



Complete Summary

GUIDELINE TITLE

NIH State-of-the-Science Conference Statement on tobacco use: prevention, cessation, and control.

BIBLIOGRAPHIC SOURCE(S)

NIH State-of-the-Science Conference Statement on tobacco use: prevention, cessation, and control. NIH Consens State Sci Statements 2006 Jun 12-14;23(3):1-26. [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

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SCOPE

DISEASE/CONDITION(S)

Tobacco use

GUIDELINE CATEGORY

Counseling
Prevention
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine

Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Nurses
Patients
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Social Workers
Substance Use Disorders Treatment Providers

GUIDELINE OBJECTIVE(S)

To provide health care providers, patients, and the general public with a responsible assessment of currently available data on tobacco use: prevention, cessation and control

TARGET POPULATION

Youth and adults in the United States

INTERVENTIONS AND PRACTICES CONSIDERED

1. Effective population and community-based interventions to prevent tobacco use in adolescents and young adults, including among diverse populations:
 - Increases in tobacco pricing and taxation
 - Laws and regulations preventing young people from gaining access to tobacco products
 - Mass media campaigns
 - School-based and comprehensive statewide programs
2. Effective strategies for increasing consumer demand for and use of proven, individually-oriented cessation treatments, including among diverse populations:
 - Mass media campaigns
 - Telephone-counseling programs (quit lines)
 - Increases in the unit price of tobacco products
 - Financial incentives and other economic strategies
 - Culturally tailored, gender-specific, and language appropriate programs
3. Effective strategies for increasing the implementation of proven, population-level, tobacco-use cessation, particularly by health care systems and communities
4. Effective prevention and of cessation interventions in populations with co-occurring morbidities and risk behaviors (e.g., psychiatric conditions, substance abuse disorders, pregnant women):
 - Pharmacologic interventions
 - Behavioral interventions

MAJOR OUTCOMES CONSIDERED

- Prevalence of smoking in youth and adults
- Prevalence of use of smokeless tobacco in youth and adults
- Quit rates
- Annual smoking-attributable economic costs

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic review of the literature was prepared by the RTI International-University of North Carolina Evidence-based Practice Center for the Agency for Healthcare Research and Quality for use by the National Institutes of Health (see the "Availability of Companion Documents" field).

MEDLINE®, the Cumulative Index to Nursing and Applied Health (CINAHL), The Cochrane Library, Psychological Abstracts, and Sociological Abstracts were searched using Medical Subject Headings as search terms or key words when appropriate; we also manually searched reference lists. With assistance from a Technical Expert Panel, a list of inclusion and exclusion criteria were generated for each question. The review was limited to human studies conducted in developed countries and published in English. Studies with participants ages 13 and older, of both sexes, and of diverse racial and ethnic populations were considered. Studies were limited to those with study duration of more than 6 months and minimum sample sizes of 30 for randomized controlled trials and 100 for other experimental or observational studies. Articles that did not report outcomes related to our Key Questions or provide sufficient information to be abstracted were excluded. All editorials, letters, and commentaries were also excluded. Finally, for work on Key Questions 1, 2, 3, and 5, prior systematic reviews (publication dates in parentheses) were relied on:

- The Guide to Community Preventive Services (2005)
- *Treating Tobacco Use and Dependence* (2000)
- *Reducing Tobacco Use: A Report of the Surgeon General* (2000)
- Several Cochrane Collaboration Reviews (1998-2005)
- Treating nicotine use and dependence of pregnant and parenting smokers: an update (2004)
- Smoking cessation approaches for persons with mental illness or addictive disorders (2002)
- A meta-analysis of smoking cessation interventions with individuals in substance abuse treatment or recovery (2004)
- Growing up tobacco free: preventing nicotine addiction in children and youths (1994)

Original research studies (1) published beyond the date range included in the systematic reviews, (2) concerning topics related to the questions not covered by the reviews, and (3) providing sufficient detail regarding their methods and outcomes were included.

Refer to Chapter 2 in the Evidence Report (see the "Availability of Companion Documents" field) for further information.

NUMBER OF SOURCE DOCUMENTS

Full text articles included in review: n = 102

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic review of the literature was prepared by the RTI International-University of North Carolina Evidence-based Practice Center for the Agency for Healthcare Research and Quality for use by the National Institutes of Health (see the "Availability of Companion Documents" field).

Decisions about including studies were made only after dual review. The quality of trials or other types of study were assessed using criteria from the U.S. Preventive Services Task Force (ratings are good, fair, or poor) and the National Health Service Centre for Reviews and Dissemination. Strength of evidence was rated using categories (strong, sufficient, insufficient) based on criteria from the Task Force on Community Preventive Services.

Bodies of evidence rated as strong included an adequate number of studies that were of good or fair quality, had study designs that were appropriate for the intervention being evaluated or issue being addressed, and were consistent in the direction of their findings. Sufficient bodies of evidence also contained studies of good or fair quality, but the suitability of the studies' designs was not as consistently appropriate and, therefore, more relevant studies were required to rate the evidence in the category. As per the Task Force model, the reasons for determining that a body of evidence was "insufficient" included unsuitable study designs, too few studies to determine the effectiveness of an intervention, too small an effect size, and inconsistent findings among studies of an intervention.

The strength of evidence applicable to each of the key questions was graded separately.

Refer to Chapter 2 in the Evidence Report (see the "Availability of Companion Documents" field) for further information.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Consensus Development Conference)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The National Cancer Institute and the National Institutes of Health Office of Medical Applications of Research sponsored a State-of-the-Science Conference on Tobacco Use: Prevention, Cessation, and Control on June 12–14, 2006 in Bethesda, Maryland. At the conference, invited experts presented information pertinent to these questions, and a systematic literature review prepared under contract with the Office of Medical Applications of Research (OMAR), through the Agency for Healthcare Research and Quality by the RTI International–University of North Carolina at Chapel Hill Evidence-based Practice Center was summarized. OMAR commissioned this review to summarize the available literature, frame the discussions regarding benefits and harms, and highlight the limitations of the entire evidence base for a State-of-the-Science conference in June 2006.

A non-Department of Health and Human Services, non-advocate 14-member panel included experts in the fields of medicine, general and pediatric psychiatry, addiction medicine, nursing, social work, population science, cancer prevention, minority health and health disparities, clinical study methodology, clinical epidemiology, and a public representative, synthesized existing literature on five main research issues needed to make progress toward public health gains worldwide. Specific substantive Key Questions were:

- What are the effective population- and community-based interventions to prevent tobacco use in adolescents and young adults, including among diverse populations?
- What are the effective strategies for increasing consumer demand for and use of proven, individually oriented cessation treatments, including among diverse populations?
- What are the effective strategies for increasing the implementation of proven, population-level, tobacco-use cessation strategies, particularly by health care systems and communities?
- What is the effect of smokeless tobacco product marketing and use on population harm from tobacco use?
- What is the effectiveness of prevention and of cessation interventions in populations with co-occurring morbidities and risk behaviors?
- What research is needed to make the most progress and greatest public health gains nationally and internationally?

The panel drafted its statement based on scientific evidence presented in open forum and on published scientific literature. The draft statement was presented on

the final day of the conference and circulated to the audience for comment. The panel released a revised statement later that day at <http://consensus.nih.gov>.

Refer to the original guideline document and Chapter 2 in the Evidence Report (see the "Availability of Companion Documents" field) for further information.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

Guideline developers reviewed published cost analyses.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Among the more important activities involved in producing a credible evidence report is conducting an unbiased and broadly based review of the draft report. External reviewers for this report included clinicians and representatives of professional societies and advocacy groups, including the Technical Expert Panel (TEP) members (see Appendix D of the Evidence Report [see the "Availability of Companion Documents" field]). Peer reviewers were charged with commenting on the content, structure, and format of the evidence report and asked to complete a peer review checklist. The report was revised, as appropriate, based on their comments. The panel released a revised statement at <http://consensus.nih.gov>.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Tobacco use remains a very serious public health problem. Coordinated national strategies for tobacco prevention, cessation, and control are essential if the United States is to achieve the *Healthy People 2010* goals. Most adult smokers want to quit, and effective interventions exist. However, only a small proportion of tobacco users try treatment. This gap represents a major national quality-of-care problem. Many cities and states have implemented effective policies to reduce tobacco use; public health and government leaders should learn from these experiences.

Because smokeless tobacco use may increase in the United States, it will be increasingly important to understand net population harms related to use of smokeless tobacco. Prevention, especially among youth, and cessation are the cornerstones of strategies to reduce tobacco use. Tobacco use is a critical and chronic problem that requires close attention from health care providers, health care organizations, and research support organizations.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate recommendations on tobacco use prevention, cessation, and control

POTENTIAL HARMS

Individuals who have a history of major depressive disorder (MDD) may have more difficulty quitting smoking and more severe nicotine withdrawal symptoms than those who do not have MDD.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- The statement reflects the panel's assessment of medical knowledge available at the time the statement was written. Thus, it provides a "snapshot in time" of the state of knowledge on the conference topic. When reading the statement, keep in mind that new knowledge is inevitably accumulating through medical research, and that the information provided is not a substitute for professional medical care or advice.
- This statement is an independent report of the panel and is not a policy statement of the National Institutes of Health (NIH) or the federal government.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Jun 12-14

GUIDELINE DEVELOPER(S)

National Institutes of Health (NIH) State-of-the-Science Panel - Independent Expert Panel

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

National Institutes of Health State-of-the-Science Panel

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All of the panelists who participated in this conference and contributed to the writing of this statement were identified as having no financial or scientific conflict of interest, and all signed forms attesting to this fact. Unlike the expert speakers who present scientific data at the conference, the individuals invited to participate on National Institutes of Health (NIH) Consensus and State-of-the-Science panels are reviewed prior to selection to assure that they are not proponents of an advocacy position with regard to the topic and are not identified with research that could be used to answer the conference questions.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [National Institutes of Health \(NIH\) Consensus Development Conference Program Web site](#).

Print copies: Available from the NIH Consensus Development Program Information Center, PO Box 2577, Kensington, MD 20891; Toll free phone (in U.S.), 1-888-NIH-CONSENSUS (1-888-644-2667); autofax (in U.S.), 1-888-NIH-CONSENSUS (1-888-644-2667); e-mail: consensus_statements@mail.nih.gov.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- NIH State-of-the-Science Conference on Tobacco Use: Prevention, Cessation, and Control. 2006 Jun. 124 p. Available in Portable Document Format (PDF) from the [National Institutes of Health \(NIH\) Consensus Development Conference Program Web site](#).

- Tobacco use: prevention, cessation, and control. Evidence report/Technology assessment. Number 140. 2006 Jun. 421 p. Available in Portable Document Format (PDF) from the [AHRQ Web site](#).

PATIENT RESOURCES

None available

NGC STATUS

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