

HEALTH & ECONOMIC CONSEQUENCES

California Department of Public Health
California Tobacco Control Program
cdph.ca.gov/programs/Tobacco

Smoking causes ischemic heart disease, cancer, stroke, and chronic lower respiratory diseases which are the leading causes of death and disability among adults.^{1,2} Smoking-attributed diseases are an economic burden due not only to health care expenses, but also productivity losses related to disability or early death.³

In 2004, approximately 35,000 deaths in California, among adults aged 35 and older, were attributed to smoking,⁴ not including death by secondhand smoke or burns. In comparison to other causes of death for the same time period and age group, this represents:

- Eight times the death from all infectious diseases combined, including HIV-related deaths.
- Seven times the death from unintentional injuries.
- Four times the death from the endocrine, nutritional, and metabolic diseases combined, including diabetes-related deaths.

Smoking-Related Health Care Costs

The total adult health-related cost of smoking was estimated to be \$18.1 billion in California in 2004. This estimate is half of the total expenditures allocated for health and human services in the 2008-2009 California budget. This equates to an additional \$500 health-related expenditure per California resident, or \$3400 per smoker.⁴

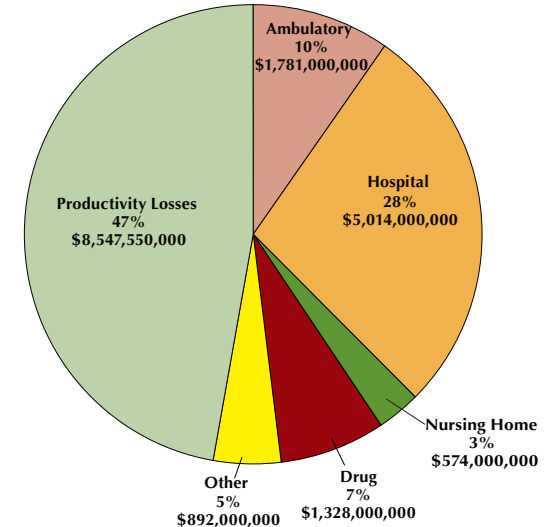
- The direct health care costs associated with smoking in California were estimated to be \$9.6 billion in 2004.⁴
- In addition, productivity losses due to smoking-attributed early death or illnesses were estimated to be \$8.5 billion in California; this does not include secondhand smoke or burn deaths.⁴
- In 2004, approximately 1.2 billion packs of cigarettes were sold in California.⁵ If smokers were to pay for these smoking-related health care costs, the price of a pack of cigarettes would need to be increased by \$9.70.

Health Consequences of Smoking

According to the Center for Disease Control and Prevention, 36,687 adults aged 35 and older died annually from smoking in California in the 2000-2004 period;⁶ this means an average 481,529 years of potential life lost (YPLL) annually in the 2000-2004 period.^{4,6}

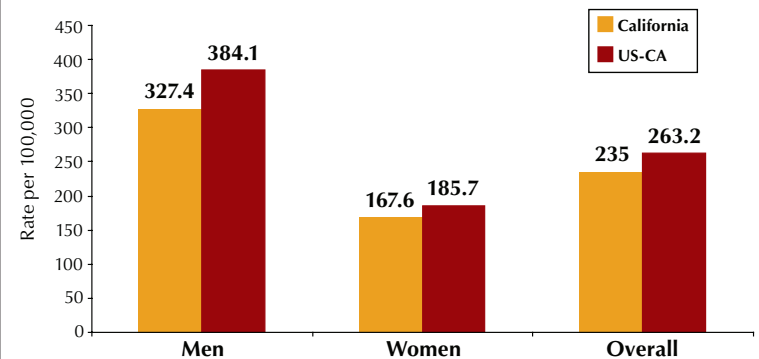
- The smoking-related death rate was three times higher for men than for women in California between 2000-2004.^{4,6}
- The three most common causes of smoking-attributable death were lung cancer, followed by chronic obstructive lung disease and then ischemic heart disease during 2000-2004.^{3,4,7}
- Smoking causes and/or worsens chronic

Cost of Smoking, 2004



Source: Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC). Accessed on March 25, 2009. Prepared by: California Department of Public Health, California Tobacco Control Program, September 2009.

Tobacco Related Deaths California and the Rest of the United States 2001-2004



Note: Rates are age adjusted.
Source: Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC). Accessed on Feb. 25, 2009. Prepared by: California Department of Public Health, California Tobacco Control Program, September 2009.

Leading Causes of Death in California, 2005

Cause of death	Count (%)	Age-adjusted rate*
Tobacco related		
Ischemic heart disease	45,059 (19%)	176.0
Trachea, lung, bronchus cancer	13,350 (6%)	52.7
Chronic Obstructive Pulmonary Diseases (COPD)	12,562 (5%)	49.8
Stroke	11,680 (5%)	46.0
Diabetes	7,689 (3%)	26.8
Other tobacco related neoplasms	1,210 (1%)	5.0
Non-Tobacco related		
Non-tobacco related neoplasms	41,176 (18%)	157.6
Non-tobacco related cardiovascular diseases	30,685 (13%)	119.0
External causes of mortality (Injury, etc)	16,815 (7%)	60.1
Non-tobacco related respiratory diseases	11,040 (5%)	43.3
Alzheimer	7,706 (3%)	30.1
All other non-tobacco related diseases	33,812 (15%)	133.8
Total	232,784 (100%)	900.2

* Age adjusted rate per 100,000. 2000 US Standard population.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2005. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2005 Series 20 No. 2K, 2008. Accessed at <http://wonder.cdc.gov/cmfi-icd10.html> on June 30, 2009.

obstructive lung diseases like emphysema, bronchitis, and asthma and increases the chances of getting both upper and lower respiratory infection.³

- Smoking causes ischemic heart disease and stroke, which are leading causes of death and physical limitation in active Californians.^{2,3}
- Smoking causes many different types of cancer. The association with lung/bronchus cancer is the strongest, followed by cancer of the larynx, mouth, throat, esophagus, pancreas, kidney, bladder, stomach, cervix, and acute myeloid leukemia.³

Trends in Tobacco-Related Diseases in California, 1988-2005

Since the 1988 passage of Proposition 99 in California, adult smoking rates declined by more than 40% from 22.7% to 13.3% in 2008.⁸ As smoking rates declined, mortality and morbidity rates for diseases related to smoking have also declined.⁹ This parallel trend supports the causal association between these conditions and smoking.

- From 1988 to 2005, lung cancer incidence declined from 70.0 to 53.9 per 100,000 in California.^{9,10}
- Likewise, lung cancer deaths were decreased from 54.1 to 41.7 per 100,000 in California between 1988 and 2005.^{9,10}
- Death rates related to chronic lung diseases also decreased from 11.5 to 4.5 per 100,000 from 1988 to 2005, respectively.⁹
- Since 1988, deaths related to ischemic heart diseases decreased from 187.3 to 65.8 per 100,000 in 2005.⁹
- Similarly, stroke deaths decreased from 42.1 to 24.7 per 100,000 between 1988 and 2005.⁹

References

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