



Bulletin No. 13

June 17, 1988

Tobacco Takes Heavy Toll on Alaskans

Cigarette smoking is the single largest preventable cause of premature death and disability in the U.S.. The Surgeon General has estimated that over 350,000 Americans die annually as a consequence of cigarette smoking. These deaths (representing approximately 15% of the nation's mortality) and the untold suffering of people with tobacco caused diseases are preventable.

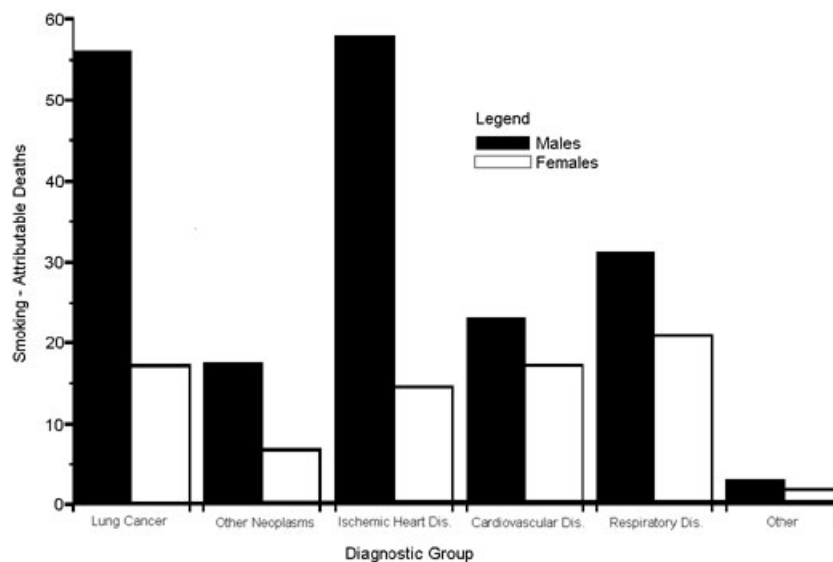
In 1986 the Minnesota Department of Health developed a computer software package to assist other states in estimating smoking attributable mortality and economic cost. The Section of Epidemiology used the Minnesota software to enter Alaska specific data for 1985 on the total number of deaths by age and sex, smoking prevalence by age and sex, and estimates of total personal health care expenditures by Alaskans. The computer program takes the Alaska data and applies advanced epidemiologic and health economics methodologies to estimate smoking attributable mortality, years of potential life lost, direct health care cost, direct mortality cost, and indirect morbidity costs.

Smoking Attributable Mortality--In 1985, there were estimated to be 261 smoking attributable deaths in Alaskans over age 20 (Figure 1). The leading smoking attributable causes of death were: Lung cancer (73 deaths), ischemic heart disease (68), respiratory diseases (52), other cardiovascular diseases (40), other neoplasms (24), and ulcers (4). For these diagnostic categories, smoking attributable deaths comprised 36% of the total 721 deaths in Alaskans over age 20 (40% for male deaths; 29% for females). For all deaths in Alaskans over age 20 during 1985, 14% were attributed to cigarette smoking.

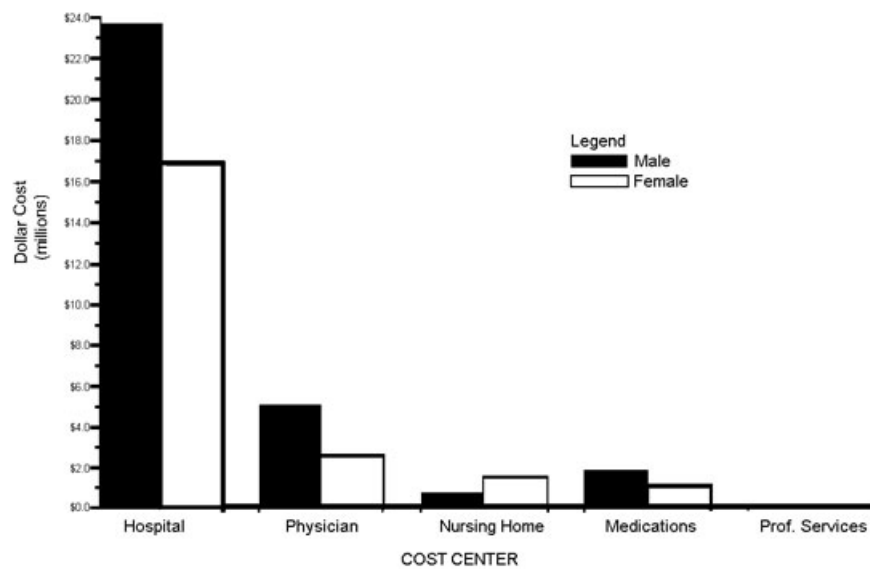
Smoking Attributable Years of Potential Life Lost (YPLL)--Smoking attributable YPLL was calculated by adding the years of life remaining until the age of 65 for each person dying of a smoking attributable death. For 1985, smoking deaths lead to 1,363 person years of potential life lost. This represents an average of 10.9 years of life lost for each person who dies prematurely from a smoking related death (11.5 years for males; 8.8 years for females).

Smoking Attributable Direct Costs--Direct cost are the expenses for health care due to smoking in Alaska. These include the cost of hospital care, physician services, medications, and nursing home care. The estimated total for direct costs in 1985 was \$52.8 million (Figure 2). This is equivalent to \$149 per Alaskan over age 20 or approximately \$408 per current smoker in Alaska over age 20.

**Figure 1. Smoking Attributable Mortality
Mortality by Gender**



**Figure 2. Smoking Attributable Direct Costs
Health Care Costs by Gender**



Smoking Attributable Indirect Mortality Costs--These costs include the value of earnings and productivity lost by persons dying due to smoking. An estimated \$28.8 million was lost due to the indirect costs caused by smoking deaths.

Smoking Attributable Indirect Morbidity Costs--These costs include the lost income and productivity of the individuals disabled by smoking related diseases. It is estimated that \$18.9 million was the cost for indirect morbidity due to smoking.

The total estimated smoking attributable cost for Alaska in 1985 was \$100.5 million. This is a conservative estimate since perinatal complications of smoking, childhood diseases related to parental smoking, and diseases caused by passive smoking have not been included.

In summary, cigarette smoking continues to exact a heavy toll of death and suffering in Alaskans. We have estimated that 261 Alaskans died of smoking related diseases during 1985 and that 1,363 years of productive life were lost. The economic impact was enormous. The need for all health care providers to encourage and assist their patients to stop smoking is obvious. The Surgeon General has called for a smoke-free society by year 2000--Our report highlights the deleterious effects of cigarette smoking in Alaska and reinforces the importance of vigorous efforts to reduce this destructive addiction.