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## Chapter 8

# Recommendations

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# Recommendations for the Control of Smokeless Tobacco

Robert Mecklenburg and R. Craig Stotts

**BACKGROUND** In 1990, Dr. Joseph Cullen, former Deputy Director, Division of Cancer Prevention and Control, National Cancer Institute, and many others who spoke at the Seventh World Congress on Tobacco and Health, appealed for immediate and widespread action against tobacco use. These speakers said that, although the research base needs strengthening, it is sufficient to promote change now. In 1991, Dr. Louis Sullivan, Secretary of Health and Human Services, when addressing the First International Conference on Smokeless Tobacco, also called for public education, new policies, and responsible action in the private and public sectors.

The recent rise in the use of ST in the United States, particularly the use of moist snuff, is cause for alarm. We know that dreadful health consequences followed the increase in smoking, and we know the toll of ST use in southeast Asia. It would be irresponsible to wait, for perhaps a quarter century, until oral cancer and other health consequences associated with ST use increase significantly. Nor can a wait-and-see attitude be justified when oral cancer incidence already exceeds the incidence of leukemia, cervical cancer, and other well-recognized cancers (American Cancer Society, 1992).

In January 1991, the National Cancer Institute and the National Institute of Dental Research convened a workshop of smokeless tobacco experts (see Appendix) to plan a response to the rise in ST use and the concomitant increase in risks for deaths from oral and other cancers in the United States and many other countries. The group assessed research conducted since the 1986 NIH Consensus Development Conference and the 1986 report of the Surgeon General's Advisory Committee, reexamined earlier conclusions, and proposed action based on current knowledge.

The NCI/NIDR workshop participants concluded that smokeless tobacco is addictive and that it causes, or is strongly associated with, adverse effects on oral and systemic health. Participants found that research findings have reinforced conclusions of other expert committees about the health effects of ST use. As a result of workshop deliberations, a document describing objectives and strategies for smokeless tobacco control and specific recommendations for action during the 1990's was prepared for use in the United States. Copies of the first draft were distributed to participants of the First International Conference on Smokeless Tobacco to facilitate consideration of issues raised during the conference and development of globally oriented conclusions, objectives, and strategies. Scientific presentations and discussions during the conference broadened, clarified, and strengthened the conclusions and recommendations provided by the U.S. workshop. As with the U.S. document, the document from the international conference is not applicable to all countries or to all situations.

Rather, it should serve as a menu from which individuals, groups, governments, or international health organizations may choose to address their tobacco-related problems.

Many ST interventions should be conducted as part of smoking control initiatives. Although smoking and smokeless tobacco differ in many ways, they also share many characteristics: (1) both are methods for nicotine administration; (2) they are often used sequentially or concurrently by the same individual; (3) both adversely affect health and are potentially lethal; and (4) they often are susceptible to similar prevention and cessation interventions.

The STCP monograph on smokeless tobacco and, hence, these recommendations are a synthesis of the work of the U.S. workshop committee and the participants of the First International Conference on Smokeless Tobacco. This volume is based on the latest scientific research in the field. Decision-makers and health care professionals are invited to read it carefully and urged to implement as many of the recommendations as possible.

**INTRODUCTION** A workshop on the control of smokeless tobacco was sponsored by the National Cancer Institute and the National Institute of Dental Research on January 24, 1991, in Rockville, Maryland, USA. Participants at the NCI/NIDR workshop included biomedical, epidemiological, and behavioral researchers; public health professionals; health educators; and representatives from government offices and research institutes within the U.S. Public Health Service. The workshop was convened to plan a response to the increase in ST use in the United States and the association of ST use with oral cancer and other health effects in the United States and other countries.

In the United States, during most of this century, the use of chewing tobacco and oral snuff, collectively referred to as smokeless tobacco, was seen primarily in rural areas and among particular occupational groups such as miners and agricultural workers, and the prevalence of use was highest among people over the age of 50 (US DHHS, 1986). In the 1970's, production and promotion of ST products increased, and new product types were introduced. Anecdotal reports and local and regional surveys show high rates of use among children and adolescents in some areas, and national surveys of adults indicate the highest prevalence now is among young adult males (Orlandi and Boyd, 1989; Schoenborn and Boyd, 1989; US DHHS, 1986). Government data (U.S. Department of the Treasury, 1991) indicate that sales of moist snuff are again increasing, after a brief period of decline in 1986 and 1987, reaching 45 million pounds in 1989 and 52 million pounds in 1990.

The workshop agreed that the conclusions of the 1986 NIH Consensus Development Conference on Smokeless Tobacco Use—that is, that smokeless tobacco use is addictive and that it causes or is strongly associated with many adverse effects on oral and systemic health—remain valid.

The findings of the 1986 Report of the Advisory Committee to the Surgeon General, *The Health Consequences of Using Smokeless Tobacco*, were summarized as follows (US DHHS, 1986):

After a careful examination of the relevant epidemiologic, experimental, and clinical data, the committee concludes that the oral use of smokeless tobacco represents a significant health risk. It is not a safe substitute for smoking cigarettes. It can cause cancer and a number of noncancerous oral conditions and can lead to nicotine addiction and dependence.

The above conclusion was supported by the following specific determinations:

- The use of smokeless tobacco can cause cancer in humans;
- Use of smokeless tobacco can result in noncancerous and precancerous oral pathologies including leukoplakias, gingival recession, and possibly gingivitis, dental caries, abrasion, and staining; and
- Smokeless tobacco contains nicotine and its use can lead to nicotine addiction or dependence.

Similar conclusions were reached by the NIH Consensus Development Conference, "The Health Implications of Smokeless Tobacco Use," and, with respect to carcinogenicity, by the International Agency for Research on Cancer (Consensus Conference, 1986; IARC, 1985). The conclusions reached by the Advisory Committee to the Surgeon General have been supported by subsequent research and serve as the bases for the recommendations that follow.

Research is in progress to delineate the mechanisms of carcinogenesis and other biological effects, to describe the time course of tobacco-related oral cancer and other pathologies, to quantify risk, to estimate attributable morbidity and mortality, to understand patterns of use, and to develop appropriate means of intervening with current or potential ST users. Because of the nature of biological, epidemiological, and behavioral research, some questions addressed by this research will not be fully answered for many years.

The workshop participants also recognize and commend the work that has already been carried out by health organizations and educators; advocacy groups; government agencies; biomedical, epidemiological, and behavioral researchers; individual activists; and members of the U.S. Congress. These groups and individuals are responsible for slowing the acceleration in ST use observed in the 1970's and early 1980's and have provided current information for understanding and combating smokeless tobacco use. Future efforts at smokeless tobacco control will build on this foundation.

**CONCLUSIONS** The following conclusions and recommendations summarize the consensus of the participants in the NCI/NIDR workshop [with subsequent organization and refinement of relevant information by the above-named authors]:

Whereas,

- Smokeless tobacco products (in the form of oral snuff) currently are the only types of tobacco with an increase in use in the United States, particularly among young persons (U.S. Department of the Treasury, 1991);
- ST use begins at a young age;
- The addictive substance in both smokeless tobacco and cigarette smoke is nicotine, and there is a clear potential for ST to serve as a gateway to cigarette smoking (or to reinforce previously established nicotine use) as well as leading to the use of other addictive substances (e.g., alcohol and illicit drugs);
- The prevalence of ST use is high among vulnerable populations (e.g., blue collar workers, rural residents, youth, Native Americans);
- Smokeless tobacco products are marketed aggressively with special targeting of vulnerable populations in the United States and abroad;
- The increase in ST use in the United States over the past decade, especially among young people, has not abated;
- Users of smokeless tobacco are at increased risk for oral cancer, noncancerous oral pathologies, and nicotine addiction;
- The biological effects and epidemiology of ST use are a recent focus of research, and it is possible and probable that continued investigation will identify further health risks and harmful effects;
- The epidemic of cigarette smoking and resulting disease and death that has taken place during this century demonstrates the severe, long-term impact on world health that can occur when use of an addictive product gains wide public acceptance before the full extent of its harmful effects is discovered;

Therefore,

This working group endorses the objectives and strategies described below to reduce the use of smokeless tobacco throughout the world. The following recommendations include endorsements, extensions, and modifications of objectives and recommendations

formulated by the Public Health Service (US DHHS, 1991), the Tata International Symposium on the Control of Tobacco-Related Cancers and Other Diseases (1990), and the World Health Organization (1988).

**Public Health Objectives**

Introduction

The Nation's objectives for health for the year 2000 include specific objectives for control of all tobacco, including smokeless tobacco (US DHHS, 1991). The risk reduction objective for smokeless tobacco is to "reduce smokeless tobacco use by males aged 12 through 24 to a prevalence of no more than 4 percent."

This working group strongly recommends that ST control activities make use of existing channels and structures that currently focus on control of cigarette smoking for the following reasons:

- Resources for public health activities are limited.
- Cigarette smoking remains the number one preventable cause of death and disability in most countries, and there is no intent or reason for ST control to compete for limited resources with smoking control activities.
- Cigarette smoking control has a long and successful history, and it is most efficient for ST control activities to function within these existing channels, structures, and techniques whenever possible.
- Cigarette smoking and smokeless tobacco use are two methods of self-administering the same addictive substance obtained from different preparations of the same plant. The tobacco industry's marketing strategies for these products are complementary. Hence, the public health response should also show a coordinated approach. The clear and unambiguous message that should be disseminated to the public is **there is no safe form of tobacco**.

A number of general considerations will influence the course of activities recommended to achieve the objectives for controlling ST use. Prominent among them are the following:

- Prevention of initiation of smokeless tobacco use by the young and cessation by current users are both necessary to achieve a significant reduction in prevalence.
- Campaigns or programs discouraging ST use should convey the message that all forms of tobacco are unhealthy. Care must always be taken that users of one tobacco product are not inadvertently persuaded to switch to another tobacco product that is perceived as a safe alternative.
- All tobacco control efforts should include smokeless tobacco. Because prevalence of ST use varies according to region, urbanicity, age, ethnicity, and type of employment, the level and nature of the effort devoted to ST control will depend on the target population.
- Although the recent increase in use of smokeless tobacco in the United States and some other countries has occurred primarily among adolescents and young adults, intervention efforts should not overlook older users and regions where there is a long tradition of tobacco use.
- Organizations and agencies that conduct ST intervention programs should collaborate with other private and public organizations worldwide, to coordinate priorities and strategies and to maximize impact for the resources available.

Recommendations for specific target audiences and locations are listed below.

Public  
Awareness

- Increase public awareness of the hazards associated with smokeless tobacco, especially among those segments of the population at greatest risk for ST use.
- Increase awareness by parents of the hazards and signs of ST use.
- Promote a shift in public opinion and social norms among predisposed groups so that smokeless tobacco is viewed as socially unacceptable, undesirable, and an unhealthy alternative to smoking.
- Develop public support for policies and legislation that discourage the use of smokeless tobacco.
- Involve professional athletes, celebrities, and other influential role models in public education campaigns.
- Develop effective counteradvertising materials and make them widely available to individuals, agencies, and organizations interested in promoting an antitobacco message.
- Provide education and training to individuals willing to become spokespersons for ST control.
- Provide materials and programs for influential organizations, such as parent and teacher associations and other organizations that reach youth, especially high-risk youth (e.g., Little League and Babe Ruth Baseball, other sports leagues, the Scouts, Future Farmers of America).

Schools

- Provide broad tobacco-related curricula in multiple grades to reduce the initiation of tobacco use, including smokeless tobacco.
- Include cessation support in school ST curricula for students and provide cessation support for school employees.
- Adopt policies that prohibit the use of any form of tobacco by students, faculty, staff, and visitors on school property at any time and at school-sponsored events in other locations.
- Provide prevention and cessation interventions in colleges and trade schools.

Health  
Services  
Professionals

- Ascertain tobacco use status of all patients and routinely provide cessation advice, support, and followup.
- Be alert to the physical signs of ST use and use clinical observations, particularly by providers of oral health services, as an opportunity to encourage cessation.
- Adopt tobacco-free policies in health care facilities to prohibit the use of any form of tobacco.
- Acquire continuing education training regarding ST use and strengthen tobacco intervention skills.

- Provide students with training and require them to demonstrate competency in tobacco use counseling.
  - Disseminate established training programs and materials for health professionals to strengthen tobacco use prevention skills (for example, materials presented in Glynn and Manley, 1989; Glynn et al., 1990; Mecklenburg et al., 1990).
- Employers and Worksites
- Implement formal tobacco policies to restrict or ban the sale and use of all tobacco at the workplace.
  - Provide information, encouragement, support, and incentives for employees and their families to quit using smokeless tobacco.
  - Involve labor unions in the planning and implementation of worksite intervention programs.
  - Use labor unions to educate their constituencies about the hazards of tobacco use, including ST, and encourage cessation.
  - Give special attention to schools and health care facilities as worksites with prominence and influence that extend beyond their own employees.
  - Emphasize efforts at worksites with populations at high risk for ST use.
- States, Counties, and Municipalities
- Assess extent of smokeless tobacco use and identify populations at risk.
  - Identify currently available resources and intervention needs.
  - Develop a formal state tobacco control plan that includes smokeless tobacco (as recommended by the Association of State and Territorial Health Officials, 1989).
  - Encourage schools to adopt tobacco-free policies and curricula that address all forms of tobacco use.
- Federal Government
- Provide appropriate resources for agencies that have responsibilities for smokeless tobacco surveillance and control.
  - Support research and disseminate findings.
  - Provide leadership in identifying research needs.
  - Provide a clearinghouse for ST research, policy, and control activities.
  - Promote transfer of scientific findings to public health educators, communications experts, and activists for dissemination to the public.
  - Coordinate smoking and smokeless tobacco control activities carried out by PHS agencies and offices and promote communication among all Government agencies involved in tobacco surveillance and control.
  - Provide clear and prominent communications to the public about the hazards of ST use.

- Provide technical support to States, including surveillance data, resource materials and listings, and current information on national activities.
  - Encourage antismoking activists to extend their activities to include smokeless tobacco.
  - Assist in recruitment of prominent spokespersons by endorsing activities, providing thank you's, or awarding special recognition.
  - Provide resources for public education campaigns in the form of media materials (public service announcements or news kits), resource listings, and background information.
  - Provide resources for intervention delivery through resource listings, guidelines for materials development, and copies of materials produced by PHS agencies.
  - Assemble information and arguments needed to support legislative initiatives and make such information available to activists.
- Health Educators
- Include smokeless tobacco as part of tobacco education programs, emphasizing that ST is not a safe alternative to cigarettes.
  - When possible, make use of available tobacco education materials. Develop new materials or adapt older ones, as needed.
  - Work with departments of education, school districts, teachers, administrators, and parent associations to elicit support for tobacco education. Encourage national organizations of these groups to pass formal position statements.
  - Promote tobacco-free policies in schools as an essential component of health education programs and interventions.
  - Direct educational efforts to high-risk youth both in school and in outside settings, such as trade schools, shop classes, 4-H Clubs, Future Farmers of America, YMCA, Little League, and other youth organizations and clubs.
  - Extend tobacco education to colleges, universities, and other postsecondary educational institutions.
- Health Professional Organizations
- Work for inclusion of interventions in smokeless tobacco as part of professional education.
  - Support continuing education programs to train professionals to intervene with their patients.
  - Promote inclusion of tobacco counseling skills in professional licensing requirements.
  - Adopt formal tobacco control positions that specifically include smokeless tobacco. Strengthen current position statements in light of the increase in ST use that has occurred since 1986.
  - Sponsor, support, or promote national- and community-level smokeless tobacco control programs and public education campaigns.

- Solicit advice from experts in the field to ensure scientific accuracy of all statements regarding ST.
  - Provide tobacco cessation services to employees and students.
- Activists
- Enlist support of prominent individuals to serve as spokespersons.
  - Provide training in advocacy skills to volunteers from the community.
  - Work with local media to secure news coverage and adequate placement of public service announcements.
  - Sponsor ST control events.
- All
- Provide multiple and sustained messages to the public about the dangers of smokeless tobacco and cigarettes.
  - Direct public education materials and campaigns to groups at highest risk; for example, televised broadcasts of sporting events provide access to potential users.
  - Use schools as a valuable channel of access to youth, but efforts to reach youth should not be confined to schools.
  - Enlist support of major sports associations to refuse involuntary promotion (accepting free samples, using tobacco products in public and while on camera, display of logos and tobacco product names at sporting events, and acceptance of tobacco company sponsorships).
  - Provide education and cessation counseling to professional athletes.
  - Encourage organizations and groups with an interest in reducing ST use to extend their resources by coordinating their activities whenever possible.
  - Participate in and support networks, newsletters, and other mechanisms to increase communication among individuals and organizations involved in tobacco control.
- Research  
Priorities**
- Research,  
Intervention,  
and  
Surveillance  
Needs
- Additional case control studies should be carried out in geographic regions with high prevalence of use to quantify the risk for oral cancer and to identify other cancers, such as lung cancer, for which smokeless tobacco could be a risk factor.
  - On the basis of additional epidemiological research, investigators should develop estimates of the attributable cancer risk from ST use.
  - Researchers should develop biological markers to identify and quantify ST use for application in epidemiological, clinical, and behavioral research.
  - Data are needed to assess patterns of smokeless tobacco use and monitor trends. All national tobacco surveys, especially surveys of youth, should include questions on ST use. Smokeless tobacco should not be omitted from surveys of smaller populations without clear evidence that it is not used.

- Standardized questions about tobacco use, knowledge, and attitudes should be developed and circulated to all agencies and organizations involved in collecting survey data. Brand names of ST products should be included to prevent confusion between snuff and chewing tobacco.
- Because youth are at special risk, national surveys of youth should include questions on perceived risks of ST use, amount of ST used, age of initiation, quit attempts, and use of cigarettes.
- More information is needed on the relationship of smokeless tobacco use to cigarette smoking, especially among young users.
- Researchers should identify motivations for ST use and barriers to cessation within various populations to develop relevant intervention strategies.
- Investigators should determine the ST knowledge and attitudes of key persons (parents, teachers, coaches, youth group leaders, professional athletes) who can function as intermediaries to bring health messages to youth.
- Researchers should develop prevention and cessation materials appropriate for target audiences, including youth, young adults, athletes, people in high-risk occupations such as logging, people with low literacy, Native Americans, and rural populations.
- Assessing the efficacy of prevention and cessation interventions for ST control should continue.
- A centralized clearinghouse is needed to monitor the literature on smokeless tobacco research, policy, media coverage, and intervention activities and to aid in research dissemination.
- New surveillance sources for clinical data, such as professional organizations and associations, should be established.
- Research on warning labels is needed to determine how they can be made more effective.

**Strategies**     *The following strategies are not endorsed by the U.S. Government or its agencies. These recommendations were developed by smokeless tobacco control experts from the United States and other countries, convened during the U.S. workshop and the First International Conference.*

The recommendation of the World Health Organization Study Group on Smokeless Tobacco Control—that countries with no established practice of smokeless tobacco use should ban manufacture, importation, sale, and promotion of ST products—is supported. In countries where smokeless tobacco use is already established, such as in the United States, it is recommended that the following legislative, regulatory, and policy objectives be instituted as *interim* measures to help achieve the long-term goal of a tobacco-free society.

All Levels of Government

- A significant proportion of public revenues derived from the sale of tobacco products should be used for tobacco intervention-related public education, research, and services.
- Taxes on smokeless tobacco should be made commensurate with those on cigarettes, and future tax increases should be applied equally to all tobacco products. The taxes should be indexed to the rate of inflation.
- States should enact legislation to prevent the sale or distribution of smokeless tobacco to minors, including sales through vending machines. Such legislation should include provisions for vigorous enforcement.
- Relevant coalitions should develop and disseminate model State and local legislation for tobacco control.
- Governments should eliminate or severely restrict all forms of tobacco product advertising and promotion to which minors are likely to be exposed, including the following:
  - image-based ads with special appeal to young people (allow only tombstone ads, i.e., black lettering against white background, until a total advertising ban is achieved);
  - placement of advertising in periodicals with large youth readerships and in those with large minority readership;
  - the use of ST product names, logos, or likenesses on other products or packaging, especially on products such as toys, bubble gum, and other child-oriented items;
  - placement of outdoor advertising near schools, recreation areas, or other places where young people congregate;
  - display of smokeless tobacco at point of sale or adjacent to items that typically appeal to children, such as candy, toys, and comic books;
  - distribution of ST samples through the mail;
  - distribution of free ST samples in public places;
  - smokeless tobacco advertising and promotion through sponsorship of athletic, sporting, cultural, or entertainment events;
  - display of promotional ads, company logos, product names, or product representation at sporting and entertainment events, especially when these events are televised.

Federal Government

- Recognizing that there is no safe level of *N*-nitrosamines in tobacco products and that it may not be technically feasible to produce an ST product free of *N*-nitrosamines, the Government should ban smokeless tobacco in the United States.

- Until a total ban is achieved, ST manufacturers should be required to seek approval of all additives used in their products from an appropriate Government agency. Furthermore, manufacturers should reduce the amount of nicotine, nitrosamines, polonium, and other known hazardous substances in their products to the lowest levels technically possible. Smokeless tobacco manufacturers should be required to list the additives in large, easily legible type on each ST container, on billboard advertisements, and in print media.
- The set of mandatory rotating health warnings on smokeless tobacco products and billboards should be expanded to include addiction as a health risk and to indicate that health benefits accrue to users when they quit. Such warnings should be prominently printed on each individually packaged product, on billboards, and in print media.
- The Federal Government should not support, or give the appearance of supporting, the production, manufacture, or sale of tobacco products.

Other  
Channels

- Activists should monitor the level and nature of ST promotion, especially noting violations of the industry's voluntary code prohibiting promotion to minors.
- All health-related organizations and associations should issue policy statements condemning the use of tobacco products, including ST, and ensure that these statements are well publicized to their members and the public. Such organizations should encourage their members to become active in tobacco control activities and provide, through their contacts with patients or clients, training, technical support, or referral as needed.
- Health and life insurance companies should determine policy applicants' use of smokeless tobacco, as well as cigarettes, to estimate risk and determine insurability.
- Tobacco-control coalitions should assemble information and arguments needed to support legislative initiatives.

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**APPENDIX**

**U.S. Workshop  
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