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Tobacco Use Among Alaska Youth

Importance of Decreasing Youth Tobacco Use

Adolescence is a time when individuals do not often consider long term health effects of their behaviors. Once a person starts using tobacco, stopping the habit is not easy because of the addictive properties of nicotine. The vast majority (83.7%) of Alaska smokers began smoking between the ages of 10 and 20 years.[1] Therefore, one of the major strategies for reducing tobacco related deaths and illnesses is to discourage youths from starting to use tobacco.[2]

Tobacco Use among Alaska High School Students[3]

Alaska high school students are more likely to be frequent smokers and to use smokeless tobacco than are U.S. students (Table 1). Alaska Native students have even higher rates of tobacco use.

Table 1. Tobacco use among high school students, Alaska and U.S. 1995

	Alaska	Alaska Natives	U.S.
	Percent of Students		
Ever Tried Cigarettes	72.1	90.7	71.3
Current Smokers[a]	36.5	61.9	34.8
Frequent smokers[b]	21.1	43.7	16.1
Smokeless Tobacco[c]	15.6	22.5	11.4

[a]Used at least once in past 30 days
[b]Used 20 or more of past 30 days
[c]Chewing tobacco or snuff on at least one of past 30 days

Smoking rates are similar for boys and girls. However, boys are more likely to use smokeless tobacco (23.5% of boys and 6.7% of girls).

Tobacco Use Among Alaska Middle School Students[3]

Over half of middle school students (grades 7 and 8) report having tried smoking at least once (58.3%); 24.8% report smoking on at least one day in the previous 30 days; 5.6% report smoking on 20 or more of the previous 30 days, and 30.3% report having tried smokeless tobacco.

Health Implications

The Centers for Disease Control and Prevention estimates that 32% of youths who become regular smokers in early adulthood will die prematurely of a smoking-related death.[4] The estimate is based on data from studies of large populations of smokers and never-smokers.

Assuming that current smoking rates persist, 56,246 Alaska youths currently aged 0-17 will eventually become smokers.[4] Among these smokers, 17,999 (32%) will die prematurely from a smoking-related illness.

Interventions to Prevent Tobacco Use among Youth

The 1994 Surgeon General's Report *Preventing Tobacco Use among Young People* states "Most of the American public strongly favor policies that might prevent tobacco use among young people. The policies include tobacco education in the schools, restriction on tobacco advertising and promotions, a complete ban on smoking by anyone on school grounds, prohibition of the sale of tobacco products to minors and earmarked tax increases on tobacco products."[5]

Effects of a Tobacco Tax

Economists use the concept of "price elasticity of demand" to describe the sensitivity of consumption to changes in price. The price elasticity of demand is defined as the percentage change in consumption that results from a 1 percent increase in price. [5] A recent analysis based on sampling over 110,000 youths across the United States found a youth smoking price elasticity of -0.675, meaning that for every 1% increase in the price of cigarettes, youth smoking would decrease by 0.675%, an estimate consistent with other studies.[6] Therefore, a $1.00 increase per pack of cigarettes would prevent 5704 of the projected 17,999 smoking-related deaths (Table 2). A larger increase would save more lives; conversely, a smaller increase would save fewer lives (Figure 1).

Table 2. Summary of projected health gains due to tobacco price increases in Alaska[a]

	No change	Increase $1.00 per pack	Increase $2.00 per pack
% ↑ in price	0	46.95%	93.90%
% ↓ in youth smoking	0	31.69%	63.38%
Projected # of smokers[b]	56,246	38,422	20,597
Projected deaths[c]	17,999	12,295	6,591
Deaths prevented[d]	0	5,704	11,408

[a]Assumes an average cost of $2.13 per pack of 20 cigarettes in Alaska
[b]Number of youth currently aged 0-17 who would eventually become smokers
[c] Premature smoking-related deaths, calculated as 32% of projected smokers
[d]Premature smoking-related deaths prevented, calculated as 17999 - projected deaths

Figure 1. Number of premature smoking-related deaths prevented by price increase per pack of cigarettes[7]

Summary

The decisions that children and adolescents make about experimenting with tobacco often result in a life-long addiction. Among Alaska high school students, 21.1% are already frequent smokers. The use of tobacco begins even before high school. Alaska Native youth are

disproportionately affected by tobacco. Tobacco use may be even more prevalent among youth not in school. Studies in the U.S. and Canada have clearly shown the effectiveness of increased price in reducing youth consumption.[5] Increasing the price by at least $1.00 per pack would prevent many premature tobacco-related deaths among Alaska youth currently aged 0-17 years, as well as the illness and suffering that would precede the deaths.

References

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