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Impact of Smoking in Alaska, 1989

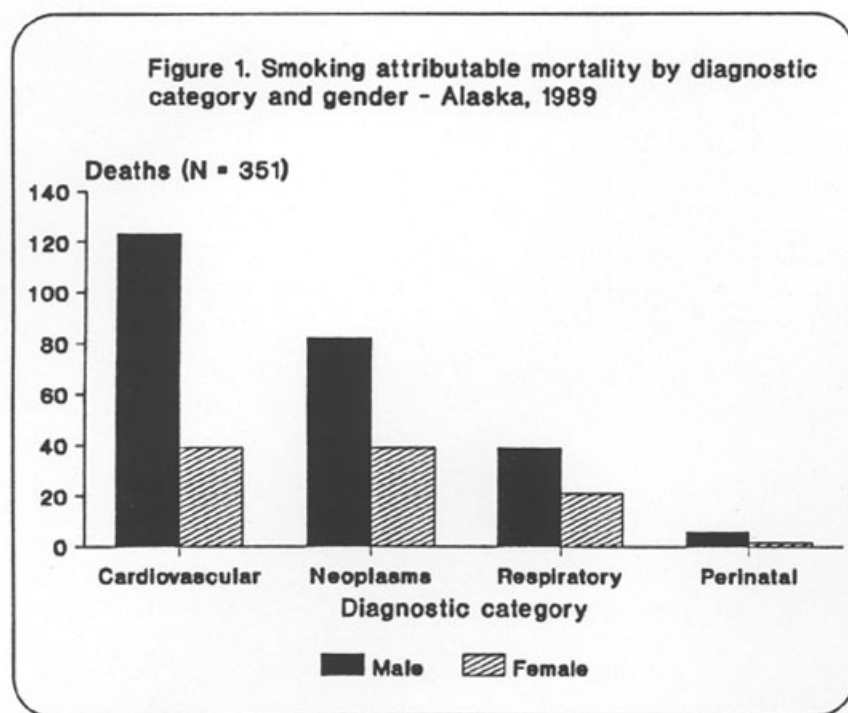
Tobacco kills 2.7 million people worldwide every year.¹ The U.S. Centers for Disease Control (CDC) estimates that 434,000 Americans died in 1988 due to smoking.²

Using computer software distributed by the Office on Smoking and Health (OSH) of the CDC, we calculated the impact of smoking in Alaska in 1989.³ Alaska data we used were:

- 1989 smoking prevalence data for persons ≥ 35 years of age (from the Current Population Survey)
- health care expenditure data (obtained from OSH)
- population estimates by age and sex (Alaska Dept. of Labor) and,
- deaths by age, sex and smoking related diagnostic category (Section of Epidemiology).

RESULTS:

Smoking Attributable Mortality— Of the 2,092 Alaskan deaths in 1989, 351 (16.8%) were estimated to be smoking related. The proportion of all deaths attributable to smoking was higher for males (250/1345 = 18.6%) than for females (101/745 = 13.6%). For males, nearly half of the smoking attributable deaths were due to cardiovascular diseases (n=123), whereas for females, 77% of smoking attributable deaths was split evenly between neoplasms and cardiovascular diseases (Figure 1). Of the 857 Alaskans ≥ 35 years of age who died of a cause shown in Figure 1, 40% of the deaths were smoking attributable (46% and 31% for male and female deaths, respectively). **Among Alaskans ≥ 35 years of age, 22% of deaths (343/1586) 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 smoking attributable death among persons 35-64 years of age. In 1989, 1446 person years of potential life were lost. This is an **average of 9.6 years of life lost for each person 35 to 65 who dies prematurely from a smoking-related death.**

Smoking Attributable Direct Costs -- Direct health-care costs are the costs for the prevention, detection and treatment of smoking-related diseases as well as the cost for rehabilitating smokers suffering from smoking related illnesses. Hospitalization, physicians' services, medication costs, nursing home costs, and other professional services are included. **The estimated total for direct costs in 1989 was \$34.1 million for persons ≥ 35 years of age.** This is equivalent to \$172 per Alaskan ≥ 35 years of age or \$624 per current smoker ≥ 35 years of age.

Smoking Attributable Indirect Mortality Costs -- These costs are calculated as the wages and salaries forfeited by persons who die prematurely from smoking-related causes. **An estimated \$38.4 million was lost due to the indirect costs caused by smoking deaths.** **Smoking Attributable Indirect Morbidity Costs** -- These costs include the lost earnings and productivity for persons disabled by smoking-related chronic diseases. The estimated cost for indirect morbidity due to smoking was \$10.7 million.

The total estimated smoking attributable cost for Alaskans ≥ 35 years of age in 1989 was \$83.2 million.

DISCUSSION

Smoking has substantial impact on mortality in Alaska. In 1989, there were 352 deaths of Alaskans due to unintentional injury (including motor vehicle crashes) compared to 351 deaths due to tobacco. Death caused by cigarette smoking usually occurs many years after a person has become addicted and may not attract as much attention as death caused by unintentional injury.

These deaths are preventable and efforts which succeed in reducing smoking prevalence will result in significant improvement in the health of all Alaskans.

Smoking cessation at any age is associated with a decreased risk for premature death.⁴ Efforts to support cessation must be further encouraged in the elderly and other groups (e.g. women and minorities) characterized by higher smoking prevalences or slower rates of decline in smoking.

Physicians and other health care providers can obtain free copies of the self-help booklet "Clearing the Air", available from the National Cancer Institute (800-4-CANCER or 800-422-6237), which may be distributed to patients who wish to quit.

(Contributed by Kathy Perham, MS, MPH, Research Analyst, Section of Epidemiology).

References:

1. World Health Organization Tobacco Alert, April 1990.
2. CDC. Smoking attributable mortality and years of potential life lost -- United States, 1988. MMWR 1991;40:62-71.
3. Shultz JM, Novotny TE, Rice DP. SAMMEC II: computer software and documentation. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, April 1990.
4. CDC. The health benefits of smoking cessation: a report of the Surgeon General, 1990. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, 1990; DHHS publication no. (CDC)90-8416.