedback</b></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><b>Understanding patients' views of drinking and enhancing motivation</b></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><b>Giving advice and negotiating</b></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><b>Closing on good terms</b></p>  | <p>CLINICIAN: Good for you, and thanks for talking with me.</p>   |





## Appendix B: Additional Resources

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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](http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians_guide.htm)

#### **AlcoholCME**

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)**

is 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

#### **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](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](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

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<sup>5</sup>Gentilello 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.

