SMOKING AND HEALTH
A National Status Report
2nd Edition

A Report to Congress

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FOREWORD

Cigarette smoking is the chief preventable cause of death in our society. It is directly responsible for some 390,000 deaths each year in the United States, or more than one of every six deaths in our country. The number of Americans who die each year from diseases caused by smoking exceeds the number of Americans who died in all of World War II, and this toll is repeated year after year.

Public health officials know these figures well. But it is important that all Americans realize the health consequences, and the cost consequences, of tobacco use. For that reason, I am pleased to present to the Congress and to the American people this National Status Report on Smoking and Health.

The information presented in this report is both startling and distressing, especially the new compilation of health and cost effects in each of our 50 States. For example:

- In 1985, the average number of smoking-attributable deaths per State was 6,096, ranging from 271 in Alaska to 28,533 in California.

- The average smoking-attributable economic costs per State were $1.0 billion, ranging from $82 million in Alaska to $5.8 billion in California.

- With the sum of State economic costs exceeding $52 billion, the economic impact of smoking can be put at some $221 per person each year. Thus cigarette smoking has an economic impact on every American, whether or not he or she smokes.

This report also shows that smoking is a particularly important problem for young Americans -- nearly all smokers now start smoking regularly in their teenage years. In addition, cigarette smoking is increasingly becoming concentrated among Americans with lower incomes and less education. I am especially concerned that we make more progress in reaching young people, women, minorities, and blue-collar workers with accurate and compelling information about smoking and health.

There is encouraging news in this report, as well. But we still have far to go in giving all Americans the information they need to make good health choices about smoking. It is my hope that the information in this report will be of help in that important cause.

Louis W. Sullivan, M.D.
Secretary

PREFACE

During the past several years, our progress toward a smoke-free society has continued. Per capita cigarette consumption (18 years of age and older) decreased from 3,370 in 1985 to a preliminary estimate of 2,850 in 1989. Total cigarette consumption fell from 594.0 billion cigarettes in 1985 to 524.6 billion in 1989, despite growth in the size of the population. Data from the 1986 Adult Use of Tobacco Survey (reported here in detail) and the 1987 National Health Interview Survey (reported in other publications of the Public Health Service) show that the prevalence of cigarette smoking among adults is now under 30 percent, an important milestone.

Nevertheless, smoking remains the chief preventable cause of death in our society. More than 1,000 Americans die each day from diseases caused by smoking. The decline in smoking has been substantially slower among women than among men. Smoking rates are higher among minorities, blue-collar workers, and less educated persons than in the overall population.

This report provides valuable State-specific information on the health and economic impact of smoking, legislative measures to control smoking, and smoking cessation and prevention programs. It is readily apparent that many States have made much more progress than others in reducing smoking and smoking-related disease.

I am pleased that Utah, my home State, has the lowest adult smoking prevalence among all 50 States -- 15 percent. However, an estimated 742 smoking-attributable deaths still occurred in Utah in 1985, and other States experienced smoking-attributable mortality rates three to four times as high as the rate in Utah. Clearly more needs to be done in all 50 States to prevent the needless death and disability, and pain and suffering, caused by the use of tobacco.

Later this year, the Public Health Service will publish National health promotion and disease prevention objectives for the year 2000. These objectives have been developed in collaboration with State and local government agencies and the private sector. Tobacco is one of the 21 priority areas for which specific objectives will be defined. The information in this report will serve as a benchmark against which States can measure their progress toward achieving ambitious goals related to smoking and smoking control.

James O. Mason, M.D., Dr.P.H.
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Introduction

Since the 1964 publication of the first Surgeon General's report linking cigarette smoking to illness and disease, efforts on the part of government and private organizations to reduce the prevalence of tobacco use and to educate the population on the harmful effects of tobacco, have increased dramatically. Programs to educate the population on the harmful effects of tobacco and to help current smokers quit are evident at every level of government and in virtually every geographic area of the United States.

Smoking cessation and prevention programs are offered on a Nationwide basis by the major voluntary health organizations. Private hospitals and organizations conduct cessation and education programs in a wide variety of locations. State and local governments have adopted legislation to control the sale of tobacco products and to limit their use to certain specific locations. The Federal Government has banned smoking on all domestic flights scheduled for two hours or less. Smoking and health advocacy groups have been formed to address the need for clean indoor air. Hotels and motels frequently offer nonsmoking rooms for their patrons, and one airline has implemented a total smoking ban on all its flights in the continental United States.

The numbers and types of programs have grown with the publication of each new Surgeon General's report. Most of the early programs focused on the individual smoker. Following the release of the 1985 Surgeon General's Report on Cancer and Chronic Lung Disease in the Workplace and the 1986 Surgeon General's Report on the Health Consequences of Involuntary (Passive) Smoking, many new programs were established emphasizing nonsmokers' rights; the obligation of employers and operators of public places to provide smoke-free working and public assembly areas was also emphasized. With the issuance in mid-1988 of the Surgeon General's report on tobacco use as an addiction, it is expected that many additional programs will come into existence, or the focus of existing programs will change to meet new areas of concern.

In recognition of the magnitude of the health impact of tobacco use and the ever increasing number of related programs, the Congress passed Public Law (P.L.) 98-474, the Comprehensive Smoking Education Act of 1984. Section 3(c) of this law requires that the Secretary of Health and Human Services report to the Congress biennially on the status of smoking programs in the Nation. This is the second report in a series. It covers the calendar years 1986 and 1987. These reports are intended to be used as directories by Members of Congress as well as by individuals at all levels.

The contents of this report reflect the growth of smoking-related programs and legislation. In the first report, approximately 800 State and local programs were listed. This report identifies over 1,500 programs. At the time the 1986 Report was issued, 60 bills related to smoking and health had been introduced at the Federal level. This report contains information on nearly 100 Federal bills that have been introduced or adopted. At the State level, approximately 400 laws that influence smoking or tobacco sale and use were in effect in 1986. As of December 1987, the number of State laws had grown to nearly 600.

This report also contains a summary of the activities of the Interagency Committee on Smoking and Health, listings of smoking and health advocacy groups, a section on local ordinances in the twenty largest cities in the United States, a summary of the results of the 1986 Adult Use of Tobacco Survey, and a summary of a study conducted by the Centers for Disease Control on smoking-attributable mortality, years of potential life lost and economic costs in the 50 States.

Report Highlights

Results of the 1986 Survey of Adult Use of Tobacco.
The fifth Adult Use of Tobacco Survey was conducted by the Office on Smoking and Health in 1986, 11 years after the previous one, which was conducted in 1975. Adult Use of Tobacco Surveys are unique in seeking information on knowledge, attitudes and behaviors of representative samples of the population relating to tobacco. Some key findings from this survey include the following:

- 26.5 percent of the U.S. adult population are cigarette smokers.
- Thirty percent of the population use some form of tobacco. Use of tobacco other than cigarettes is a male phenomenon and 9 percent of men currently smoke a cigar or pipe and 5 percent currently use smokeless tobacco.
- There has been a downward trend in the age at which smokers start to smoke regularly. Nearly all smokers now start smoking regularly in their teenage years.
- Cigarette smoking and use of tobacco vary with education and income. Those with higher education and who report higher incomes are less likely to smoke or use tobacco. There is no difference between these groups in the proportion of people who have ever been smokers. People of higher socioeconomic status are more likely to have quit smoking.
- There are different patterns of smoking among the different subgroups of the population. Blacks tend to smoke fewer cigarettes a day than do whites, but use brands that are higher in tar content and are mentholated.

Successful quitters in 1986 were much more likely to report success on the first or second quit attempt than successful quitters in 1975. Even with the decrease in the proportion of smokers in the population, there has been little change in the proportion of smokers who have tried to quit between 1975 and 1986. Both of these figures suggest that the downward trend in smoking prevalence will continue for at least the short term.

These findings suggest that the antismoking efforts in the private and public sectors are meeting with some success and that, if such efforts are continued, there will be a further reduction in smoking prevalence in the community. Dissemination of these findings and other in-depth analyses of the 1986 survey are expected to lead to a more effective targeting of antismoking campaigns. These, in turn, should lead to a more rapid reduction in the prevalence of smoking in the community.

Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs

The adverse health impact of smoking and associated economic costs have long been accepted as enormous. This study attempted to quantify, on a State-by-State basis, the number of deaths, years of potential life lost, and the costs attributable to smoking for 1985. This study is not a cost-benefit analysis, but rather an attempt to quantify both the disease and economic impact of smoking for each State.

Costs associated with smoking-related death and illness may be immediate or deferred. There are costs to the individual and to society in general. Indirect costs of smoking are the value of lost productivity, output, or manpower resources that cannot be used because of illness.

In 1985, the average number of smoking-attributable deaths per State was 6,099 (ranging from 271 in Alaska to 28,533 in California). The rate of smoking-attributable deaths per 100,000 persons ranged from 45.3 in Utah to 175.9 in Kentucky (the average State rate was 129.1).

The average number of smoking-attributable years of potential life lost (YPLL) to life expectancy per State was 70,621 (ranging from 4,335 in North Dakota to 335,319 in New York). The rate of smoking-attributable YPLL per 100,000 persons ranged from 643 in North Dakota to 2,167 in Kentucky (the average State rate was 1,489).

The average smoking-attributable economic costs per State were $1.0 billion (ranging from $82 million in Alaska to $5.8 billion in California). On a per capita basis, these costs ranged from $54 per person in Puerto Rico to $284 in Rhode Island (the average State per capita cost was $205).

Based on these State-specific estimates, the National totals are as follows. In 1985, more than 316,000 deaths* and an additional 3.7 million years of potential life lost (YPLL) to life expectancy were attributable to tobacco use. The total economic impact for all 50 States was over $52 billion: $23.7 billion in direct morbidity costs, $10.2 billion in indirect morbidity costs, and $18.4 billion in indirect mortality costs. On a per capita basis, the economic impact was $221 per person for the United States as a whole. A more recent national estimate of smoking-attributable mortality, based on updated relative risk estimates from the American Cancer Society's Cancer Prevention Study II, is 390,000 deaths in 1985. The derivation of this new estimate is explained in detail in the 1989 Surgeon General's Report.

Smoking causes more premature deaths than cocaine, heroine, alcohol, fire, automobile accidents, homicide, and suicide combined. The vast health and economic impact of smoking and tobacco use reinforces the need to sustain smoking cessation and prevention of smoking as a high-priority public health effort at the National level as well as within each State.

Interagency Committee

The Interagency Committee on Smoking and Health was established as part of the Comprehensive Smoking Education Act of 1984 (P.L. 98-474). The Committee, chaired by the Surgeon General of the U.S. Public Health Service, Dr. C. Everett Koop, is comprised of 25 members; 20 Federal members and 5 non-Federal scientists and physicians representing private entities. Since the inaugural meeting on October 1, 1985, the Committee has met five times. Topics of the meetings include: the impact of advertising and promotion of tobacco products; free cigarette sampling and other related marketing techniques; smoking and its impact on minority populations; implementation of the new smoking regulations promulgated by the General Services Administration; and the international aspects of tobacco and health.

Legislation

In an effort to simplify and standardize existing information on Federal and State legislation pertaining to smoking and health, this report examines the Federal laws and the laws of all 50 States and the District of Columbia through calendar year 1987. Nearly 600 State laws pertaining to smoking and health have been identified. This total does not include all laws pertaining to the taxation of cigarettes or tobacco products, but includes those laws that mandate that tax revenues be earmarked for special health-related programs or research.

The smoking-related laws vary widely in their scope and intent, but for purposes of evaluation and comparability, they have been categorized as follows: limitations on smoking in public places; regulation on sale and use of tobacco products by minors; schools and school health education; regulations of advertising practices; commerce; taxation; and health and safety regulations.

Each of the 50 States and the District of Columbia regulate the sale and/or use of tobacco in some fashion. In addition,

* The State estimates that provide the basis for this National total were derived using relative risk estimates for smoking-related diseases from studies conducted in the 1950's and 1960's. Since those State calculations were made, more current relative risk estimates have become available. These estimates were used in the 1989 Surgeon General's Report on Reducing the Health Consequences of Smoking: 25 Years of Progress to yield an estimate of 390,000 smoking-attributable deaths in the United States in 1985.

information was compiled from the largest 20 cities in the United States to provide a sampling of local regulations on smoking and tobacco sale and use. The local ordinances are grouped into five categories: smoking in public places; smoking regulations in the workplace; public safety regulations; municipal tobacco taxation; and regulation of cigarette sales to minors. All 20 cities have local ordinances pertaining to smoking in public places; nine in the workplace; 14 regarding public safety; five enforcing local taxation; and eight regulating the sale to minors.

Findings of State legislation include:

- 43 States and the District of Columbia have legislation restricting smoking in public places.
- 20 States and the District of Columbia, a total of 21 jurisdictions, restrict smoking in Government and/or private workplace settings.
- All States tax cigarettes. State taxes range from a low of 2¢ (North Carolina) to a high of 38¢ (Minnesota) per pack of cigarettes.
- Five states prohibit the sale or use of clove cigarettes.
- 19 States require elementary and secondary schools to include instruction on the hazards of tobacco use.
- 44 States and the District of Columbia restrict sales or distribution of tobacco products to minors. The age at which an individual can purchase tobacco products range from a high of 19 years of age to a low of 16 years of age; 14 States allow minors under age 18 to purchase tobacco products. Six States have no law pertaining to the sale or distribution of tobacco to a minor.

National, State and Local Programs.
The smoking and health movement in this country has been a collaborative effort involving virtually every facet of the health community. The National voluntary health organizations, their State and local affiliates, State and local health departments, the Federal Government, and numerous other agencies have played a crucial role in this effort. This section attempts to give the reader an overview of the activities of these various organizations with a special review of more than 1,500 community level programs.

The programs described include cessation clinics, prevention efforts aimed at children and adolescents, school programs, community and patient education programs, mass media campaigns, and individual self-help and counseling programs. Also included are summaries of smoking education and information programs of various agencies of the Federal Government, particularly those within the U.S. Public Health Service.

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