U.S. Preventive Services Task Force

Counseling and Interventions to Prevent Tobacco Use and Tobacco-Caused Disease in Adults and Pregnant Women: Reaffirmation Recommendation Statement

▶ **See related Putting Prevention into Practice on page 1269.**

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.

This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 1201.

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

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 Web site at http://www.uspreventiveservicestaskforce.org/uspstf/uspstbac2.htm.

Summary of Recommendations and Evidence

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products *(Table 1)*. **A recommendation.**

The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke. **A recommendation.**

Rationale

Importance. *Tobacco use, and cigarette smoking in particular, is the leading preventable cause of death in the United States. Tobacco use results in more than 400,000 deaths annually from cardiovascular disease, respiratory disease, and cancer. Smoking during pregnancy results in the deaths of about 1,000 infants annually and is associated with an increased risk of premature birth and intrauterine growth retardation. Environmental tobacco smoke contributes to death in an estimated 38,000 persons annually.*

Recognition of behavior. *The "5-A" behavioral counseling framework provides a useful strategy for engaging patients in smoking cessation discussions: 1) Ask about tobacco use; 2) Advise to quit through clear personalized messages; 3) Assess willingness to quit; 4) Assist to quit; and 5) Arrange follow-up and support.*

Effectiveness of interventions to change behavior. *In nonpregnant adults, the USPSTF found convincing evidence that smoking cessation interventions, including brief behavior counseling sessions (less than 10 minutes) and pharmacotherapy delivered in primary care settings, are effective in increasing the proportion of patients who successfully quit smoking, and remain abstinent for one year. Although less effective than longer interventions, even minimal interventions (less than three minutes) have been found to increase quit rates.*

The USPSTF found convincing evidence that smoking cessation decreases the risk of heart disease, stroke, and lung disease.

In pregnant women, the USPSTF found convincing evidence that smoking-cessation counseling sessions, augmented with messages and self-help materials tailored for pregnant women who smoke, increase abstinence rates during pregnancy compared with brief, generic counseling interventions alone. Tobacco cessation at any point during pregnancy yields substantial health benefits for the expectant mother and baby. The USPSTF found inadequate evidence to evaluate the safety or efficacy of pharmacotherapy during pregnancy.

Harms of interventions. *Finding no published studies that describe harms of counseling to prevent tobacco use in adults or pregnant women, the USPSTF judged the magnitude of these harms to be no greater than small. Harms of pharmacotherapy are dependent on the specific medication used. In nonpregnant adults, the USPSTF judged these harms to be small.*

USPSTF assessment. *The USPSTF concludes that there is high certainty that the net benefit of tobacco cessation interventions in adults is substantial.*

The USPSTF also concludes that there is high certainty that the net benefit of augmented, pregnancy-tailored counseling in pregnant women is substantial.

Clinical Considerations

- **Patient population.** This recommendation applies to adults 18 years or older and

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Table 1. Counseling and Interventions to Prevent Tobacco Use and Tobacco-Caused Disease in Adults and Pregnant Women: Clinical Summary of the USPSTF Recommendation

Population	Adults 18 years or older	Pregnant women of any age
Recommendation	Ask about tobacco use Provide tobacco cessation interventions for those who use tobacco products Grade: A	Ask about tobacco use Provide augmented pregnancy-tailored counseling for women who smoke Grade: A
Counseling	The "5-A" framework provides a useful counseling strategy: 1. **A**sk about tobacco use 2. **A**dvise to quit through clear personalized messages 3. **A**ssess willingness to quit 4. **A**ssist to quit 5. **A**rrange follow-up and support Intensity of counseling matters: brief, one-time behavior counseling is helpful; however, longer sessions or multiple sessions are more effective. Telephone counseling "quit lines" also improve cessation rates.	
Pharmacotherapy	Combination therapy with counseling and medications is more effective than either component alone. Pharmacotherapy approved by the U.S. Food and Drug Administration includes nicotine replacement therapy, sustained-release bupropion, and varenicline.	The USPSTF found inadequate evidence to evaluate the safety or efficacy of pharmacotherapy during pregnancy.
Implementation	Successful implementation strategies for primary care practice include: • Instituting a tobacco user identification system • Promoting clinician intervention through education, resources, and feedback • Dedicating staff to provide treatment, and assessing the delivery of treatment in staff performance evaluations	
Relevant USPSTF recommendations	Recommendations on other behavioral counseling topics are available at http://www.uspreventiveservicestaskforce.org/.	

NOTE: *For the full USPSTF recommendation statement and supporting documents, visit http://www.uspreventiveservicestaskforce.org/.*

USPSTF = U.S. Preventive Services Task Force.

all pregnant women regardless of age. The USPSTF plans to issue a separate recommendation statement about counseling to prevent tobacco use in nonpregnant adolescents and children.

- **Counseling interventions.** Various primary care clinicians may deliver effective interventions. There is a dose-response relationship between quit rates and the intensity of counseling (i.e., more sessions or longer sessions improve quit rates). Quit rates seem to plateau after 90 minutes of total counseling contact time.[1] Helpful components of counseling include problem-solving guidance for patients who smoke (to help them develop a plan to quit and overcome common barriers to quitting) and the provision of social support as part of treatment. Complementary practices that improve cessation rates include conducting motivational interviewing, assessing readiness to change, offering more intensive counseling or referrals, and using telephone "quit lines."[1]

- **Treatment.** Combination therapy with counseling and medications is more effective at increasing cessation rates than either component alone. Pharmacotherapy approved by the U.S. Food and Drug Administration and identified as effective for treating tobacco dependence in nonpregnant adults includes several forms of nicotine replacement therapy (gum, lozenge, transdermal patch, inhaler, and nasal spray), sustained-release bupropion, and varenicline.[1]

- **Useful resources.** Detailed reviews and recommendations about clinical interventions for tobacco cessation are available in the U.S. Public Health Service Clinical

Practice Guideline, "Treating Tobacco Use and Dependence: 2008 Update" (available at http://www.surgeongeneral.gov/tobacco/).[1]

Tobacco-related recommendations from the Centers for Disease Control and Prevention's Guide to Community Preventive Services are available at http://www.thecommunityguide.org/tobacco/.[2]

Other Considerations

Implementation. Strategies that have been shown to improve rates of tobacco cessation counseling and interventions in primary care settings include implementing a tobacco user identification system; providing education, resources, and feedback to promote clinician intervention; and dedicating staff to provide tobacco dependence treatment and assessing the delivery of this treatment in staff performance evaluations.

Discussion

In 2003, the USPSTF reviewed the evidence for tobacco cessation interventions in adults and pregnant women contained in the 2000 U.S. Public Health Service Clinical Practice Guideline "Treating Tobacco Use and Dependence" and found that the benefits of these interventions substantially outweighed the harms.[3,4] In 2008, the USPSTF reviewed new evidence in the updated U.S. Public Health Service guideline and determined that the net benefits of screening and tobacco cessation interventions in adults and pregnant women remain well established.[1] The USPSTF found no new substantial evidence that could change its recommendations and, therefore, reaffirms its previous recommendations. The previous recommendation statement and a link to the updated U.S. Public Health Service guideline review can be found at http://www.uspreventiveservicestaskforce.org.[4]

Recommendations of Others

Policies of the American Academy of Family Physicians on tobacco use, prevention, and cessation are available online at http://www.aafp.org/online/en/home/policy/policies/t/tobacco.html.[5]

Clinical recommendations of the American College of Preventive Medicine on tobacco cessation counseling are available at http://www.acpm.org/pol_practice.htm.[6]

Recommendations of the American College of Obstetricians and Gynecologists for assisting smoking cessation during pregnancy are available at http://www.acog.org/departments/dept_notice.cfm?recno=13&bulletin=1863.[7]

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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.

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