

Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse: Recommendation Statement

► See related Putting Prevention into Practice on page 971.

This summary is one in a series excerpted from the Recommendation Statements released by the U.S. Preventive Services Task Force (USPSTF). These statements address preventive health services for use in primary care clinical settings, including screening tests, counseling, and preventive medications.

The complete version of this statement, including supporting scientific evidence, evidence tables, grading system, members of the USPSTF at the time this recommendation was finalized, and references, is available on the USPSTF website at <http://www.uspreventiveservicestaskforce.org>.

A collection of USPSTF recommendation statements reprinted in *AFP* is available at <http://www.aafp.org/afp/uspstf>.

Summary of Recommendations and Evidence

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen adults 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse (*Table 1*). **B recommendation.**

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening and behavioral counseling interventions in primary care settings to reduce alcohol misuse in adolescents. **I statement.**

Rationale

IMPORTANCE

The USPSTF uses the term alcohol misuse to define a spectrum of behaviors, including risky or hazardous alcohol use (e.g., harmful alcohol use, alcohol abuse or dependence). Risky or hazardous alcohol use means drinking more than the recommended daily, weekly, or per-occasion amounts resulting in increased risk of health consequences. For example, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the U.S. Department of Agriculture define risky use as consuming more than four drinks on any day or 14 drinks per week for men, or more than three drinks on any day or seven drinks per week for women (as well as any level of consumption under certain circumstances).^{1,2} Harmful alcohol use (defined by the International Statistical Classification of Diseases and Related Health Problems, 10th revision) is a pattern of drinking that causes damage to physical or mental health.³

Alcohol abuse (defined by the *Diagnostic and Statistical Manual of Mental Disorders*,

4th ed.) is drinking that leads an individual to recurrently fail in major home, work, or school responsibilities; to use alcohol in physically hazardous situations (such as while operating heavy machinery); or to have alcohol-related legal or social problems.⁴ Alcohol dependence (or alcoholism; defined by the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.) includes physical cravings and withdrawal symptoms, frequent consumption of alcohol in larger amounts than intended over longer periods, and a need for markedly increased amounts of alcohol to achieve intoxication.⁴

An estimated 30% of the U.S. population is affected by alcohol misuse, and most of these persons engage in risky use. More than 85,000 deaths per year are attributable to alcohol misuse; it is the estimated third leading cause of preventable deaths in the United States.^{5,6}

DETECTION

The USPSTF found adequate evidence that numerous screening instruments can detect alcohol misuse in adults with acceptable sensitivity and specificity.

BENEFITS OF DETECTION AND BEHAVIORAL COUNSELING INTERVENTIONS

The USPSTF found adequate evidence that brief behavioral counseling interventions are effective in reducing heavy drinking episodes in adults engaging in risky or hazardous drinking. These interventions also reduce weekly alcohol consumption rates and increase adherence to recommended drinking limits. Direct evidence is more limited about the effectiveness of brief behavioral counseling interventions in pregnant women engaging in alcohol use. However, studies in

Table 1. Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse: Clinical Summary of the USPSTF Recommendation

Population	Adults 18 years or older	Adolescents
Recommendation	Screen for alcohol misuse and provide brief behavioral counseling interventions to persons engaged in risky or hazardous drinking	No recommendation Grade: I statement
Screening tests	Grade: B Numerous screening instruments can detect alcohol misuse in adults with acceptable sensitivity and specificity. The USPSTF prefers the following tools for alcohol misuse screening in the primary care setting: (1) AUDIT (2) Abbreviated AUDIT-Consumption (3) Single-question screening, such as asking, "How many times in the past year have you had five (for men) or four (for women and all adults older than 65 years) or more drinks in a day?"	
Behavioral counseling interventions	Counseling interventions in the primary care setting can improve unhealthy alcohol consumption behaviors in adults engaging in risky or hazardous drinking. Behavioral counseling interventions for alcohol misuse vary in their specific components, administration, length, and number of interactions. Brief multicontact behavioral counseling seems to have the best evidence of effectiveness; very brief behavioral counseling has limited effect.	
Balance of harms and benefits	There is a moderate net benefit to alcohol misuse screening and brief behavioral counseling interventions in the primary care setting for adults 18 years or older.	The evidence on alcohol misuse screening and brief behavioral counseling interventions in the primary care setting for adolescents is insufficient, and the balance of benefits and harms cannot be determined.
Other relevant USPSTF recommendations	The USPSTF has made recommendations on screening for illicit drug use, and counseling and interventions to prevent tobacco use. These recommendations are available at http://www.uspreventiveservicestaskforce.org/ .	

NOTE: For the full recommendation statement and supporting documents, go to <http://www.uspreventiveservicestaskforce.org/>.

AUDIT = Alcohol Use Disorders Identification Test; USPSTF = U.S. Preventive Services Task Force.

the general adult population show that such interventions reduce alcohol consumption and increase adherence to recommended drinking limits among women of childbearing age.

The USPSTF found insufficient evidence on the effect of screening for alcohol misuse and brief behavioral counseling interventions on outcomes in adolescents.

HARMS OF DETECTION AND BEHAVIORAL COUNSELING INTERVENTIONS

There are minimal data to assess the magnitude of harms of screening for alcohol misuse or of consequent brief behavioral counseling interventions in any population. However, no studies have identified direct evidence of harms. Thus, given the noninvasive nature of the screening process and behavioral counseling interventions, the related harms are probably small to none.

USPSTF ASSESSMENT

The USPSTF concludes with moderate certainty that there is a moderate net benefit to screening for alcohol misuse and brief behavioral counseling interventions in the primary care setting for adults 18 years or older.

The evidence on screening for alcohol misuse and

brief behavioral counseling interventions in the primary care setting for adolescents is insufficient, and the balance of benefits and harms cannot be determined.

Clinical Considerations

PATIENT POPULATION

The B recommendation applies to adults 18 years or older, and the I statement applies to adolescents 12 to 17 years of age. Although pregnant women are included, this recommendation is related to decreasing risky or hazardous drinking, not to complete abstinence, which is recommended for all pregnant women. These recommendations do not apply to persons who are actively seeking evaluation or treatment for alcohol misuse.

SCREENING TESTS

The USPSTF considers three tools as the instruments of choice for screening for alcohol misuse in the primary care setting: the Alcohol Use Disorders Identification Test (AUDIT), the abbreviated AUDIT-Consumption (AUDIT-C), and single-question screening (e.g., the NIAAA recommends asking, "How many times in the past year have you had five [for men] or four [for women and all adults older than 65 years] or more drinks in a day?").

Of available screening tools, the AUDIT is the most widely studied for detecting alcohol misuse in primary care settings; both the AUDIT and the abbreviated AUDIT-C have good sensitivity and specificity for detecting the full spectrum of alcohol misuse across multiple populations. The AUDIT comprises 10 questions and requires approximately two to five minutes to administer; the AUDIT-C comprises three questions and takes one to two minutes to complete. Single-question screening also has adequate sensitivity and specificity across the alcohol-misuse spectrum and requires less than one minute to administer.

BEHAVIORAL COUNSELING INTERVENTIONS

Behavioral counseling interventions for alcohol misuse vary in their specific components, administration, length, and number of interactions. They may include cognitive behavioral strategies, such as action plans, drinking diaries, stress management, or problem solving. Interventions may be delivered by face-to-face sessions, written self-help materials, computer- or web-based programs, or telephone counseling. For the purposes of this recommendation statement, the USPSTF uses the following definitions of intervention intensity: very brief single contact (five minutes or less), brief single contact (six to 15 minutes), brief multicontact (each contact is six to 15 minutes), and extended multicontact (one or more contacts, each longer than 15 minutes). Brief multicontact behavioral counseling seems to have the best evidence of effectiveness; very brief behavioral counseling has limited effect.^{5,6}

The USPSTF found that counseling interventions in the primary care setting can positively affect unhealthy drinking behaviors in adults engaging in risky or hazardous drinking. Positive outcomes include reducing weekly alcohol consumption and long-term adherence to recommended drinking limits. Because brief behavioral counseling interventions decrease the proportion of persons who engage in episodes of heavy drinking (which results in high blood alcohol concentration), indirect evidence supports the effect of screening and brief behavioral counseling interventions on important health outcomes, such as the probability of traumatic injury or death, especially that related to motor vehicles.

Although screening detects persons along the entire spectrum of alcohol misuse, trials of behavioral counseling interventions in primary care settings largely focused on risky or hazardous drinking rather than alcohol abuse or dependence. Limited evidence suggests that brief behavioral counseling interventions are generally ineffective as singular treatments for alcohol abuse or dependence. The USPSTF did not formally evaluate other interventions (such as pharmacotherapy or outpatient treatment programs) for alcohol abuse or dependence,

but the benefits of specialty treatment are well established and are recommended for persons meeting the diagnostic criteria for alcohol dependence.

SCREENING INTERVALS

Evidence is lacking to determine the optimal interval for screening for alcohol misuse in adults.

SUGGESTIONS FOR PRACTICE REGARDING THE I STATEMENT

In deciding whether to screen adolescents for alcohol misuse and provide behavioral counseling interventions, primary care health professionals should consider the following factors.

Potential Preventable Burden. In 2010, approximately 14% of adolescents in the 8th grade and 41% in the 12th grade reported using alcohol at least once within the past 30 days; 7% and 23%, respectively, reported consuming at least five or more drinks on a single occasion (an episode of heavy use) within the previous two weeks.⁷ Motor vehicle crashes are the leading cause of death for adolescents⁸; according to the Substance Abuse and Mental Health Services Administration, about 4% of 16-year-olds and 9% of 17-year-olds in 2009 drove under the influence of alcohol at least once during the previous year.⁹ About 37% of traffic deaths among persons 16 to 20 years of age involve alcohol, and these deaths often involve alcohol-impaired drivers with lower blood alcohol concentrations than other age groups.¹⁰

Costs. Behavioral counseling interventions are associated with a time commitment ranging from five minutes to two hours, spread over multiple contacts. There are potential financial costs for parents and caregivers from lost work hours and travel to and from the provider.

Potential Harms. Potential harms associated with screening for alcohol misuse include anxiety, stigma or labeling, and interference with the clinician-patient relationship. Although evidence is very limited, no direct harms were identified for any population in available studies.

Current Practice. Research suggests that although most pediatricians and family physicians report providing some alcohol prevention services to adolescent patients, they do not universally or consistently screen and counsel for alcohol misuse.¹¹ Barriers to screening and counseling include a perceived lack of time, familiarity with screening tools, training in managing positive results, and available treatment resources.¹²

USEFUL RESOURCES

The AUDIT and AUDIT-C screening instruments for alcohol misuse are available from the Substance Abuse and Mental Health Services Administration-Health Resources and Services Administration Center for

Integrated Health Solutions (<http://www.integration.samhsa.gov/clinical-practice/screening-tools>). Details about single-question screening, and resources on primary care–feasible behavioral interventions, are available from the NIAAA (<http://pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/guide.pdf>).

The Community Preventive Services Task Force recommends electronic screening and brief intervention to reduce excessive alcohol consumption. This method uses electronic devices (e.g., computers, telephones, mobile devices) to facilitate screening for excessive drinking and delivering a brief intervention that provides personalized feedback about the risks and consequences of excessive drinking. Delivery of personalized feedback can range from fully automated (computer-based) to interactive (provided by a person over the telephone). At least one part of the brief intervention must be delivered by an electronic device. Electronic screening and brief intervention can be delivered in various settings, such as health care systems, universities, or communities. The Community Preventive Services Task Force found limited information on the effectiveness of electronic screening and brief intervention among adolescents.

The Community Preventive Services Task Force has also evaluated public health interventions (those that occur outside of the clinical practice setting) to prevent excessive alcohol consumption. It recommends instituting liability laws for establishments that sell or serve alcohol, increasing taxes on alcohol, maintaining limits on days and hours of the sale of alcohol, and regulating alcohol outlet density in communities as effective in preventing or reducing alcohol-related harms. It also recommends enhanced enforcement of laws prohibiting the sale of alcohol to minors. More information about the Community Preventive Services Task Force's recommendations on alcohol misuse is available at <http://www.thecommunityguide.org/alcohol/index.html>.

The Cochrane Collaboration has performed two systematic reviews to evaluate the effects of universal school- and family-based prevention programs to prevent or reduce alcohol misuse in young persons. Although not entirely consistent across studies, evidence generally supported the effectiveness of certain school-based psychosocial and developmental programs, such as the Life Skills Training Program, the Unplugged Program, and the Good Behavior Game.¹³ Similarly, evidence generally supported small but positive effects from family-based interventions in preventing alcohol misuse in young persons.¹⁴

The USPSTF has made recommendations on screening for and interventions to decrease the unhealthy use of other substances, including illicit drugs and tobacco. More information can be found at <http://www.uspreventiveservicestaskforce.org/>.

This recommendation statement was first published in *Ann Intern Med*. 2013;159(3):210-218.

The “Other Considerations,” “Discussion,” “Update of Previous Recommendation,” and “Recommendations of Others” sections of this recommendation statement are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspsdrin.htm>.

The U.S. Preventive Services Task Force recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

REFERENCES

1. National Institute on Alcohol Abuse and Alcoholism. Rethinking Drinking: Alcohol and Your Health. Bethesda, Md.: National Institute on Alcohol Abuse and Alcoholism; 2010. http://pubs.niaaa.nih.gov/publications/RethinkingDrinking/Rethinking_Drinking.pdf. Accessed April 16, 2013.
2. U.S. Department of Agriculture, U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2010. 7th ed. Washington, DC: U.S. Government Printing Office; 2010. <http://www.cnpp.usda.gov/publications/dietaryguidelines/2010/policydoc/policydoc.pdf>. Accessed April 16, 2013.
3. Janca A, Ustun TB, van Drimmelen J, Dittmann V, Isaac M. ICD-10 Symptom Checklist for Mental Disorders, Version 1.1. Geneva: World Health Organization; 1994. http://www.who.int/substance_abuse/research_tools/en/english_icd10.pdf. Accessed April 29, 2013.
4. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed., text revision. Arlington, Va.: American Psychiatric Association; 2000.
5. Jonas DE, Garbutt JC, Brown JM, et al. Screening, Behavioral Counseling, and Referral in Primary Care to Reduce Alcohol Misuse. Comparative Effectiveness Review No. 64. Rockville, Md.: Agency for Healthcare Research and Quality; 2012. <http://www.ncbi.nlm.nih.gov/books/NBK99199/>. Accessed April 16, 2013.
6. Jonas DE, Garbutt JC, Amick HR, et al. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2012;157(9):645-654.
7. Johnston LD, O’Malley PM, Bachman JG, Schulenberg JE. *Monitoring the Future: National Survey Results on Drug Use, 1975-2011. Volume I: Secondary School Students*. Ann Arbor, Mich.: University of Michigan; 2012.
8. Centers for Disease Control and Prevention. 10 Leading Causes of Injury Deaths by Age Group Highlighting Unintentional Injury Deaths, United States—2008. Atlanta, Ga.: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2012.
9. Substance Abuse and Mental Health Services Administration. Report to Congress on the Prevention and Reduction of Underage Drinking. Rockville, Md.: Substance Abuse and Mental Health Services Administration; 2011.
10. Hingson R, Heeren T, Levenson S, Jamanka A, Voas R. Age of drinking onset, driving after drinking, and involvement in alcohol related motor-vehicle crashes. *Accid Anal Prev*. 2002;34(1):85-92.
11. Millstein SG, Marcell AV. Screening and counseling for adolescent alcohol use among primary care physicians in the United States. *Pediatrics*. 2003;111(1):114-122.
12. Van Hook S, Harris SK, Brooks T, et al.; New England Partnership for Substance Abuse Research. The “Six T’s”: barriers to screening teens for substance abuse in primary care. *J Adolesc Health*. 2007;40(5):456-461.
13. Foxcroft DR, Tsertsvadze A. Universal school-based prevention programs for alcohol misuse in young people. *Cochrane Database Syst Rev*. 2011;(5):CD009113.
14. Foxcroft DR, Tsertsvadze A. Universal family-based prevention programs for alcohol misuse in young people. *Cochrane Database Syst Rev*. 2011;(9):CD009308. ■