

# Tobacco-Cessation Patient Counseling: American College of Preventive Medicine Practice Policy Statement

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## **Burden of suffering**

Causing approximately 419,000 deaths in the United States each year, smoking is the most important preventable cause of premature mortality (1) and morbidity. (2) Tobacco use is linked convincingly with cancer and other diseases, (3-5) affecting the pulmonary, gastrointestinal, cardiovascular, and reproductive systems, resulting in cancers of the lung, head and neck, esophagus, pancreas, kidney, bladder, and cervix, and causing an estimated 148,000 cancer deaths each year. (1) Each year smoking causes an estimated 180,000 deaths due to cardiovascular disease, including 100,000 deaths from coronary artery disease and 23,000 deaths from cerebrovascular disease. (1) Smoking is responsible for 84,000 deaths annually from pulmonary disease. (1)

The health of nonsmokers is also adversely affected by smoking. Tobacco use by women during pregnancy causes morbidity associated with low-birth weight babies, preterm deliveries, and approximately 1,700 deaths among infants and children under 1 year of age annually. Passive cigarette smoke exposure causes an estimated 3,000 lung cancer deaths among nonsmokers each year. (1) Smoking is also the most important risk factor for fatal household fires, (6) resulting in 1,400 deaths annually. In children, passively inhaled tobacco smoke increases incidence of asthma, lower respiratory tract infections, and middle ear effusions. (3)

## **Description of preventive measures**

The preventive measure consists of tobacco-cessation counseling provided by physicians and other health care professionals. Although the optimal methodology and frequency of physician counseling are not established, the key elements of effective counseling include identifying tobacco users, offering consistent and repeated cessation advice that is of personal medical relevance, adjuncts such as nicotine replacement therapy (NRT), follow-up contact, and advice regarding intensive cessation therapy. (3,7) For patients who are unwilling to quit, motivational interventions, including information regarding personal risks associated with smoking and rewards resulting from cessation may be offered. Counseling may be offered at all patient encounters, to both outpatients and hospitalized patients. (7) Similar strategies may be employed in smokeless tobacco-cessation interventions. (3,7-9)

## **Evidence of Effectiveness**

Many of the health risks associated with smoking may be reduced by smoking cessation. (10) Improvements in pregnancy outcomes, lung function, and coronary artery disease morbidity and mortality may result from smoking cessation. (10)

Over 100 randomized controlled clinical trials have demonstrated modest but statistically significant improvements in tobacco-cessation rates for persons who receive physician counseling. (3,7,11,12) In a meta-analysis of 56 studies, cessation rates of 10.7% were found for those receiving less than 3 minutes of counseling, 12.1% for those receiving between 3 and 10 minutes of counseling, and 18.7% for those receiving over 10 minutes of counseling. (7) Although little information is available regarding effectiveness of counseling for specific ethnic and demographic groups, counseling is

especially effective for smokers at special risk, including those who are pregnant and those who have ischemic heart disease (15% and 21% cessation rates, respectively). (7,12) A limited number of controlled trials have suggested that counseling is also effective for smokeless tobacco cessation. (8,9)

The efficacy of tobacco-cessation interventions is enhanced by the use of pharmacologic therapy, (3,7) The pharmacologic intervention most consistently found to be an effective adjunct to smoking-cessation counseling is NRT. (7,13) Quit rates at 6 months or longer double with transdermal NRT compared with placebo. (7) NRT is currently available as transdermal delivery systems (nicotine patch) nicotine gum, nicotine inhaler, or nicotine nasal spray. Currently the nicotine patch and gum are available over the counter, and the nicotine patch and gum are available over the counter, and the nicotine inhaler and nasal spray are available by prescription only. Three randomized trials have also demonstrated the effectiveness of bupropion, a phenelthylamine antidepressant, for smoking cessation. (14-17) Only one randomized trial has reported a statistically significant improvement in tobacco cessation with clonidine. (15) The evidence to support the use of tranquilizers or hypnotics as adjuncts to tobacco-cessation counseling is inconclusive. (7,12) Studies showing the effectiveness of pharmacologic adjuncts to smokeless tobacco-cessation counseling are not available. (7)

Intensive smoking-cessation therapy, involving multiple counseling sessions with tobacco-cessation specialists, is also effective. (7) Few smokers however, are willing to participate in such programs (16) because of the cost and time-consuming nature of the intervention.

### **Public Policy Considerations**

The prevalence of cigarette smoking in the United States declined between 1965 and 1990, but subsequently has remained relatively constant. In 1995, 25% of U.S. adults, or 47 million people, were current smokers. (17) Even a modest increase in quit rates of 4% resulting from physician counseling would result in about 2 million more quitters each year. Demographic differences in smoking prevalence suggest high-risk groups. Tobacco usage among adolescents of both genders has recently been increasing, to a prevalence of 35% in 1995. (18) In addition, groups with a high smoking prevalence include American Indians/Alaska Natives (prevalence 36%), persons with 9-11 years of education (prevalence 38%) (17) and individuals of lower socioeconomic status (prevalence 33%). (17,19) Consumption of smokeless tobacco is also increasing, (20) especially among Caucasian males aged 18-34. (21)

Tobacco use is costly: The estimated direct cost for medical care to treat illness attributable to smoking was 50 billion in 1993. (2) With inclusion of the indirect cost of work loss due to smoking-related morbidity, the actual cost may be twice as high. (2)

In contrast, although cost estimates vary widely, tobacco cessation counseling and NRT are cost effective. Law and Tang estimated the cost of physician counseling to be \$1,500 per life saved in 1995 dollars, (12) and in 1996 the Agency for Health Care Policy and Research estimated the cost of physician counseling, intensive counseling, and NRT to be \$2,321 per year of life saved. (22) A more intensive treatment program generated a cost of \$6,828 per net year of life gained; however, in comparison with cost effectiveness of other medical services, this cost is relatively inexpensive. (23) Although little information is available regarding the efficacy of counseling for adolescents, the increasing prevalence of tobacco use among this age group underscores the importance of continuing counseling activities while concurrently conducting systematic research to determine which strategies are most effective.

### **Recommendations of Other Groups**

All major health care agencies and associations recommend routine tobacco use cessation counseling for adults and adolescents. Some of these include the American College of Physicians, the American

Academy of Family Physicians, the American Academy of Pediatrics, the American Cancer Society, the American College of Obstetricians and Gynecologists, the American Heart Association, the American Lung Association, the National Cancer Institute, the American Medical Association, the American Dental Association, the National Institutes of Health, the U.S. Preventive Services Task Force, the Canadian Task Force on the Periodic Health Examination, and the Agency for Health Care Policy and Research. (3,7)

## **Rationale**

Tobacco use continues to be the single most important preventable cause of premature mortality and morbidity in the United States. Seventy percent of smokers visit a physician at least annually, (24) and thereby provide many opportunities for physicians to provide counseling. Counseling from a physician about tobacco cessation during office visits improves cessation rates and is cost effective. (3,7,12,22,23)

## **Recommendations of the American College of Preventive Medicine**

Clinicians should provide tobacco use cessation counseling at every clinical encounter. The counseling should be personal, medically oriented, clear, and strong. Nonsmokers may be encouraged to remain abstinent. Patients who use tobacco products may be identified through office and medical record systems, such as including smoking status as part of the vital signs. Or using a stamp on the front of the patient record identifying the patient as a smoker. Tobacco users may be counseled on the health effects of tobacco use, and may receive personal advice and encouragement to quit at every visit. Recommendations regarding NRT may be offered. Specific recommendations include: (1) Tobacco usage history should be obtained at all patient visits. (2) Nonsmokers, especially children and adolescents, should be encouraged not to start. (3) Office and medical record systems to identify patients who use tobacco should be employed. (4) Physicians and other office staff should advise all tobacco users to quit. (5) Physicians and other office staff should identify and assist smokers who are willing to quit. (6) Physicians and other office staff should provide motivational interventions for smokers who are not willing to quit.

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