been dissuaded from smoking. Smokers simply shop where the tax is lower and respect for the law takes another step backward.

(A copy of the KPMG report has been provided for review by the committee.)

THE ESTIMATED REVENUE EFFECTS OF A PROPOSED $1 PER PACKAGE INCREASE IN THE CIGARETTE TAX RATE IN ALASKA

PREPARED FOR:

THE ALASKA CABARET, HOTEL, RESTAURANT AND RETAIL ASSOCIATION

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PREFACE

Barents Group LLC of KPMG Peat Marwick LLP was asked by the Alaska Cabaret, Hotel, Restaurant and Retail Association to study a proposal by the State of Alaska Long-Range Financial Planning Commission ("the Commission") to increase the State cigarette tax by $1 per package from $0.29 to $1.29 starting in fiscal year 1996. This report, which describes our findings, has an Executive Summary, four parts, and a technical appendix. Part I is an introduction, Part II describes the methodology used to evaluate the Commission's analysis, Part III describes our results, and Part IV provides our conclusions.

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EXECUTIVE SUMMARY

Barents Group LLC of KPMG Peat Marwick LLP was asked by the Alaska Cabaret, Hotel, Restaurant and Retail Association to study a proposal by the State of Alaska Long-Range Financial Planning Commission ("the Commission") to increase the State cigarette tax by $1 per package from $0.29 to $1.29 starting in fiscal year 1996. The Commission estimates that this proposal would increase cigarette tax revenues (in constant 1996 dollars) by $42 million per year for the period 1996 to 2000 (and beyond).

KPMG Barents found several major shortcomings in the Commission's estimating procedures that lead to a substantial overstatement of the net revenue impact of the proposal. The Commission assumed an unrealistically low responsiveness of cigarette consumers to changes in the price of cigarettes. The Commission also ignored the tendency for consumer responsiveness to increase with time. Furthermore, the Commission ignored the long-run decline in per-capita cigarette consumption observed in Alaska and in the United States in general. Finally, the Commission misstates the revenue potential of a fixed, per unit tax in the context of inflation. Each of these considerations contributes to an overstatement of potential revenue gains from the tax proposal.

In summary, KPMG Barents found that the Commission overstated the revenue potential of the proposed tax by almost $10 million (29 percent) in FY 1996, and by $25 million (146 percent) in FY 2000. Consequently, the proposed tax would play a much smaller role in closing Alaska's growing fiscal gap than claimed by the Commission. The tax would also increase the bootlegging of cigarettes in Alaska, in connection with military installations, Indian reservations, or other nontaxed alternatives. Finally, as a result of declining cigarette demand, the State increase would reduce local tax collections in Anchorage, Juneau, and Fairbanks by a total of $5 million over the 5-year period.

I. INTRODUCTION

The State of Alaska Long-Range Financial Planning Commission ("the Commission") has proposed a $1 per package increase in the State cigarette tax. The reason for this tax increase is to help close a widening deficit in State finances for fiscal year 1996 (FY 1996) and beyond. The Commission estimates a deficit of $513 million for FY 1995 and forecasts a deficit of over $1.3 billion by FY 2000 without changes in current State fiscal policy.[1]

A 345 percent increase in the State cigarette tax from $0.29 to $1.29 will have a number of unintended effects in the State. These effects include: (1) continued shortfalls in state government revenues; (2) a loss in revenue to major municipal governments; (3) increased illegal activity because of the bootlegging of tax-free cigarettes from jurisdictions not covered by the state's taxing authority, military bases for example; and (4) deterioration in the distribution of income due to the regressive nature of the tax.

The Commission estimates that a $1 per package increase in the cigarette tax will raise an additional $42 million per year (in constant 1996 dollars) during the period FY 1996 through FY 2000[2]. These estimates, however, are based upon several questionable assumptions that overstate the revenue potential of the tax, and will result in the State's revenue goals not being met.

First, the Commission believes that consumers would be unlikely to materially adjust their purchasing behavior in response to significantly higher cigarette prices caused by the tax increase. In other words, the Commission assumes a "demand elasticity" much lower than reported in most peer reviewed professional journals. The scientific evidence suggests that following the proposed tax increase, cigarette sales, and, hence, tobacco tax revenues, would fall much more than the Commission believes.

Second, the Commission makes no reference to the long-run decline in smoking per capita in Alaska and nationwide. Taking this into account further lowers the revenue potential of a tax increase.

Third, the Commission ignores long-run factors specific to Alaska that are likely to further erode potential tax revenue gains. Tax-free cigarette sales at military installations are likely to rise substantially, through legitimate sales and through bootlegging, if the proposed tax increase becomes law. Even under the existing tax regime, an extraordinarily large share of cigarette sales in the State already occur through military bases.

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[1] See State of Alaska Long-Range Financial Planning Commission, 1995, p. 1. These amounts are expressed in FY 1996 dollars.

[2] See State of Alaska Long-Range Financial Planning commission, 1995, p. 3 and p. 26.

Finally, the Commission misstates the revenue potential of a fixed, per-unit tax in an inflationary environment, which also contributes to an overestimation of potential new tax revenue.

In addition to the impact on State tax collections, we also find that the proposed tax increase will directly reduce the tax collections of Anchorage, Fairbanks, and Juneau. This reduction will result from the tax-induced decline in demand for cigarettes that are subject to local taxation in these jurisdictions.

Interest in the distributional consequences of taxes has historically been a major concern in tax policy debates. The concern is particularly acute for lower-income taxpayers, for whom even relatively small dollar increases in tax burden can require disproportionately large sacrifices. The 345-percent increase in cigarette taxes will represent a much larger percentage of income for lower income residents than for wealthier residents. This will adversely affect the distribution of income within the State and make the tax system more regressive.

In summary, we find that the Commission overstates potential revenue gains of the proposed tax increase by 29 percent in FY 1996, and by FY 2000, overstates potential revenue gains by 146 percent. In addition, the decline in local tax revenues collected by Anchorage, Juneau, and Fairbanks, which the Commission does not discuss, will be approximately $1 million per year. Indeed, revenues may be even lower due to increased bootlegging. Finally, the tax increase will fall most heavily on the lower-income portion of the State's population.

II. METHODOLOGY

The central relationship in our study is the demand for cigarettes. This relationship explains how cigarette consumers react to changes in the price of a pack of cigarettes.[3] This relationship also describes the decline in smoking nationwide, in particular, and how changing consumer preferences affect demand. Finally, the demand for cigarettes is affected by inflation when fixed, per-unit taxes are not indexed to the price level, as they are not in all states.

This section briefly discusses each of these considerations. The Technical Appendix explains these factors in greater detail.

The Demand Elasticity for Cigarettes

A demand elasticity describes how responsive consumers are to a change in price. If a large percentage increase in the price of cigarettes is followed by a larger percentage decline in the consumption of cigarettes, then economists say that the demand for cigarettes is "price elastic," that is, very responsive to a price change. There have been many studies of cigarette demand, dating back to at least 1933[4]. Among these, some carry more influence than others, especially those articles that appear in peer reviewed professional journals. Among the peer reviewed articles cited in this report, the average demand elasticity is -0.619; the average long-run demand elasticity is -1.033[5]. The Commission assumes an elasticity of -0.333, which is at the very low end of the estimate range of all the peer reviewed publications.[6] By choosing a lower-bound elasticity estimate, the Commission overestimates the potential revenue gain, because a low elasticity implies that consumers purchase roughly the same quantity of a commodity, regardless of its price.

Moreover, elasticities tend to increase over time, as consumers learn to adjust to price changes. The Commission ignores this consideration entirely.

As a simple example, assume the average retail price of cigarettes is $2 per pack. A $1 per pack tax increase will raise the price by 50 percent. A price elasticity of -0.33, as assumed by the Commission, implies a 16.5 percent drop in consumption; i.e., the percent decline in demand is equal to -0.33 multiplied by the percent increase in price. On the other hand, a short-run elasticity of -0.619 implies a 31-percent drop in demand, and a long-run elasticity of -1.033 implies a 52-percent drop in demand. This drop in demand affects not only the revenues from the proposed $1 per pack tax increase, but also reduces the number of packs on which the current $0.29 tax per pack tax is collected.

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[3] This is the elasticity of demand for cigarettes. See Technical Appendix.

[4] See References.

[5] See Appendix Table A-3 for full list of elasticities.

[6] The Commission does not explicitly identify its elasticity; however, it can be inferred from their data. See Technical Appendix.

Such differences in estimating future consumption indicate that the Commission has significantly overstated potential tax collections.

Declining Cigarette Consumption

Per-capita cigarette consumption peaked in the United States in the mid-1970s, and has declined steadily since then.[7] Total cigarette consumption has declined more slowly, because the decline in per-capita consumption has been partially offset by population growth. Trends in Alaska are similar to those for the nation overall. From 1984 to 1994 in the United States, per-capita cigarette consumption declined at a compound annual rate of -2.9 percent, whereas total cigarette consumption declined more slowly at a compound annual rate of -2.1 percent. Comparable figures for Alaska are -3.4 percent and -2.2 percent. The difference between the decline in per capita consumption and total consumption is slightly greater in Alaska that in the U.S. as a whole because Alaska's population has tended to grow more rapidly. Based on this experience, we assume that, holding cigarette prices constant, the demand for cigarettes declines by 2 percent per year from 1995 through 2000.[8]

The Commission ignores this long-standing decline in cigarette consumption, which also contributes to an overstatement in the revenue potential of the proposed $1 per pack tax increase. After 5 years, the Commission's assumption leads to annual consumption and tax collections being overstated by approximately 10 percent.

Inflation and Revenue Estimates

Inflation affects the revenue potential of the proposed tobacco tax in at least two ways. First, the State cigarette tax in Alaska is a per-unit tax (currently, 29 cents per pack), and like all other states, is not indexed to inflation.[9] Therefore, holding constant the quantity of cigarette packs sold, nominal cigarette tax revenues will remain constant through time (29 cents multiplied by the number of packs sold). The real (i.e., inflation-adjusted) value of these tax revenues would fall due to the declining purchasing power of the dollar. The Commission assumes that the real value of tax revenues remains constant at $42 million per year.[10] With inflation and declining demand, this is not possible. If the annual inflation rate is estimated to be 3.4 percent, the most recent official long-run forecast by the Congressional Budget Office (CBO), the real value of a $1 per pack tax increase will have fallen to about $0.85 after 5 years.

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[7] See The Tobacco Institute, 1994, p. 3.

[8] These growth rates are calculated from data presented in The Tobacco Institute, 1994, p. 6, p. 194. Of course, assuming a higher rate of decline would reduce tax revenues even further.

[9] No state indexes its per-unit tobacco tax to inflation. See The Tobacco Institute, 1994, p. 9.

[10] See State of Alaska Long Range Planning Commission, p. 3, p. 26.

The Commission also ignores a second aspect of inflation, which tends to understate collections. The price per package of cigarettes can be broken into two parts: a nontax component and a federal plus state tax component. The nontax component is likely to rise with increases in the general price level. As indicated above, per-unit federal and State taxes are not indexed to inflation. Consequently, the inflation-adjusted price per pack will fall through time (everything else the same), due to the declining real cost of the tax burden. This effect is not considered by the Commission.

The nontax share is currently about 74 percent of the average Alaskan retail price of cigarettes, but falls to about 49 percent under the proposed tax increase.[11] The nontax portion of the retail price will tend to rise with inflation, while the tax portion is fixed. If we assume the nontax share grows with inflation at 3.4 percent annually, by the fifth year, under the proposed $1 per pack tax increase, the real price will be overstated by approximately 7 percent.[12] With lower real prices, actual demand will be somewhat higher than would otherwise be the case.

The combined effect of the Commission's assumptions and methodology is to substantially overstate anticipated tax collections under the proposed $1 per pack tax increase. The specific results of our analysis are discussed in the next section.

[11] The federal tax on each pack of cigarettes is $0.24 and the State tax is $0.29. The combined total tax rate of $0.53 is equal to about 26 percent of the retail price. If the tax share increases by $1 per pack, to $1.53, taxes will equal 51 percent of the retail price.

[12] Four years of inflation at 3.4 percent results in an upward price adjustment for the nontax share of 14.3 percent. With a 1996 retail price of approximately $3 per pack following the proposed increase, the price in 2000 would be equal to the nontax price of $1.47 increased by 14.3 percent, or $1.68, plus the federal and State tax of $1.53, for a total of $3.21. The Commission implicitly assumes the entire retail price is increased with inflation, which would result in a 2000 retail price of $3.43 per pack, or 7 percent higher.

III. RESULTS

The most relevant numbers for the State to consider in budget forecasting are current (or "nominal") dollar estimates. That is, how much money is expected to flow into the State treasury as a result of a given fiscal policy option. To be consistent with actual collections, such estimates must take into account expected price inflation. On the other hand, it can be useful to consider estimates expressed in constant dollars, provided that the calculations properly account for those factors that change with inflation (e.g., pretax cigarette prices) and those that do not (e.g., cigarette taxes expressed as a fixed amount per pack).

The Commission uses solely constant (or "real") dollars, while KPMG Barents' estimates are prepared both in current and constant dollars. To make the comparisons more meaningful, we also present the Commission's estimates in a form that adjusts for the effects of inflation. Both approaches show that the Commission's estimates are significantly overstated.

Differences in 1996 Dollars

The results of our study in real 1996 dollars are summarized below in Table 1. That is, these figures are consistent with the constant-dollar concept reported by the Commission. The table also shows the decline in local tax revenues not estimated by the Commission.

TABLE 1

ESTIMATED TAX COLLECTIONS UNDER A $1 PER PACK INCREASE
(Millions of 1996 Dollars)

	FY1996	FY1997	FY1998	FY1999	FY2000
KPMG Barents' estimate[13]	32.6	28.2	24.1	20.4	17.1
Commission's estimate	42.0	42.0	42.0	42.0	42.0
Commission's overestimate	9.4	13.8	17.9	21.6	24.9
Percentage overestimate	29%	49%	74%	106%	146%
Local revenue loss not estimated by Commission	-0.8	-0.9	-1.0	-1.1	-1.1

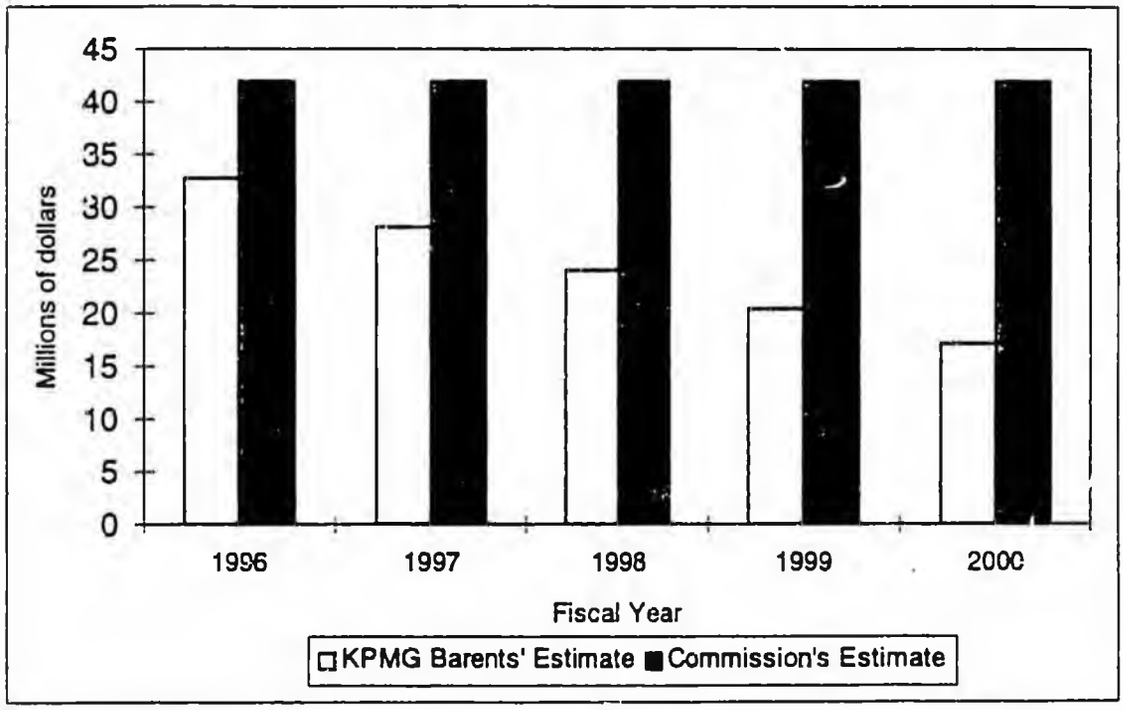
The KPMG Barents estimate expressed in real dollars shows the likely change in cigarette taxes from the $1 per pack increase in the State tobacco tax. The tax increase begins in FY 1996 with a net real revenue gain for the State of $32.6 million. This

[13] Isolated effect of a $1 per pack increase; transition from short-run elasticity to long-run elasticity is spread over 5 years. That is, the short run elasticity is used in FY 1996, the long run elasticity is used in FY 2000, and the difference between the short-run and long-run elasticities is spread ratably over the intervening years.

amount then falls consistently until FY 2000 when the real value of the net gain in tax revenue is $17.1 million. In real terms, the Commission's estimate remains constant at $42 million per year. In FY 1996, the Commission's estimates exceeds the KPMG Barents estimate by $9.4 million (29 percent over KPMG Barents); by FY 2000, the Commission's estimates exceeds the KPMG Barents estimate by $24.9 million in real terms (146 percent over KPMG Barents). Figure 1 shows these estimates graphically. Clearly, the Commission has significantly overestimated the potential revenue in each year.

FIGURE 1

COMPARISON OF KPMG BARENTS' REVENUE ESTIMATE WITH COMMISSION'S ESTIMATE (IN 1996 DOLLARS)



The differences between the Commission's estimates and the KPMG Barents estimates are shown in Table 2. The largest single difference results from the Commission's use of a very low price elasticity of demand. By FY 2000, this single factor accounts for a $17.4 million dollar gap. The historical long-run decline in demand for cigarettes is also significant and accounts for a $3.7 million shortfall by FY 2000. The last major difference is the impact of inflation on the retail price of cigarettes. Here, the Commission apparently assumes that the average retail price in 1993 dollars will remain constant in real terms over the forecast period. While the pretax price may remain constant, existing federal and State cigarette taxes are constant in nominal terms, that is,

they are not adjusted for inflation. By not including this effect, the Commission overstates collections in FY 2000 by $3.9 million.

TABLE 2

RECONCILIATION BETWEEN COMMISSION'S AND KPMG BARENTS ESTIMATES
(Millions of 1996 Dollars)

	FY1996	FY1997	FY1998	FY1999	FY2000
Commission's Estimate	42.0	42.0	42.0	42.0	42.0
Elasticity	-9.1	-11.6	-13.8	-15.7	-17.4
Decline in demand	-0.9	-1.7	-2.4	-3.1	-3.7
Inflation	0.5	-0.6	-1.7	-2.8	-3.9
KPMG Barents Estimate	32.6	28.2	24.1	20.4	17.1

Differences in Nominal Dollars

The results of our study in nominal dollars are summarized in Table 3. More detailed results can be found in the Technical Appendix.

TABLE 3

ESTIMATED TAX COLLECTIONS UNDER A $1 PER PACK INCREASE
(Millions of Current Dollars)

	FY1996	FY1997	FY1998	FY1999	FY2000
KPMG Barents estimate	32.6	29.1	25.8	22.6	19.5
Commission's estimate	42.0	43.4	44.9	46.4	48.0
Commission's overestimate	9.4	14.3	19.1	23.9	28.5
Percentage overestimate	29%	49%	74%	106%	146%
Local revenue loss not estimated by Commission	-0.8	-0.9	-1.1	-1.2	-1.3

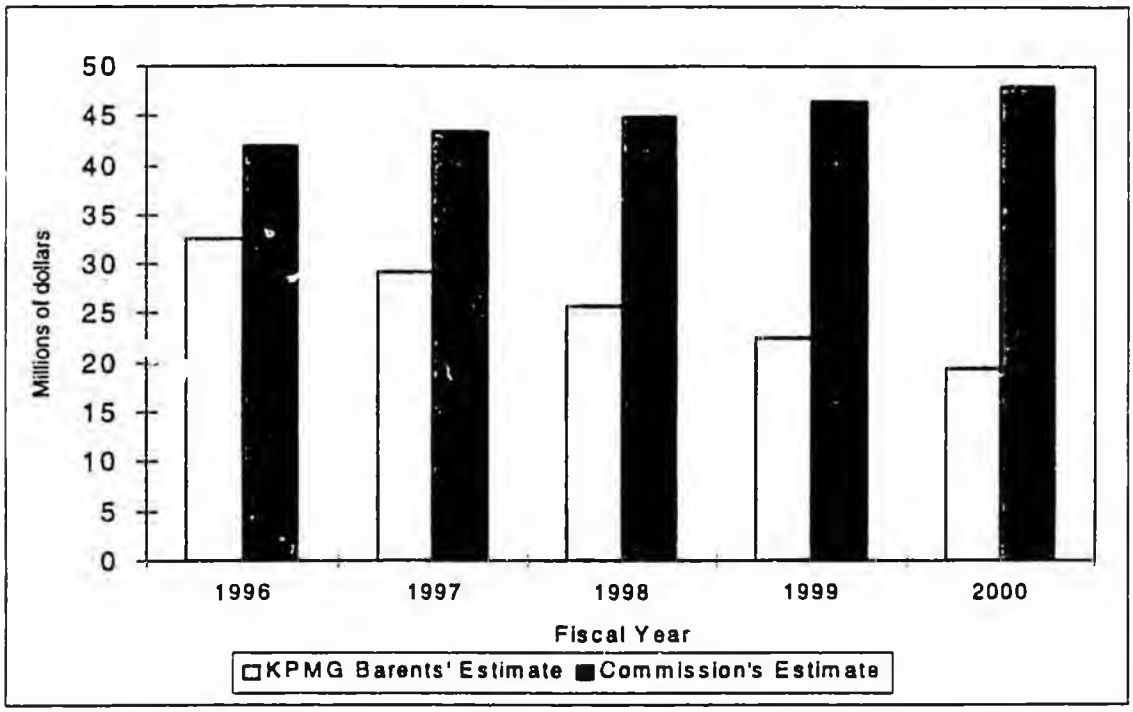
The KPMG Barents estimate shows the likely change in cigarette tax revenue from the $1 per pack increase in the State tobacco tax.[14] Table 3 shows the tax increase beginning in FY 1996, which implies a net revenue gain for the state of $32.6 million. This revenue gain decreases until by FY 2000, the nominal value of this increment in tax revenue has fallen to $19.5 million.[15] Table 3 also shows the amount and the percentage

[14] All values in the table are in nominal dollars. That is, they are not in real (i.e., inflation-adjusted) dollars.
[15] The real value in 1995 dollars of this revenue gain in FY 2000 would be considerably less than $20 million.

by which the Commission's calculations exceed the KPMG Barents estimate. In FY 1996, the Commission overestimates tax revenues by $9.4 million (29 percent over the KPMG Barents estimate); by FY 2000, the Commission exceeds the KPMG Barents forecast by $28.5 million (146 percent over the KPMG Barents estimate). Figure 2 shows both the KPMG Barents estimate and the Commission's estimate in nominal dollars.

FIGURE 2

COMPARISON OF KPMG BARENTS' REVENUE ESTIMATES WITH COMMISSION'S REVENUE ESTIMATES (ADJ. FOR INFLATION)



Appendix Tables A-1 and A-2 presents in detail the derivation of the KPMG Barents estimates. Further discussion of the methodology is provided in the Technical Appendix.

Local Tax Effects

The Commission projects that the fiscal gap in the State of Alaska will widen to $861 million (1996 dollars) by the year 2000[16]. The KPMG Barents estimate of $17.1 million (1996 dollars) represents only 2 percent of that gap. In addition, the proposed $1 tax increase will impair the revenue collection efforts of Alaska's three largest municipal governments: Anchorage, Fairbanks, and Juneau.

[16] See State of Alaska Long-Range Financial Planning Commission, 1995, p. 6.

Tables 4 and 5 show the local tax effects in 1996 and in current dollars. The annual decline in collections is approximately $1 million with about 80 percent of the impact occurring in Anchorage. In 1996 dollars, over the five-year period, Anchorage collections will decline by a total of $4 million, Fairbanks will lose about $700,000, and Juneau will lose about $300,000. Collections for these three municipal governments will decline by a total of almost $5 million dollars over the five-year period.

TABLE 4

ESTIMATED IMPACT OF $1 STATE CIGARETTE TAX INCREASE ON LOCAL TAX COLLECTIONS
(Thousands of 1996 Dollars)

City	FY1996	FY1997	FY1998	FY1999	FY2000	Total
Anchorage	-659	-735	-802	-861	-914	-3,971
Fairbanks	-115	-128	-140	-150	-159	-691
Juneau	-46	-52	-56	-61	-64	-279
Total Local Taxes	-820	-914	-998	-1,072	-1,137	-4,942

The total decline in local tax collections expressed in current dollars will be similar to the 1996 dollar figures, although somewhat higher due to the effects of inflation. The decline in collections for the three municipal governments over the five year period is $5.3 million in current dollars. Table 5 shows those figures.

TABLE 5

ESTIMATED IMPACT OF $1 STATE CIGARETTE TAX INCREASE ON LOCAL TAX COLLECTIONS
(Thousands of Current Dollars)

City	FY1996	FY1997	FY1998	FY1999	FY2000	Total
Anchorage	-659	-760	-858	-952	-1,044	-4,273
Fairbanks	-115	-132	-149	-166	-182	-744
Juneau	-46	-53	-60	-67	-73	-300
Total Local Taxes	-820	-945	-1,067	-1,185	-1,300	-5,318

Military Sales and Bootlegging

The proposed tax increase would make the combined State plus federal cigarette tax higher in Alaska than in any other state.[17] Given an average retail price of $2.01 per

[17] Michigan currently has the highest state cigarette tax rate at 75 cents per pack.

pack in Alaska, this amounts to a 50 percent increase in the price of cigarettes.[18] Consequently, consumers of cigarettes sold in Alaska would have an incentive to reduce their consumption of taxable cigarettes. Some people would do this by smoking less; others would seek nontaxable or lower-priced sources of cigarettes. There are four ways by which lower priced cigarettes may be attained: cross-border purchases, purchases on Indian reservations, purchases on military installations, and bootlegging. Although Alaska has a long border with Canada, two of its major cities (Anchorage and Fairbanks) are not in close proximity to it. Moreover, cigarette taxes in the two bordering jurisdictions (Yukon Territory and British Columbia) would remain higher than in Alaska, even with the proposed tax change. Consequently, there would be little incentive for cross-border purchases. Similarly, there is only one Indian reservation in Alaska (tribal land on Annette Island) where State and federal cigarette taxes are not levied. However, this jurisdiction is relatively small and isolated and would not be a major source of cigarettes.

Legal and illegal (bootlegged) sales involving military installations could become an even larger source of cigarettes in the State if the proposed $1 per package tax increase is enacted. Cigarette purchases at military commissaries and exchanges are exempt from federal and state taxes. Current and retired military personnel and their relatives enjoy tax-free privileges. The prices of cigarettes at military bases are, therefore, much lower, and the 345 percent proposed tax increase can be expected to increase the propensity for Alaska residents to purchase their cigarettes through alternative non-taxed means.

Although sales to nonfamily civilians are illegal, military personnel might sell bootleg cigarettes to civilians off-base. Indeed, bootlegging appears to be widespread in Alaska and elsewhere. In 1994, over 45 million cigarette packs were sold at military commissaries in Alaska.[19] During the same year, taxable unit sales at civilian outlets were 53.6 million packs. Thus, there are almost as many unit sales at Alaskan military bases as elsewhere in the State. Indeed, if complete data were available for Elmendorf -- these figures include only 5 months of Elmendorf sales -- total military base sales would likely be greater than taxable sales.[20]

One reason for the high sales volume at military installations is the relatively high ratio of military personnel-to-resident population in Alaska. In 1992, this ratio was 4.2

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[18] See The Tobacco Institute, 1994, p. 194 for the average retail price of cigarettes in Alaska.

[19] These data are from military scanning audits at four of the five major military bases in Alaska: Fort Greely in Fort Greely, Fort Richardson in Anchorage, Fort Wainwright in Fairbanks, and Eielson Air Force Base in Fairbanks. Scanning At Elmendorf Air Force Base in Anchorage did not begin until March 1995, and purchases at Elmendorf typically equal the unit sales of the other four bases combined. There are nine other military installations in Alaska, but cigarette sales at these other bases are small compared to sales at the five major bases.

[20] During the 5-month period for which Elmendorf data are available, average monthly sales at Elmendorf were 3.3 million packs. If the same average monthly sales rate were to be applied to the other 7 months, total military sales would increase by 23 million packs.

percent in Alaska, whereas the national ratio was 0.5 percent.[21] However, legal sales to military personnel and their families may constitute only a small part of the high volume of cigarette sales on military installations in Alaska. For comparison, in fiscal year 1993-94 in California, taxes were paid on 1,824 million packages; tax-exempt sales on military bases were only 79 million packages.[22] Unlike most states, approximately half the entire civilian population in Alaska lives within an easy commute of a military installation.[23] Alaska has fourteen military installations with 24,559 active military personnel, 32,189 dependents, and 7,393 civilian employees. Eight of these installations are within 30 miles of a population center. More complete details can be found in Table A-4 in the Appendix.

Currently the 56,748 residents of Alaskan military bases purchase an average of 793 non-taxed packs of cigarettes per year. This compares with only 96 taxable packs per year purchased from local businesses by the States 556,000[24] non-military residents. Average per capita consumption in Alaska is 161 packs per year[25]. This implies that residents of Alaskan military bases would be expected to smoke a total of 9.1 million packs of cigarettes a year, and that the remaining 35.9 million packs purchased on military bases are finding their way to the local population. If these 35.9 million packs were purchased legally and, therefore, taxed, the State would raise an additional $10.4 million in tax revenues each year at the current $0.29 rate. In addition to the $10.4 million of lost State revenue, the municipal governments of Anchorage, Fairbanks, and Juneau are also, in effect, losing revenue. With the proposed tax increase, more cigarette purchases are likely to occur through bootlegging, causing the State and local governments to lose even more revenues.

Although it is not possible to estimate exactly the current level of this illegal activity nor to estimate exactly the increase in bootlegging that would occur as a result of this tax increase, experience in other states indicates that cigarette sales on military bases surge after large increases in cigarette excise taxes.

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[21] For comparison, the ratio was 0.6 percent in California, 0.3 percent in Illinois, and 0.1 percent in New York in 1992. See Statistical Abstract of the United States: 1992, p. 22, p. 338.

[22] See California State Board of Equalization, Table 30B.

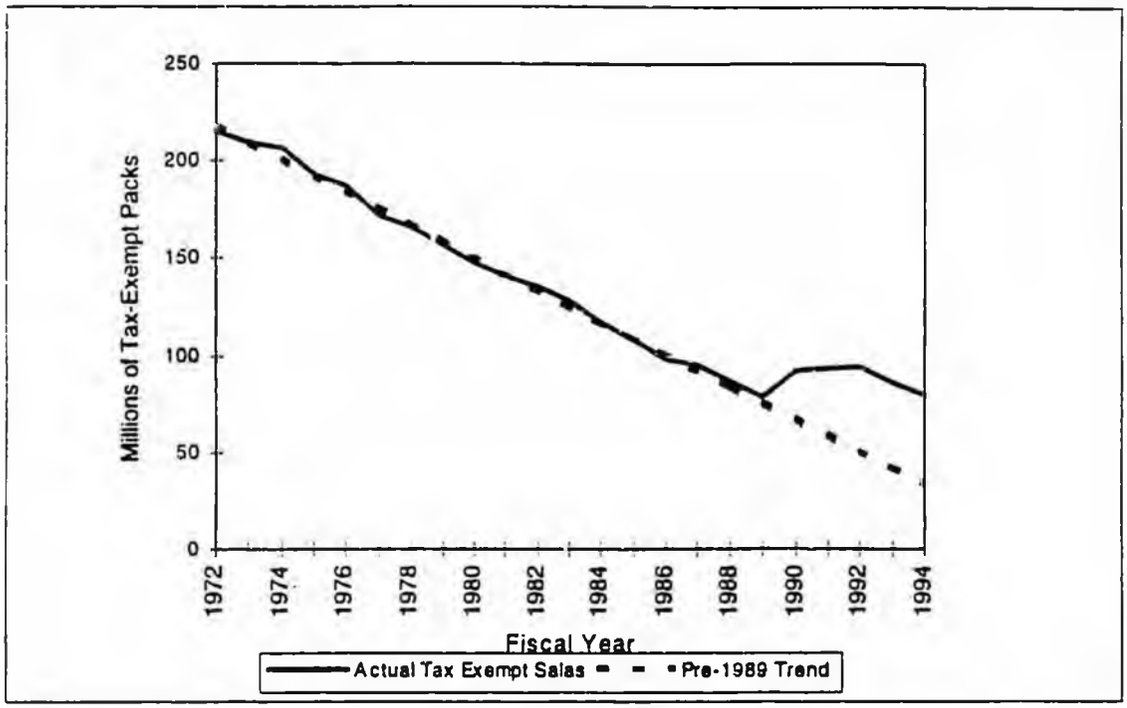
[23] Approximately half of the resident population of Alaska is concentrated in Anchorage, Juneau, and Fairbanks and can easily travel to a military base.

[24] WEFA Group estimate of population for 1995 (612,600) minus military.

[25] Total cigarette consumption in Alaska (53.6 million plus 45 million) divided by total population of 612,600.

FIGURE 3

TAX-EXEMPT CIGARETTE SALES IN CALIFORNIA, 1972-1994[26]



In 1989, California more than tripled its cigarette tax from 10 cents to 35 cents per pack, which was the first increase in the State cigarette tax in 22 years. Cigarette sales on military bases in the State jumped 18 percent that year.[27] This increase can be clearly seen in Figure 3. Also notable in Figure 3 is the deviation of actual tax-exempt cigarette sales from the pre-1989 trend. Had the excise tax on cigarettes not been increased in California, it is likely that tax-exempt cigarette sales would have continued to fall, as shown by the trend line.

Even more dramatic was the surge in sales on the two major bases in Michigan following the tripling of Michigan's cigarette tax rate from 25 cents per pack to 75 cents on May 1, 1994. Comparing the period October through April following the tax increase to the same seven-month period immediately before the tax increase, tax-exempt unit sales surged 53 percent on these two bases (Selfridge and K. I. Sawyer).

Bootlegging, of course, is not limited to military installations. In the face of cigarette taxes that grew to roughly five times those in the United States, cigarettes

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[26] Source: Annual Report of the Excise Taxes Division of the California State Board of Equalization. "Table 30-B - Cigarette Distributions and Per Capita Consumption 1959-60 and 1993-94," 1995.

[27] See California Department of Revenue, Table 30B. Tax-exempt sales increased from 78 million packs to 92 million packs from 1989 to 1990. This was very unusual, since tax-exempt sales had declined each year since 1972.

smuggled into Canada soared from 1986 to 1994. In one report in 1993, it was estimated that 50 percent of the cigarette volume in the province of Quebec was smuggled.[28]

Due to its clandestine nature, it is extremely difficult to measure the responsiveness of illicit trade to a large percentage increase in a State's cigarette tax rate. Nonetheless, there is strong evidence that a 50 percent increase in cigarette prices in Alaska would further drive sales underground, and that the most likely channel for these transactions would involve bootlegging from military installations. Since Alaska is more prone to this activity than most states, it is likely that the elasticity assumptions used in Table 1 (-0.619 short run; -1.033 long run) are too small. Increasing these elasticities would further reduce the expected net increases in tax revenue from the proposed $1 per pack tax.

The Regressive Nature of Excise Taxes

In addition to not raising the desired revenues, tobacco excise taxes are regressive in nature. The burden of the Commission's proposed $1 tax increase will fall disproportionately on those least able to pay it.

One way to measure the regressivity of a tax system is to look at the relative tax paid by each income group. The burden of a regressive tax will fall more heavily on those with lower income than on those with higher income. That is, under a regressive tax regime, those with low income will pay a higher percentage of their income on taxes than those with higher incomes. A progressive tax regime has the opposite effect; high income groups pay a larger percentage of their income than a lower income group.

Consider an Alaska resident who smokes one pack of cigarettes per day. That smoker currently pays $105.85 in excise taxes per year[29]. Under the proposed tax increase, that smoker will pay $470.85 in excise taxes per year - an increase of $365. This increases will affect those with lower incomes disproportionately. Figure 4 represents this graphically. Clearly, as income increases, the percentage of income spent on these excise taxes approaches zero. The average real personal income in Alaska is $24,650[30]. Thus, on average, the excise tax of $470.85 per year represents almost 2 percent of real personal income.

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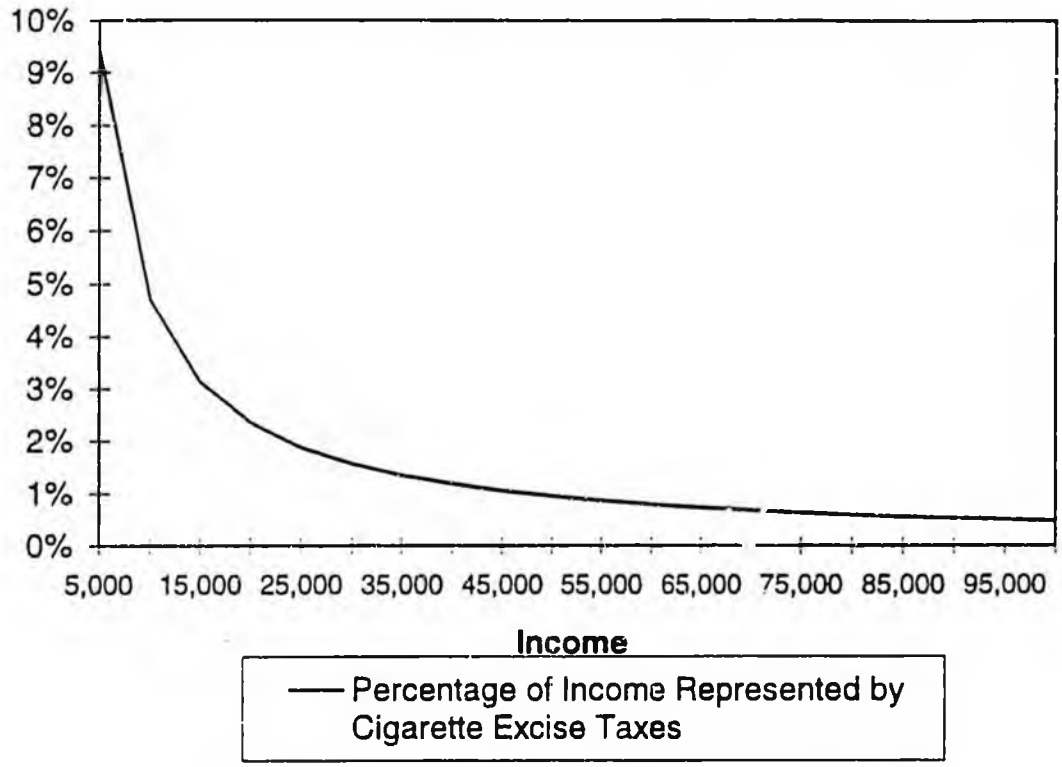
[28] See Wall Street Journal, December 8, 1993, and Linquist, Avey, Macdonald, and Baskerville, 1994.

[29] 365 days x $0.29 current taxes = $105.85.

[30] $15.1 billion of total real personal income divided by total population of 612.600 from the WEFA Group, *Regional Forecast Fall 1995*, p. 11.12.

FIGURE 4

PERCENTAGE OF INCOME SPENT ON CIGARETTE EXCISE TAXES BY A 1-PACK PER DAY SMOKER FOLLOWING THE PROPOSED $1 TAX INCREASE



IV. CONCLUSION

This report shows that the State of Alaska Long-Range Financial Planning Commission considerably overstates the revenue potential of the proposed $1 per package increase in the State cigarette tax. This is because the Commission assumes an unrealistically low demand elasticity for cigarettes. The Commission also ignores the secular decline in cigarette consumption and the tendency for demand elasticities to increase over time. Elasticities are likely to be relatively large (larger than we assume in this report) due to the high accessibility of military bases to the civilian population in Alaska. The Commission also confuses nominal tax revenues from a per-unit tax with inflation-adjusted tax revenues.

We find that the Commission overstates potential tax revenues from the proposed tax increase by almost $10 million (29 percent) in FY 1996, and that this overestimate grows to $25 million (146 percent) by FY 2000. Consequently, the proposed tax increase would have a much smaller impact on Alaska's fiscal gap than claimed by the Commission. In addition to having a much smaller impact on the deficit, the proposed tax is likely to increase the illicit trade in cigarettes. By decreasing taxable unit sales in Alaska, the proposal will adversely affect the tax bases of local jurisdictions (Anchorage, Fairbanks, and Juneau) that tax cigarette sales. Over the five year period, these local taxes will decline by approximately $5 million. Finally, due to the regressive nature of tobacco taxes, the proposed increase will adversely affect those State residents least able to afford it.

TECHNICAL APPENDIX

In order to estimate the change in tax revenue caused by an increase in excise taxes, it is necessary to understand how that increase in excise taxes will affect consumer behavior. Excise taxes are typically shifted forward to the consumer in the form of a price increase, and consumers will react to that increase in price according to their price elasticity of demand for that product. The concept of price elasticity of demand is central to this analysis.

In addition to discussing elasticity of demand, this appendix also discusses the scenarios considered in arriving at the KPMG Barents revenue estimate, the constant and current dollar estimates, a summary of elasticities of demand from various journals, and provides more detailed information on the military bases in Alaska.

1. Elasticity of Demand (E_d)

The elasticity of demand (E_d) is defined as the percentage change in quantity demanded caused by a one-percent change in the consumer price of a commodity. For example, if a one-percent change in the price of a package of cigarettes causes a 0.8 percent decline in the quantity of cigarettes demanded, then the elasticity of demand for cigarettes is -0.8. By definition

$$\Delta Q = E_d[(P+\Delta P)/P - 1]Q$$

In 1993/94 in Alaska P = \$2.009/pack, Q = 52.8 million packs sold, and ΔP (the proposed tax increase) = \$1. Gross cigarette tax revenues were \$15.321 million, and the Commission claimed that with the tax, gross tax revenues would be \$57 million. Therefore

$$.29\ Q_0 = \$15.321 \text{ million}$$

$$1.29\ Q_1 = \$57 \text{ million, and}$$

$$Q_0 = 15.321/.29$$

$$Q_1 = 57/1.29$$

Solving for $Q_1 - Q_0 = -8.6$ million packages. Thus, $E_d = -.33$.

Instead of using only the price elasticity of demand used by the Commission, KPMG Barents uses more appropriate elasticities of demand for both the long-run and the short-run. The elasticities chosen are based on elasticities reported in studies of cigarette demand in professional, peer reviewed journals.

2. Scenarios of Appendix Tables A-1 and A-2

Scenario (1), the KPMG Barents estimate, shows the transition from the short run to the long run, after price changes caused by inflation have been removed and changing consumer preferences are recognized. We assume that the transition from the short run to the long run occurs over five years, so that by FY 2000 the revenue impact is identical to that in long-run Scenario (2c). Similarly, the initial revenue impact in FY 1996 in the KPMG Barents estimates is assumed to equal the FY 1996 revenue value for short-run Scenario (3c).

Scenarios (2a), (2b), and (2c) derive the long-run net new revenues generated from a $1 per pack increase in the State cigarette tax. For each year, we assume that the long-run demand elasticity of -1.033 applies to the change in cigarette prices. Scenario (2a) shows the long-run revenue impact of the $1 proposed tax increase. (2b) shows the tax revenue impact of changes in demand without the tax increase. Scenarios (3a), (3b), and (3c) perform the same analysis using a short-run demand elasticity of -0.619.

Scenarios (4a) through (4d) represent models similar to those used by the Commission and use a price elasticity of -0.333. The overestimates caused by the Commission's misspecifications are found by subtracting the KPMG Barents estimate (Scenario 1) from Commission Scenario (4d). The amount of overestimation is also indicated in the table as Scenario (5).

3. Appendix Table A-1: Estimates in constant dollars

The Commission's revenue estimate of $42 million of increased tax revenue per year is computed in constant, Fiscal Year 1996 dollars. By definition, therefore, the Commission does not account for inflation. Appendix Table A-1 follows the same methodology and presents the results in constant, 1996 dollars. KPMG Barents, however, starts with revenue estimates in current, inflation adjusted dollars, and deflates those values using the Congressional Budget Office's (CBO) inflation forecasts[31] to arrive at constant dollar figures.

4. Appendix Table A-2: Estimates in current dollars

We use the Congressional Budget Office ("CBO") inflation forecast to increase the nontax component of the price of a pack of cigarettes. The tax component (federal cigarette tax plus State cigarette tax) is fixed, and is added to the nontax component to give the nominal cigarette price each year. This is the inflation adjusted price of a pack of cigarettes. KPMG Barents uses this inflation-adjusted price in estimating the change in quantity of cigarettes demanded, and the effect of inflation is carried through all the calculations.

[31] For CBO's inflation forecasts, An Analysis of the President's Budgetary Proposals for Fiscal Year 1996, April 1995.

5. Appendix Table A-3

Table A-3 is a summary of cigarette price elasticities dating from 1933 to the present. The studies reflect a variety of methodologies, but all are studies of the demand for cigarettes. KPMG Barents chose to use averages of those elasticities cited in the peer reviewed journal articles for this study.

6. Appendix Table A-4

Table A-4 is a summary of information from the Directory of U.S. Military Bases Worldwide edited by William R. Evinger in 1995. It clearly illustrates the proximity of many Alaskan military bases to the large population centers.

REFERENCES

Summary of Studies of Cigarette Price Elasticities of Demand (arranged in chronological order)

Schoenberg, E.H. "The Demand Curve for Cigarettes," Journal of Business, 6 (January, 1933): 15-35.

Stone, Richard. "The Analysis of Market Demand," Journal of the Royal Statistical Society, 108 (1945): 286-391.

U.S. Treasury Department, Division of Tax Research. Federal Excise Taxes on Tobacco, Washington, D.C., (1948).

Rockwell, George, Jr. in Karl A. Fox. "The Analysis of Demand for Farm Products," U.S. Department of Agriculture Technical Bulletin No. 1081, Washington, D.C.: Government Printing Office, (1948): 69.

Tenmant, Robert B. The American Cigarette Industry. New Haven: Yale University Press, (1950).

Federal Reserve Bank of Richmond, Research Department. "Flue-Cured Tobacco, An Economic Survey," Richmond, Virginia: Federal Reserve Board of Richmond, (1952).

Maier, Frank H. "Consumer Demand for Cigarettes Estimated from State Data," Journal of Farm Economics, 37 (November, 1955): 690-704.

Sackrin, Seymour M. "Factors Affecting the Demand for Cigarettes," Agricultural Economics Research, 14 (January, 1962): 81-88.

Koutsoyannis, A. P. "Demand Functions for Tobacco," The Manchester School of Economic and Social Studies 31 (1963), pp. 19-28.

Vernon, John M., N.W. Rives, and T.H. Naylor. "Econometric Model of the Tobacco Industry," Review of Economics and Statistics, 2 (1969): 149-158.

Houthtakker, H. and Lester D. Taylor. Consumer Demand in the United States (2nd Edition). Cambridge: Harvard University Press, (1970).

Miller, Robert H. "The Demand for Cigarettes in the United States," (unpublished mimeograph), 23rd National Tobacco Workers Conference, Economics Section, College Park, Maryland, (1970).

Laughunn, D. J. and H.L. Lyon. "The Feasibility of Tax Induced Price Increases as a Deterrent to Cigarette Consumption," Journal of Business Administration, 3 (1971): 27-35.

Mann, Charles K. "Taste, Technology, and the Government. The Case of Tobacco," (doctoral dissertation), Cambridge, Harvard University, Department of Economics, (February, 1971).

Hamilton, James L. "The Demand for Cigarettes: Advertising, the Health Scare, and the Cigarette Advertising Ban," Review of Economics and Statistics, 54 (November, 1972): 401-411.

Schmalensee, R. The Economics of Advertising. Amsterdam: North Holland, (1972).

Schnabel, M. "An Oligopoly Model of the Cigarette Industry," Southern Economic Journal 38(1972): 325-335.

Sutton, Russell W. "An Econometric Analysis of the Structure of the U.S. Tobacco Industry," (doctoral dissertation), University of Kentucky, (September, 1974).

Warner, Kenneth E. "The Effects of the Anti-Smoking Campaign on Cigarette Consumption," American Journal of Public Health, (1977): 645-650.

Ippolito, Richard A., Dennis R. Murphy, and Donald Sant. Staff Report on Consumer Responses to Cigarette Health Information, Federal Trade Commission, (1979).

Lewit, Eugene M. and Douglas Coate. "The Potential for Using Excise Taxes to Reduce Smoking," (paper presented at the annual meeting of Allied Social Science Associations), Denver, Colorado, (September, 1980).

Fujii, Edwin T. "The Demand for Cigarettes: Further Empirical Evidence and Its Implications for Public Policy," Applied Economics, 12 (December, 1980): 479-489.

Schneider, L., B. Klein, and K. Murphy. "Governmental Regulation of Cigarette Health Information," Journal of Law and Economics, 24 (1981): 575-612.

Young, Trevor. "The Demand for Cigarettes: Alternative Specifications of Fujii's Model," Applied Economics, 15 (April, 1983): 203-211.

Sumner, D.A. and J. Alston. "Effects of the Tobacco Program: An Analysis of Deregulation," American Institute Occasional Paper no. 1-71.

Sullivan, D. "Testing Hypotheses about Firm Behavior in the Cigarette Industry," Journal of Political Economy, 93 (1985): 586-598.

Baltagi, B.H. and Dan Levin. "Estimating Dynamic Demand for Cigarettes Using Panel Data: The Effects of Bootlegging, Taxation, and Advertising Reconsidered," Review of Economics and Statistics (1986): 48-55.

Porter, R. H. "The Impact of Government Policy on the U.S. Cigarette Industry," in Pauline M. Ippolito and David T. Scheffman. Empirical Approaches to Consumer Protection Economics. Washington, D.C.: Federal Trade Commission, (1986).

Baltagi, B.H. and R.K. Goel. "Quasi-Experimental Price Elasiticities of Cigarette Demand and the Bootlegging Effect," American Journal of Agricultural Economics 69(1987): 750-754.

Kao, K. and V. J. Tremblay. "Cigarette 'Health Scare,' Excise Taxes, Advertising Ban: Comment," Southern Economic Journal, 54 (1988): 770-776.

Russo, G. "An Empirical Analysis of Cigarette and Physician Demand," University of Hawaii, Working Paper, (1989).

Chaloupka, F. "Rational Addictive Behavior and Cigarette Smoking," Journal of Political Economy 99 (1991): 722-42.

Wasserman, J., W.G. Manning, J.P. Newhouse, and J.D. Winkler. "The Effects of Excise Taxes and Regulations on Cigarette Smoking," Journal of Health Economics 10 (1991): 43-64.

Keeler, Theodore E., Teh-Wei Hu, Paul G. Barnett, and Willard G. Manning. "Taxation, Regulation, and Addiction: A Demand Function for Cigarettes Based on Time Series Evidence." Journal of Health Economics (1993): 1-18.

Becker, Gary S., Michael Grossman, and Kevin M. Murphy. "An Empirical Analysis of Cigarette Addiction," The American Economic Review 84 (1994): 396-418.

Franke, George R. "U.S. Cigarette Demand, 1961-1990: Econometric Issues, Evidence, and Implications," Journal of Business Research 30 (1994): 33-41.

Reekie, W. Duncan. "Consumers' Surplus and the Demand for Cigarettes," Managerial and Decision Economics 15 (1994): 223-234.

Townsend, Joy, Paul Roderick, and Jacqueline Cooper. "Cigarette Smoking by Socioeconomic Group, Sex, and Age: Effects of Price, Income, and Health Publicity," British Medical Journal 309 (1994): 923-935.

Saba, Richard P., Randolph T. Beard, Robert B. Ekelund, and Rand W. Ressler. "The Demand for Cigarette Smuggling," Economic Inquiry 33 (1995): 189-202.

Tremblay, Carol Horton, and Victor J. Tremblay. "The Impact of Cigarette Advertising on Consumer Surplus, Profit, and Social Welfare," Contemporary Economic Policy 13 (1995): 113-124.

Other References

Alaska's Growing Fiscal Gap: The Preliminary report of the State of Alaska Long-Range Financial Planning Committee. State of Alaska Long-Range Planning Committee: August 12, 1995.

Annual Report of the Excise Taxes Division of the California Board of Equalization. "Table 30-B - Cigarette Distributions and Per Capita Consumption 1959-60 to 1993-94," 1995.

Annual U.S. Economic Data: 1975-1994. St. Louis: The Federal Reserve of St. Louis, May 1995.

Evinger, William R., ed. Directory of U.S. Military Bases Worldwide. Phoenix: Oryx Press, 1995.

Lindquist, Avey, Macdonald and Baskerville. Cigarette Smuggling in the United States. August 1994.

Military Audits Scanning Data for Alaska and Michigan. Philip Morris, USA: Sept. 1993-Aug. 1995.

Sumner, Daniel A. "Measurement of Monopoly Behavior: An Application to the Cigarette Industry." Journal of Political Economy, 89 (1981): 1010-1019.

Tamburri, Rosanna. "Canada May Cut Its Tobacco Taxes to Curb Smuggling," Wall Street Journal, December 8, 1993.

The Tax Burden on Tobacco. Washington, D.C.: The Tobacco Institute, (1994).

Viscusi, W. Kip. Smoking: Making the Risky Decision. New York: Oxford University Press, (1992).

United States Congressional Budget Office. An Analysis of the President's Budgetary Proposals for Fiscal Year 1996, April 1995.

APPENDIX TABLE A-1
DERIVATION OF KPMG BARENTS REVENUE ESTIMATES
(in millions of 1996 dollars)

	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000
1. KPMG Barents' estimate	0.00	32.62	28.16	24.10	20.40	17.05
Assumed short-run to long-run elasticity phase-in rate			0.25	0.50	0.75	1.00
2a. $1 state tax increase; E=-1.033	15.54	34.67	33.41	32.20	31.01	29.87
2b. No state tax increase; E=-1.033	15.54	15.36	14.68	14.03	13.41	12.81
2c. #1a minus #1b (netting out long-run price effects)	0.00	19.31	18.73	18.16	17.60	17.05
3a. $1 state tax increase; E=-.619	15.54	47.93	45.89	43.93	42.04	40.23
3b. No state tax increase; E=-.619	15.54	15.31	14.58	13.89	13.23	12.60
3c. #2a minus #2b (netting out short-run price effects)	0.00	32.62	31.30	30.03	28.81	27.63
4a. $1 state tax increase; E=-.333	15.54	57.09	54.41	51.84	49.39	47.06
4b. No state tax increase; E=-.333	15.54	15.27	14.52	13.80	13.11	12.46
4c. State of Alaska's revenue impact estimate: (properly deflated)	0.00	41.82	39.89	38.05	36.28	34.60
Overestimate (compared to baseline, #1):	0.00	9.20	11.73	13.95	15.88	17.55
4d. Commission's estimate	0.00	42.00	42.00	42.00	42.00	42.00
Overestimate (compared to baseline, #1):	0.00	9.38	13.84	17.90	21.60	24.95
Percentage overestimate:		28.7%	49.1%	74.3%	105.8%	146.3%

APPENDIX TABLE A-2
DERIVATION OF KPMG BARENTS REVENUE ESTIMATES
(in millions of current dollars)

	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000
1. KPMG Barents' estimate	0.00	32.62	29.12	25.76	22.56	19.50
Assumed short-run to long-run elasticity phase-in rate			0.25	0.50	0.75	1.00
2a. $1 state tax increase; E=-1.033	15.54	34.67	34.55	34.42	34.29	34.14
2b. No state tax increase; E=-1.033	15.54	15.36	15.18	15.00	14.83	14.65
2c. #1a minus #1b (netting out long-run price effects)	0.00	19.31	19.37	19.42	19.46	19.50
3a. $1 state tax increase; E=-.619	15.54	47.93	47.45	46.96	46.48	45.99
3b. No state tax increase; E=-.619	15.54	15.31	15.08	14.85	14.63	14.41
3c. #2a minus #2b (netting out short-run price effects)	0.00	32.62	32.37	32.11	31.85	31.58
4a. $1 state tax increase; E=-.333	15.54	57.09	56.26	55.43	54.61	53.79
4b. No state tax increase; E=-.333	15.54	15.27	15.01	14.75	14.49	14.24
4c. State of Alaska's revenue impact estimate: (properly deflated)	0.00	41.82	41.25	40.68	40.11	39.55
Overestimate (compared to baseline, #1):	0.00	9.20	12.13	14.91	17.56	20.06
4d. Commission's estimate	0.00	42.00	43.43	44.90	46.43	48.01
Overestimate (compared to baseline, #1):	0.0	9.4	14.3	19.1	23.9	28.5
Percentage overestimate:		28.7%	49.1%	74.3%	105.8%	146.3%

APPENDIX TABLE A-3
SUMMARY OF STUDIES OF CIGARETTE PRICE ELASTICITIES OF DEMAND

Author	Year	Type of analysis	Time Period	Price Elasticity
Schoenberg	1933	Time-series Ordinary least squares	1923-1931	-0.25 and -0.68
Stone	1945	Time-series Ordinary least squares	1929-1941	-0.39
U.S. Treasury Dept.	1948	Time-series	1929-1943	-0.01
Rockwell	1948	Time-series	1927-1941	-0.03
Temnant	1950	Time-series Ordinary least squares	1913-1945	inelastic
Federal Reserve Bank of Richmond	1952	Time-series	1929-1948	-0.66
Maier	1955	Cross-section Each year estimated separately	1947-1951	-0.31 to -1.48
Sackrin	1962	Time-series	1926-1958	-0.3 to -0.4
Koutsoyannis	1963	Time-series Aggregate tobacco consumption international results	1950-1959	-0.036 to -0.951
Vernon, et al.	1967	Time-series 19 equation econometric model of the tobacco industry	1949-1966	-0.43

Author	Year	Type of analysis	Time Period	Price Elasticity
Houthtakker and Taylor	1970	Cross-section	1964-1967	-0.54
		Three-pass least squares		
Miller	1970	Time-series	1949-1968	-0.89
Laughunn and Lyon	1971	pooled	1950-1968	-0.81
		Bayesian regression		
Mann	1971	Time-series	1949-1969	-0.84
Hamilton	1972	Cross-section	1954-1965	-0.51
		Ordinary least squares		
Schmalensee	1972	Time-series	1947-1967	-0.32 (short-run)
		Ordinary least squares		-1.1 (long-run)
Schnabel	1972	Time-series	1949-1963	-0.85
		Ordinary least squares		
Sutton	1974	Time-series	1950-1972	-0.45
Warner	1977	Time-series	1947-1970	-0.511
Ippolito, Dennis and Sant	1979	Time-series	1925-1925	-0.81
		Cochrane-Orcutt procedure		
Lewit and Coate	1980	Cross-section	1976	-0.4
		Ordinary least squares		
Fujii	1980	Time-series	1929-1973	-0.48
		Ridge regression		

Author	Year	Type of analysis	Time Period	Price Elasticity
Schneider, Klein and Murphy	1981	Time-series	1930-1978	-1.2
Young	1983	Time-series	1929-1973	-0.33 to -0.34
		Ridge regression		
Sumner and Alston	1984	Time-series	1946-1983	-0.29
		Generalized least squares		
Sullivan	1985	Panel	1955-1982	-0.66
		Generalized least squares		
Baltagi and Levin	1986	Panel	1963-1980	-0.215
		Hausman-Taylor estimation		
Porter	1986	Time-series	1947-1982	-0.05 to -0.29
		Two stage least squares		
Baltagi and Goel	1987	Time-series	1956-1983	-0.114 to -0.917
		Quasi-experimental method		
Kao and Tremblay	1988	Time-series	1953-1980	-0.50 to -1.0
		Two stage least squares		
Russo	1989	Cross-section	1980	-0.57
		Tobit maximum likelihood		
Chaloupka	1991	Time-series	1976-1980	-0.37 to -0.27
		Two stage least squares		

Author	Year	Type of analysis	Time Period	Price Elasticity
Wasserman et al.	1991	Time-series Generalized liner model	1975-1985	-0.283 to 0.059
Keeler, Hu and Barnett	1991	Time-series Full information maximum likelihood with instrumental variables	Jan. 1980 - Jan. 1990	-0.35 (pretax) -0.65 (posttax)
Becker, Grossman, and Murphy	1994	Time-series of state Cross-sections Two-stage least squares	1955-1985	-0.734 to -0.788 (Long-Run) -0.355 to -0.436 (Short-Run)
Franke	1994	Time-series Logarithmic ordinary least squares and two stage least squares	1961-1990	-0.368 to -0.547
Reekie	1994	Time-series Logarithmic and linear ordinary least squares	1970-1989	-0.877
Townsend, Roderick, and Cooper	1994	Time-series Multiple regression analysis	1972-1990	-0.5 (men) -0.6 (women)
Saba, Beard, Ekelund, and Ressler	1995	Time-series for Cross-section of states Nonlinear least squares estimation	1960-1986	-1.30

APPENDIX TABLE A-4
ACTIVE MILITARY BASES IN ALASKA

Name of Base	*Location*	*Active Duty Personnel*	*Dependents*	*Civilian Personnel*
Adak Naval Air Station	On Adak Island in Andreanof Islands of Aleutian Chain; approximately 1220 miles from Anchorage.	650	200	230
Adak Naval Security Group Activity	On Adak Island in Andreanof Islands, approximately 1200 air miles South West of Anchorage.	600	450	25
Elmendorf Air Force Base	North side of Anchorage city limits.	7,000	13,000	2,400
Kulis Air National Guard Base	At Anchorage IAP off Raspberry Road, approximately 5 miles from downtown.	1,200		245
Eareckson Air Force Base	Remote Air Force Base, 1500 miles South West of Anchorage at westernmost tip of the Aleutian Islands.	550		25
Eielson Air Force Base	26 miles South East of Fairbanks on Richardson Highway.	2,786	4,439	1,498
Fort Greely	105 miles South of Fairbanks on Richardson Highway.	500	300	100
Fort Richardson	Approximately 8 miles North of Anchorage on Glenn Highway.	4,400	5,600	1,570
Fort Wainwright	Approximately 0.25 miles from Downtown Fairbanks	5,000	6,700	1,150
17th Coast Guard District Headquarters	In Federal Building in downtown Juneau	233		36
Ketchikan Coast Guard Base/Group	In South East Alaska, 1 mile South of Ketchikan on Revillagigedo Island; not accessible by road.	250		25
King Salmon Airport	727 miles just West of Aleutian range approximately 280 miles South West of Anchorage; 0.5 miles from Town of King Salmon. Not Accessible by ground transportation.	290		17
Kodiak Coast Guard Support Center	North East corner of Kodiak Island, 7 miles South of Kodiak.	1,100	1,500	62
Tatalina Air Force Station	Approximately 230 air miles North West of Anchorage; 150 miles West of Mt. McKinley.			10
Total		24,559	32,189	7,393

Note: Anchorage Naval Reserve Center with no reported personnel has been excluded from this table.
Source: Evinger, William R., ed. Directory of U.S. Military Bases Worldwide, Phoenix: Oryx Press, 1995.

DETROIT NEWS & FREE PRESS - DETROIT, MI - 10/28/95

Cigarette smuggling getting worse, cop says

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BY MATTHEW G. DAVIS
Free Press Staff Writer

Cigarette smuggling in Michigan is so rampant, said Dearborn Police Chief Ron Deziel, that his narcotics investigators spend more time tracking down illegal cigarettes than illegal drugs.

"We literally cannot keep up with the constant flow of tips on cigarette smuggling," Deziel said, "let alone initiation of meaningful investigations targeted at organized-crime smuggling."

Deziel made his comments before a state Senate subcommittee, which met Friday in Dearborn City Council chambers to hear testimony on how the Legislature can curb cigarette smuggling. About three dozen people attended.

The smuggling problem, which started when the state tripled its cigarette tax to 75 cents in March 1994, extends far beyond Dearborn.

In fact, Michigan is the biggest market in the country for contraband cigarettes, said Larry Ford, supervisor in the federal Bureau of Alcohol, Tobacco and Firearms. Ford said three additional BATF field offices outside Michigan have been called in to investigate smuggling.

Several law enforcement officials on Friday recommended requiring cigarette manufacturers to stamp each pack. That would make it easier for police to detect illegal cigarettes, particularly at convenience stores.

"A stamp would definitely help in enforcement," Ford said. "We have a lot of mom and pop stores trading in contraband cigarettes."

Critics of the stamp, though, said it would not be a remedy.

"It will change the course of smuggling," said Rod Stamler, a former deputy commissioner of the Royal Canadian Mounted Police.

TAX RATES

The highest and lowest taxes per pack:

HIGHEST
1. Washington — 81.5 cents
2. Michigan — 75 cents
3. Washington, D.C. — 65 cents
4. Hawaii — 60 cents
5. New York — 56 cents
5. Rhode Island — 56 cents
7. Massachusetts — 51 cents
8. Connecticut — 50 cents
9. Minnesota — 48 cents
10. North Dakota — 44 cents

LOWEST
1. Virginia — 2.5 cents
2. Kentucky — 3 cents
3. North Carolina — 5 cents
4. South Carolina — 7 cents
5. Georgia — 12 cents
5. Wyoming — 12 cents
7. Tennessee — 13 cents
8. Indiana — 15.5 cents
9. Alabama — 16.5 cents
10. Missouri, West Virginia — 17 cents

Stamler, who recently conducted a study on interstate smuggling, said a stamp only would force the lucrative trade into the hands of more sophisticated smugglers — and organized crime — that have the resources to counterfeit stamps.

Nonetheless, state Sen. Doug Carl, R-Mt. Clemens, chairman of the subcommittee, said he expects to introduce a bill by the end of the year requiring stamps on cigarettes packs.

Carl said the alternative to curbing the smuggling, lowering the tax, is not politically feasible.

Times Herald, Port Huron, MI - 12/12/94

By TOM PIDGEON, The Associated Press

Jim Garmo's Galaxy food store in Ypsilanti has been burglarized nine times since May. The thieves ignored the cash register and cleaned out the store's stock of cigarettes.

Cigarette tax take goes up in smoke

Sales plunge following 50-cent boost

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By JUAN B. ELIZONDO Jr.
The Associated Press

LANSING — Burglars have hit Jim Garmo's store in Ypsilanti nine times since May. But he hasn't lost a dime from his cash register.

Instead, Mr. Garmo said, the thieves have taken a lucrative commodity: cigarettes.

Fewer cigarettes are being sold in Michigan since a 50-cent per-pack tax increase kicked in on May 1. But the drop doesn't mean Michigan smokers are lighting up less.

Mr. Garmo said the tax increase indirectly caused the burglaries at his store while also killing off his cigarette sales. He said his cigarette business has dropped from 700 cartons a week to about 250 cartons. With cigarette sales go impulse purchases.

"There's a lot of losses there," Mr. Garmo said. "I don't think we gain anything from the tax increase."

The increase was part of the Proposal A school tax plan, which was overwhelmingly approved by voters on March 15. The 50-cent increase pushed Michigan's cigarette tax to 75 cents a pack, the highest in the country.

Since the May 1 increase, state revenues from cigarette sales have dropped about 30%. A national tobacco interest group said cigarette sales are down statewide by about 40% and some retailers said their sales have dropped even lower.

Guy Arrans, vice president of sales and operations for Pri-Mar Petroleum in St. Joseph, said things are especially bleak along the state lines.

Pri-Mar runs 11 Pri-Mart convenient stores in southwest Michigan and has watched cigarette customers drive south into Indiana.

"As soon as the tax increase was passed, there were ads for cigarettes for $11 a carton. Ours sell for $19 to $20 a carton," Mr. Arrans said.

One Pri-Mart store, just four miles from Indiana, lost 98% of its carton sales from May 1 to Nov. 30, Mr. Arrans said. Total cigarette sales fell 50% at that store.

Efforts to get around the tax increase are a growing problem, said Lt. Robert Manes, head of the Michigan State Police Treasury Enforcement Division.

"We've been involved in cigarette tax cases before, but not to the degree now," Lt. Manes said.

He heads a three-person team within the division. The team was created in October to investigate tobacco smuggling and theft cases. Lt. Manes said tobacco cases before the tax increase averaged between three and 10 a year. Since May, there have been 24, he said.

As the profit margin increases for stolen and smuggled cigarettes there is a potential for organized crime to get involved, said Mark Smith, director of the National Coalition Against Crime and Tobacco Contraband. The Washington-based organization gets most of its funding from tobacco companies.

Mr. Smith said the overwhelming part of Michigan's lower cigarette sales are caused by smuggling and stealing. In a report released earlier this year, the group said cigarette sales in neighboring states increased by up to 30%.

"The anti-smoking campaign will point to (the drop) as a success in getting people to stop smoking, but that's not true," Mr. Smith said. "Most of the entire amount is due to smuggled products."

Lt. Manes said there have been three big raids since October in the Detroit area. One netted 60 cases; one other recovered 189 cases.

John Beasley, head of the tobacco program in the state's Center for Health Promotion, said cigarette smuggling might account for some sales drop, but it's too early to tell.

The Department of Public Health estimates that nearly 2 million of Michigan's 9.5 million residents, including 125,000 minors, smoke. When lawmakers were considering the cigarette tax increases, health officials estimated the higher cost would prompt 170,000 to give up the habit.

But Mr. Beasley said revenue and sales figures since May aren't enough to gauge what's happening. He noted that sales were up before the higher tax kicked in — 23% according to Treasury officials.

MICHIGAN CAPITOL BACKGROUNDER

CIGARETTE SMUGGLING

THE SMOKING GUN

■ State law says it's illegal to bring a single pack of cigarettes into Michigan from another state. People who buy cigarettes in other states and bring in less than $50 worth of cigarettes could face misdemeanor charges and would lose the cigarettes, if caught.

■ Smuggling more than $50 worth of cigarettes is a felony punishable by up to five years in prison and a $5,000 fine.

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■ ANOTHER VIEW

Excise Taxes: the Impact on Economics, Crime

By Dr. John E. Berthoud, Alexis de Tocqueville Institution

Given the current focus in Washington on shifting our federal tax system toward consumption and away from productive activity, many in the states see this as a blessing to raise their consumption taxes. While the adverse consequences of taxes on income and investment are no doubt paramount, what has been lost in the debate in the states sometimes are the negative economic consequences of taxes on consumption. Economists have long found that excise taxes offer an excellent case study of consumption taxes. The findings of most economic studies are that higher excise taxes cause substantial and widespread harm.

Excise taxes lead to economic loss for higher tax states for three key reasons. First, there is of course a loss in business revenue and employment in the state with higher taxes as residents cross borders to make their purchases. Second, there are subsidiary sales losses — when people travel across borders to avoid higher taxes, they may make additional purchases in convenience stores or at gas stations. Finally, direct sales losses and subsidiary sales losses both lead to a loss in government revenue, which was supposedly the reason taxes were set at higher rates in the first place. Governments lose a whole host of revenues, including most obviously sales and excise taxes. In addition, high tax states will lose personal income tax revenues, as well as revenues from business taxes and fees.

Studies have demonstrated the economic consequences of excise taxes for the states. For example, a 1990 study by Price Waterhouse examined cross-border activity between Indiana and Illinois. Indiana realized a net economic benefit from tobacco products and motor fuels, but lost sales in wine and distilled spirits. The economic gains and losses were due largely to tax differentials.

In motor fuels taxes, Indiana had a 5-cent price advantage in 1988. This translated into sales which were 27.5 percent higher (Illinois'. Similarly, Indiana had a tax advantage in cigarettes — in 1988, a carton of cigarettes cost $1.37 more in Illinois. Part of this tax difference was due to state taxes and part was due to local taxes. (Chicago, for example, has a $2.60 per carton tax on top of the state levy.) However, in alcohol, Illinois had the comparative advantage. While having a higher sales tax (6 percent versus 5 percent), Illinois' excise tax on wine was 23 cents per gallon compared to 47 cents in Indiana. Illinois' tax on spirits was $2 per gallon versus $2.05 in Indiana.

These tax differentials led to substantial cross-border activity and translated into huge gains for the state with the comparative tax advantage in the differing products. The net result of cross-border activity with Illinois was, $58.8 million in additional sales and excise tax revenues, $31.6 million in additional retail sales, 1,996 additional jobs providing $22.5 million in compensation. Price Waterhouse concluded that 10.4 percent of sales and excise tax revenue on these products was due to cross-border activity.

Today, we see a similar pattern of economic gains and losses due to tax differentials. Most significantly, Indiana and other states seem to be gaining cross-border cigarette sales at the expense of Michigan. The Michigan tax on cigarettes rose from 25 cents per pack to 75 cents per pack in May 1994. Sales in fiscal 1995 in Michigan are down 27.6 percent while sales in bordering states are up. Sales are up 9.34 percent in Indiana, 6.1 percent in Ohio and 8 percent in Wisconsin. Thus, Indiana is clearly reaping the benefits from a cross-border advantage with Michigan.

And not only are individual consumers crossing Michigan borders, but evidence of organized smuggling is appearing. The Michigan state police report an increase in this type of activity since the tax took effect last year. Given the experience of Canada, we should not be surprised to see this type of activity.

Because of sky-high excise taxes in the early 1990s, Canada faced a huge problem with smuggling of alcohol and especially tobacco that ultimately led to a rollback in taxes. In 1992, one out of five cigarettes sold there was smuggled in. This smuggling was simply a matter of economics: in Montreal, a carton of legal cigarettes cost $48, while illegal cartons could be bought for $18.

The situation got so bad that even the Royal Canadian Mounted Police were waving the white flag. Mounted Police Commissioner N.D. Inkster saw the smuggling as a crisis. In a 1994 letter to the prime minister he wrote: "We are at a point where existing law enforcement resources are virtually incapable of turning the tide in this rapidly expanding problem, given our other responsibilities across Canada. While seizures have increased dramatically, the extent of the problem has been rising at a much faster rate with the involvement of organized crime groups and otherwise law-abiding citizens engaging in criminal activity through the open purchase of contraband." Inkster argued that various measures should be taken to combat the smuggling, perhaps the most significant of which was a reduction in taxes on these products. Finally, this smuggling epidemic led the government in 1994 to lower the tax on tobacco to $5 per carton.

And while in the United States, the 50 states are particularly susceptible to negative economic repercussions from cross-border activity, there are negative consequences from the federal government raising excise taxes. Using a computable general equilibrium model, it was discovered that doubling federal excise taxes on alcohol, tobacco and motor fuels would lead to a 3.75 percent decline in output in key sectors most affected by these taxes and a loss of 301,910 jobs.

While it is crucial for government to keep taxes low on productive activities — such as work and investment — because of the dangers of cross-border activity, it is also critical to keep sales and excise taxes low. Rather than getting into an either-or debate in the states on the merits of different taxes, the best strategy for legislators seeking to balance the budgets is to cut spending. There is no such thing as a "good" tax to raise.■

Dr. John E. Berthoud is Vice President of the Alexis de Tocqueville Institution in Arlington, Va.

MARCH 1995

Tobacco road: Higher cigarette tax rates can encourage smuggling

Ed Carron

Cigarette smuggling threatens to become a major problem.

There's a giant sucking sound in the United States - and you don't need to be Ross Perot to hear it. It's the sound of hundreds of thousands of Americans smoking cigarettes smuggled from Mexico and other points of entry. And it's growing louder every day.

Over the past 15 years, the average state and federal tax on a pack of cigarettes has gone up 152 percent - from 21 cents to 53 cents. And some states are way above average. Michigan, for instance, raised its state cigarette tax 200 percent in May 1994, from 25 cents a pack to a national high of 75 cents.

With politicians hot for tax revenue and cigarette prohibitionists on the march, the trend can only continue. Indeed, one of the few things Congress seemed to agree on during the health-care debate was the easiest way to get money to pay for national health care: Raise cigarette taxes. The Senate Finance Committee's bill proposed an increase in the federal cigarette tax of more than 900 percent.

The effects of such prohibition-by-taxation are as predictable as they are usually ignored. Cigarette smuggling is well on its way to becoming a major problem in the United States. Raising cigarette taxes any further risks repeating Canada's recent disastrous experience with cigarette smuggling, which threatened "the very fabric of Canadian society," according to Canadian Prime Minister Jean Chretien, when he announced deep cuts in cigarette taxes a year ago.

Contraband cigarettes held no more than 2 percent of the total cigarette market in Canada until 1991, when the government imposed a value-added tax and increased the federal cigarette tax by 146 percent. After the tax increase, however, the price differential between cigarettes sold in Canada and those in the United States soared to more than CDN$35 a carton. More and more smokers refused to pay as much as CDN$50 for a fully taxed carton of cigarettes when they could buy the same brand on the black market for CDN$20-40.

The result was an invitation to organized crime. Mohawk Indians from tribes along the U.S.-Canada border, biker gangs, and Asian Triads smuggled cigarettes across the border in boats, airplanes, trucks, vans, legitimate courier companies, and snowmobiles.

Ironically, most of the smuggled cigarettes were made in Canada. Canadian tobacco companies exported 15.6 billion cigarettes to the United States in 1993, up more than 830 percent from 1990. Because there was no apparent increased U.S. demand for Canadian cigarettes, it's widely accepted that almost all of the exported cigarettes, on which no Canadian taxes were paid were smuggled back into Canada.

These cigarettes were sold by street vendors, out of the backs of cars, at flea markets, at restaurants, at bars, at convenience stores, and at high schools. When one smoker hooked up with a dealer, all of his or her friends and coworkers were connected as well. The October 20, 1992, Globe and Mail of Toronto reported that a 77-year-old woman was buying "hot smokes" for members of her bridge club and that a surgeon became the black market supplier for his co-workers at Montreal hospital. Many of the smokers who were uneasy about breaking the law decided it was OK when they saw that "everybody's doing it."

Not everybody, but it started getting close. Before the tax hike, one in 50 cigarettes smoked in Canada had evaded taxes, estimates the forensic and investigative accounting firm of Lindquist Avey Macdonald Baskerville in a study sponsored by the Canadian tobacco industry. By the end of 1993, nearly one in three cigarettes was contraband. An August 1994 report by the Non-Smokers' Rights Association (Canada) disputes those figures. But it concedes that one in four cigarettes may have been contraband in 1993.

Smuggling particularly hurt "mom and pop" convenience stores, which rely heavily on cigarette sales. Rod Stamler, a partner with Lindquist Avey and a former assistant commissioner of the Royal Canadian Mounted Police, says that many retailers began carrying "dual inventory" - legal cigarettes over the counter, illegal smokes below. Retailers also were victims of a crime wave, as it became more lucrative for thieves to skip the cash register and head straight for the cigarettes.

The government tried cracking down on cigarette smuggling, but the police didn't get that much support. "Everyone thinks the taxes on cigarettes are too high, so it's not a crime to buy them illegally," Staff Sergeant Walter Wafer, head of the Mounties' customs-and-excise section in Montreal, told the Toronto Globe and Mail.

The government's inability to enforce an unpopular law only emboldened Canadians to become more defiant. On January 24, 1994, 75 store owners in St. Eustache, Quebec, rebelled by openly selling contraband cigarettes. Hundreds of Canadians waited hours to buy cigarettes for less than half the legal price. The police, perhaps deciding in this instance that it was better to be loved than feared, made no arrests.

Such upfront defiance of the law alarmed Canadian politicians. Even more disturbing to them were signs that cigarette tax evasion was having spill-over effects on other taxes. To stop the fiscal, political, and social hemorrhaging, in February the federal and five provincial governments made deep cuts in cigarette taxes, which essentially eliminated cigarette smuggling in Canada.

Tax rates are still much lower in the United States than they were in Canada, but signs of rebellion are already apparent. Contraband cigarettes evading federal taxes made up 6 percent of the total U.S. cigarette market in 1994, up from a negligible level in 1991, according to a preliminary estimate in a new study by Lindquist Avey.

The study suggests that the United States is now at the same stage that Canada was in early 1991, the time at which cigarette smuggling there began to spin out of control. The United States may need just one more significant tax increase to unleash a full-scale revolt.

The study was commissioned by the National Coalition Against Crime and Tobacco Contraband, which is

financially backed by R.J. Reynolds Tobacco Co. The coalition also includes other tobacco companies, wholesalers, distributors, and retailers.

Anti-smoking forces dismiss the coalition as a tobacco-industry front group and say its warnings are scare tactics. John Bloom, who works on tobacco-tax issues for the American Cancer Society, says the Lindquist Avey estimate "is just about as believable as the tobacco industry's claim that nicotine isn't addictive." In fact, he argues that "a major federal tax increase would not cause a significant international smuggling problem and would actually reduce what little interstate smuggling that is going on," by reducing the price differential percentage between states.

Nonetheless, international cigarette smuggling appears to be on the rise in the United States. Perhaps the most visible tip-off is what's going on at the Mexican border. The Department of Agriculture estimates that U.S. tobacco companies exported 148.3 million packs to Mexico in 1994, an increase of 2,424 percent from 1990. As with Canada's exports, it's assumed that the vast majority of these untaxed cigarettes are smuggled back into the United States.

The volume of traffic at border crossings, which has increase since the passage of the NAFTA, makes it difficult for U.S. Customs officials to detect smuggled goods - and even then they are looking primarily for illicit drugs, not untaxed cigarettes. Individuals buy untaxed cigarettes at duty-free shops, drive into Mexico, and cross back into the United States. Illegal immigrants commuting to work in Texas sometimes smuggle cigarettes in backpacks, says Kevin Koch, vice president of McLane Company, a cigarette distributor.

But as the case in Canada, most international cigarette smuggling appears to be controlled by organized crime. Couriers, or "mules," were used by one Los Angeles organization to transport cigarettes from Mexico into California. Until it was raided in July 1994, the ring reportedly was smuggling 7,000 cartons every week.

Organized crime groups have been involved in interstate smuggling for years, but because smokers can easily cross state lines, crime groups account for only a small portion. However, the experience and criminal infrastructure that these groups have developed to evade state taxes is helping them adapt to evading federal cigarette taxes.

The Mafia's smuggling competitors include the increasingly powerful Russian mafia, Mexican rings, and various American Indian organizations.

Cross-border smuggling is especially acute in California. Monte Williams, administrator of the excise tax division of the State Board of Equalization, says smuggling in California "keeps getting worse every month." He estimates that up to 7 percent of state tobacco market was illegal in 1994 and that the state treasury could lose $50 million as a result.

Many of the for-export-only cigarettes intended for Mexico never make it across the border. Organized crime groups illegally obtain cigarettes from free trade export warehouses along the border, and then forge the paperwork to make it appear that the untaxed cigarettes had been exported.

In the New York City area, for-export cigarettes housed in bonded warehouses or officially loaded onto ships destined for Europe, Asia, or the Middle East have been found in Brooklyn warehouses, according to Paul Rickard of the New York state tax and finance department. Lindquist Avey's Stamler says that it often is less risky for organized crime to divert untaxed cigarettes into New York City from a New Jersey free-trade zone warehouse or other nearby points of entry than to truck cigarettes all the way from North Carolina.

"Cigarette smuggling is more profitable than narcotics and less risky," says Det. Lieut. Robert Manss, who heads Michigan's state police Treasury Enforcement Team. With its high cigarette tax and recent history of smuggling cigarettes to Canada, his state appears ripe for a major increase in contraband sales. Right now, says Manes, his team is primarily "trying to gather intelligence."

But early indications suggest that cigarette smuggling in Michigan is growing substantially. Preliminary state treasury figures indicate that cigarette sales have dropped significantly since the tax increase.

Manes says that some of this drop may be due to retailers who stockpiled cigarettes before the tax went into effect. But interstate tax-dodging also seems to be a factor. Ohio and Indiana both report increases in their cigarette sales, especially near the Michigan border. And in Kentucky, where cigarette taxes are $7.20 a carton less than Michigan's, statewide cigarette sales were up 5.7 percent following Michigan's tax increase.

Bill Zeiler or Zeiler's Farm Market in Temperance, Michigan, says that cigarettes used to account for 20 percent to 33 percent of total sales at the store, which is located just across the border from Toledo, Ohio. Since the tax increase, he says, cigarette sales have fallen almost 85 percent.

Zeiler also says that the store is losing more than just cigarette sales: "People would buy cigarettes every day or every couple of days, and they'd usually buy something else. Now they're going to Ohio stores to buy those things."

Other Michigan stores are reporting a surge in cigarette-related theft. Jim Garmo, who has run the Galaxy Superstore in Ypsilanti for about 10 years, says he had never suffered any break-ins until the tax increase. Since then, however, Garmo says that his store was burglarized nine times for cigarettes between June and October. And sales have dropped from 1,300 cartons a week to 350 cartons.

One reason why cigarette smuggling in the United States is almost certain to keep expanding is that even politicians with reputations as tax-cutters often rely on cigarette tax hikes. Michigan's recent voter-approved increase was part of Republican Gov. John Engler's plan to cut property taxes (See "Engler's Angel," August/September 1994).

The Republican-controlled Congress is unlikely to increase the federal cigarette tax in the near future, but state taxes continue to rise. Arizona voters narrowly approved a 40-cent-per-pack tax increase last November to fund indigent health expenses.

Higher cigarette taxes will not only be a disappointment for prohibitionists and tax-starved politicians. If a large increase goes forward in the United States, cigarette smuggling "will make the illicit drug trade look like peanuts by comparison," warns Stamler. With 45 million smokers in the United States, there is a huge potential black market. Organized crime will enter its second golden age.

But more important, Americans will become comfortable with routinely breaking the law and evading taxes. Repeating Canada's experiment in excessive cigarette taxes may well threaten the very fabric of American society.

Ed Carson is staff reporter for REASON.

Tobacco taxes climb, so does smuggling

DETROIT (AP) — As Michigan's tax on tobacco went up, so did smuggling and profits for those who deal illegally in such trafficking. State officials say the increase was in line with what was expected.

Michigan's cigarette tax rose from 25 cents to 75 cents per pack in May, making it the highest tax in the United States. Improperly bringing cigarettes with a wholesale value of more than $50 into Michigan is a five-year felony.

But the Detroit Free Press reported last week that some people don't seem put off by that threat.

North Carolina retailers told the newspaper that people driving vans and trucks with Michigan license plates often make huge cash purchases of cigarettes — but usually under $10,000 to avoid federal paperwork.

They go from store to store until their vehicles are full.

"It's bigger than we expected," said Lt. Robert Manes, head of the State Police tobacco tax enforcement unit. "It's blatant disregard for the tobacco tax. It's not like they sneak around."

The cigarette tax was among taxes raised last year in a revamping of financing for Michigan public schools.

Since then, many Michigan smokers stock up and buy up for their friends and themselves while in other states, the Free Press said. Legal cigarette sales in Michigan between June 1 and Nov. 31 decreased 26 percent from the same period in 1993.

The newspaper said organized smugglers also are at work, buying up cigarettes in states like North Carolina, where the tax is a nickel a pack.

Once in Michigan, the cigarettes are distributed to party stores, gas stations and other retailers, who can sell cheaper than competitors and still profit.

It's impossible to say precisely what smuggling costs the state because officials don't know how much of the decline in sales is the result of people quitting or smoking less to avoid the tax.

State investigators say they believe it to be in the millions, however.

Deputy treasurer Nick Khouri said state officials were prepared for some sales decrease.

"There is both a drop in smoking and there is smuggling," Khouri said. "The bottom line is we expected about a 20-percent drop in consumption, and it's about in line with what we anticipated."

Khouri said this fiscal year, the state expects to reap $570 million in cigarette tax revenues. That compares with $240 million in the year before the tax tripled.

Ron Davis, chief medical officer for the Department of Public Health, said that most of the drop in cigarette sales in Michigan is due to smokers who cut back or quit. Ron Davis, chief medical officer for the Department of Public Health, said that most of the drop in cigarette sales in Michigan is due to smokers who cut back or quit.

"How many people are going to drive to Indiana or Ohio or Kentucky and load their RV with cigarettes, or buy them in a back alley from a smuggler?" Davis said.

Detroit Free Press

Metro Final
Mostly sunny.
High 42. Low 24.
Saturday: Partly cloudy, warmer.

On Guard For 163 Years

Friday
February 17, 1995

▶ At Issue

■ Michiganders are supposed to pay $7.50 in taxes whenever they buy a carton of cigarettes.

Not all do.

Anyone is allowed to bring a couple of cartons home from another state, where the tax is lower, but some people are bringing in truckloads. Smugglers can make as much as $7 a carton selling out-of-state cigarettes to stores; the retailers can then sell the cartons for their usual price — or less — and still increase their profits.

Police have made some arrests, but smugglers can easily carry hundreds of cartons in a van and attract no attention on the highways.

Some state officials say smuggling isn't a major problem and much of the recent drop in Michigan cigarettes sales is because people are smoking less. But sales are up sharply in several states with lower taxes.

JOHN COLLIER/Detroit Free Press

State Police Detective Sgt. James Ward, left, and a federal agent take stock last week of a rented truck full of smuggled cigarettes.

SMUGGLERS WIN

State loses millions in tax dollars

BY CHRIS CHRISTOFF
Free Press Lansing Bureau Chief

Michigan's higher tobacco tax has spawned rampant cigarette smuggling that's siphoned millions of tax dollars from the state treasury, while lighting up huge profits for traffickers.

One big truckload of cigarettes can bring a $100,000 profit for a smuggler in Michigan.

North Carolina retailers told the Free Press that people driving vans and trucks with Michigan plates often make huge cash purchases of cigarettes — but usually under $10,000 to avoid federal paperwork.

Then they'll go to other stores and keep buying until they fill their vehicle.

Last week, Dearborn police confiscated a rented truck from North Carolina parked illegally on a city street. Inside were 120 cases of cigarettes — 72,000 packs — worth $132,200 wholesale. If they had been distributed, the sellers would have avoided about $50,000 in state taxes.

"It's bigger than we expected," said Lt. Robert Manes, head of the State Police tobacco tax enforcement unit charged with catching smugglers. "It's blatant disregard for the tobacco tax. It's not like they sneak around."

Michigan's cigarette tax rose from 25 cents to 75 cents per pack in May, making it the highest tax in the United States. Improperly bringing cigarettes with a wholesale value of more than $50 into Michigan is a felony punishable by up to five years in prison.

Voters raised the cigarette tax — and others — last year to offset the reductions in property taxes used to fund schools.

Since then, many Michigan smokers have stocked up regularly for themselves and friends by buying low-tax cigarettes in nearby states, including Indiana, Ohio and Kentucky. Legal cigarette sales in Michigan between June 1 and Nov. 31 decreased 26 percent from the same period in 1993.

Meanwhile, organized smugglers have hauled truckloads of cigarettes to Michigan, especially from North Carolina and even from Indian reservations in New York

JEFF KOWALSKY/Detroit Free Press

The JR Tobacco Outlet in Statesville, N.C., will sell as many [illegible] cartons. Any more would be illegal.

cigarettes can net a $100,000 profit for a smuggler selling them in Michigan.

One man in the Detroit area smuggled and sold more than $1 million worth of cigarettes in Michigan, according to sales records seized by police. He netted an estimated $500,000 profit and cost the state about $316,000 in taxes. The criminal investigation is continuing, police said.

Last month in Pontiac, police seized suspected smuggled cigarettes worth about $100,000 wholesale, worth more than $40,000 in taxes.

"The money they get is more than they can get selling drugs, and the penalties are not too harsh," said Frank Daiza, a licensed cigarette wholesaler in Detroit.

Daiza believes smuggling cut his cigarette sales by nearly 40 percent. He said honest store owners are hurt by those who buy cigarettes cheap from smugglers and then sell them at lower prices.

"They're organizing," Daiza said. "One guy will go down South and bring some cigarettes back. When the other guys see how much profit there is, they get together and go back down for more."

The state tax on a carton of cigarettes rose from $2.50 to $7.50. Wholesalers like Daiza charge about $18 per carton of premium brand cigarettes such as Marlboro or Kool, including the tax.

Smugglers can buy the same carton from North Carolina retailers, or from Indian reservations in New York, for $10 to $12, then sell to stores or gas stations in Michigan for $5 to $7 more.

Retailers in turn can sell to customers for less than the usual $20 per carton, and still increase their profits.

State investigators believe three or four "camels" smuggle large amounts to Michigan, some as often as twice a week. They believe most large-scale smuggling occurs in the Detroit area.

A Pontiac party store owner who discussed the activity on condition of anonymity said he's been solicited at least 10 times in the past six months by truckers who offer to buy him large quantities of cigarettes when they travel to low-tax states.

"You can buy 50 cartons for $40 below cost. You buy 500 cartons, sell them and you make a quick $400," he said.

Catching smugglers red-handed is like catching raindrops with a net. Police acknowledge it's almost impossible to intercept them on busy state highways when they're using nondescript vehicles.

Manes' team has been swamped, seizing 45,000 cartons of suspected smuggled cigarettes since the higher tax took effect. Those cartons would have netted the state $337,500 in taxes if bought legally.

The state Department of Treasury has two or three investigators who work primarily on tobacco tax violations; Manes soon will add three more investigators to his team. He has had more than 30 complaints of illegal cigarette sales in the past year, compared to a half dozen in previous years. Often informants are store owners who suspect rivals of selling illegal cigarettes.

The Southern connection

Kentucky's 3-cent tax is even lower than North Carolina's, and Kentucky is closer to Michigan. But North Carolina is especially attractive to smugglers because, like Michigan, the state does not affix stamps to cigarette packs.

> **"The money they get is more than they can get selling drugs, and the penalties are not too harsh."**
>
> **FRANK DAIZA,**
> **licensed cigarette wholesaler**

That means smugglers don't have to remove the stamp to avoid suspicion, which saves time and money. Michigan and North Carolina are among only five states that do not use cigarette stamps.

One North Carolina source of Michigan-bound cigarettes is Sam's Club, a members-only discount chain owned by Wal-Mart. Sam's Clubs in North Carolina sell cigarettes at retail for much less than Michigan's wholesale prices.

At Sam's Club in Winston-Salem, N.C., manager Larry Scruggs said Michiganders often buy large quantities of cigarettes from his store and always pay cash.

Scruggs said they usually buy less than $10,000 worth to avoid having to file an IRS cash transaction form required for large purchases.

"One guy came here regularly. We couldn't pronounce his name. ... He said, 'Just call me Dave,'" Scruggs said. "He'd come in with a wallet just full of bills. He'd want to buy $17,000 worth of cigarettes. When I told him he'd have to fill out a form, he said, no, no, he'll just buy $9,000.

"I assume he went somewhere else to buy more cigarettes with the rest of the money."

Scruggs said after one large sale to a Michigan customer, he checked on the man's club membership. He found the customer had used a false address in the Detroit area to obtain the card.

Federal law prohibits unlicensed buyers from purchasing more than 300 cartons of cigarettes per day. But the rule is virtually unenforced; the U.S. Bureau of Alcohol, Tobacco and Firearms only assists state investigators when asked to investigate major cross-state smuggling.

Cheap cigarettes are a big draw at JP ... Tobacco Outlets in North Carolina. The back of the Statesville store, on I-77, is a smoker's dream — a wall 200 feet long and 15 feet

How it Works

Q. *How do people avoid Michigan's cigarette tax?*

A. Smuggling cigarettes from states with lower rates is one way. It's done by organized rings and by individuals who want to save money for themselves and friends.

Retailers can buy smuggled cigarettes for less than they pay wholesale in Michigan, then resell them at discount prices and still make money. The cheapest cigarettes, compared with Michigan, are in Kentucky, where the per-pack tax is only 3 cents. That means a carton — 10 packs — of cigarettes in Kentucky is at least $7.20 cheaper than in Michigan.

But Kentucky requires a stamp on all cigarette packs sold there, so they are "marked." Big-time smugglers prefer to pay 5 cents per pack in taxes in North Carolina; packs are not stamped there, making smuggled cigarettes tougher to detect.

Michiganders can go to another state and legally avoid the tax by only buying small amounts of cigarettes.

Q. *Why is it illegal to carry a lot of cigarettes in another state and bring them to Michigan?*

A. Cigarettes are a specially taxed item, and each state sets its own rate. States with higher rates — like Michigan — want to control cigarette sales so they don't lose revenue.

Q. *What's the penalty for cigarette smuggling?*

A. If you import cigarettes with a wholesale value of more than $50 — approximately three cartons — from another state, you have committed a felony punishable by up to five years in prison and a $5,000 fine. It's also illegal to sell cigarettes without a sales tax license. If you do, you could be liable for double the tax.

Q. *How is the tax paid?*

A. Wholesalers or other licensed distributors pay the state the 75-cents-per-pack tax when they buy cigarettes from manufacturers. Retailers buy from the distributors and pass the tax on to consumers.

Wholesalers and retailers are supposed to keep detailed records of their transactions. Anyone transporting cigarettes must have invoices showing where they were purchased and who will receive them.

Also, distributors must label the shipping crates with their names and addresses and show that the tax has been paid. Michigan and North Carolina are two of only five states that don't require wholesalers to stick a state-issued stamp on cigarette packs. The others are North Carolina, North Dakota, Alaska and Hawaii.

Q. *Where do people buy these cigarettes in other states? Isn't it illegal to sell to smugglers?*

A. Police believe there may be distributors in low-tax states who sell large quantities to Michigan buyers and cover up the sales. Some retailers in other states also sell large quantities of cigarettes to anyone who walks in the door. A federal law is supposed to limit such sales to no more than 300 cartons per day, but it is often ignored.

The Free Press found that in North Carolina, smugglers from Michigan drive around the state in trucks, picking up hundreds of cartons at several retailers to skirt the federal law.

Q. *How do police catch smugglers?*

A. It's almost impossible to catch them rolling along on Michigan highways; smugglers can pack a lot of cartons into a small cargo van.

Mostly, police receive tips from people who know of store owners buying illegal cigarettes. In Dearborn, a neighbor called police recently when some people down the street were unloading a truck full of cigarette cases — 60 cartons to a case — into a house.

Last October, a State Police sting caught state convenience stores in Washtenaw County trafficking in illegal cigarettes.

by Chris Christoff

high stacked with open cases of cigarettes.

On a recent weekend at the store, wholesale manager Derone McNeill said that a few hours earlier a man with Michigan plates bought 299 cartons.

"We'll sell up to 299 cartons to any Tom, Dick or Harry that walks in and can afford to buy that many," McNeill said.

Brenda Coleman, administrative officer for North Carolina's cigarette tax office, said smuggling is one plausible explanation for that state's recent dramatic increase in cigarette sales.

"I'm sure anything you could envision, some of it's going on someplace," she said. "We do cooperate with other states on violations we're aware of."

Troubling history

Smuggling in Michigan hasn't triggered violence — yet.

Manes and others are wary of the armed turf wars that erupted along the Canada-New York border a few years back. Canada had raised its tobacco tax to 75 cents a pack, the same as Michigan's current tax, although other Canadian taxes raise the ultimate cost much higher. The increase prompted smuggling from the United States through Indian reservations, which don't pay federal or state taxes.

Shoot-outs between smuggling gangs were commonplace. A year ago, partly in response to smuggling, Canada lowered its tax.

Smuggling to Michigan elicits an I-told-you-so-response from the Tobacco Institute, which lobbied against raising the tax. Institute spokesman Walker Merryman predicted organized crime would get a foothold.

"It's a disaster for Michigan," Merryman said. "I think it is an object lesson for any other state that is thinking about dramatically increasing its excise taxes."

Another who says smuggling is a good argument to lower the cigarette tax is Joseph Sarafa, executive director of the Associated Food Dealers of Michigan. The higher cigarette tax last year contributed to the closing of 11 percent of the state's party stores in 1994, he said, five times more than the national average.

Especially hard hit have been stores along the Indiana and Ohio borders.

Guy Arrans, vice president of sales for Pri Mar Petroleum Inc., a St. Joseph-based company with 11 convenience-gas stores in southwest Michigan, said one of his stores four miles from the Indiana border lost 98 percent of its cigarette carton sales, and half its pack sales.

Another store, 18 miles from Indiana, lost $18,000 a month in cigarette sales. Arrans estimated that 500,000 fewer customers visited the company's stores from May through December last year.

The lure of cheap smokes in Indiana tripped up Edward Greene of Pleasant Lake, near Jackson. This week in Coldwater, he was sentenced to 30 days in jail, $685 in fines and two years' probation for lugging 34 cartons of cigarettes from Indiana on Dec. 29.

Green's haul was discovered when he was pulled over by a state trooper for a traffic violation. State Police believe Green is the first person convicted on charges stemming from cigarette smuggling since the higher tax took effect.

Green's case was pleaded to a misdemeanor. Branch County Prosecutor John Livesay said the plea was fair, considering a smuggler with a truckload would face the same five-year prison term Green did.

Manes said he hopes judges are tougher on pending cases with people accused of big-time smuggling.

"The chances of someone going to prison for five years with this type of tax fraud is slim and none, unless it's a repeat offender," Manes said. "As our cases get to trial, we'll find out how much people care.

"Every taxpayer should care."

NOV 26, 1996

IN MICHIGAN

Cigarette smuggling costs state, police say

New York officers arrest Michigan residents in huge nicotine pipeline.

By Jeremy Pearce
The Detroit News

New York State Police have arrested three dozen Michigan residents they say are involved in a huge cigarette smuggling pipeline that's costing both states millions in lost taxes.

Michigan residents have been arrested near three Indian reservations in western New York this year for illegal possession of thousands of cartons of contraband cigarettes.

Police said they believe the smugglers are acting independently or in small groups and are not part of a major ring. The smugglers, they said, stuff vans with as many as 1,200 cartons, resell them to Michigan party stores and make as much as $8,000 per smuggled shipment.

"The word is out in Michigan that you can come to New York and get cheap cigarettes," said New York State Police investigator John McEvoy.

"We've seen smuggling to Michigan picking up rapidly over the past six months. There's more of it every day."

Since Indian reservations don't charge cigarette taxes, buyers avoid New York's tax and can resell the cigarettes at a substantial profit in Michigan, which has a state tax of $7.50 per carton.

Michigan does not have a cigarette tax stamp and consumers can't tell whether smokes are legal or illicit. State lawmakers are now scrambling to pass bills calling for the creation of a tax stamp.

"Michigan State Police and Department of Treasury agents are woefully understaffed to deal with this," said state Sen. Douglas Carl, R-Macomb Township.

One bill has already passed the House and is being reviewed by the Senate Finance Committee. A second has yet to see a vote.

Michigan's tax was raised from 25 cents per pack to 75 cents in 1994, part of a major tax reform package to lower property taxes.

Michigan store owners caught with more than $50 in smuggled cigarettes face a felony charge that carries a possible $10,000 fine and prison term.

Under New York's law, smugglers face felony charges as well. Consumers are not allowed to leave New York's reservations with more than two cartons.

In May, a Michigan man charged with avoiding the tax was acquitted after Chautauqua County, N.Y., Judge John Ward told a jury that if the man did not try to resell the cigarettes in New York, he was not evading New York's tax.

On Friday, a second case with the same charge was dismissed by Ward against a second Michigan man for the same reason.

Last year, Michigan officials reviewed a private study that estimated smuggled cigarettes cost the state about $144 million in lost tax revenues every year. State Department of Treasury estimates have been lower — between $20 million and $22 million per year.

A $1 per pack increase in the state cigarette tax?

Public Opinion Poll Results
December 14, 1995 - January 20, 1996

- Alaska's state budget is about five hundred million dollars larger than the revenue it will take in this year. Most of this revenue is from oil and gas taxes. People have different views about how to deal with this fiscal gap. Do you think the fiscal gap can be closed only with spending cuts, or do you think the fiscal gap can be closed only with a mix of spending cuts and new revenue sources?

Spending Cuts	16%
Spending Cuts and Revenue Sources	72%

- Now, I would like to turn to tobacco taxes. The current Alaska state tax is 29 cents per pack of cigarettes. In general, do you favor or oppose increasing Alaska's tobacco taxes by one dollar per pack to help close the state's fiscal gap?

Strongly Favor	49%
Somewhat Favor	25%
Somewhat Oppose	5%
Strongly Oppose	16%

- If it was proven that a large cigarette price increase prevents or reduces smoking among children and teenagers, would you favor or oppose raising the state tax by one dollar per pack?

Strongly Favor	71%
Somewhat Favor	15%
Somewhat Oppose	9%
Strongly Oppose	3%

- Do you generally favor taxing other tobacco products, such as chewing tobacco, snuff, and cigars, at a higher rate than cigarettes, about the same rate as cigarettes, or at a lower rate than cigarettes?

Higher Rate	8%
Same Rate	83%
Lower Rate	5%

- I want to get your final opinion, even if it is different from the opinions you expressed earlier. All things considered, do you favor or oppose increasing Alaska's tobacco taxes by one dollar per pack?

Strongly Favor	58%
Somewhat Favor	15%
Somewhat Oppose	7%
Strongly Oppose	18%

These data are based on preliminary analysis of the results of the Alaska SmokeLess States Survey, a telephone survey of a representative sample of 820 Alaska residents 18 and older conducted from December 14, 1995 through January 20, 1996. The survey was conducted using a single-stage, list-assisted random-digit-dialing stratefied sample design. One adult was selected to be interviewed within each household. The survey concerned public attitudes toward the state's budget gap and tobacco policy issues. The margin of sampling error (95% sampling interval) for statewide estimates made for all residents is no more than plus or minus 4.3 percentage points. The survey was conducted by Mathematica Policy Research, Inc. in Princeton, New Jersey, under contract with the Robert Wood Johnson Foundation.

BACKGROUND

ALASKA TOBACCO CONTROL ALLIANCE

Post Office Box 110614
Juneau, AK 99811-0614 · 907/465-3140 Fax: 465-2770

STEERING COMMITTEE:

Alaska Black Caucus

Alaska Dental Society

Alaska Health Fair, Inc.

Alaska Native Health Board

Alaska Pharmaceutical Association

Alaska Public Health Association

Alaska State Medical Association

Alaskans for Drug Free Youth

American Lung Association of Alaska

Anchorage School District

Bristol Bay Area Health Corporation

K.D. Consulting

Municipality of Anchorage, Department of Health and Human Services

Nome Community Center/ Young Teen Center

Rural Alaska Community Action Program

Sitka Teen Resource Center

State of Alaska Department of Health and Social Services:
Division of Alcohol and Drug Abuse, Division of Public Health, Section of Community Health Services, Section of Epidemiology

Tanana Chiefs Conference, Inc.

Yukon-Kuskokwim Health Corporation, Health Education Department

Alaska Tobacco Control Alliance
Resolution to Support an Increase in the Tobacco Tax

- Whereas tobacco kills far more Americans each year than alcohol, car accidents, suicide, homicide, AIDS, heroin and cocaine combined;
- Whereas tobacco is the leading cause of preventable death in the country;
- Whereas 3,000 children become regular smokers each and every day;
- Whereas 73% of daily teen smokers who think they won't be smoking in 5 years are still smoking 5 years later;
- Whereas 84% of Alaska adult smokers started smoking between the ages of 10 and 20;
- Whereas tobacco kills 1 out of 5 Alaskans;
- Whereas Alaskan Natives suffer disproportionately from the burden of tobacco addiction and illness;
- Whereas it is the responsibility of the State of Alaska to do everything in its power to blunt the negative impact of tobacco on the health of our citizens;
- Whereas smoking-related death and disease cost each Alaskan $220 in 1991;
- Whereas smoking-related death and disease cost the Alaska economy $127.6 MILLION DOLLARS in 1991;
- Therefore be it resolved that The Alaska Tobacco Control Alliance calls upon the Alaska Legislature to enact a significantly higher state excise tax on all forms of tobacco, and to ensure that this higher tax rate is regularly increased to keep pace with inflation.

Tobacco Use by Youth: Patterns and Prevention

Revised
April 1995

Developed by the
American Lung Association of Alaska

(907) 276-5864

with funding from the Robert Wood Johnson Foundation's grant, "Trampling Tobacco: A Winning Tobacco Control Strategy for Alaska"

Alaska Tobacco Control Alliance

Tobacco Use by Youth: Patterns and Prevention

TOBACCO USE BY YOUTH

Most smokers begin smoking during childhood and adolescence. Nicotine addiction is established during the first two to three years of tobacco use.

- For any cross section of adults who smoke, 89 percent begin using cigarettes by or at age 18. Seventy-one percent begin smoking daily by or at age 18.[1]
- The average age when people first try smoking a cigarette is 14.5 years.[2]
- Nearly 84 percent of Alaskan adults started smoking between the ages of 10 and 20 years old.[3]
- Seventy-three percent of daily teen smokers who think they won't be smoking in 5 years are still smoking 5 years later.[4]
- Seventy percent of teen smokers say that given the chance to do things differently, they wouldn't have started smoking.[5]
- Eighty percent of teen smokers want to and have tried to quit. Only 1.2% succeed.[6]

The prevalence of smoking by youths has remained basically unchanged since 1980.

- Among high school seniors, the prevalence of regular smokers (those who have smoked in the past 30 days) was 30.5% in 1980 and 29.9% in 1993; the prevalence of daily smokers was 21.3% in 1980 and 19.0% in 1993.[7]
- In Alaska, 27% of 12th grade girls and 18% of 12th grade boys report daily use of cigarettes. Rates are highest among Alaska Natives: 31% of 12th grade girls and 21% of 12th grade boys.[8]

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[1]Centers for Disease Control and Prevention. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 1994.

[2]Centers for Disease Control and Prevention. 1994.

[3]Alaska Division of Public Health and Alaska Area Native Health Service. *1989 Alaskan Adolescent Health Survey.*

[4]Centers for Disease Control and Prevention. 1994.

[5]Gallup Organization, 1992.

[6]Teenage Attitudes and Practices Survey, 1993.

[7]Institute of Medicine. *Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths.* Washington, DC: National Academy Press. 1994.

[8]Alaska Department of Health and Social Services. *The State of Adolescent Health in Alaska.* Juneau, AK: Alaska Department of Health and Social Services, May 1990.

Tobacco Use by Youth: Patterns and Prevention (page 2)

Use of smokeless tobacco by youth has increased dramatically since 1970.

- Although little use of smokeless tobacco was seen among adolescents before 1970, the prevalence of its use among older teens (16-19 years old) increased nearly 10-fold between 1970 and 1985, and overall appears to have remained constant since then.[9]
- In Alaska, 18% of 12th grade boys and 7% of 12th grade girls report daily use of smokeless tobacco. Rates are highest among Alaska Natives: 24% of 12th grade boys and 13% of 12th grade girls.[10]

Restricting youth access to tobacco is the key to breaking the cycle of tobacco use.

- Research has documented that most minors who smoke purchase their own cigarettes. The major source of cigarettes from underage consumers is small stores and gas stations.
- Despite the fact that all states prohibit the sale and distribution of tobacco products to minors, tobacco is easily accessible to youth. Youth purchase tobacco from all sources when laws are not enforced.
- In 13 studies of over-the-counter sales, illegal sales to minors occurred at the (average-weighted) rate of 67 percent.[11]

Young people tend to use vending machines more than the general smoking public. Vending machines are more popular among the youngest adolescents.[12]

- In 1988, only 4 to 8 percent of all cigarettes were sold through vending machines. However, the National Automatic Merchandising Association reported that young people tend to use vending machines more often than the general smoking public.[13]
- Nine studies of vending machine sales found the (average-weighted) rate of illegal sales was 88 percent.[14]
- A National Automatic Merchandising Association survey found that minors were successful 77% of the time in buying tobacco from vending machines placed where minors were prohibited.[15]

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[9] Institute of Medicine. 1994.

[10] Alaska Department of Health and Social Services. *The State of Adolescent Health in Alaska.* May 1990.

[11] Centers for Disease Control and Prevention. 1994.

[12] Centers for Disease Control and Prevention. 1994.

[13] Automatic Merchandising Association. Cigarette Sales from Vending Machines, 1988. Chicago, IL: National Automatic Merchandising Association, 1989 as reported in Centers for Disease Control and Prevention. 1994.

[14] Centers for Disease Control and Prevention. 1994.

[15] Americans for Nonsmokers' Rights. "Youth Access to Tobacco" (fact sheet). Berkeley, CA, 92.

Adults are another important source of tobacco for minors.

- Several studies document that between 17 and 25 percent of adolescents obtain tobacco from their parents or guardians.[16]

Tobacco: Its Prevalence and Impact

Revised
April 1995

Developed by the
American Lung Association of Alaska

(907) 276-5864

with funding from the Robert Wood Johnson Foundation's grant, "Trampling Tobacco: A Winning Tobacco Control Strategy for Alaska"

Alaska Tobacco Control Alliance

Tobacco: its Prevalence and Impact

► **Tobacco use is the single most preventable cause of premature death and crippling disease in the United States.[1]**

CIGARETTE USE

► **Alaska has one of the highest smoking rates in the nation.**

- Alaska has the sixth highest rate of smoking and the sixth highest rate of smoking-related death in the nation.[2]
- Twenty-eight percent of Alaskan adults smoke cigarettes regularly. By contrast, the national median is 22 percent. More females (29%) than males (27.1%) smoke in Alaska.[3]
- Nearly 84 percent of Alaskan adults started smoking between the ages of 10 and 20 years old.[4]

► **Alaskan adolescents, particularly females and those living in rural communities, report high rates of smoking. Use increases with each grade. For almost every grade, more girls than boys smoke on a daily basis.[5]**

- Twenty-seven percent of 12th grade females and 18 percent of 12th grade males report that they smoked cigarettes every day.[6]
- Female students in grades 10 - 12 living in communities with less than 2,500 residents report substantially higher daily cigarette use rates (31%) than those in communities of more than 2,500 residents (17%).[7]

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[1]Alaska Division of Public Health. *Alaska Behavioral Risk Factor Survey: 1992 Annual Report.* Juneau, AK: Alaska Division of Public Health, October 1994.

[2]U.S. Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report,* Vol. 43 No. SS-1, June 10, 1994.

[3]Alaska Division of Public Health. October 1994.

[4]Alaska Division of Public Health. October 1994.

[5]Alaska Department of Health and Social Services. *The State of Adolescent Health in Alaska.* Juneau, AK: Alaska Department of Health and Social Services, May 1990.

[6]Alaska Department of Health and Social Services. May 1990.

[7]Alaska Department of Health and Social Services. May 1990.

Tobacco: Its Prevalence and Impact (page 2)

SMOKELESS TOBACCO USE

- **Among Alaskan adults, 5.4 percent are current smokeless tobacco users.**
  - Men use these products at higher rates (9.0 %) than women (1.4%).[8]

- **Alaskan adolescents, particularly males and those living in rural communities, report high rates of smokeless tobacco use. As with smoking, use increases with each grade. Unlike smoking, more males use smokeless tobacco than females.[9]**
  - Eighteen percent of Alaskan 12th grade males and 5 percent of 12th grade females report using smokeless tobacco on a daily basis.[10]
  - Among males from communities under 2,500, 16 percent chew tobacco daily, triple the rate among males in larger communities. Even greater are the differences for females—12 percent of female teenagers in small communities compared to fewer than 1 percent in larger communities.[11]

- **One-third of high-school-aged adolescents in the United States smoke or use smokeless tobacco.[12]**
  - The 25-year decline in smoking prevalence among youth leveled off since 1980 and in fact, is on the rise among male high school seniors.[13]
  - Use of smokeless tobacco among high school males has become markedly more prevalent over the last two decades.[14]

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[8]Alaska Division of Public Health. *Alaska Behavioral Risk Factor Survey: 1992 Annual Report.* Juneau, AK: Alaska Division of Public Health, October 1994.

[9]Alaska Department of Health and Social Services. May 1990.

[10]Alaska Department of Health and Social Services. May 1990.

[11]Alaska Department of Health and Social Services. May 1990.

[12]Centers for Disease Control and Prevention. 1994.

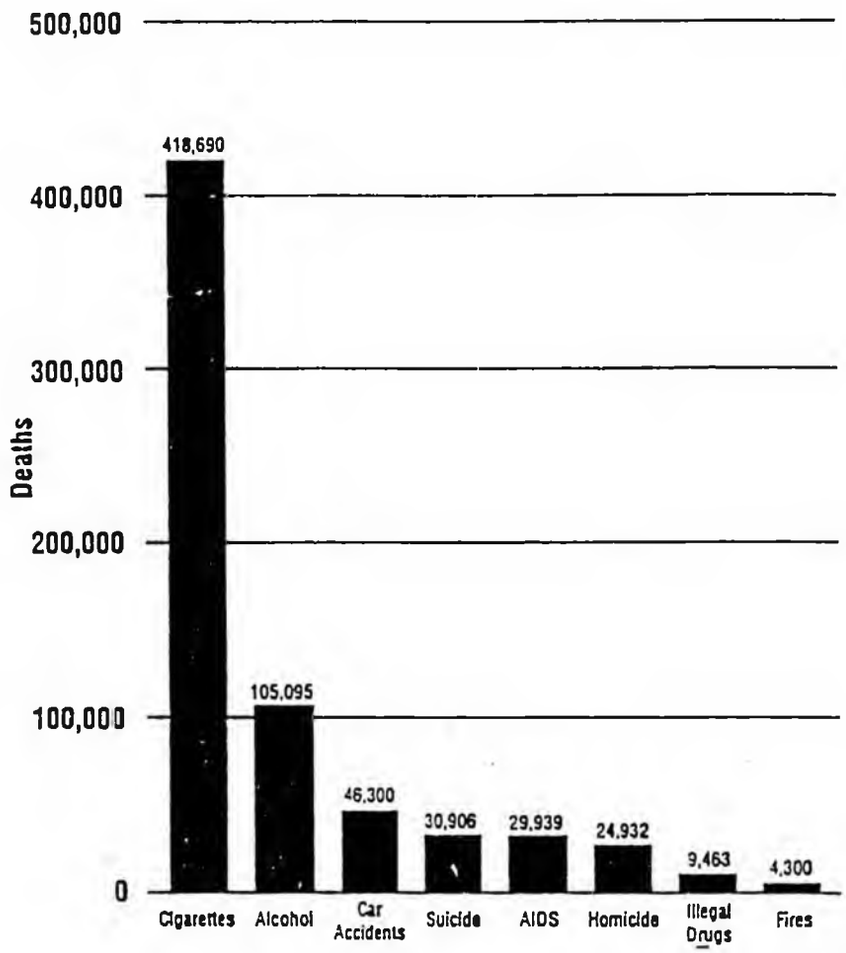
[13]U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1994.

[14]Centers for Disease Control and Prevention. 1994.

Tobacco: Its Prevalence and Impact (page 3)

HEALTH IMPACTS OF TOBACCO USE

- **Smoking kills an estimated 419,000 Americans each year—more than alcohol, heroin, cocaine, automobile accidents, homicides, suicides, AIDS and fires combined.[15]**



- **Smoking accounted for 19 percent of the deaths in Alaska in 1991, averaging one death per day. Among Alaskans 35 years of age and older, 23 percent of deaths were attributed to smoking.[16]**

[15]U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. 1994. (1990 data)

[16]Alaska Division of Public Health. "Bulletin: Costs of Smoking in Alaska, 1991." Anchorage, AK: Section of Epidemiology, Bulletin No. 23, November 30, 1994.

Tobacco: Its Prevalence and Impact (page 4)

- **Tobacco use is a major risk factor for diseases of the heart and blood vessels; chronic bronchitis and emphysema; cancers of the lung, larynx, pharynx, oral cavity, esophagus, pancreas, and bladder; and other problems such as respiratory infections and stomach ulcers.[17]**

  - Smoking accounts for 21 percent of all coronary heart disease deaths, 87 percent of lung cancer deaths, and 30 percent of all cancer deaths.[18]

- **Cigarette smoking during pregnancy accounts for 20 to 30 percent of low birth weight babies, up to 14 percent of pre-term deliveries, and about 10 percent of all infant deaths.[19]**

- **The Surgeon General reports that tobacco use in adolescence is associated with a range of health-compromising behaviors, including being involved in fights, carrying weapons, engaging in higher-risk sexual behavior, and using alcohol and other drugs.[20]**

  - Cigarettes and smokeless tobacco are generally the first drug used by young people in a sequence that can include tobacco, alcohol, marijuana, and hard drugs.[21]

ENVIRONMENTAL TOBACCO SMOKE

- **Smoke from other people's cigarettes—known as Environmental Tobacco Smoke (ETS)—has been identified as the third leading cause of preventable death in the United States, behind active smoking and alcohol related deaths. ETS causes more than 53,000 deaths per year from heart disease and cancer.[22]**

- **For every eight smokers killed as a result of smoking-related illnesses and disease, one non-smoker dies from exposure to environmental tobacco smoke.[23]**

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[17]Alaska Division of Public Health. October 1994.

[18]Alaska Division of Public Health. October 1994.

[19]Alaska Division of Public Health. October 1994.

[20]Centers for Disease Control and Prevention. 1994.

[21]Centers for Disease Control and Prevention. 1994.

[22]Glantz, SA and Parmley, W. "Passive Smoking and Heart Disease: Epidemiology, Physiology, and Biochemistry," *Circulation*, Volume 89, 1991, 1-12 as reported in California Healthy Cities Project. *Tobacco Control in California Cities: A Guide for Action*. Sacramento, CA: California Department of Health Services.

Tobacco: Its Prevalence and Impact (page 5)

- **Environmental tobacco smoke is a cause of lung cancer in non-smokers. It also can precipitate or worsen the symptoms of pneumonia, asthma, bronchitis, and allergies.[24]**

- **Environmental tobacco smoke is linked to between 150,000 and 300,000 annual cases of respiratory tract infections in children up to 18 months old.[25]**

- **The U.S. Environmental Protection Agency has classified environmental tobacco smoke as a Class A Carcinogen—a substance known to cause cancer in humans for which there is no safe level of exposure.[26]**

ECONOMIC IMPACTS OF TOBACCO USE

- **Smoking costs the American public over $100 billion each year in health care costs and lost productivity.[27]**

- **In Alaska, the estimated total cost attributed to smoking in 1991 was $127.6 million for persons age 35 and older. Of this, $45.6 million was for direct health care costs, equivalent to $220 per Alaskan or $941 per current smoker in this age group.[28]**

▽ ▽ ▽

This fact sheet was produced with funding from the Robert Wood Johnson Foundation's grant, "Trampling Tobacco: A Winning Tobacco Control Strategy for Alaska." For further information, contact the American Lung Association at 907/276-5864 or the Alaska Department of Health and Social Services, Health Promotion Program at 907/465-3140.

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[23] U.S. Environmental Protection Agency, 1990.

[24] Alaska Division of Public Health. *Alaska Cancer Control Plan.* Anchorage, AK: Section of Epidemiology, January 1994.

[25] U.S. Environmental Protection Agency. *Passive Smoking of Environmental Tobacco Smoke.* Washington, D.C.: U.S. Environmental Protection Agency, 1993.

[26] U.S. Environmental Protection Agency. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.* EPA/600/6-90/006F, December 1992.

[27] Office of Technology Assessment, U.S. Congress. "Smoking-Related Deaths and Financial Costs," November 1993.

[28] State of Alaska Epidemiology Bulletin. "Costs of Smoking in Alaska, 1991." November 30, 1994.

Citizens To Protect Kids from Tobacco

1057 W. Fireweed Lane, Suite 204 • Anchorage, Alaska 99503 • (907) 277-8696 • Fax: (907) 263-2073

"Cigarette taxes...are the most effective way to discourage tobacco use among young people...Increasing the cigarette tax could be one of the most important public health measures this country has ever taken." [1]

- former U.S. Surgeon General C. Everett Koop

❖ Increased tobacco taxes will save lives and protect our kids.

The 1994 U.S. Surgeon General's report *Preventing Tobacco Use Among Young People* affirms that increasing tobacco taxes will have a strong impact on children because they are more price sensitive than adults. As stated in the report: "...the large amount of empirical literature [indicates that increased] taxes on cigarettes would significantly reduce overall rates of cigarette smoking. Much of the impact of higher prices would come from...discouraging initiation among young smokers.[2] Research indicates that an increase of 10% in tobacco prices will reduce consumption by 4% for adults and by between 10-14% among children.

❖ Increased tobacco taxes are fair.

Tobacco taxes can be viewed as a "user-fee" to offset the enormous costs subsidized by the general public through publicly funded health care, payment of needlessly high health insurance premiums, and payment for higher priced goods and services as a result of diminished worker productivity. U.S. health care expenditures caused directly by smoking totaled $50 billion in 1993.[3] On average, each pack of cigarettes smoked is directly responsible for more than $3.90 in national health care costs and lost productivity.[4] In Alaska, the estimated total costs attributed to smoking in 1991 was $127.6 million for persons age 35 and older. Of this, $45.6 million was for direct health care costs, equivalent to $220 per Alaska or $941 per current smoker in this age group.[5]

❖ The public supports tobacco taxes.

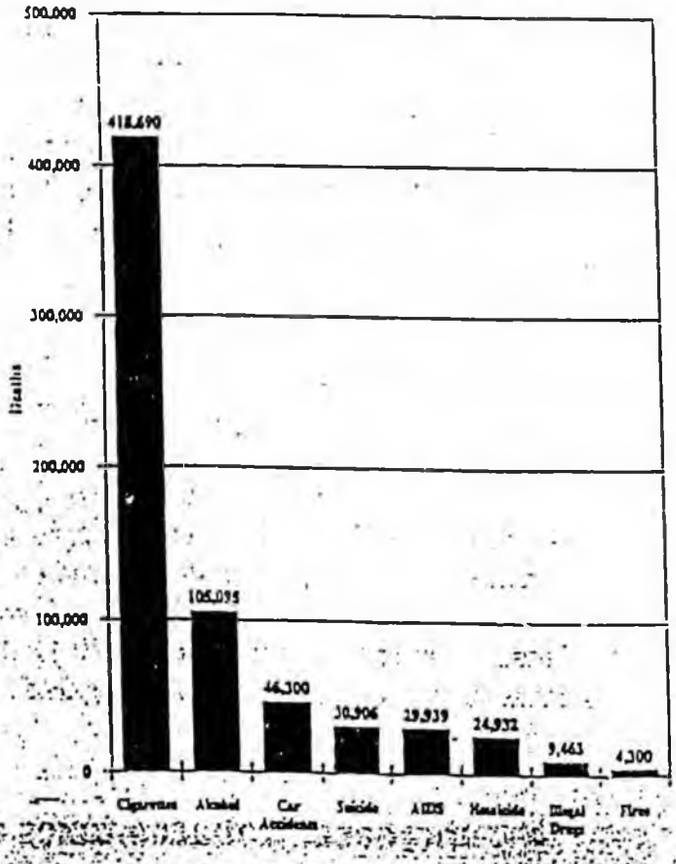
As noted by former Surgeon General Koop: "...polls show that almost 80% of Americans - Republicans and Democrats, young and old, men and women - support a large cigarette tax."[6] The death and disability caused by tobacco is a non-partisan issue.

AMERICAN CANCER SOCIETY Alaska Division, Inc. | American Heart Association | AMERICAN LUNG ASSOCIATION of Alaska | Alaska Native Health Board

CITIZENS TO PROTECT KIDS FROM TOBACCO

Nothing Kills Like Tobacco

❖ Tobacco kills far more Americans than alcohol, car accidents, suicide, homicide, AIDS , heroin and cocaine combined.7



Source: Centers for Disease Control, U.S. Department of Health and Human Services. Chart produced by the Coalition on Smoking OR Health.

❖ Adults don't start smoking....kids do. The average age of smoking initiation is 14.5 years old.8 About 3,000 kids start smoking each day and of those nearly a third will die from a tobacco related illness.9

❖ "Tobacco taxes are fair because tobacco kills hundreds of thousand of Americans each year; because there is no safe level of tobacco use; because tobacco is highly addictive; and because virtually all new tobacco users are kids."10

❖ Alaska has the sixth highest rate of smoking and smoking-related death in the U.S.11 One out of five deaths in Alaska are attributed to smoking.12

❖ 84% of Alaskan adults smokers started smoking between the ages of 10 and 20.13

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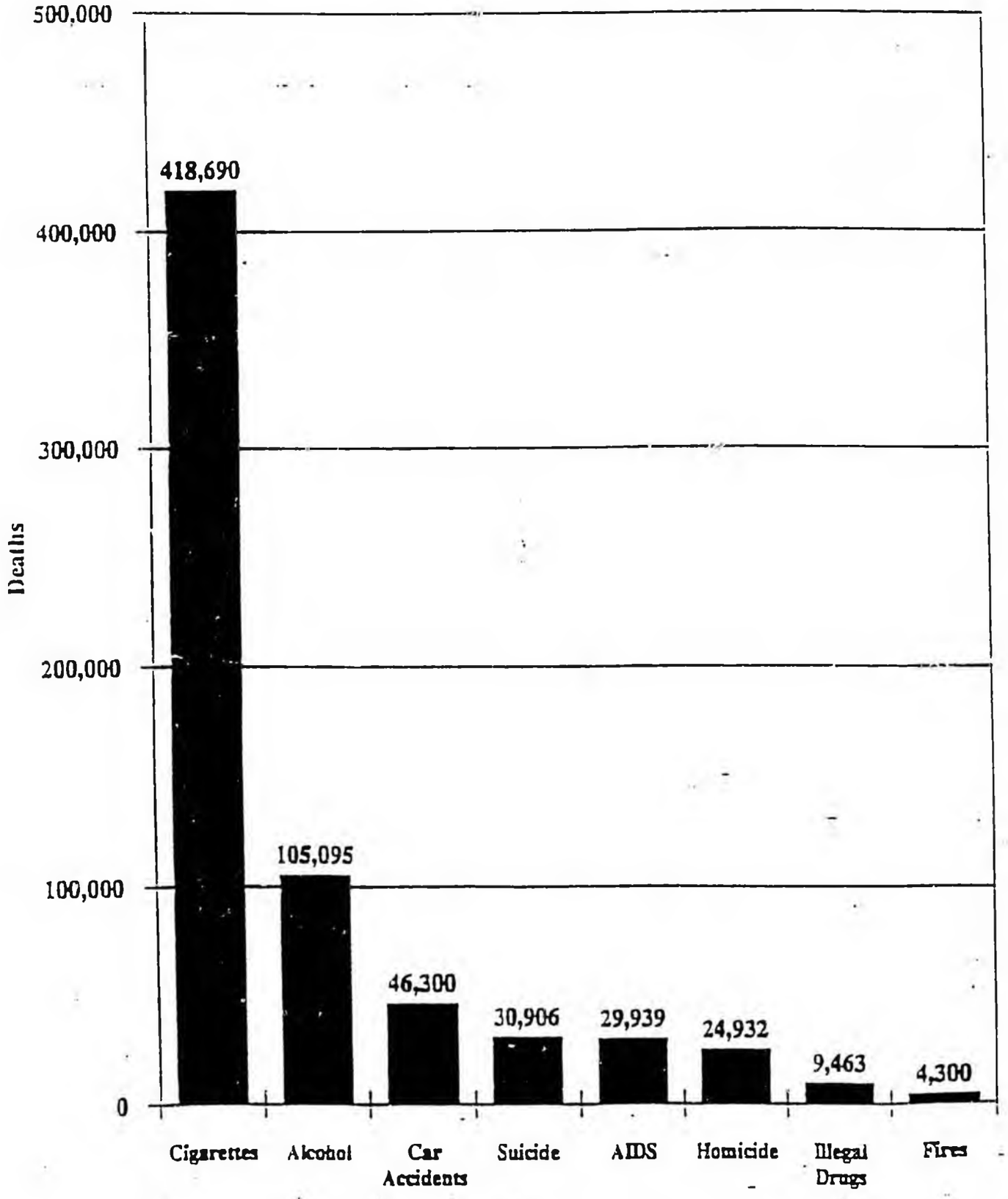
1. C. Everett Koop, "A Tax That's Good for You," *The Washington Post* (September 21, 1993). C. Everett Koop served as U.S. Surgeon General from 1981 to 1989.
2. *Preventing Tobacco Use Among Young People--A Report of the Surgeon General* (1994), p. 227.5.
3. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).
4. Ibid.
5. Alaska Department of Health and Social Services, "Bulletin," (Juneau: Alaska Department of Health and Social Services, Section of Epidemiology, 30 November 1994).
6. C. Everett Koop, "A Tax That's Good for You," *The Washington Post* (September 21, 1993).
7. Centers for Disease Control and Prevention, U.S. Dept. of Health and Human Service, 1990 data.
8. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).
9. U.S. Department of Health and Human Services, "Children and Tobacco: The Facts," August 10, 1995.
10. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).
11. U.S. Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report, Vol. 43 No. SS-1, June 10, 1994.
12. Alaska Division of Public Health, "Bulletin, costs of Smoking in Alaska, 1991," (Anchorage, AK: Section of Epidemiology, Bulletin No. 23, November 30, 1994).
13. Alaska Division of Public Health, *Alaska Behavioral Risk Factor Surveys: 1992 Annual Report*, Juneau, AK: Alaska Division of Public Health, October 1994, page 24.

CIGARETTES KILL MORE AMERICANS THAN AIDS, ALCOHOL, CAR ACCIDENTS, FIRES, ILLEGAL DRUGS, MURDERS AND SUICIDES COMBINED.



Source: Centers For Disease Control, U.S. Department of Health and Human Services. Chart produced by the Coalition on Smoking OR Health.

A Tax That's Good for You *by C. Everett Koop*

Health-related taxes are different." That's what President Clinton said when he suggested a hefty cigarette tax—perhaps as much as $2 a pack—as one of the ways to pay for the health care reform that most Americans know we need. He's right.

A cigarette tax is different because it helps almost everyone. A substantial cigarette tax would benefit not only the entire nation by helping to provide more accessible health care at a lower cost, but it would also benefit particular groups; smokers would benefit because it would help them to quit; nonsmokers would benefit because the air they breathe would have less harmful smoke; children would benefit because fewer kids would get hooked on cigarettes; and—if the tax is done right—even tobacco farmers could benefit. The only real losers would be the tobacco industry, which has made its profits by lying to the American people about the dangers of smoking.

But the tobacco industry lobbyists are pressuring the President to back down, to settle for a cigarette tax as low as 50 cents, and they're linking arms with tax opponents in Congress to defeat this critical part of health care reform. Now, more than ever, President Clinton needs to remember his own words—for cigarette taxes are different indeed.

Cigarette taxes are different because they are the most effective way to discourage tobacco use among young people. In Canada, where cigarette taxes have been raised to more than $3 per pack, youth smoking rates have dropped by 60% since 1980.

Cigarette taxes are different because cigarettes kill more than 400,000 Americans each year, and rob our economy of $68 billion a year in health care costs and lost productivity. Increasing the cigarette tax could be one of the most important public health measures this country has ever taken. Experts predict that a $2 per pack increase would persuade millions of young people not to start smoking and would help millions of current smokers to quit. About 7.6 million Americans would choose not to smoke because of the tax.

Figuring that smoking kills about a third of all those who smoke, this tax could prevent the premature death of at least 2 million Americans alive today. No other single aspect of any health care reform plan can make so dramatic a claim. Let's not lose this unique opportunity to prolong those 2 million lives just to please the tobacco industry and its friends in Congress.

Senators and congressmen should be happy to find a tax that is actually popular. Polls show that almost 80% of Americans—Republicans and Democrats, young and old, men and women—support a large cigarette tax. So those members of Congress elected on a "no new taxes" pledge can go along with this one. Cigarette taxes *are* indeed different.

Even tobacco farmers could benefit from the new cigarette tax if it is as hefty as once planned. Most tobacco farmers know the right and smart thing to do is to get out of a business that produces disease, disability, and death, and this tax can help them make the transition to the smoke-free society and smoke-free economy that lie in our future. A small percentage of the revenue from this tax could be returned to tobacco-growing states to be used to help tobacco farmers diversify. Instead of blindly opposing the $2 cigarette tax, tobacco-state members of Congress should be fighting for their share of the pie to help move their states into the economy of the 21st century.

President Clinton says he wants dialogue on the health care reform package, and that should eventually produce the plan the nation needs. But there's already one issue on which almost everyone agrees—a major cigarette tax. Let's not let the tobacco industry make victims of the public on this one. Health-related taxes are different; they're good for you.

C. Everett Koop, MD, was surgeon general from 1981 to 1989.

This article appeared in the *Washington Post* September 21, 1993.

A TAX THAT'S GOOD FOR YOU
BY C. EVERETT KOOP

cigarette smoking--United States 1993. MMWR 1994;43:469-472.
12. Alaska Bureau of Vital Statistics: 1993 Annual Report. Alaska Division of Public Health.
13. Alaska Behavioral Risk Factor Surveillance Survey. 1992 Annual Report. Alaska Division of Public Health.
14. Giovino GA, Hemmingfield JE, Tomar SL: Epidemiology of tobacco use and dependence. Epidemiol Rev 1995;17:1-65.
15. Federal Register, August 11, 1995. Regulations restricting the sale and distribution of cigarettes and smokeless tobacco products to children and adolescents: proposed rule

Table 5.
Economic Costs of Smoking in Alaska: Estimates for 1993

Smoking related direct costs*	$96,490,000
Smoking related indirect mortality costs**	$183,200,000
Smoking related indirect morbidity costs**	$15,940,000
Total smoking related costs	$295,630,000

* Calculation of direct costs based on 6.13% of total medical care costs for Alaska for 1993 ($1,573,000,000)
** Indirect mortality costs calculated using SAMMEC with a 3% discount rate and 1990 earnings data

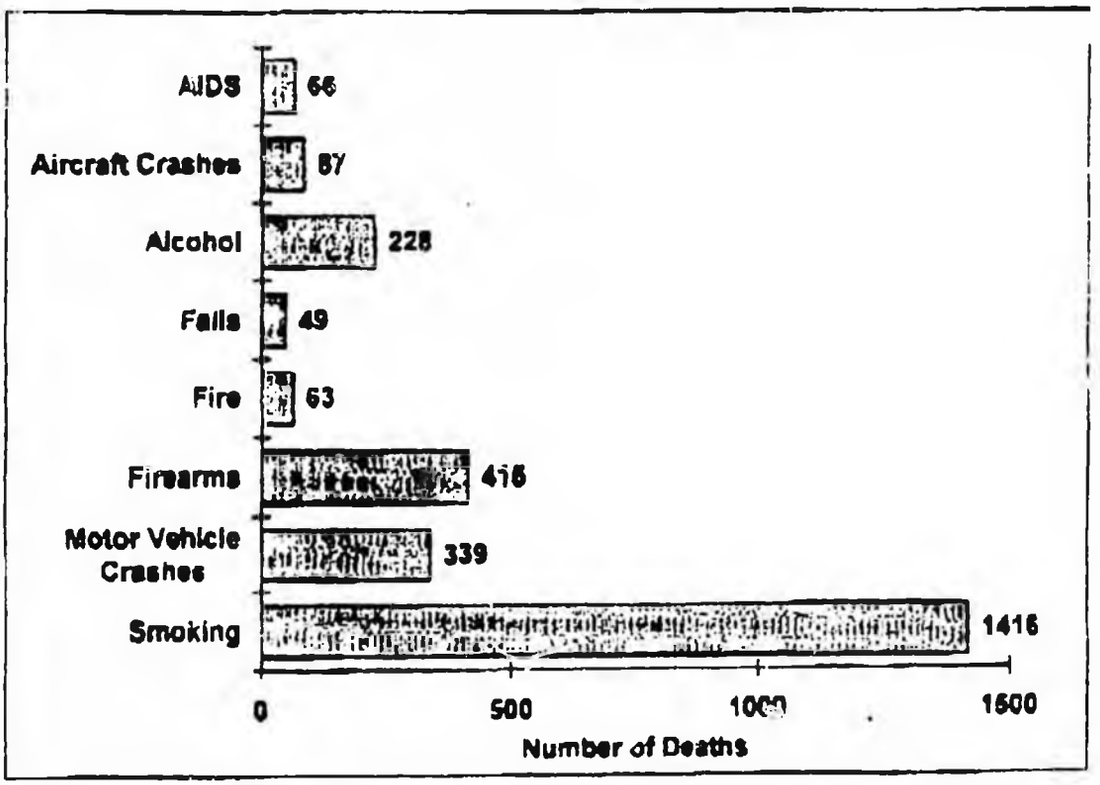


Figure 1: Alaska Resident Deaths by Selected Cause : 1992-94 Mortality Data for Alaska Residents 1992-94, provided by the Bureau of Vital Records, Alaska Division of Public Health. ICD-9 Codes. Aircraft crashes: 840-845; AIDS 42-44 : Alcohol 291, 303, 305, 357.5, 535.3, 425.5, 790.3, 860, 571.0-571.3; Falls 880-888; Fires 890-899; Firearms 922.955,965,970,985; Motor vehicle crashes 810-825.

Smoking Attributable Mortality and Economic Costs in AK 1992-1994

Excise Taxes and Preventing Tobacco Use In Young People

by David Sweanor

We need to reexamine the approaches taken in the worldwide fight against tobacco use. We need to consider the evidence of our success to date, not on the basis of justifying past action, but with the aim of increasing our effectiveness. We need to be reminded that during our 25-year fight against tobacco, world cigarette production has doubled and per capita consumption has increased 25%.

In most parts of the world, like my own country of Canada, the resources committed to tobacco control are very limited. This means the few people working to reduce tobacco use must use the most effective tools available. It is my view that the economics of tobacco have defeated our worldwide efforts to date and that turning the economics to our favor is the single most effective thing we can do to reduce tobacco use.

Affordability of tobacco appears to be, for many countries, the single largest determinant of how many children will start smoking.

Fortunately, the cost of cigarettes need not be determined solely by tobacco companies: tax policy can dictate prices and health concerns can dictate tax policy. It is time to use the incredibly cost-effective tool of tax policy as central to any strategy to reduce tobacco use and to prevent young people from ever becoming addicted in the first place.

David Sweanor is Legal Counsel for the Non-Smokers' Rights Association of Canada.

The Economics of Tobacco Control

It is hardly surprising that those who came early to the fight against tobacco use chose the well-tried weapons of previous health campaigns: first, the search for a cure. When that failed, we looked to health education. Only when we came to realize that much greater gains could be made, did we resort to legislative action.

Each of these successive approaches has been a movement toward dealing with the source of the problem. We started with the symptoms and moved to the cause. The closer we have come to the source of the problem, the more effective the intervention has been. As we examine the various legislative avenues available, it is clear that some are more effective. I believe that economics is about the most effective tool available, and legislative intervention in the area of tobacco tax policy is the way to turn this tool to our advantage.

We know that controlling tobacco use is different from other health battles—because the foe is not a virus or bacteria, but a powerful industry with a vested interest in making money from the product causing the disease.

It can fairly be said that the profits from marketing tobacco are so great that some companies are willing to kill for them. Cigarettes are very cheap to manufacture, they are addictive, and virtually every national market is controlled by no more than three companies. The result is often little price competition, so retail prices edge upward, and profits skyrocket.

However, there is a flaw in marketing a deadly product—built-in obsolescence not of the product, but of its consumers. The tobacco industry has to recruit new consumers to survive. The profile of these new recruits varies from country to country but with one universal constant: the new users of tobacco products are overwhelmingly young people. As a result, we know that the real battle is to stop the tobacco industry from recruiting young people. A person who has not become a tobacco user by age 20 is likely to never become one.

We also know that, despite decades of health education, young people do not grasp the magnitude of the risk associated with tobacco use. For example, in Canada, despite the best efforts of health educators, a recent survey[1] found that only a small minority could recall that smoking caused heart disease, many did not know that lung cancer is fatal, and few realized that the risk of heart disease declines dramatically soon after someone quits smoking.

Presented at the 8th World Conference on Tobacco OR Health, Buenos Aires, Argentina, March 30-April 3, 1992.

But there is one piece of knowledge we and the tobacco industry have in common—that price is the key. If the price of tobacco goes down, use goes up. If tobacco becomes less affordable, consumption goes down.

Price has the greatest influence among those who are not yet addicted: the young. The industry needs to get them into the market.

We need to keep them out.

Cigarette Prices and Young People

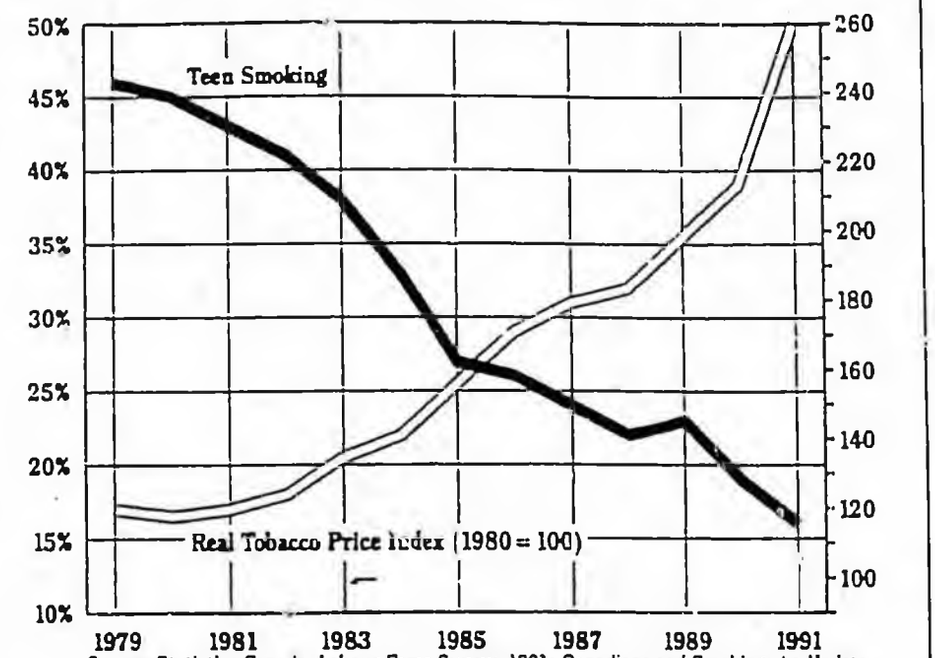
Evidence from the United States[2] has suggested that every 10% increase in the real (i.e., after inflation) price of cigarettes leads to roughly a 10% reduction in tobacco use among teenagers. This evidence, which has existed for at least a decade, led some of us in Canada to decide to focus on tax increases as an integral part of our approach to tobacco control.

These efforts have been successful. We have obtained very large tobacco tax increases that have caused dramatic increases in tobacco prices and resulted in stunning falls in the number of young people using tobacco.

In 12 years—from 1979 to 1991—the real price of tobacco increased by a total of 158% and teenage tobacco use fell by two thirds (Figure 1). This is startling progress toward the goal of a tobacco-free society.

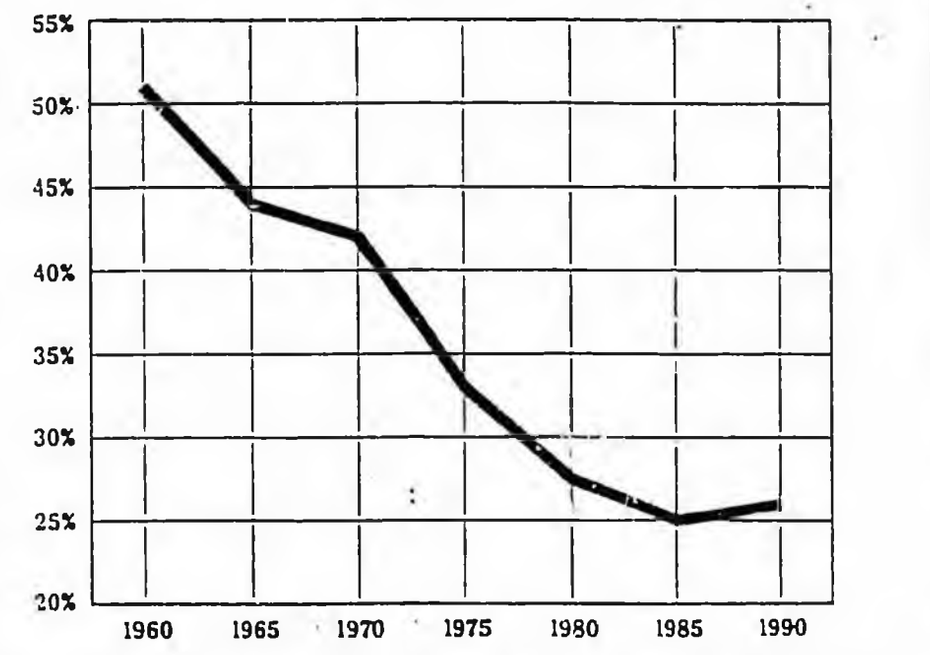
In determining the extent to which the decline in Canadian teenage tobacco use has been induced by tax-based price increases, various factors can be considered. Public education campaigns do not explain this drop, since countries like Canada (such as the United States) ran similar campaigns but experienced no comparable decline in teenage smoking. Even our ad ban, health warnings, and laws protecting nonsmokers cannot explain

Figure 1: Real cigarette prices and cigarette smoking among Canadians age 15 to 19



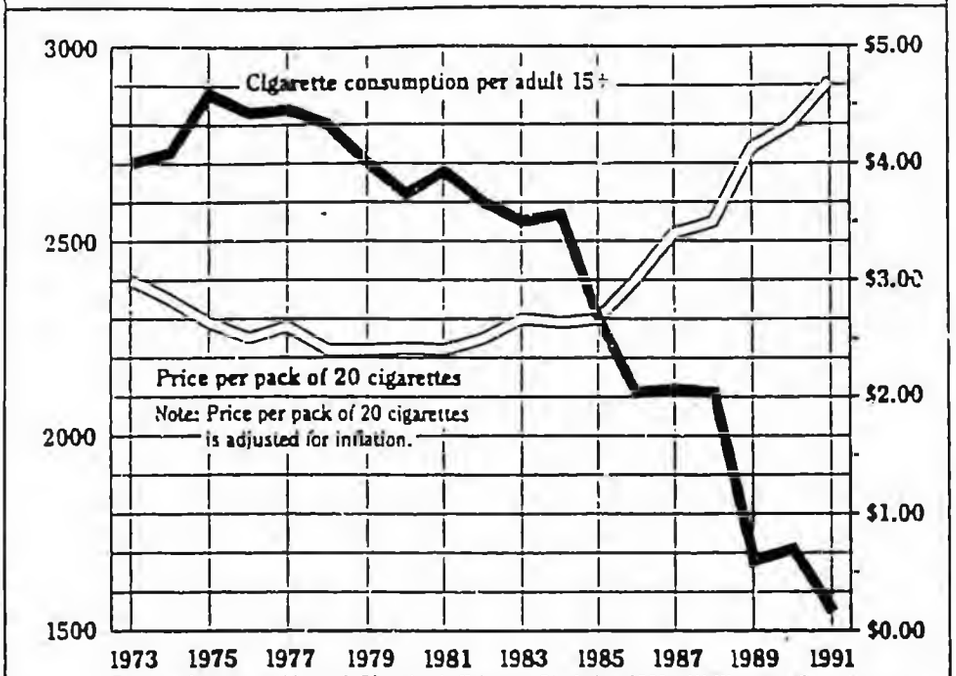
Source: Statistics Canada, Labour Force Survey, 1991; Canadians and Smoking: An Update. *Health and Welfare, Canada, 1991.*

Figure 2: Tobacco taxation in the United States—average cigarette tax as a % of retail price



Source: The Tax Burden on Tobacco. *The Tobacco Institute.* Volume 25, 1990, pp. 72-108.

Figure 3: Cigarette consumption versus pack price—New Zealand, 1973-1991



Source: Longesen M. and Sheerin J. Tobacco Statistics 1991. Wellington, Department of Statistics and Department of Health, 1992. ISBN 0-477-06495-7

this fall, since these are recent measures. A 1991 study[3] found that the price sensitivity of Canadian teenagers is much in line with what the US studies had suggested.

Unlike many other interventions, the impact of tax changes is immediate and dramatic. Whereas other interventions often require a great commitment of resources, the cost of a tax intervention can work out to no more than pennies per life saved. All that is needed is a little knowledge, some persuasive advocacy, and persistence.

How Can We Use This Information?

It seems clear that tobacco taxation is a strategy that works. Why then is it so underutilized? Why have so few governments used taxes to reduce tobacco consumption? Why have some countries—like the United States—let the tax component of retail prices slump (Figure 2) while research showed the impact of tobacco use and the role of taxation in reducing such use? Why do some governments who are prepared to see tobacco advertising banned, still protect the cheap cigarettes produced by their national tobacco monopolies?

One reason must be that the health lobby has been so reluctant to put tobacco tax increases at the top of its agenda. Unlike the tobacco industry, we have failed to realize the power of economics. Because we are less experienced in talking to government finance officials than dealing with the health departments. Because it means talking an unfamiliar language to people who may—at the start—be unsympathetic.

But the experience of places such as Hong Kong, Britain, New Zealand, and Canada shows that the effort is repaid many times over. In fact, the benefits from the impact on youth smoking are greatly compounded by the impact on adult tobacco consumption. An analysis of countries around the world shows the powerful inverse relationship between price and consumption. New Zealand is but one example (Figure 3).

Finance ministers are willing to listen to a well-presented health case. This could be due to a combination of pure expediency, since tobacco taxes are a convenient way to raise money, and a recognition of the role of fiscal policy in preventing disease. Once convinced, these officials can be powerful allies within government.

Another lesson is that tax increases are the fastest, surest way of achieving large reductions in tobacco consumption. And that in turn opens the way for further initiatives. Fewer smokers make it easier to get restrictions on workplace smoking, to get smoke-free transportation, and to get rid of advertising. The higher taxes can also increase a government's willingness to implement bold marking schemes that make smuggled tobacco easier to identify while reducing the attractiveness of tobacco packaging. These measures are part of a strategy that reinforces the message to the next generation, that smoking is an activity on the way out.

Obstacles to Action

The tobacco industry resists tobacco tax increases with an intensity commensurate with its certainty that such measures reduce consumption. The industry will throw any obstacle in the way of a sizable tax increase. It will also seek loopholes that keep cheap products in the market as a lure for those who might otherwise not

tart—or quit—as the price rises.

Favorite tactics of the industry include focusing attention on the plight of local tobacco growers and tobacco factory workers. It will also attempt to portray the tax as unfair to the poor, to enlist the services of those with strong government ties to oppose you, or to promote the idea that higher taxes will increase crime.

Fortunately, all these tactics of the tobacco industry have already been effectively countered in some countries. Anyone now embarking on a campaign for health-oriented tobacco tax policies can become an "instant expert" simply by learning the lessons of the campaigns run to date. The arguments the tobacco industry makes with respect to economics can be shown as no more credible than the position the industry takes on health.

The major obstacle to date has been the reluctance of health organizations to move strongly into the area of tobacco pricing. The tobacco industry and governments have done exactly as would be expected on tobacco pricing given their respective interests and methods of operation. It is the "health lobby" that has been rather absent from this field. As a result, we have left the area of economic policy firmly in the hands of the tobacco industry and placed ourselves at a great disadvantage in our efforts to reduce youth smoking.

Conclusion

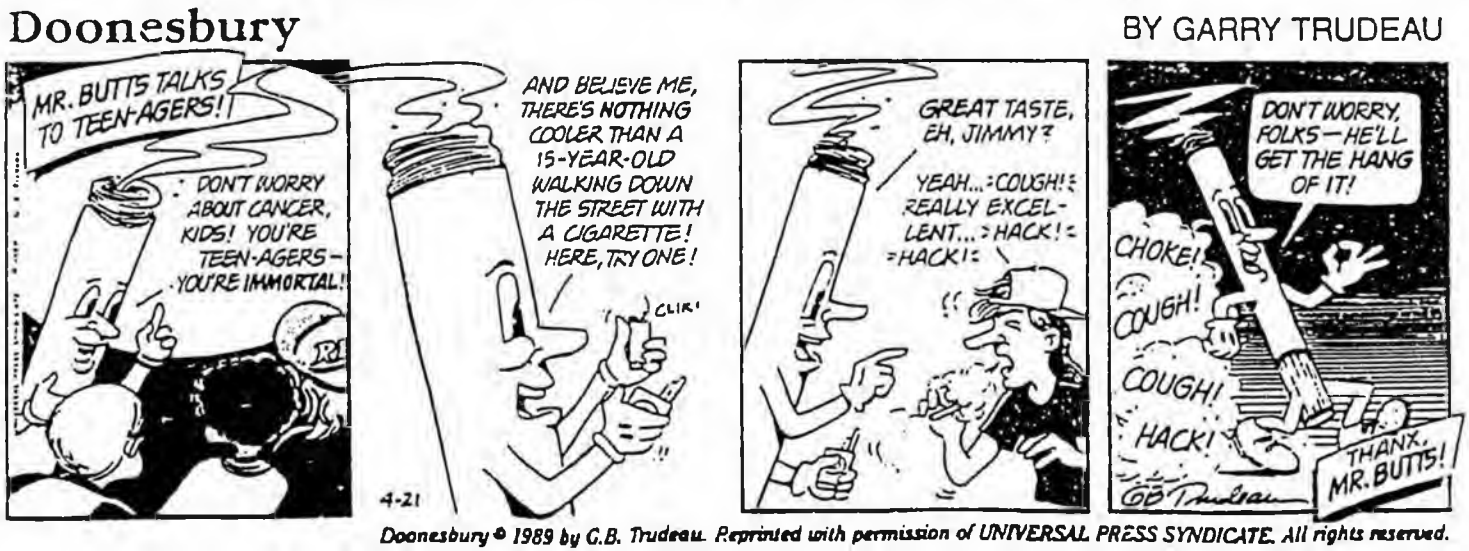
If the health community remains reluctant to get seriously involved in the economics of tobacco, we will almost undoubtedly see worldwide tobacco sales continue to increase in the foreseeable future. The increasing affordability of tobacco is probably the major reason world cigarette production has doubled in the last 25 years. If we do not move on this front, far too many of the planet's young people—the people we talk so earnestly of saving from tobacco addiction—will be making their debut as mortality statistics 25 years from now.

If we choose to get involved, to change the economic landscape in tobacco control, the impact on world tobacco consumption could be beyond anything achieved to date. The level of smoking among young people could be suddenly and significantly reduced. The impact of these same price changes among adults could lead to an unprecedented decline in world tobacco sales.

A quarter of a century ago, at the First World Conference on Smoking and Health, Senator Robert F. Kennedy said: "The industry we seek to regulate is powerful and resourceful. Each new effort to regulate will bring new ways to evade.... This is a battle that can be won." These words are as true today as they were when first spoken. They are no less true in the area of tax policy than any other area of tobacco control. Our major challenge today is to use what we know to finally start winning that battle.

References

1. Canadian Council on Smoking and Health. *Awareness of Health Hazards Due to Smoking.* Environics Research Group Limited, Toronto, December 1990.
2. US Department of Health and Human Services. *Smoking and Health in the Americas: A 1992 Report of the Surgeon General,* with the Pan American Health Organization. US DHHS, Public Health Service, Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1992, pp.127-136.
3. Roberta Ferrence, et al. *Effects of Pricing on Cigarette Use Among Teenagers and Adults in Canada 1980-1989.* Addiction Research Foundation, Toronto, February 1991.



WHY DO TOBACCO TAXES MATTER?

Economic studies, many from the United States, show that price has a powerful effect on the consumption levels of tobacco. Estimates of the price effect vary, but, broadly speaking a 10% real (that is, inflation adjusted) increase in price reduces aggregate per capita consumption by around 4%. Conversely, a decline in the real price of tobacco leads to increased consumption.

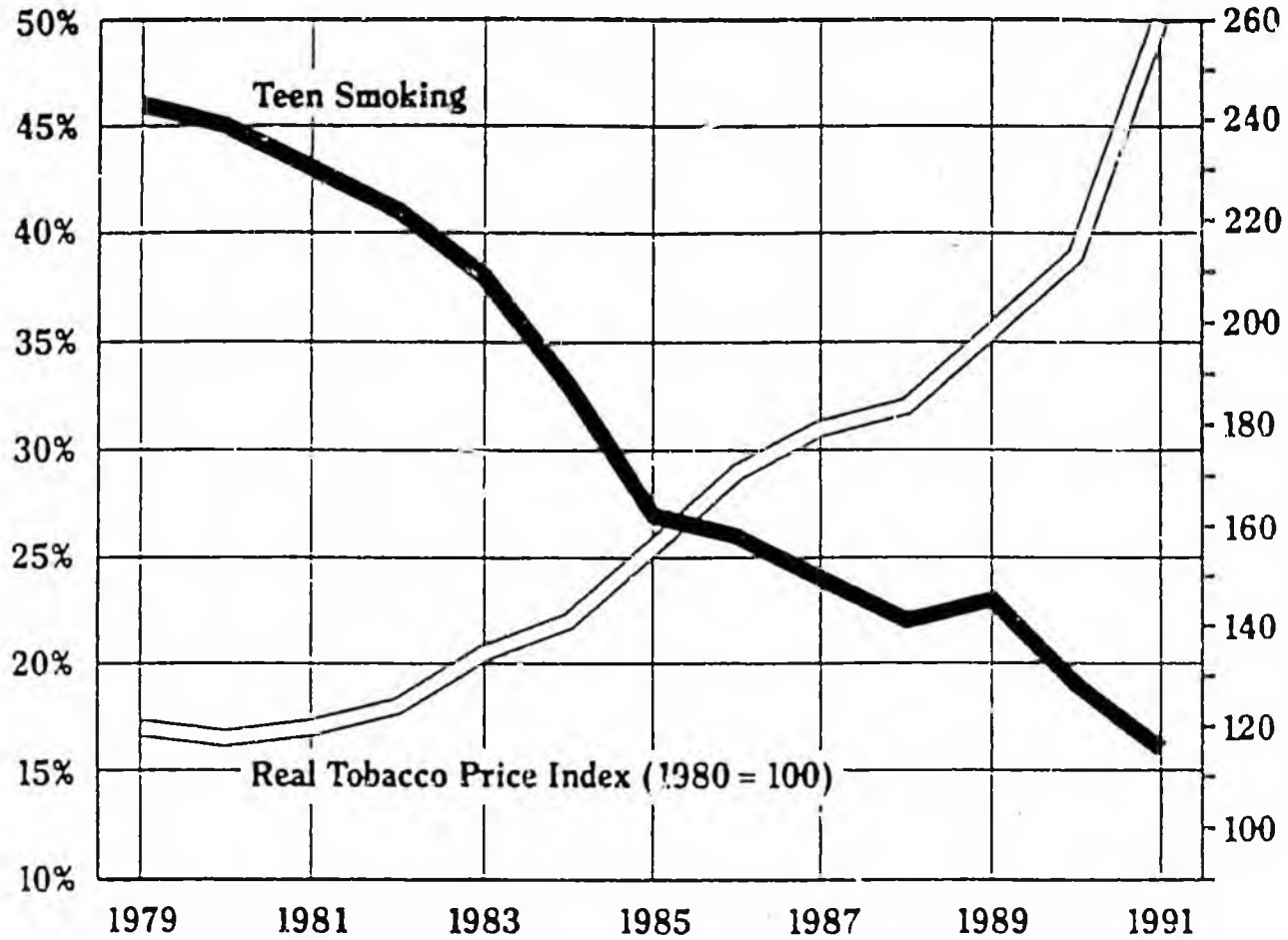
This relationship between price and consumption can be seen in more than academic studies. One of the best ways to illustrate it is to take the historical per capita consumption data presented at page 6 of The Tax Burden on Tobacco and the average price of a pack of cigarettes from 1954 to 1994 (pages 76 to 121). Since the Tobacco Institute conveniently ignores inflation, we can factor it into the sales price information by using the consumer price index. The result is a graph showing almost a mirror image between price and consumption, as can be seen in Figure 1.

There is also research indicating that teenagers are particularly price sensitive, with price affecting both the quantity consumed and the decision as to whether to smoke-at-all. Generally, each one percent increase in the real price will lead to a corresponding one percent decline in teenage consumption. A survey of the research in this area led the General Accounting Office to conclude in 1989 that a higher tobacco excise tax should significantly reduce the number of teenage smokers.

Of course taxes are not the only influence on the price of tobacco. *The Tax Burden on Tobacco* illustrates the role of such factors as the growth of discounted cigarettes from 1990 to 1994 (pages 113 to 121). The Tobacco Institute calls these discounted cigarettes "generic brands" and does separate calculations of state prices taking these brands into consideration. During this time the average price of cigarettes varied considerably from the price of the non-discounted brands.

The key thing about taxes is that they allow governments to influence the price of tobacco products. The affordability of tobacco products affects consumption, price affects affordability and taxes affect price.

Figure 1: Real cigarette prices and cigarette smoking among Canadians age 15 to 19



Source: Statistics Canada, Labour Force Survey, 1991; Canadians and Smoking: An Update. *Health and Welfare, Canada, 1991.*

The Health Effects of Cigar Smoking, Pipe Smoking and Smokeless Tobacco Use

Prepared by Catherine Schumacher, MD, MSPH and Michael G. Landen, MD, MPH
Section of Epidemiology
Alaska Division of Public Health

The health effects of cigar smoking, pipe smoking and smokeless tobacco are discussed less frequently than the effects of cigarette smoking, mainly because many more people smoke cigarettes. Nonetheless, the detrimental health effects of cigars, pipe smoking and smokeless tobacco are well established. Cigars, pipes and smokeless tobacco are nicotine delivery systems that lead to addiction. Furthermore, all deliver known carcinogens.

Cigars

- Cigar and cigarette smokers have a similarly increased risk of laryngeal and oral cancers;
- The risks of lung cancer and of chronic obstructive lung disease are also elevated among cigar smokers, but not to the extent as in cigarette smokers.
- Cigars deliver nicotine that can be absorbed through the lining of the mouth and pharynx, whereas cigarettes need to be inhaled to absorb the nicotine.
- Cigar smokers vary in their smoking habits with regard to inhaling and with regard to smoking other products. Additionally, cigars vary in their nicotine and tar amounts. Therefore, the health effects vary depending on smoking behaviors and type of cigar.
- Nonetheless, the health risks, in particular oral and laryngeal cancers, remain significant regardless of inhaling.

Pipes

- Pipe smoking has declined from 14.1% of men in 1965 to 2.0% of men in 1991;
- Pipe smokers have increased risks of chronic obstructive lung disease, oral cancer, laryngeal cancer, esophageal cancer, and lung cancer;
- Risks are somewhat lower than those for cigarette smoking, ranging from 50-250% greater than those for non-smokers;
- An estimated 1,095 deaths were attributable to pipe smoking in the US in 1991; the relatively low number of deaths as compared to cigarette smoking-related deaths (over 400,000) is not because pipe smoking is safe, but because so few people smoke only pipes.

Smokeless Tobacco

- Smokeless tobacco, especially moist snuff, contains high levels of potent carcinogens, including polynuclear aromatic hydrocarbons, radiation emitting polonium and a variety of nitrosamines;
- Smokeless tobacco is strongly associated with oral cancers;
- Smokeless tobacco is also associated with other cancers;
- About 1/3 of regular users develop leukoplakia, a white wrinkled patch on the gums and inside of the mouth, which is a premalignant condition;

- Smokeless tobacco also causes other conditions affecting the mouth and gums;
- Smokeless tobacco causes elevations in blood pressure and may be related to coronary heart disease;
- In Alaska rural communities, smokeless tobacco use is not uncommon among five-year-olds (17% of girls and 10% of boys); nationally, the average age to start smokeless tobacco use is 12 years.

Summary

- Pipes, cigars and smokeless tobacco do not represent safe alternatives to cigarettes;
- Increasing the price of one type of nicotine delivery system, but not others, may lead to people merely switching to another system;
- Pipe and cigar smoking are not common now however, a decade ago, smokeless tobacco use was rare. The tobacco industry has shown that it can successfully market smokeless tobacco to youth.

References

Public Health Service. The health consequences of using smokeless tobacco: a report of the Advisory Committee to the Surgeon General. Bethesda, Maryland. USDHSS, April, 1988: NIH #86-2874.

CDC: Smokeless tobacco use in rural Alaska. MMWR 1987;36:140-3.

Connolly GN, Winn D, Hecht SS, et al: The reemergence of smokeless tobacco. NEJM 1986; 314: 1020-1026.

Nelson [illegible]is RM, Chrismon JH, Giovino GA: Pipe smoking in the United States, 1965-1991: Prev[illegible]ce and attributable mortality. Prev Med 1996; 25:91-99.

Henningfield JE, Harihan M, Kozlowski LT: Nicotine content and health risks of cigars. JAMA 1996; 276:1857-8.

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January 29, 1997

MEMORANDUM

TO:

FROM: Paul Brandt
Legislative Analyst

RE: **The Effects of Tax Increases on Tobacco Use by Minors**

You asked for information on how tobacco tax increases affect the rate of tobacco use by minors. After a brief summary, this memorandum provides a short review of economic concepts and data sources used by researchers, and then presents the findings of several studies that examine the effects of price increases on tobacco use.

Summary

Experts with whom we spoke cited numerous studies examining the effects of tax increases on tobacco use by minors.[1] Even with an issue as sensitive as tobacco taxes, we found little argument with the fact that increased tobacco costs results in decreased tobacco sales. Tax opponents may argue, however, that control measures such as stricter youth tobacco laws are more effective at reducing teen smoking than increased taxes. Opponents of tax increases also contend that although raising prices decreases cigarette sales, illegal tobacco sales flourish, thus masking any lasting actual decline in smoking rates. Advocates of tax increases point to a review of youth tobacco use by the office of the U.S. Surgeon General, including research accounting for the illegal cigarette sales, which concludes that tax increases provide an immediate and lasting method of controlling smoking. The Surgeon General estimates that a 10 percent price increase results in a 2 to 5 percent decline in cigarette use within the general population and cigarette use

[1]Among others, we contacted the American Cancer Society, the American Lung Association, the Centers for Disease Control, the Office of the Surgeon General, the National Conference of State Legislatures, the Tobacco Merchants Association of America, and the Tobacco Institute.

decreases at least as high, if not significantly higher, among youth.[2] Additionally, the Surgeon General reports that 86 percent of the overall decrease in youth cigarette use comes from discouraging initiation of new smokers; the remaining 14 percent comes from decreased cigarette use by young people who are already smoking. The 86 percent decline in new smokers is an important point because studies also indicate that more than 80 percent of smokers began smoking before age 18. Stopping young people before they start is often cited by health advocates as a major goal of their anti-smoking campaigns. In fact, the Surgeon General recommends raising prices as a primary measure to control tobacco use by minors because of the scientific evidence showing its great effects. In addition, a recent study, conducted by independent researchers, examines the effects of both tax increases and laws designed to restrict minors' access to tobacco. According to one of the authors, Dr. Frank Chaloupka, tax increases are the single most effective method of reducing youth cigarette use. His study, based on information from 110,000 youths nationwide, finds that tax increases significantly reduce youth smoking rates and that laws designed to prevent minors' access to tobacco are ineffective.

Background

According to David Reaume, former professor of economics at the University of Alaska Southeast, economists use two fundamental economic concepts to examine the effects of price increases on product demand--*the law of demand* and *price elasticity of demand*. The *law of demand* dictates that raising prices causes a decrease in product demand. Economists measure the rate of change using *price elasticity of demand*. Mr. Reaume explained that demand for any product decreases as prices increase but the degree of change is likely to be small for necessities and large for luxury items. He also cautioned that many variables affect product demand and when measuring the amount of change caused by price increases economists must try to account for all factors.

Numerous tobacco-related studies use data collected by the U.S. Centers for Disease Control (CDC) when analyzing the effects of tax increases on youth smoking rates. According to Dana Shelton, epidemiologist for the CDC, it is the way in which researchers use CDC information that is important. Many researchers use sources other than the CDC's data because information obtained by state-sponsored Youth Risk Behavior Surveys comes from random samples of an entire population rather than multiple year studies of specific individuals. After obtaining their own study results, researchers may use CDC data to estimate nationwide results. For example, researchers may contact the same set of teens over a three-year period to determine if tax increases resulted in changes such as quitting, reducing, or starting smoking. Based on these contacts, researchers are able to project how tax increases influence youth smoking rates; they then use

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[2]Studies reviewed by the Surgeon General report a 2.3 to 14.4 percent decrease in youth smoking as a result of a 10 percent increase in price. Many studies report findings exceeding 7 percent.

CDC data to project their findings onto a larger population such as Alaska or the entire United States. Using the same group of teens allows researchers to account for other variables such as the effects of youth smoking laws as well as how tax increases influence tobacco use. According to Ms. Shelton, researchers perform strict analyses to ensure that specific events such as tax increases caused their findings rather than other variables or normal fluctuations within the population. Ms. Shelton cautioned that selecting individual pieces of data from a large work like the CDC's Surveillance Summaries, which includes the results of state Youth Risk Behavior Surveys, and basing conclusions on that information is not a scientifically accepted method of analyzing data and would likely be erroneous.[3]

The Effect of Tax Increases on Cigarette Consumption Within the General Population

According to a report by the Surgeon General, numerous studies examining the effects of tax increases on cigarette consumption estimate that raising prices by 10 percent results in a 2 to 5 percent decrease in cigarette use (Attachment A).[4] The Surgeon General criticizes some studies for failing to model the addictive aspects of consumption and others for failing to account for smuggling of cigarettes between states.

According to Dan Howle of the Tobacco Institute, the problem of illegal cigarette sales is well documented in Canada, as well as other states, following large tax increases. He indicated that Canada's large cigarette tax initially reduced smoking rates, but as illegal tobacco markets developed cigarette use began to rise. In support of his argument Mr. Howle cited a 1996 report by the Tax Foundation. The report concluded that although increased prices resulted in decreased cigarette sales, illegal tobacco sales may mask any actual declines in cigarette use.[5] Tobacco tax advocates contend that smuggling illegal cigarettes to Alaska would be unprofitable because of shipping costs and the high price of cigarettes in Canada (the only jurisdiction with which we

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[3]CDC Surveillance Summaries distributes scientific information to public health officials, including information on tobacco consumption by minors. The CDC receives information for Surveillance Summaries from various sources including state Youth Risk Behavior Surveys.

[4]Centers for Disease Control and Prevention, *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*, 1994. p. 269-273. The overall range of price elasticity of cigarette demand was between -0.14 and -1.23 (that is, a 10 percent price increase results in a 1.4 to 12.3 percent decrease in cigarette use); the majority of estimates fell within the narrower range of 2 to 5 percent.

[5]The Tax Foundation, *The Effect of Excise Tax Differentials on Interstate Smuggling and Cross-Border Sales of Cigarettes in the United States*, October 1996. The Tax Foundation is a nonprofit, tax exempt organization that relies solely on voluntary contributions for support. They supply fiscal information and analysis to policymakers, business leaders, and the general public.

share a border). They also contend that Alaska's single Indian reservation on Annette Island is an unlikely source for large quantities of tobacco products and the U.S. Department of Defense could place restrictions on military tobacco sales, as was done in Hawaii, if problems with illegal distribution develop.

The Surgeon General also reviewed studies examining both the effects of illegal smuggling and tax increases. As is the case in other research findings, these studies estimate that a 10 percent price increase leads to a 2 to 5 percent decrease in cigarette use. After reviewing the results of many studies, the Surgeon General concludes that even with differences in data, theoretical modeling, and estimation techniques numerous studies reach one general conclusion--increasing cigarette prices reduces smoking.

The Effect of Tax Increases on Adolescent Tobacco Users

As in the general population, studies reviewed by the Surgeon General show that tax increases cause a significant decrease in youth smoking rates. While the range of findings varied (overall, the studies found that a 10 percent price increase results in a 2.3 to 14.4 percent decrease in cigarette use), many studies estimate that a 10 percent price increase reduces overall youth cigarette use by more than 7 percent.

Researchers examine the overall effect of tax increases on youth smoking by calculating the decrease in cigarette use by those already smoking and determining the number of minors who never start. The Surgeon General reports that 86 percent of the overall decrease in youth cigarette use comes from discouraging initiation of new smokers. The fact that increasing taxes significantly reduces overall cigarette use and decreases the number of new youth smokers leads the Surgeon General to recommend raising prices as a primary control measure.

Dan Howle of the Tobacco Institute contends that tough state laws restricting the sale of tobacco to minors could decrease youth smoking rates without tax increases. He also states that when tax increases create an underground market for tobacco, illegal sales make laws restricting minors' access to tobacco ineffective. As an example, he cites the problems with smuggling experienced in Canada following large cigarette tax increases.

A recent study that compares both the effects of cigarette tax increases and laws limiting youth access to tobacco, however, found that raising prices is a highly effective means of controlling teen cigarette use. This study concludes that laws alone, due to problems of enforcement, have little impact on smoking rates.[6] In the study, Dr. Frank Chaloupka and Dr. Michael Grossman analyzed data from over 110,000 youths collected during the years 1992, 1993, and 1994

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[6]Attachment B is a copy of "Price, Tobacco Control Policies and Youth Smoking" by Dr. Frank Chaloupka and Dr. Michael Grossman.

(Attachment B).[7] The study finds that tax increases significantly reduce cigarette use among adolescents and estimates that for every 10 percent price increase the overall youth demand for cigarettes declines 13.13 percent.

Enforcement of Tobacco Laws In Alaska

In Alaska, current state laws restrict sales of tobacco to anyone under the age of 19, make it illegal for minors to purchase, possess or use tobacco, and place restrictions on cigarette vending machines. According to Mary Collins, research analyst for the Division of Alcoholism and Drug Abuse within the Alaska Department of Health and Social Services, the 1996 Alaska Youth Tobacco Purchase Survey found that while 64 percent of merchants statewide refused to sell tobacco products to minors, the remaining 36 percent of merchants sold tobacco to minors. According to Kathleen Mather of the Alaska Department of Public Safety, law enforcement officials issued four citations for illegally selling or giving tobacco to minors in 1996 and seven in 1995. Additionally, minors received 96 citations for illegally possessing or using tobacco in 1996.

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I hope this information is helpful for your purposes. Please do not hesitate to call if you have additional questions.

Attachments

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[7]Dr. Chaloupka and Dr. Grossman have studied the effects of tax increases on cigarette demand for several years and have prepared a number of research studies on the issue. Dr. Chaloupka is an Associate Professor of Economics at the University of Illinois at Chicago and Dr. Grossman is a Professor of Economics at City University of New York Graduate School.

LEGAL SERVICES

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Juneau, Alaska 99801-2105

MEMORANDUM February 10, 1997

SUBJECT: CSHB 1(STA), increasing taxes on cigarettes and tobacco products -- sectional analysis. (Work Order No. 20-LS0001\E)

TO: Representative Con Bunde
ATTN: Patti Swenson

FROM: Jack Chenoweth
Legislative Counsel

CSHB 1(STA) generally proposes increases to state-imposed taxes on cigarettes and tobacco products.

Bill section 1: The bill section sequentially increases the tax on cigarettes and, because the changes are made to the rate of a tax that is dedicated, would have the effect of providing for the deposit of the increase into the "School Fund." AS 43.50.140. The increases are as follows:

Between the bill's effective date and June 30, 2000, the per cigarette tax would be set at 52 1/2 mills, a 50 mill rate increase, or an increase of $1.00 per pack (50 mills x 20 cigarettes per pack = 1000 mills or $1.00) from the current cigarette tax levy;

Between July 1, 2000, and June 30, 2003, the per cigarette tax would be set at 64 1/2 mills, an additional 12 mill increase, or an additional increase of 24 cents per pack;

Between July 1, 2003, and June 30, 2006, the per cigarette tax would be set at 76 1/2 mills, an additional 12 mill increase, or a further increase of 24 cents per pack; and

Thereafter, at three-year intervals, the per cigarette tax increases at a rate of 12 mills (24 cents per pack).

Bill section 2: Whether the rate imposed in a dedicated tax may be changed without destroying the dedication is debatable. In the event the courts are asked to decide the question and determine that the dedication is destroyed, this bill section is included to restore the current rate of tax for the component that is dedicated for inclusion in the School Fund.

Bill section 3: The bill section amends AS 43.50.090 to add a provision directing the Department of Revenue to give public notice of the cigarette tax rate changes and specific notice of the changes being made under AS 43.50.090(a) to all cigarette tax licensees at appropriate times.

Bill section 4: This is a contingent provision. In the event the changes set out in bill section 1 are found to destroy the dedication, then the tax rate changes are made to current AS 43.50.190(a), a provision that imposes a further tax on cigarettes and that, because the proceeds are not dedicated, adds the increased revenue to the state general fund.

Bill section 5: This is also a contingent provision. The bill section amends AS 43.50.190 to add a provision directing the Department of Revenue to give public notice of the cigarette tax rate changes and specific notice of the changes being made under AS 43.50.190(a) to all cigarette tax licensees at appropriate times.

Bill section 6: AS 43.50.300 levies an excise tax on tobacco products other than cigarettes. The amendment proposed would increase the excise tax on tobacco products other than cigarettes from its current 25 percent of the product's wholesale price to 100 percent of the wholesale price.

Bill section 7: The bill section adds new provisions to AS 43.50.300 that authorize the Department of Revenue to further change the rate of the excise tax on tobacco products other than cigarettes in line with inflation, at two-year intervals, spelling out how the change is to be calculated, and requiring the giving of public notice and specific notice of the change to all tobacco tax licensees at appropriate times.

Bill section 8: The provisions of the new material added by bill section 3 directing the Department of Revenue to give public notice of the cigarette tax rate changes and specific notice of the changes being made under AS 43.50.090(a) to all cigarette tax licensees at appropriate times may be superfluous if the court rules against the tax dedication and AS 43.50.090(a) as amended by bill section 1 is repealed. Under those circumstances, AS 43.50.090(d) is also to be repealed.

Bill section 9: These bill sections spell out the contingency under which certain of the earlier bill sections--bill sections 2, 4, 5, and 8--are to take effect. They are to be given effect only if a court determines that changing the rate of taxation on cigarettes destroys the dedication of tax revenue derived from the cigarette tax.

Bill sections 10 and 11 are effective date provisions. Key tax change provisions are to take effect October 1, 1997; other provisions take effect on the date that contingency identified in bill section 9 occurs.

JBC:glc
97-079.glc

Alaska State Legislature

CHAIR
HOUSE HEALTH, EDUCATION
& SOCIAL SERVICES COMMITTEE

VICE-CHAIR
HOUSE JUDICIARY COMMITTEE

MEMBER
LEGISLATIVE BUDGET & AUDIT COMMITTEE
HOUSE SPECIAL COMMITTEE ON OIL & GAS
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REPRESENTATIVE CON BUNDE

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SPONSOR STATEMENT
CSHB 1 (STA)
"An Act relating to taxes on cigarettes and tobacco products; and providing for an effective date."

CSHB1(STA) is aimed at Alaskan youth who use tobacco products. Youth smoking and smokeless tobacco use rates in Alaska are higher than the national average. Within Alaska, the highest smoking rate is in the Bush (33%) and the lowest in the urban areas (25%). Nearly 84% of Alaskan adults started smoking between 10 and 20 years of age. In 1995, 36.5% of high school students were identified as current smokers; 23.5% of the high school boys were identified as current users of chewing tobacco.

Youth who use tobacco quickly become addicted to nicotine and most often become long-term users who suffer the long-term health effects of smoking. Withdrawal from nicotine addiction is like withdrawal from other highly addictive substances: difficult and painful. Seventy percent of smokers say they want to quit, and millions try each year, but only 2.5% succeed in any given year. CSHB1(STA) seeks to stop our youth from ever using tobacco, and to decrease the number of adults already using tobacco. CSHB1 (STA),when passed, will move Alaska far ahead of other states in the fight against youth access to tobacco.

There are some enormous health and economic costs which flow from tobacco use. Some of these costs are easy to measure, some are difficult to measure and some are beyond measurement. Getting an idea of these costs can help the move toward health and economic policies that help control tobacco.

The costs that can be easily measured are the costs that involve delivering direct health care services which would not have been needed if tobacco was not used. In 1996 the state collected $16.7 million in cigarette tax revenues. That same year, the estimated economic impact of smoking in Alaska was over $194 million in direct health care costs related to smoking and tobacco products. Approximately $9.8 million of the direct health care costs were paid by state Medicaid. CSHB 1(STA) will help recover some of the excessive medical costs created by the use of tobacco.

Other easily measurable costs that have been researched are: the costs of disability, increased illness, fire losses, and forgone income due to early mortality. Tobacco use is the leading cause of death in Alaska. One out of five deaths in Alaska are tobacco related. The U.S. Centers for Disease Control estimates that 18,000 Alaskans currently under the age of 18 will die from tobacco-related diseases if effective action is not taken to end this epidemic. CSHB1(STA) contains a tobacco tax of $1 per pack and provisions to inflation proof the tax. This tax is the single most effective way to reduce tobacco consumption among children and adults, and thereby prevent premature deaths.

There are some costs related to tobacco use which are more difficult to quantify. There is the work of someone who becomes ill from tobacco usage, the responsibility of trying to replace the work that person does, lack of access to advanced health care that creates a significant burden for an entire family, the illness or premature death of a tobacco user which can prevent their children from getting an adequate education resulting in limited chances for success, as well as, the amount of disposable income devoted to maintaining a nicotine addiction. In some cases a significant portion

of a family's disposable income is spent on maintaining a tobacco addiction, thereby preventing this money from being spent on improving family nutrition, educational needs, or investment in productive capacity. Not only does this perpetuate the cycle of poverty, but it is a loss to the local economy, since the money goes instead toward the profits of large outside tobacco companies.

There is evidence that the poor quit smoking in larger numbers in response to price increases. Therefore, they will benefit by a tobacco tax increase of $1 per pack to a greater extent than more affluent socioeconomic groups. Additionally, since the number of children who will start to smoke is clearly inversely related to price, a large tax increase will make it possible to save large numbers of another generation of smokers from tobacco addiction. For every price increase of 10% we can expect to reduce consumption of tobacco products by an equal or greater amount among children and teens. The $1 per pack tax increase proposed in CSHB1(STA) would reduce youth smoking in Alaska by an estimated 32% and prevent over 5,700 premature deaths among Alaskans currently under the age of 18.

There are costs that are very real but cannot be measured. These include reduced quality of life for the tobacco user, for those affected by second-hand smoke and for those people whose lives are torn apart due to the loss or illness of a loved one. The value of human life and of attaining human potential, cannot be measured in economic terms. But our inability to quantify these aspects of tobacco use should not leave us blind to them. They are by far the largest of the true costs of tobacco industry products.

Legislators in our state have a constitutional duty to provide for the promotion and protection of public health. A $1 per pack increase in the tobacco tax and the provision to inflation-proof the tax will help ensure a continuous decrease in the use of tobacco products by the youth and adults of Alaska, as well as, promote a continued trend toward decreased health care cost and healthier people.

Finally, a January 1996 statewide survey conducted by Mathematica Policy Research of Princeton, New Jersey found that 74% of Alaskans support an increase of $1 per pack in the state excise tax on cigarettes. This includes 75% of "conservatives," 75% of "moderates," 73% of "liberal" and 55% of smokers. This legislation had wide public support in 1996 and it still does. CSHB1(STA) is long overdue. I urge the passage of House Bill 1, a fair tobacco tax for all people in Alaska.

HB1

RESOLUTION

WHEREAS, tobacco use is widely recognized as the leading cause of preventable death in Alaska and responsible for approximately 1 in 5 deaths in the United States; and

WHEREAS, in the U.S. alone, it is estimated that more than 400,000 deaths each year are attributable to tobacco use and in Alaska it is estimated that smoking is responsible for approximately 470 deaths per year; and

WHEREAS, the 1995 Youth Risk Behavior Survey (YRBS) determined that Alaska high school students have smoking rates higher than the national average; and

WHEREAS, nearly all new smokers start before the age of 19, with an average age of 14.5 years old; and

WHEREAS, despite enormous effort, experience has shown that education and enforcement efforts alone have not succeeded in preventing an increase in the number of new teen smokers; and

WHEREAS, the Jan/Feb/Mar 1996 edition of *Alaska Medicine*, the official journal of the Alaska State Medical Association, was devoted to "Tobacco: Alaska's Most Preventable Health Problem"; and

WHEREAS, as reported in that journal, a proven way to decrease adolescent use of tobacco products is raising the cost of tobacco through increased excise taxes; and

WHEREAS, the American Medical Association (AMA) has recognized and supported increased taxes as an effective means of preventing new teenagers from becoming addicted to tobacco; and

WHEREAS, experience in Canada and various states in the U.S. has demonstrated the effectiveness of increased taxes as a deterrent to teen smoking; and

WHEREAS, opinion surveys in Alaska have repeatedly shown that the general public strongly supports increased tobacco taxes, including a substantial portion of smokers; and

WHEREAS, former Surgeon General C. Everett Koop has specifically recognized and endorsed the effort of Alaskans to enact a $1 per pack tax increase stating that "Alaska is in a position to lead the nation on this critical health issue [and could] set an example that could ultimately save millions of lives nationwide."

THEREFORE BE IT RESOLVED, that the Alaska State Medical Association reaffirm its support for a $1 per pack state tobacco tax increase as an essential means to deter new young smokers from becoming addicted to tobacco products; and

BE IT FURTHER RESOLVED, that the Alaska State Medical Association encourage its members and all health care professionals to actively support this effort.

ASSOCIATION OF ALASKA SCHOOL BOARDS

Advocates for Alaska's Youth

January 20, 1997

The Honorable Con Bunde, Chair
House HESS Committee
Alaska State Capitol
Juneau, AK 99801-1182

Dear Representative Bunde:

The Association of Alaska School Boards has established child advocacy as one of our top priorities. Our mission to promote parental, public, and social service commitment to the shared responsibility of educating all children enables us to address issues that deal with the health and safety of Alaska's children. To this end, during the 1996 AASB Annual Conference, our membership reaffirmed their commitment to a resolution which recommends increasing tobacco taxes in order to reduce the accessibility of tobacco by teens.

We are pleased that you have sponsored a bill (HB 1) which will prevent tobacco addiction among our children. We believe that, through the combined influences of tax levies, strict law enforcement, and quality education, we can all have a hand in preventing our children from becoming addicted to tobacco.

AASB supports legislation which keeps our kids tobacco free. Thank you for your commitment to the health and well-being of Alaska's children.

Sincerely,

Carl Rose

Carl F. N. Rose
Executive Director

[illegible] West 11th Street, Juneau, Alaska 99801-1510 • Tel (907) 586-1083 • Fax (907) 586-2995 • e-mail aasb@alaska.net

SUPPORT

ASSOCIATION OF ALASKA SCHOOL BOARDS

Advocates for Alaska's Youth

Position Paper
Increase in Tobacco Tax

In order to address the risk to the health and safety of children and youth that tobacco related products represent, the Association of Alaska School Boards strongly supports legislation which would increase the cigarette tax.

After a review of the research, we take this position because:

- nicotine is an addictive drug that has been proven harmful to children;
- the average teenage smoker starts smoking at 14 1/2 years old and becomes a daily smoker before the age of 18;
- if people do not begin to smoke as teenagers or children, it is unlikely they will ever do so; and
- children tend to vastly underestimate the likelihood that they will become addicted to nicotine.

Tobacco use is a problem among Alaska's teens. 27% of 12th grade girls and 18% of 12th grade boys report daily use of cigarettes. Rates are highest among Alaska Natives: 31% of 12th grade girls and 21% of 12th grade boys.

Of public health strategies available for reducing tobacco use, increasing tobacco taxes as a way of raising the price of tobacco products is viewed as the most effective. One of its virtues is that it is immediate and does not require further public resources to implement.

By increasing the tax on tobacco Alaska can significantly reduce the use of tobacco among teens. Below are two examples of regions where taxation reduced tobacco consumption among teens.

- In Canada, between 1979 and 1991, higher tax rates increased the real price of tobacco by 158 percent and teenage consumption dropped by two-thirds.
- In California, cigarette smoking declined nearly 24 percent(from 26.7 percent in 1988 to 20.4 percent in 1992) after California approved a 25 cent excise tax increase.

AASB believes that it is much easier to prevent smoking, than it is to help a teenager quit once they have become addicted. We hope that you consider joining AASB in our goal to protect the health of teenagers by voting to increase the Alaskan sales tax on tobacco.

1/20/97

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ASSOCIATION OF ALASKA SCHOOL BOARDS

Advocates for Alaska's Youth

SUBJECT AREA: Child and Youth Advocacy
97-4
INCREASE IN TOBACCO TAX

WHEREAS, Alaska has the sixth highest rate of smoking and the sixth highest rate of smoking-related deaths in the nation, and

WHEREAS, 32% of Alaskan girls smoke or chew tobacco daily, and 36% of Alaskan boys smoke or chew daily; and

WHEREAS, nearly 84% of Alaskan adults started smoking between the ages of 10 and 20 years of age, and

WHEREAS, smoking is illegal by youth under the age of 19, and

WHEREAS, smoking accounted for 19% of deaths in Alaska in 1991, averaging 1 per day; and

WHEREAS, the estimated direct health care cost attributed to smoking in 1991 was $45.6 million for persons 35 and older; and

WHEREAS, between 1979 and 1991 Canada reduced the teenage consumption of tobacco by 67% by increasing the tax rates by 15.8% ; and

WHEREAS, the US Government Accounting Office has determined that for every 1% increase in the price of cigarettes, 1% fewer teenagers will smoke; and

WHEREAS, Alaska's tobacco tax was last increased in 1989; and

WHEREAS, a January 1996 statewide survey found that 74% of Alaskans support an increase of $1 per pack in the state excise tax on cigarettes; and

WHEREAS, the current cigarette tax is $0.29 per pack or 25% of the wholesale price of other tobacco products.

NOW THEREFORE BE IT RESOLVED that the Association of Alaska School Boards supports legislation which would increase the cigarette tax by an additional $1.00 per pack (to be indexed yearly to inflation) and an increase on other tobacco products by an additional 75%.

BE IT FURTHER RESOLVED that the Association of Alaska School Boards supports the direction of funds raised under this tax to go towards prevention efforts.

SUBJECT AREA: Child and Youth Advocacy
97-5
ACCESS TO TOBACCO PRODUCTS

WHEREAS, nicotine is an addictive drug and has been proven to be harmful to children; and

WHEREAS, the average teenage smoker starts at 14 1/2 years old and becomes a daily smoker before the age of 18; and

WHEREAS, studies show that if people do not begin to smoke as teenagers or children, it is unlikely they will ever do so; and,

WHEREAS, each and every day, another 3,000 young people become regular smokers, and nearly 1,000 of them will eventually die as a result of their smoking; and

WHEREAS, children tend to vastly underestimate the likelihood that they will become addicted to nicotine; and

WHEREAS, a 1994 Surgeon General's report found that young people were able to buy cigarettes in vending machines an average of 88% of the time; and

WHEREAS, Alaska state law prohibits the use of tobacco by minors;

NOW THEREFORE BE IT RESOLVED that the Association of Alaska School Boards seeks legislation to strengthen penalties for illegal sale of tobacco products to minors; and

BE IT FURTHER RESOLVED, that AASB seek legislation to further reduce access to tobacco vending machines by minors; and

BE IT FURTHER RESOLVED that AASB support vigorous enforcement of laws concerning the sale, use, and possession of tobacco-related products by children and adolescents.

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