

## **Preface**

*from the Surgeon General,  
U.S. Department of Health and Human Services*

Forty years have passed since Surgeon General Luther Terry released the landmark 1964 report of the Surgeon General's Advisory Committee on Smoking and Health. Dr. Terry had asked the committee to evaluate all available scientific evidence to determine whether smoking caused lung cancer and other diseases. The approach adopted by this committee has become a model for the many Surgeon General's reports that have followed: identify all relevant scientific data, evaluate and summarize the evidence, and apply the criteria for causal inferences to determine whether the weight of the evidence supports a definitive conclusion.

In 1964, the Surgeon General's committee concluded that cigarette smoking causes chronic bronchitis and cancers of the lung and larynx. Using these established, now standard, causal criteria, other reports of the Surgeon General have linked active smoking to many other diseases and conditions. Secondhand smoke has also been found to adversely impact health, a conclusion first reached in the 1986 Surgeon General's report.

This report returns to the topic of that first Surgeon General's report, the health consequences of active smoking. It has been many years since active smoking and health has been the sole topic of a Surgeon General's report, and this report provides a comprehensive overview only touched on in recent reports. During the last four decades, the scientific evidence on smoking and disease has expanded substantially, linking active smoking with an ever-growing list of diseases. In fact, some long-term studies of smokers are now providing a picture of how the risks of smoking play out across a lifetime. Even for diseases that we have long known were caused by smoking, such as lung cancer, there are new questions related to unexplained changes in the characteristics of the diseases. There are also questions about how changes in the cigarettes smoked in the United States and other countries have affected risks to smokers.

This report looks not only at active smoking but also examines the issue of causal criteria, laying out in terms agreed upon by national and international scientific bodies what evidence is required in order to declare that a disease or condition is causally related to smoking. Conclusions from previous reports have been updated using new uniform standards of both causality and language, and, in addition, there are a number of new causal conclusions for cancer, cataract, and general health status. Cataract, a common problem in older Americans, is now known to be causally related to active smoking. This report also concludes that at all ages, smokers are generally less healthy than nonsmokers.

This report provides a tragic picture of the consequential effects of active smoking across a lifetime. Active smoking affects reproduction and the hearts and lungs of adolescents and young adults. Even by early middle age, it causes death from cancer and cardiovascular diseases, shortening the life expectancy of smokers. With increasing age, the frequency of smoking-caused diseases rises.

I am encouraged by the declining smoking rates in the United States in recent decades. However, every day nearly 5,000 people under 18 years of age try their first cigarette, and in 2001, an estimated 46.2 million American adults smoked. These numbers represent an enormous emotional and financial burden for their families and for our health care system. This report documents the path leading to disease and death that these smokers inevitably face if they continue to smoke.

Over the years the harmful effects of smoking have been well documented. Although great progress has been made, a challenging struggle remains. This report will hasten the day when many of the findings herein are no longer true and we will be able to view smoking as a scourge of the past. We all need to strengthen our efforts to prevent young people from ever starting to smoke, and to encourage smokers of all ages to quit.

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Surgeon General