

## It's Worse Than You Thought Smoking Harms Nearly Every Organ, Surgeon General Finds

May 27, 2004

Smoking causes diseases in nearly every organ of the body, according to the U.S. Surgeon General's comprehensive new report on smoking and health.

Published 40 years after the surgeon general's first report on smoking -- which concluded that smoking was a definite cause of three serious diseases -- this newest report finds that cigarette smoking is conclusively linked to diseases such as leukemia, cataracts, pneumonia and cancers of the cervix, kidney, pancreas and stomach.

"We've known for decades that smoking is bad for your health, but this report shows that it's even worse than we knew," Dr. Richard H. Carmona said. "The toxins from cigarette smoke go everywhere the blood flows. I'm hoping this new information will help motivate people to quit smoking and convince young people not to start in the first place."

According to the report, smoking kills an estimated 440,000 Americans each year. On average, men who smoke cut their lives short by 13.2 years, and female smokers lose 14.5 years. The economic toll exceeds \$157 billion each year in the United States -- \$75 billion in direct medical costs and \$82 billion in lost productivity.

"We need to cut smoking in this country and around the world," HHS Secretary Tommy G. Thompson said. "Smoking is the leading preventable cause of death and disease, costing us too many lives, too many dollars and too many tears. If we are going to be serious about improving health and preventing disease we must continue to drive down tobacco use. And we must prevent our youth from taking up this dangerous habit."

In 1964, the Surgeon General's report announced medical research showing that smoking was a definite cause of cancers of the lung and larynx (voice box) in men and chronic bronchitis in both men and women. Later reports concluded that smoking causes a number of other diseases such as cancers of the bladder, esophagus, mouth and throat; cardiovascular diseases; and reproductive effects.

The new report, *The Health Consequences of Smoking: A Report of the Surgeon General*, expands the list of illness and conditions linked to smoking. The new illnesses and diseases are cataracts, pneumonia, acute myeloid leukemia, abdominal aortic aneurysm, stomach cancer, pancreatic cancer, cervical cancer, kidney cancer and periodontitis.

Statistics indicate that more than 12 million Americans have died from smoking since the 1964 report of the surgeon general, and another 25 million Americans alive today will most likely die of a smoking-related illness.

The report's release comes in advance of World No Tobacco Day, an annual event on May 31 that focuses global attention on the health hazards of tobacco use. The goals of World No Tobacco Day are to raise awareness about the dangers of tobacco use, encourage people not to

use tobacco, motivate users to quit and encourage countries to implement comprehensive tobacco control programs.

The report concludes that smoking reduces the overall health of smokers, contributing to such conditions as hip fractures, complications from diabetes, increased wound infections following surgery, and a wide range of reproductive complications. For every premature death caused each year by smoking, there are at least 20 smokers living with a serious smoking-related illness.

Another major conclusion, consistent with recent findings of other scientific studies, is that smoking so-called low-tar or low-nicotine cigarettes does not offer a health benefit over smoking regular or "full-flavor" cigarettes.

"There is no safe cigarette, whether it is called 'light,' ultra-light,' or any other name," Dr. Carmona said. "The science is clear: the only way to avoid the health hazards of smoking is to quit completely or to never start smoking."

The report concludes that quitting smoking has immediate and long-term benefits, reducing risks for diseases caused by smoking and improving health in general. "Within minutes and hours after smokers inhale that last cigarette, their bodies begin a series of changes that continue for years," Dr. Carmona said. "Among these health improvements are a drop in heart rate, improved circulation, and reduced risk of heart attack, lung cancer and stroke. By quitting smoking today a smoker can assure a healthier tomorrow."

Dr. Carmona said it is never too late to stop smoking. Quitting smoking at age 65 or older reduces by nearly 50 percent a person's risk of dying of a smoking-related disease.

In addition to the 960-page printed report, The Health Consequences of Smoking, the U.S. Department of Health and Human Services released a new interactive scientific database of more than 1,600 key articles cited in the report, available through the Internet ([www.surgeongeneral.gov](http://www.surgeongeneral.gov)). The database can be used to find detailed information on the specific health effects of smoking as well as to develop customized analyses, tables and figures.

The database will be continually updated as new critical studies are published, allowing the surgeon general to determine on a regular basis whether the evidence supports a new definitive conclusion about smoking-caused disease. "Using this technology, once a threshold of danger is met, we can quickly alert the American people of new information related to smoking," Dr. Carmona said.

The report found that for a number of diseases and conditions associated with smoking, the evidence is not yet conclusive to establish a causal link. For these illnesses, which include colorectal cancer, liver cancer, prostate cancer, and erectile dysfunction in men, additional studies are needed to reach the threshold of evidence required by the Surgeon General's strict causal criteria to declare that they are causally related to smoking. These criteria were introduced in the 1964 report and have been updated in the 2004 report using new uniform standards.

For breast cancer, the evidence suggests that there is no causal relationship overall to smoking.

However, the report notes that on a genetic basis, some women may be at increased risk if they smoke. More research is required to clarify the role of smoking in the cause and progression of breast cancer.

Copies of the full *The Health Consequences of Smoking: A Report of the Surgeon General* and related materials are available from the Centers for Disease Control and Prevention, Office on Smoking and Health, 1-800-CDC-1311, [www.cdc.gov/tobacco](http://www.cdc.gov/tobacco) and on the surgeon general's Web site at [www.surgeongeneral.gov](http://www.surgeongeneral.gov).