The Health Consequences of SMOKING 1977-1978

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Office of the Assistant Secretary for Health
Office on Smoking and Health

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Rockville, Md. Maryland 20857

The Honorable Thomas P. O'Neill Speaker of the House of Representatives Washington, D.C. 20515

Dear Mr. Speaker:

As required by Section 8(a) of the Public Health Cigarette Smoking Act of 1969, I am submitting the 1977-1978 report on the health consequences of smoking. The report includes the "Bibliography on Smoking and Health-1976," the "Bibliography on Smoking and Health-1977," and "The Health Consequences of Smoking, 1977-1978."* The report bears a 2-year designation in order to return the series to an annual timetable which was altered because of the time required for the clearance processing of the 1976 report. The Bibliographies are prepared annually and routinely to reflect the new acquisitions to the smoking and health data base which operates at a cost of \$200,000.00 per year; the health consequences of smoking report, which is a review of this new current information and prepared specifically for Congress, this year cost \$9,800.00.

"The Health Consequences of Smoking, 1977-1978" includes recently published data from three classic prospective studies of the mortality resulting from cigarette smoking. These studies, involving almost one and a half million persons, continue to document excess mortality among smokers as compared to nonsmokers.

This part of the report also includes data on the established risks of low birth weight and increased perinatal mortality for offspring of women who smoke during pregnancy. In addition, the new evidence is reviewed that shows not only a high rate of heart attacks among women who smoke cigarettes, but that this effect is particularly critical in women who use oral contraceptives.

The data in this report indicate that former smokers show lower death rates than continuing smokers and within 10 to 15 years after quitting come close to the low rates of those who never smoked.

One study supports previous evidence that there is a partial solution to the health problem in the use of cigarettes with lower emissions of "tar" and nicotine.

As a result of public demand and a responsive industry, there has been over recent years a continuing decline in the emissions of "tar" and nicotine in cigarettes in use.

The data in this report and in previous annual reviews of the health consequences of smoking have established cigarette smoking as a habit responsible for an overwhelming level of premature death and disability in this country. To reduce this preventable and costly

^{*}The bibliographies have been published as DHEW Publication Number (CDC) 78-8309, January and February 1978.

mortality and morbidity, this Department recently announced a new antismoking program.

The program is one of public education, regulation, and research with special emphasis on children, teenagers, and young women, and on occupations where smoking increases risks from occupational exposure. In undertaking this program, I have invited the cooperation of the major broadcast networks, State and local school officials, the major corporations of this Nation, State Governors and legislators, the Federal Trade Commission, the Federal Communications Commission, the Civil Aeronautics Board, and others whose involvement and cooperation are crucial to the success of this program. In response to the evidence linking the combined use of oral contraceptives and cigarette smoking, the Food and Drug Administration, Public Health Service, HEW, has recently required that a warning statement to that effect accompany oral contraceptives as they are distributed to those who use them. To provide leadership and to coordinate this program, an Office on Smoking and Health has been established in the Office of the Assistant Secretary for Health. As one of its first tasks, this Office will coordinate the production of a comprehensive document which reviews not only the biomedical but also the behavioral and control data about smoking and its effects on health. The report will be submitted to Congress

As the principal health officials of this government, the Surgeon General and I are committed to fulfilling our responsibilities to provide information and direction to permit American citizens to make genuinely free choices about smoking and their own health. In this regard and as I am required by P.L. 91-222 to make such legislative recommendations that I deem appropriate based on the scientific data about the impact of smoking on health, I will submit within the year a legislative package which I hope will meet with your approval. With appropriate coordination of legislative action and program, we can solve this difficult and important public health problem.

Sincerely,

Joseph A. Califano, Jr.

Secretary

Enclosures

Identical letter sent to The Honorable Walter F. Mondale

This tenth report to the Congress on the health consequences of smoking discusses the special problems incurred by women who smoke and presents recently published overall mortality data on smoking.

Smoking was first recognized as a health problem in the 1930's, when a sharp increase was noted in lung cancer rates for men. No similar increase was noted for women at that time for several reasons. First, as a group, women did not start smoking when men did, since such behavior was socially unacceptable for women at that time. Consequently, until the last decade, there were insufficient numbers of women who had smoked for a long enough period of time to provide the size population necessary for meaningful research.

In recent years, however, the same health risks to men as a result of smoking have been documented for women who smoke. These include cardiovascular disease, lung cancer, cancer of other specific sites, bronchitis, and emphysema. These diseases occur among smokers at rates far greater than those of nonsmokers. Additionally, women have been found to incur unique risks for themselves and for their offspring. For example, women over 30 years of age who smoke and use oral contraceptives have substantially higher risks of myocardial infarction. Moreover, the offspring of women who smoke during pregnancy face greater risks of perinatal mortality and low birth weight. Further understanding of the mechanisms involved in these health consequences continues to evolve.

Three large prospective epidemiologic studies demonstrate that overall mortality rates for cigarette smokers are approximately 70 percent higher than those for nonsmokers. These studies also document a decrease in overall mortality rates for those who quit smoking, provided they were not ill at the time of cessation. There is about a 15 percent reduction in overall mortality risk for smokers of low "tar" and nicotine cigarettes (less than 17.6 mg. "tar" and less than 1.2 mg. nicotine) compared to those who smoke high "tar" and nicotine cigarettes (25.8-35.7 mg. "tar" and 2.0-2.7 mg. nicotine).

Several publications have become available since the last report to Congress which review the social, behavioral, legislative, and health issues related to smoking. A recently published paper by Daniel Horn, Ph.D., as part of his work with the World Health Organization, discusses the major barriers to be overcome if further progress is to be made against the threat of smoking to health. A copy is included as Appendix A to this report. Two other publications of note include the U.S. Public Health Service's "Proceedings of the Third World Conference on Smoking and Health, 1975," DHEW Publication No. (NIH) 77-1413, 1977, Volumes I and II, and the World Health Organization's "Smoking and Its Effects on Health," Technical Report Series No. 568, Switzerland, 1975.

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PREVIOUS REPORTS

Reviews of the scientific information linking smoking to health problems began in 1964 with the publication of Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service, subsequently referred to as the "Surgeon General's Report." Thereafter, Public Law 89-92 was passed requiring supplemental reports to Congress on this subject, and the following three reports were published:

- 1. The Health Consequences of Smoking, A Public Health Service Review; 1967.
- 2. The Health Consequences of Smoking, 1968 Supplement to the 1967 PHS Review.
- 3. The Health Consequences of Smoking, 1969 Supplement to the 1967 PHS Review.

Public Law 91-22 amended the previous law in April 1970 and required a comprehensive review within 18 months, with annual reports to be submitted thereafter. The result of this review was The Health Consequences of Smoking, A Report of the Surgeon General; 1971. Since then, the following annual reports on the health effects of smoking have been published:

- 1. The Health Consequences of Smoking, A Report of the Surgeon General, 1972.
- 2. The Health Consequences of Smoking, 1973.
- 3. The Health Consequences of Smoking, 1974.
- 4. The Health Consequences of Smoking, 1975.
- 5. The Health Consequences of Smoking, A Reference Edition, 1976.

Each report since the original "Surgeon General's Report" has reviewed the scientific literature relevant to the association between

smoking and cardiovascular diseases, non-neoplastic bronchopulmonary diseases, and cancer. Smoking as related to the following diseases and conditions has been reviewed periodically in these reports:

Allergy (1972) Exercise Performance (1973) Harmful Constituents of Cigarette Smoke (1972) Noncancerous Oral Disease (1969) Overview: The Health Consequences of Smoking (1975) Overview: The Health Consequences of Smoking (1976) Peptic Ulcer Disease (1967, 1971, 1972, 1973) Pipe and Cigar Smoking (1973) Pregnancy (1967, 1969, 1971, 1972, 1973) Public Exposure to Air Pollution from Tobacco Smoke (1972, 1975) Tobacco Amblyopia (1971)

THE 1977-1978 REPORT

This publication, The Health Consequences of Smoking, 1977-1978, contains the most recent data on the health effects of smoking unique to women and on the effects of smoking on overall mortality. Although emphasis is on the most recent data, research from earlier years is included where necessary for clarity.

The report was prepared in the following way by the staff of the National Clearinghouse for Smoking and Health, a division of the Bureau of Health Education, Center for Disease Control, Public Health Service:

- 1. The Technical Information Center of the Clearinghouse continually monitors and collects the scientific literature on the health effects of smoking by means of several established mechanisms:
 - a. An information science corporation is under contract to

extract articles on smoking and health from the scientific literature of the world.

- b. The National Library of Medicine, through the MEDLARS system, provides a monthly listing of articles on smoking and health. Articles not provided by the information science corporation are obtained for review.
- c. Staff members review current medical literature and identify pertinent articles.
- 2. Initial drafts for the present report were prepared by the staff of the National Clearinghouse and sent to experts in the content area for review and comment regarding the format, the appropriateness of the articles selected for discussion, and conclusions. The drafts were then revised by the Clearinghouse to incorporate these comments. The final drafts of the complete report were reviewed by the National Cancer Institute, the National Heart, Lung, and Blood Institute, the National Institute of Environmental Health Sciences, the National Institute of Child Health and Human Development, and by additional experts both inside and outside the Public Health Service.

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The National Clearinghouse for Smoking and Health Director, Daniel Horn, Ph.D., was responsible for the preparation of this report. Medical Staff Director was John J. Witte, M.D. The consulting and technical editors were Elvin E. Adams, M.D., and Susan J. Dillon, respectively. The Technical Information Office responsible for the literature collection was Donald R. Shopland.

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Chapter 1

Smoking-Related Health Problems Unique to Women Contents

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