

State of Alaska
Epidemiology



Bulletin

Recommendations
and
Reports

Department of Health and Social Services
Joel Gilbertson, Commissioner

Division of Public Health
Doug Bruce, Director

Section of Epidemiology
John Middaugh, MD, Editor

3601 C Street, Suite 540, PO Box 240249, Anchorage, Alaska 99524-0249 (907) 269-8000
24-Hour Emergency Number 1-800-478-0084

<http://www.epi.Alaska.gov>

Volume No. 8 Number 3
April 27, 2004

Tobacco Use in Alaska

Part 1 of a 5-Part Series

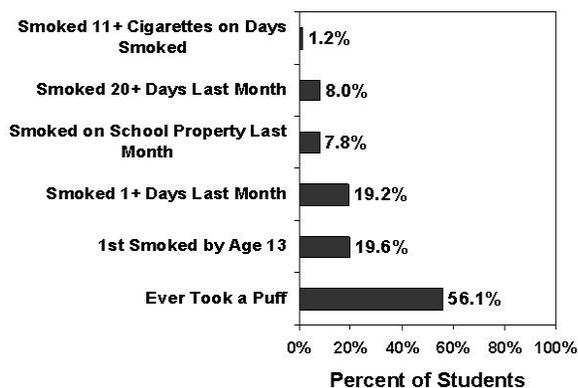
Tobacco use remains the number one threat to public health, both in Alaska and nationwide. This overview of tobacco use in Alaska is the first in a series of *Bulletins* over the next two months that will describe Alaska's leading preventable cause of death, as reported in the new publication: *Tobacco in the Great Land: A Portrait of Alaska's Leading Cause of Death*.

Prevalence: Who is Using Tobacco and How Much Are They Using?

Youth

The 2003 statewide, representative Youth Risk Behavior Survey (YRBS) found that 19% of Alaskan high school students currently smoke cigarettes at least 1 day per month.¹ High school boys and girls are equally likely to be smokers, with smoking most common among 12th grade students.² The smoking rate among Alaska Native youth (44%) is nearly four times the rate among non-Native youth (12%).³ Figure 1 shows the percentages of students reporting each of a variety of smoking behaviors.⁴ For an in-depth description of youth tobacco use, see *Epidemiology Bulletin* Volume 7, Number 4, published November 4, 2003.

Figure 1. Percentage of High School Youth At Each Level of Smoking, Alaska Youth Risk Behavior Survey (YRBS), 2003



Adults

Approximately one in four Alaskan adults smokes cigarettes (28% among men, 25% among women).⁵ As with youth, Alaska Native adults are more likely to smoke (44%) than are their non-Native peers (24%).⁶ Other groups with relatively high smoking prevalences include 18 to 24 year-olds (34% smoking prevalence) and Alaskans living in rural

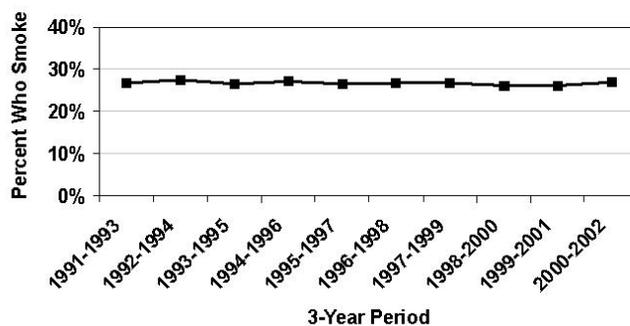
areas of the state (38% smoking prevalence).⁷ Three out of four adult Alaskan smokers say they smoke every day.⁸ On average, these daily smokers smoke 17 cigarettes—or nearly a pack—each and every day.⁹

Trends: Is tobacco use increasing or decreasing?

Since 1995, the percentage of Alaskan high school youth who report ever having taken even a single puff of a cigarette dropped significantly, from 72% to 56%. The prevalence of smoking among Alaska youth was cut nearly in half, from 37% to just 19%. Frequent smoking, or smoking on at least 20 of the past 30 days, also fell considerably, from 21% in 1995 to just 8% in 2003.¹⁰

This encouraging trend is not echoed among adults. Adult smoking prevalence has remained fairly level over the past 12 years.¹¹ (Figure 2) However, while the number of Alaskan adults who are smokers has remained stable, the amount they are smoking appears to be declining. Between 1994 and 2002, the percentage of Alaskan adult smokers who smoke less often than every day has been inching upward, from 15% to 25%.¹² Furthermore, the average number of cigarettes smoked by these less-than-every-day smokers has dropped from 8 to less than 5 per day on days when they smoked.¹³ Corresponding to this apparent decline in amount of cigarettes smoked is a 30% drop in annual per capita sales of cigarettes in Alaska between 1997 (89.4 packs per capita) and 2002 (62.8 packs per capita).¹⁴

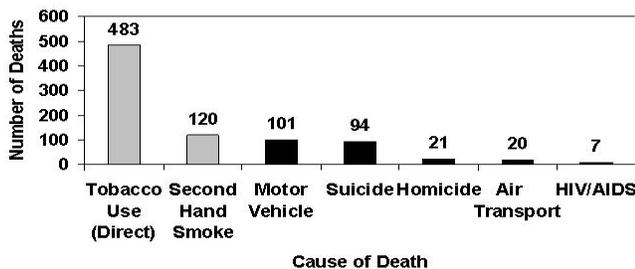
Figure 2. Trend in Percentage of Adults Who Smoke (3-Year Moving Averages), Alaska BRFSS, 1991-2002



Costs: What Does Tobacco Use Cost in Lives and Dollars?

In Alaska, 483 deaths in 2001 were due directly to tobacco use, with an additional 120 deaths due to environmental tobacco smoke (ETS) exposure. The death toll for tobacco accounted for one in five deaths statewide.¹⁵ Figure 3 depicts the relative burden in terms of deaths from several selected causes.

Figure 3. Number of Deaths Due to Selected Causes, Alaska, 2001



Data Sources: Alaska Bureau of Vital Statistics, 2001; Alaska Behavioral Risk Factor Surveillance System, 2001; Smoking Attributable Mortality, Morbidity, and Economic Costs software (CDC)

Tobacco also places a financial burden on Alaskans. The direct medical expenditures caused by tobacco in 1998 were \$132,900,829, the most recent year for which medical expenditure data are available. An additional \$137,000,000 is attributed to lost productivity due to premature tobacco-related death. This amount would certainly be larger if estimates of lost productivity due to tobacco-related morbidity were available.

Compared to the approximately \$400 per Alaskan per year spent on the direct medical care and lost productivity costs caused by tobacco, only \$10 per Alaskan was spent on tobacco control and prevention within the State in Fiscal Year 2003, the year Alaska saw its highest level of tobacco prevention and control spending to date.¹⁶

Table 1. Tobacco-Related Deaths and Economic Costs, Alaska 1998

Direct Medical Expenditures	
Ambulatory	\$54,000,000
Hospital	\$40,000,000
Prescription Drugs	\$9,000,000
Nursing Home	\$9,000,000
Other	\$20,000,000
Total Neonatal Expenditures	\$900,829
Total direct economic costs due to tobacco	\$132,900,829

Data Sources: Alaska Bureau of Vital Statistics, 1998; Alaska Behavioral Risk Factor Surveillance System, 1998; Smoking Attributable Mortality, Morbidity, and Economic Costs software (CDC)

Interventions: What Can Be Done to Reduce Tobacco Use?

Since tobacco use generates such substantial health and economic costs, a reduction in tobacco use and the elimination of exposure to secondhand smoke would have tremendous benefits for the nation overall, and Alaska specifically. The Centers for Disease Control and Prevention (CDC) has identified the following four goal areas in which work must be done in order to reduce, and eventually eliminate, the morbidity and mortality associated with tobacco use:

- elimination of exposure to environmental tobacco smoke (ETS),
- prevention of initiation of tobacco use among youth,
- promotion of cessation among youth and adults, and
- identification and elimination of tobacco-related disparities in tobacco use.¹⁷

Population-based policy initiatives, such as implementing smoking bans, increasing tobacco excise taxes, and reducing patient out-of-pocket costs for effective cessation therapy are recommended as evidence-based ways to achieve these four goals.¹⁸ Many of the identified best practices for reducing and eliminating tobacco use and exposure have been adopted in Alaska, including:

- implementing a \$1.00 per pack cigarette excise tax in 1997,
- coordinating of an aggressive counter-marketing campaign,
- implementing local clean indoor air ordinances, and
- enforcing laws prohibiting sales to minors.

Summary

Alaska experiences a tremendous burden in morbidity, mortality, and economic costs due to tobacco use. Substantial progress is being made to reduce this burden. The declines in youth smoking are dramatic. There is hope because adult smokers may be smoking less. But vigilance is necessary to continue these encouraging trends and reverse those negative trends that still exist. A major challenge is to eliminate the tremendous disparity in tobacco use between Alaska Natives and non-Natives. Accessible, understandable, and current information on tobacco use behaviors and attitudes is an

essential tool in the fight against this public health threat. We hope that this series of *Bulletins* will provide that tool for health professionals, affiliated partners, and concerned Alaskans alike. A complete copy of *Tobacco in the Great Land*, can be found at <http://www.epi.alaska.gov/pubs/tobaccofeb04.pdf>.

The following topics will be addressed in future *Bulletins* of this series:

- smokeless tobacco use
- disparities in tobacco use
- environmental tobacco smoke
- tobacco use cessation

References

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- ³ Ibid, pp. 37, (YRBS data)
- ⁴ Ibid, pp. 36, (YRBS data)

- ⁵ Ibid, pp. 83, (Behavioral Risk Factor Surveillance System [BRFSS] data)
- ⁶ Ibid, pp. 75, (BRFSS data)
- ⁷ Ibid, pp. 84-85, (BRFSS data)
- ⁸ Ibid, pp. 82, (BRFSS data)
- ⁹ Ibid, pp. 80, (BRFSS data)
- ¹⁰ Green T, Middaugh J, Saxon S, Utermohle CJ. 2003 Youth Risk Behavior Survey. Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2004, pp. 14.
- ¹¹ Peterson E, Fenaughty A, Eberhart-Phillips JE, Tobacco in the Great Land: A Portrait of Alaska's Leading Cause of Death. Anchorage, Alaska: Section of Epidemiology, Division of Public Health, Alaska Department of Health and Social Services, 2004, pp. 74, (BRFSS data)
- ¹² Ibid, pp. 78, (BRFSS data)
- ¹³ Ibid, pp. 79, (BRFSS data)
- ¹⁴ Ibid, pp. 75-76, (AK Department of Revenue, Division of Tax, tobacco tax data)
- ¹⁵ Ibid, pp. 16, Methodology for estimates: Using 2001 smoking prevalence (BRFSS) and mortality (AK Bureau of Vital Statistics) data, CDC's Smoking Attributable Morbidity, Mortality and Economic Costs (SAMMEC) software was used to estimate the number of deaths to Alaskans that year due to tobacco. The number of Alaskan deaths due to ETS was also estimated by pro-rating the national estimate of ETS-attributed deaths (53,000) to Alaska's population.
- ¹⁶ Ibid, pp. 23-25.
- ¹⁷ Centers for Disease Control and Prevention. Best Practices for Comprehensive Tobacco Control Programs—August 1999. Atlanta GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, August 1999.
- ¹⁸ Hopkins DP, Briss PA, Ricard CJ, et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J Prev Med.* 2001;20(S2):16-86.

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State of Alaska, Section of Epidemiology
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