Minnesota Plan for Nonsmoking and Health: Ideas for Statewide Action

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The Technical Advisory Committee on Nonsmoking and Health was appointed by the Minnesota Commissioner of Health to develop a plan for statewide smoking control and for the promotion of nonsmoking in Minnesota. The report of the Committee recommendations and a reveiw of the report is presented, highlighting those recommendations directed toward physicians and health care institutions.

ON SEPTEMBER 17, 1984, the Minnesota Department of Health released "The Minnesota Plan for Nonsmoking and Health: Report and Recommendations of the Technical Advisory Committee on Nonsmoking and Health".[1] The report contains recommendations for reducing mortality, morbidity, and costs by promoting nonsmoking in Minnesota, encouraging smoking cessation among current smokers, facilitating primary prevention of cigarette smoking among Minnesota youth, and promoting clean indoor air. The recommendations are in the broad areas of: (1) school and youth education, (2) public education, (3) regulatory measures, (4) economic incentives, and (5) information and evaluation needs.

The recommendations present a statewide plan to reduce smoking prevalence through education and mass communication, public and private regulation, and economic incentives and disincentives. They are addressed to many audiences including individual smokers and nonsmokers. The underlying assumption is that no single method is sufficient; multicomponent programs are as essential on the statewide scale as they are for individual smokers.

The complete text of the recommendations is contained in Table 1. Several recommendations are directed specifically to physicians and health care institutions. These are presented in boldface type. This article summarizes the report with emphasis on recommendations and policies of special interest to Minnesota physicians and health professionals.

Background

In 1982, a committee of experts convened by the Commissioner of Health concluded that cigarette smoking was among nine major unresolved health problems in Minnesota.[2] Of the five problems related to lifestyle — cigarette smoking, alcohol and drug misuse, nutrition, physical inactivity, and stress — cigarette smoking was selected as the first target for comprehensive statewide planning and action.

The Technical Advisory Committee on Nonsmoking and Health was appointed by the Com-

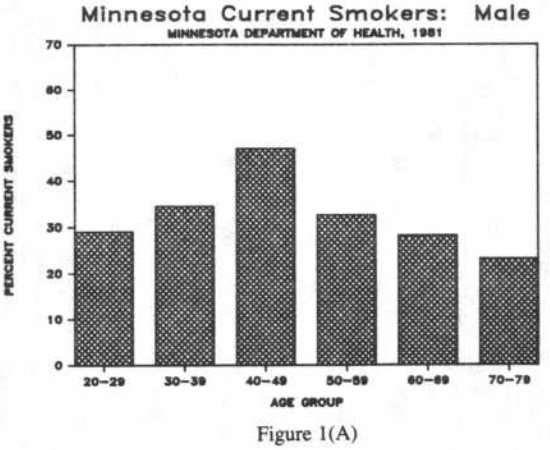

Figure 1(A)

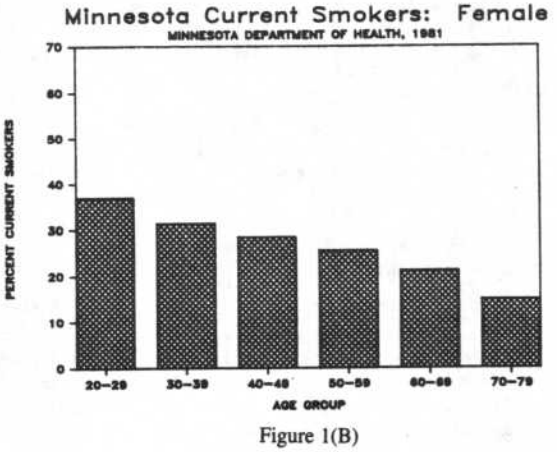

Figure 1(B)

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TABLE 1

The Technical Advisory Committee on Nonsmoking and Health Recommendations for the Promotion of Nonsmoking in Minnesota

School and Youth Education

The School Curriculum:

Schools in Minnesota should expose students at the seventh grade level to six or more curriculum hours of nonsmoking education, using techniques shown through studies to be effective in reducing smoking rates.

The contest approach used in Sweden, in which students and teachers are awarded plaques and public recognition for attaining a completely nonsmoking class, should be evaluated for use in Minnesota. Other approaches to nonsmoking, particularly through student organizations, should be encouraged and evaluated. A classroom and television curriculum in which parents watch jointly with children at home has shown promise and should be further evaluated.

The School Environment:

Regulation of smoking in schools should be conducted in a way which deemphasizes the importance, prestige, maturity, and desirability of the smoking habit.

a. The Minnesota Clean Indoor Air Act should be thoroughly known and implemented in schools.
b. The focus on nonsmoking in the schools should be kept positive and rule environment firm and consistent but not oppressive.

The School's Relationship with the Comnmunity

Informational, regulatory, and economic measures to promote nonsmoking in the community should be designed to reinforce, supplement, and utilize programs within the schools.

Public Education

Promotion of Nonsmoking through Marketing and Communication Techniques

The Minnesota Department of Health should sponsor a long-term public communications campaign to promote nonsmoking using social marketing principles. The marketing of nonsmoking should be carefully coordinated with regulatory, economic, and health-information measures to achieve a combined effect.

The Minnesota Department of Health should continue to provide scientific information on smoking and nonsmoking on a regular basis to the news media and other channels.

The Health Care System as Teacher and Role Model

Physicians should treat smoking as a serious preventable or curable health problem. Diagnostic and therapeutic techniques should be handled with the same level of professional and scientific expertise applied to other conditions.

The Role of the Community

Interested Community Health Services Agencies and other organizations in Minnesota communities should conduct community-wide campaigns for promotion of nonsmoking. Training sessions and materials should be provided for those who wish to learn community organization techniques.

Advice for Smokers

Advice for Nonsmokers

Public and Private Regulatory Measures

Businesses and Other Organizations as Promoters of Nonsmoking

The Minnesota Department of Health should establish a visible and successful nonsmoking policy for Department of Health employees which can serve as a model for other organizations.

Hospitals, clinics, physicians offices, long term care institutions, voluntary health organizations, the Minnesota Department of Health, and Community Health Services Agencies, should establish smoke-free buildings as soon as possible and no later than 1990.

Minnesota employers are encouraged to set nonsmoking policies in the worksite which are broader than the minimum provisions of the Minnesota Clean Indoor Air Act. Employers may implement a range of stronger policies, including the establishment of a smoke-free worksite. The acceptability of such policies is demonstrated by successful examples in health institutions and individual Minnesota corporations.

At least eighty percent of Minnesotans have contact with physicians and/or health care facilities in a given year. Health care institutions should become more effective educational resources and image makers by:

a. *developing and publicizing definite policies promoting nonsmoking, such as that recently instituted by the Minnesota Medical Association.*
b. *The Minnesota Department of Health, the Minnesota Hospital Association, the Minnesota Nursing Association, and other representatives of the health care industry should jointly develop policies and recommendations for visible and effective enforcement of the Minnesota Clean Indoor Air Act in hospitals. Long-term goals promoting nonsmoking in health care settings beyond the requirements of the Act should be encouraged, but not legislated at present, with the exception that the sale of cigarettes in health care institutions is incongruent with the facts on smoking and health and should be eliminated by either voluntary or legislative means.*

Organizers of public events should reject contributions and sponsorship monies which result in advertising for cigarettes and other tobacco products.

Making the Minnesota Clean Indoor Air Act More Effective

Clear materials in the form of questions and answers on this topic should be prepared by the Minnesota Department of Health and be widely distributed through channels which will effectively reach both employers and the public.

The Minnesota Department of Health currently offers consultation and information on the Minnesota Clean Indoor Air Act in the workplace only through response to inquiries and complaints, usually by means of letters and telephone calls. The Department should expand its consultation, information and enforcement program for the Act in the workplace and make this activity widely known

TABLE 1 *(Continued)*

through public information channels.

Enforcement of rules under the Minnesota Clean Indoor Air Act has recently been centralized in the Minnesota Department of Health. All workplaces should be included in a uniform set of rules.

Restaurant owners should be encouraged to increase the size of nonsmoking sections beyond the 30% required by law if necessary to accommodate all patrons desiring nonsmoking areas.

Recommendations to the Federal Government

Cigarettes which self-extinguish in five minutes or less are highly desirable for fire safety and indoor air quality. National legislation to effect this is recommended. This recommendation should be transmitted through a variety of means to Minnesota's Congressional delegation.

National legislation should be enacted which would:

a. remove the restrictions on state legislation of tobacco advertising required by the Cigarette Labelling Act, and
b. require that cigarette warning labels be clear, specific, and rotated periodically.

Comment: Direct regulation of advertising by state legislation is forbidden by the federal legislation which requires the health hazard warning on cigarette packages. Although this provision could be challenged, the legal effort required could be extremely expensive and its outcome uncertain.

Controlling Access to Tobacco

A state law forbidding distribution of free cigarettes should be enacted.

The Federal government should be asked to establish administrative policies which are consistent with the Minnesota Clean Indoor Air Act for federal properties in Minnesota.

Economic Incentives and Disincentives

Raising the Cost of Smoking

The State of Minnesota should increase the existing 18-cent excise tax on cigarettes by 10 cents during fiscal year 1986. Subsequent *annual* 5-cent excise tax increases should be planned for the following 5-year period.

The Commissioner of Health should send letters to Minnesota's congressional delegation recommending that:

a. the temporary 8-cent increase in federal excise tax on cigarettes, effective January, 1983, be made permanent; and
b. legislation for additional increases in the federal excise tax be drafted and introduced.

Financing Nonsmoking Programs

Funding needs for the promotion of nonsmoking should be obtained from multiple sources including legislative appropriation.

Lower Insurance Costs for Nonsmokers

Chief Executives and Medical Directors of companies writing life and health/disability insurance and pensions in the State of Minnesota should be encouraged to offer nonsmokers' discounts on individual life, health, and disability insurance policies. The availability of nonsmokers' discounts on individual insurance policies should be communicated to the public through public health messages and insurance industry advertising.

The Minnesota Department of Health and the Minnesota Insurance Information Center should encourage property/casualty companies writing homeowners insurance to consider giving discounts to nonsmoking households.

"Cafeteria" plans developed within the context of employee benefits programs should distinguish nonsmokers for financially rewarding options, incentives, or bonuses.

Business leaders should be made aware of the reduction in insurance and employee benefits costs which is possible from reduced smoking rates among employees.

Education About Economic Benefits of Nonsmoking

Employers should be informed about the excess costs incurred by smokers in the workforce, based on the most accurate estimates in the research literature.

Employers should be informed of strategies to encourage nonsmoking among employees through differential benefits and financial incentives favoring nonsmokers and by offering smoking cessation programs to smokers. The respective employer organizations and societies should be encouraged to participate.

Smokers should be advised to inquire whether their life and health insurance programs cover the costs of smoking cessation programs.

Employers and the public should be informed about energy and dollar savings from reduced ventilation costs in buildings where smoking is prohibited or greatly restricted.

Comment: Assessing special taxes on the advertising of cigarettes is not a practical way to counter the effect of advertising and is not recommended.

Comment: It appears that employers could hire only nonsmokers. With regard to hiring practices, smokers are not a protected group pursuant to federal or state statutory civil rights laws.

Information and Evaluation Needs

Coordinating Information Resources

The Minnesota Department of Health should maintain a research database of scientific literature on cigarette smoking. The database should include information on health consquences, smoking patterns, prevention of smoking onset, smoking cessation, health economics of smoking, and policies related to smoking.

The Minnesota Department of Health should identify and facilitate access to educational materials related to smoking; the availability of these materials to educators, health professionals, and the public through the Department and other sources should be publicized.

(Continued next page)

TABLE 1 (continued)

Evaluating Program Impact

The Minnesota Department of Health should conduct annual telephone surveys using random digit dialing to provide ongoing information on smoking prevalence, public knowledge and opinions, and the penetration of program efforts of sufficient accuracy for evaluation of the statewide nonsmoking program. For research purposes, the validity of surveys should be checked through biochemical measures of cigarette smoking. Core questions should be kept constant to follow smoking trends over time.

The Minnesota Department of Health should provide assistance to communities in conducting survey research prior to and after community nonsmoking campaigns.

The Minnesota Department of Health should maintain resources to conduct or contract for other types of survey research such as determining location of programs, observation of behavior, compliance with the Minnesota Clean Indoor Air Act, placement of no-smoking signs, and additional survey needs.

A formal research design should be used whenever possible to systematically implement recommendations included in this report. Such a structure permits detailed evaluation of program effectiveness, is desirable for program effectiveness, is desirable for program monitoring, and is essential if grant funding for programs is to be obtained.

TABLE 2 -- EPIDEMIOLOGIC FINDINGS ON SMOKING IN MINNESOTA

Smoking Status of Minnesota Adults, 1981

Smoking Status	Males	Females	Both Sexes
Never Smoked	37.4%	53.3%	47.0%
Former Smokers	30.9%	18.7%	23.5%
Current Smokers	31.7%	28.0%	29.5%

Smoking-Attributable Deaths by Diagnostic Category, Minnesota, 1981

Diagnostic Category	Males	Females	Both Sexes
Heart Diseases	1350	450	1800
Cancers	1280	440	1720
Respiratory Diseases	620	290	910
Digestive Diseases	60	35	95
Perinatal Conditions/SIDS	35	25	60
Cigarette-Ignited Fire Deaths	20	10	30
TOTALS:	3365	1250	4615

Annual Smoking-Attributable Disability:	39,000 Person-Years
Annual Smoking-Attributable Economic Costs:	
Direct Health Care Costs	$374,600,000
Indirect (Lost Income) Costs	
Premature Mortality	$303,000,000
Disability	calculations in progress

missioner of Health in November, 1983 and was charged with the task of developing a plan for statewide smoking control and the active promotion of nonsmoking. The Committee was comprised of representatives from the fields of epidemiology, health behavior research, smoking cessation and prevention research, cardiology, respiratory medicine, nursing, wholesale/retail sales, insurance, legislation, law, advertising, community action, business, labor, local government, education, and economics.

Highlights of the Epidemiologic Findings

According to a 1981 risk factor survey, 29.5% of the Minnesota population over age 18 currently smoked cigarettes (Figure 1).[3] In the younger age groups, women are more likely than men to smoke.

Smoking-attributable mortality in Minnesota totals more than 4600 deaths per year (Table 2). Annually, cigarette smoking is responsible for 1800 cardiovascular disease deaths — 1250 from coronary heart disease and 550 smoking-attributable deaths from sudden cardiac death, atherosclerosis, aortic aneurysm, peripheral vascular disease, and cerebrovascular disease.[4]

The estimate of 1720 smoking-linked cancer deaths includes 1230 deaths from lung cancer, plus deaths from cancers of the oral cavity, larynx, esophagus, pancreas, kidney, urinary bladder, stomach, and uterine cervix.[5]

Eighty-five percent of deaths from emphysema, chronic bronchitis, and chronic obstructive pulmonary disease (660 deaths annually in Minnesota) can be ascribed to cigarette smoking.[6] Smoking-related deaths from pneumonia, influenza and asthma elevates the total of smoking-related respiratory deaths to 910.

Deaths from other causes are also attributed to smoking: (1) 95 deaths annually among digestive diseases; (2) 60 perinatal and infant deaths from respiratory distress syndrome, low birth weight, and sudden infant death syndrome; and (3) 30 deaths from cigarette-ignited fires. The total of 4615 smoking-attributable deaths (1981 mortality data) represents 14% of total mortality for Minnesota (Figure 2).

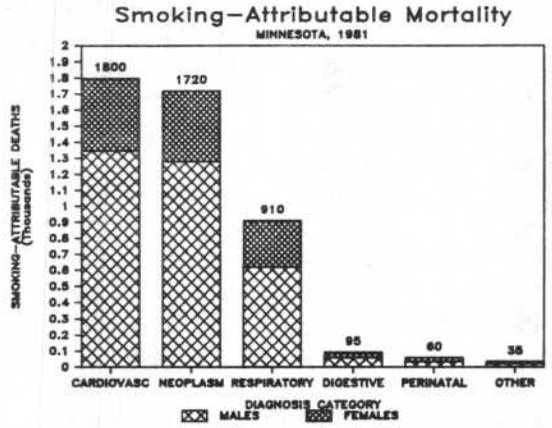

Figure 2

Cigarette smoking is considered responsible for 9% of total statewide disability — 39,000 person - years of disability — based on the application of smoking-attributable fractions to earlier calculations of annual disability.[7]

Total direct health care costs attributable to cigarette smoking were estimated at $374,600,000 for 1983, 7.05% of total direct costs.[1] This figure is equal to 82 cents per pack sold in 1983 (456,681,000 packs) or $91 per Minnesota citizen. Indirect mortality costs — the costs of lost income from persons who die prematurely from smoking-related diseases — were estimated to be $303,300,000 for 1983. This figure increases the hidden costs of cigarettes by 66 cents per pack sold. Yet to be calculated are indirect costs from smoking-related *disability*.

Active Promotion of Nonsmoking in Minnesota

The Technical Advisory Committee report focuses on the promotion of nonsmoking, emphasizing the fact that *nonsmoking* has been the usual behavior throughout human history. Cigarette smoking was a majority phenomenon in this country only for a few decades for males (1930s to 1960s) and momentarily for females in the 1960s.[8] Nonsmoking is once again normative in the United States and in Minnesota — seven out of 10 adults are nonsmokers.

Three recommendations are particularly salient. The report calls for an increase in the state excise tax or 10 cents by 1986 with annual 5 cent increases for the succeeding five years. The proposed 35 cent increase within six years would effectively triple the present 18 cent excise tax. The major rationale for the proposed tax increase is based on research on the "price elasticity" of cigarettes; a 10% increase in cigarette price is associated with a 4-5% decrease in per capita cigarette consumption.[9] The impact of price elasticity is particularly strong for adolescent males; increased cigarette prices are associated with decreased numbers of male youth adopting the cigarette habit.[10]

The report calls for a professionally-produced, statewide public communications campaign to actively market nonsmoking. The multi-year campaign would be intended to match the quality and inno-

vation of tobacco advertising for print media and outdoor advertising and have access to the television media.

The report calls for scientifically evaluated nonsmoking education for seventh grade students throughout Minnesota. ''Peer-led'', experiential curricula developed at the University of Minnesota and at other centers, focusing on the social influences to smoke and the short-term health consequences of cigarette smoking, appear to be effective in decreasing the rate of adoption of smoking behavior by adolescents.[11-13]

Highlights of the Recommendations of the Technical Advisory Committee on Nonsmoking and Health for Health Professionals

Within the context of the comprehensive array of recommendations, several are directed toward physicians and health care providers.

Physician Management of Patients who Smoke

One recommendation is targeted toward primary care physicians and provides an outline of the conduct of office visits to intervene effectively with patients who smoke. The office counseling model, described by Pechacek and Grimm[14] at the University of Minnesota, suggests that physicians treat smoking as a medical high risk condition. They are advised to obtain a detailed smoking history; to make the physical examination an intervention by focusing on cardiovascular and respiratory findings; to increase the impact and personalize the risk message through spirometric tests or through immediate analysis for carbon monoxide in a sample of expired air; to ask the patient to make a commitment to a specific quit date; to provide the patient with self-help materials; and to check-up on the patient's progress at the time of the quit date and at subsequent office visits. Office strategies for managing smoking behavior in patients are available from other sources as well.[15,16] Resources available to the physician include: (1) reprints of articles on patient management from the Minnesota Department of Health; (2) the Heart Attack Prevention Workshop produced by the Division of Epidemiology, University of Minnesota; and (3) physician education in smoking control which will become available to some state physicians through a National Cancer Institute grant to develop physician interventions on smoking behavior.

Health professionals can also encourage patients to use smoking cessation programs available in the community. Such programs may also be effective in promoting successful maintenance of smoking cessation.

The favorable impact of physician advice not to smoke has been shown in a randomized controlled trial.[17] The intervention group which received physician advice to quit smoking decreased cigarette consumption throughout a ten year follow-up period and mortality from coronary heart disease and lung cancer was reduced in this group.

Smoking Policies in Health Care Institutions

Several recommendations are presented for developing smoking policies at the Minnesota Department of Health, in hospitals, physician's offices, long term care institutions, and voluntary health organizations. The report calls for effective observance and enforcement of the Minnesota Clean Indoor Air Act (MCIAA) as a minimum standard. Health care institutions are advised to go beyond the provisions of the MCIAA and to develop and publicize policies which promote nonsmoking. Health care institutions are presented with the challenge and the guideline to become smoke-free by the year 1990.

The Minnesota Department of Health is revising smoking policies. A committee comprised of employee-elected representatives and Commissioner of Health-appointed representatives is considering the appropriate staged sequence of smoking policies.

Relevant to other health care institutions is a survey of patients at the University of Minnesota Hospitals assessing patient attitudes toward a smoke-free hospital environment.[18] The majority of patients surveyed favored a smoke-free hospital environment and viewed a smoke-free hospital as an indicator of improved patient care.

Health Care Institutions as Image Makers and Educational Resources on Smoking Policies

The report calls for health care providers and health care institutions to be more effective educational resources and image makers by becoming the vanguard in establishing restricted smoking policies and in moving toward a smoke-free environment. As a first step beyond compliance with the MCIAA, health care institutions should ban cigarette sales on their premises.

Additional steps have already been taken by the Minnesota Medical Association (MMA) and by the Park Nicollet Clinics. The MMA had recently adopted a policy to prohibit smoking in meetings, encouraging employees not to smoke while on the job or while representing MMA, and encouraging em-

ployees to quit by offering cessation programs and incentives. Smoking was banned in all public and patient care areas of the Park Nicollet Clinics on January 1, 1984. Employee smoking is restricted to designated smoking lounges for an interim period with future plans for a complete smoking ban on the clinic premises. Other health care institutions and organizations have also gone beyond the minimum provisions of the Minnesota Clean Indoor Air Act and the trend appears to be well underway.

Other Recommendations of Interest to Health Professionals

The report calls for health care providers involved in health promotion and disease prevention activities at the community level, to participate in — or initiate — campaigns to promote nonsmoking and to stimulate attempts to quit. For clinicians who see patients presenting with symptoms which are aggravated by passive exposure to cigarette smoke in the work environment, information on the options available to nonsmokers under the MCIAA may be useful to convey to these patients. For administrators of health care institutions with substantial numbers of smokers in the workforce, the economic recommendations which detail the costs of smokers to employers and suggest incentives to encourage nonsmoking are of interest.

As recommended by the Technical Advisory Committee, the Minnesota Department of Health has established a research database of cigarette smoking articles. Reprints are available upon request. In the future, the Minnesota Department of Health may also function as a referral source for direct education materials on smoking for physicians and for the public. Research scientists are available to assist physicians interested in evaluating the effectiveness of their education and intervention efforts with patients who smoke.

Obtaining Copies of the Report

"The Minnesota Plan for Nonsmoking and Health" is distributed by the Minnesota Center for Nonsmoking and Health, Minnesota Department of Health, 717 Delaware St. SE, Minneapolis, Minnesota, 55440. A shorter summary version of the report will be available soon and will be mailed in response to routine requests. Limited numbers of copies of the full report including the epidemiologic findings and rationale sections for each recommendation are also available upon request.

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