

The Health Consequences of SMOKING

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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The
Health Consequences
of Smoking

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Preface

This report is the seventh in a series issued by the Public Health Service reviewing and assessing the scientific evidence linking cigarette smoking to disease and premature death. The current report reiterates, strengthens, and extends the findings in earlier reports that cigarette smoking is a major health problem in the United States.

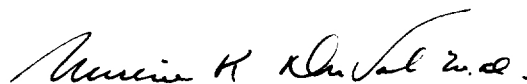
The evidence has broadened dramatically in recent years. A Public Health Service assessment of evidence available in 1959 was largely focused on the relationship of cigarette smoking and lung cancer. The first formal report on this subject in 1964 found that cigarette smoking was not only a major cause of lung cancer and chronic bronchitis, but was associated with illness and death from chronic bronchopulmonary disease, cardiovascular disease, and other diseases.

The 1973 report confirms all these relationships and adds new evidence in other areas as well. The evidence in the chapter on pregnancy strongly indicates a causal relationship between cigarette smoking during pregnancy and lower infant birth weight and a strong, probably causal, association between cigarette smoking and higher late fetal and neonatal mortality. Also reported is the convergence of other evidence which suggests that cigarette smoking during pregnancy interacts with other risk factors to increase the risk of an unfavorable outcome of pregnancy for certain women more than others.

For the first time in this series of reports, a separate chapter is devoted to pipe and cigar smoking and the health hazards involved. Included is an assessment of the health implications of the new small cigars which look like cigarettes.

A final chapter, new to the reports, concerns cigarette smoking and exercise performance. A review of a number of fitness tests comparing smokers to nonsmokers indicates that cigarette smoking impairs exercise performance for many types of athletic events and activities involving maximal work capacity.

The interrelationships of smoking and health are no less complex today than they were reported to be in the 1964 report. But since that time we have greatly broadened our knowledge and understanding of the problem. The current report symbolizes this progress.



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DECEMBER 13, 1972.

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Preparation of the Report and Acknowledgments

“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,” was published in 1964. The National Clearinghouse for Smoking and Health, established in 1965, has the responsibility for the continuous monitoring, compilation, and review of the world’s medical literature which bears upon the health consequences of smoking. As called for by Public Law 89–92, the following three reviews of the medical literature on the health consequences of smoking, which had come to the attention of the Clearinghouse since the original “Surgeon General’s Report,” were sent to the Congress:

1. “The Health Consequences of Smoking, A Public Health Service Review: 1967” (submitted July 1967).
2. “The Health Consequences of Smoking, 1968 Supplement to the 1967 PHS Review” (submitted July 1968).
3. “The Health Consequences of Smoking, 1969 Supplement to the 1967 PHS Review” (submitted July 1969).

Public Law 91–222 was signed into law on April 1, 1970, and called for an 18-month interval between the 1969 supplement and the next report. During this period, a comprehensive review of all of the medical literature available to the Clearinghouse relating to the health consequences of smoking was undertaken, with an emphasis upon the most recent additions to the literature. The product of this review was: “The Health Consequences of Smoking, A Report of the Surgeon General: 1971,” submitted to the Congress in January of 1971. Subsequently, a review of the medical literature in the field, which had come to the attention of the Clearinghouse since the publication of the 1971 report, was published as, “The Health Consequences of Smoking, A Report of the Surgeon General: 1972,” submitted in January of 1972.

Every report published since the original "Surgeon General's Report" has contained a review of the medical literature relevant to the association between smoking and cardiovascular disease, nonneoplastic bronchopulmonary disease, and cancer. Several of the reports included reviews of the relationship between smoking and peptic ulcer disease (1967, 1971, 1972) and cigarette smoking and pregnancy (1967, 1969, 1971, 1972). Other topics relating to the use of tobacco have received special emphasis in single reports:

1. Tobacco Amblyopia (1971 Report).
2. Allergy (1972 Report).
3. Public Exposure to Air Pollution From Tobacco Smoke (1972 Report).
4. Harmful Constituents of Cigarette Smoke (1972 Report).
5. Noncancerous Oral Disease (1969 Report).

The present document, "The Health Consequences of Smoking: 1973," includes reviews of the relationships between smoking and cardiovascular disease, bronchopulmonary disease, cancer, and peptic ulcer disease which are based upon medical literature which has become available to the Clearinghouse since the publication of the 1972 report. It also includes special reviews of the health consequences of pipe and cigar smoking and of the relationship between cigarette smoking and the outcomes of pregnancy. The material in these two latter chapters reflects a comprehensive review of the pertinent world medical literature which has come to the attention of the Clearinghouse since the publication of the original "Surgeon General's Report," including material which has become available since the 1972 report. The final chapter in this year's report is a review of the relationship between smoking and exercise performance, an area not covered previously in any report.

With the exception of "Chapter 4, Pregnancy," each chapter is organized in a similar fashion. The introduction to each chapter is a summary of the work reviewed in previous reports. The summary of each chapter encompasses only the work which has most recently become available to the Clearinghouse. The pregnancy chapter is organized into separate sections according to several different outcomes of pregnancy. Each section includes a brief review of previously reported work and contains its own separate summary, in place of an overall summary for the entire chapter.

The preparation of this report was accomplished in the following fashion :

1. The continuous monitoring and compilation of the medical literature on the health consequences of smoking was accomplished through several mechanisms.
 - (a) An information science corporation is on contract to extract articles on smoking and health from the medical literature of the world. This organization provides a semimonthly accessions list with abstracts and copies of the various articles. Translations are called for as needed. Articles are classified according to subject and filed by a series of code words and phrases.
 - (b) The National Library of Medicine, through the Medlars system, sends the National Clearinghouse for Smoking and Health a monthly listing of articles in the smoking and health area. These are reviewed, and articles not identified by the information science corporation are ordered.
 - (c) Staff members review current medical literature and identify pertinent articles.
2. The first drafts of the individual chapters were sent to reviewers for criticism and comment with respect to the articles reviewed, articles not included, and conclusions. The drafts were then revised until they met with the general approval of the reviewers. The final drafts were reviewed as a whole by the Director of the National Clearinghouse for Smoking and Health, the Director of the National Cancer Institute, the Director of the National Heart and Lung Institute, the Director of the National Institute of Environmental Health Sciences, the Surgeon General, and by additional experts both within and outside of the Public Health Service.

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