

HB

1

(File 1)

HF IN

FILE

HOUSE COMMITTEE REPORT

(11)

Date Referred to Committee: February 14, 1997

FURTHER REFERRALS:

Date of Committee Action: 2/26/97

The FINANCE Committee considered:

HB 1

HOUSE BILL NO. 1

CIGARETTE AND TOBACCO TAX

"An Act relating to taxes on cigarettes and tobacco products; and providing for an effective date."

recommends it be replaced with the following committee substitute CS HB 1 (FIN) the same title a new title

additional referral to _____ Committee
 attached amendment(s)

ADOPTS: _____ Letter of Intent

ATTACHES NEW FISCAL NOTE(S): (Dept) _____ APPROVES PREVIOUS: (Dept/Date) _____
 fiscal note(s) Revenue fiscal note(s) _____
 zero fiscal note(s) _____ zero fiscal note(s) _____

SIGNING WITH RECOMMENDATIONS		DP	DNP	NR	AM
<i>Gene Therriault</i>	Therriault				X
<i>Mark Hanley</i>	Hanley				X
<i>Alan Mylender</i>	Mylender	X	X		
<i>Joe J. Davis</i>	J. DAVIS	X	X		
<i>Ben Gussendonk</i>	Gussendonk				X
<i>Fearg Martin</i>	Martin		X		
<i>Neil Kohring</i>	Kohring		X		
<i>Frank G. Davis</i>	G. DAVIS			X	
<i>Pete Kelly</i>	Kelly		X		
<i>Carl H. Moses</i>	Moses			X	

CO
 CHAIR'S SIGNATURE *Gene Therriault* *Mark Hanley*

Revision Date: _____ Dept. Affected: Revenue
 Title: Cigarette and Tobacco Tax BRU: Revenue Operations
 Component: Income and Excise Audit
 Sponsor: Representative Bunde
 Requestor: (H) FIN COMPONENT SERIAL NO. 113

Expenditures/Revenues: (Thousands of Dollars)

OPERATING EXPENDITURES	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
PERSONAL SERVICES	30.0	30.0	30.0	30.0	30.0	30.0
TRAVEL	0.5	0.5	0.5	0.5	0.5	0.5
CONTRACTUAL	6.5	1.5	1.5	1.8	1.5	1.5
SUPPLIES	0.5	0.5	0.5	0.5	0.5	0.5
EQUIPMENT	4.0	0.0	0.0	0.0	0.0	0.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	41.5	32.5	32.5	32.8	32.5	32.5

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES	29,181.9	43,772.9	43,772.9	60,668.6	50,668.6	60,904.2
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	41.5	32.5	32.5	32.8	32.5	32.5
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other						
TOTAL	41.5	32.5	32.5	32.8	32.5	32.5

Estimate of any current year (FY97) cost \$ 0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

(See Attached Analysis)

Prepared by: Brett Fried, Economist Phone: 465-3682
 Division: Income and Excise Audit Division Date: February 27, 1997
 Approved by Commissioner: Wilson L. Condon Date: February 27, 1997
 Agency: Department of Revenue

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**Alaska Department of Revenue
Income and Excise Audit Division**

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DRAFT BILL ANALYSIS

Section 1 changes the amount the licensee can deduct for expenses from one percent of the total tax due to four-tenths of one percent. Also increases the School Fund portion of the cigarette tax rate by \$1.00 per pack of 20; from 2.5 mills per cigarette (\$.05 per pack) to 52.5 mills per cigarette (\$1.05 per pack) through FY 2000. Combining this rate with the 12 mills per cigarette (\$.24 per pack) levied under AS 43.50.190, which goes to the General Fund, the total tax rate on a pack of cigarettes would increase from \$.29 to \$1.29. After June 30, 2000 the School Fund portion increases to 64.5 mills per cigarette (\$1.29 per pack) so the total tax rate on a pack of cigarettes increases from \$1.29 to \$1.53 through FY 2003. After June 30, 2003 the School Fund portion increases to 76.5 mills per cigarette (\$1.53 per pack) so the total tax rate on a pack of cigarettes increases from \$1.53 to \$1.77 through FY 2006. After June 30, 2006 the school fund portion increases to 88.5 mills (\$1.77) plus an additional 12 mills (\$.24) during each succeeding three-year period.

Section 2 This section only takes effect if section 1 of this act is ruled unconstitutional (see section 10). If so, the statute would be amended back to how it was prior to the bill passage.

Section 3 directs the Department of Revenue to give public notice of changes in cigarette tax rates under AS 43.50.090 at the time these tax rates are changed.

Section 4 This section only takes effect if section 1 is ruled unconstitutional (see section 10). If so, this section increases the General Fund portion of the cigarette tax rate by \$1.00 per pack of 20; from 12 mills per cigarette (\$.24 per pack) to 62 mills per cigarette (\$1.24 per pack) through FY 2000. Combining this rate with the 2.5 mills per cigarette (\$.05 per pack) levied under AS 43.50.090, which is dedicated to the School Fund, the total tax rate on a pack of cigarettes would increase from \$.29 to \$1.29. After June 30, 2000 the General Fund portion increases to 74 mills per cigarette (\$1.48 per pack) so the total tax rate on a pack of cigarettes increases from \$1.29 to \$1.53 through FY 2003. After June 30, 2003 the General Fund portion increases to 86 mills per cigarette (\$1.72 per pack) so the total tax rate on a pack of cigarettes increases from \$1.53 to \$1.77 through FY 2006. After June 30, 2006 the General Fund portion increases to 86 mills (\$1.96) plus an additional 12 mills (\$.24) during each succeeding three-year period.

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Section 5 This section only takes effect if section one is ruled to be unconstitutional (see section 10). If so, this section directs the Department of Revenue to give public notice of changes in cigarette tax rates under AS 43.50.190 at the time these tax rates are changed.

Section 6 increases the tobacco products tax rate from 25% to 100% of the wholesale price of the tobacco products.

Section 7 creates a new section under AS 43.50 (AS 43.50.365) to increase the tobacco product tax rate applied to the wholesale price by the Anchorage CPI on July 1 of each even numbered year. The starting point of the index is January 1, 1998.

Section 8 changes the amount that the tobacco products licensee can retain to cover expenses from one percent of the tax due to four-tenths of one percent.

Section 9 This section only takes effect if section 1 is ruled unconstitutional (see section 11). If so, this section repeals the public notice provision for changes in the cigarette tax rates under AS 43.50.090 that were made in section 3 of this bill.

Section 10 provides for sections 2, 4, 5 and 9 of this Act only taking effect if dedication of the proceeds of the cigarette tax to the School Fund is found to be unconstitutional.

Section 11 establishes that if section 1 is found unconstitutional and sections 2 and 4 of this act take effect then revenue derived under section 1 (prior to it being found unconstitutional) that exceeds the original 2.5 mills will be credited to the tax levied under AS 43.50.190 (a) as amended by section 4 of this Act.

Section 12 establishes an effective date of October 1, 1997 for sections 1, 3, 6, 7 and 8 of this Act.

Section 13 establishes an effective date for sections 2, 4, 5 and 9 of which ever of the following comes later: (1) when a court enters a final judgement that the amendment under section 1 of this act is unconstitutional or (2) when the time for appeal has expired or upon entry of a final order on the appeal that section 1 is unconstitutional.

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OPERATING EXPENDITURES

Department of Revenue is requesting operating funds to cover ½ the costs of a Revenue Auditor III position. With such a large increase in taxes due the state (increase from \$17 to \$50 million annually), the department anticipates increased taxpayer noncompliance.

With significantly higher levels of tax, it is possible that taxpayers will look for loopholes or other methods of tax avoidance. This position will be responsible for ensuring that all taxpayers are identified and that taxpayers are filing and paying the proper amount of tax. The projected annual salary costs for the ½ portion of this position comes to \$30.0.

The department is also requesting one time FY 98 funding of \$5.0 for contractual funds to cover costs of public notice of rate increases, forms revisions and postage, and \$4.0 for equipment (\$3.5 for computer costs and \$.5 for office equipment). The recurring costs will be \$2.5 to cover travel, contractual and supplies, except for FY 01 where an addition \$.3 will be necessary to cover public notice of the tax rate increase.

REVENUE COLLECTED

The attached spreadsheet details revenue projections from rate increases in this bill.

Alaska Department of Revenue
Income and Excise Audit Division
Projected Revenue Increases from Change in Tobacco Tax Rates

Cigarette and Tobacco Tax
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	FY 98*	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04
Cigarettes							
<i>Elasticity Factor</i>	-18.3%	0.0%	0.0%	-23.0%	0.0%	0.0%	-27.0%
Consumption (packs of cigarettes)	28,625,595 *	42,938,393	42,938,393	40,567,562	40,567,562	40,567,562	38,249,415
Rate	\$1.29	\$1.29	\$1.29	\$1.53	\$1.53	\$1.53	\$1.77
Cigarette Tax	<u>\$36,927,017</u>	<u>\$55,390,527</u>	<u>\$55,390,527</u>	<u>\$62,068,369</u>	<u>\$62,068,370</u>	<u>\$62,068,370</u>	<u>\$67,701,465</u>
Less .4% Commission	<u>(147,708)</u>	<u>(221,562)</u>	<u>(221,562)</u>	<u>(248,273)</u>	<u>(248,273)</u>	<u>(248,273)</u>	<u>(270,806)</u>
Net Cigarette Tax	\$36,779,309	\$55,168,965	\$55,168,965	\$61,820,096	\$61,820,096	\$61,820,096	\$67,430,659
FY 97 Projected Cigarette Tax	<u>(10,083,937) *</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>
Net Cigarette Tax Increase	\$26,695,372	\$40,043,060	\$40,043,060	\$46,694,191	\$46,694,191	\$46,694,191	\$62,304,764
Increase to School Fund	\$26,695,372	\$40,043,060	\$40,043,060	\$46,694,191	\$46,694,191	\$46,694,191	\$62,304,764
Tobacco Products							
<i>Elasticity Factor</i>	-18.3%	0.0%	0.0%	-19.0%	0.0%	-20.7%	0.0%
Consumption (Whole. Pr. 1996 \$)	\$3,591,648 *	\$5,387,473	\$5,387,473	\$5,314,097	\$5,314,097	\$5,240,722	\$5,240,722
Rate	100%	100%	100%	106%	106%	112%	112%
Tobacco Products Tax	<u>\$3,591,648</u>	<u>\$5,387,473</u>	<u>\$5,387,473</u>	<u>\$5,632,943</u>	<u>\$5,632,943</u>	<u>\$5,869,609</u>	<u>\$5,869,609</u>
Less .4% Commission	<u>(14,367)</u>	<u>(21,550)</u>	<u>(21,550)</u>	<u>(22,532)</u>	<u>(22,532)</u>	<u>(23,476)</u>	<u>(23,478)</u>
Net Tobacco Products Tax	\$3,577,282	\$5,365,923	\$5,365,923	\$5,610,411	\$5,610,411	\$5,846,130	\$5,846,130
FY 97 Projected Tob. Prod. Tax	<u>(1,090,715)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>
Net Tobacco Prod. Tax Increase	\$2,486,566	\$3,729,880	\$3,729,880	\$3,974,338	\$3,974,338	\$4,210,067	\$4,210,067
Increase to General Fund	\$2,486,566	\$3,729,880	\$3,729,880	\$3,974,338	\$3,974,338	\$4,210,067	\$4,210,067
Cigarette and Tob. Products							
Net Cigarette and Tobacco Tax	\$40,366,691 *	\$60,634,888	\$60,634,888	\$67,701,312	\$67,701,313	\$67,937,978	\$73,671,073
Net Cig. and Tob. Increase	<u>\$28,181,939 *</u>	<u>\$43,772,910</u>	<u>\$43,772,910</u>	<u>\$60,868,629</u>	<u>\$60,868,630</u>	<u>\$61,090,249</u>	<u>\$66,614,811</u>

*Note: The bill's effective date results in the tax increase covering 8 months in FY 98.

CS FOR HOUSE BILL NO. 1(FIN)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - FIRST SESSION

BY THE HOUSE FINANCE COMMITTEE

Offered:

Referred:

Sponsor(s): REPRESENTATIVES BUNDE, Ivan, Croft, Porter, Hudson, Green

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to taxes on cigarettes and tobacco products; and providing for
2 an effective date."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 * Section 1. AS 43.50.090(a) is amended to read:

5 (a) There is levied an excise tax [OF TWO AND ONE-HALF MILLS] on each
6 cigarette imported or acquired in the state. Each licensee shall, at the time of filing
7 the return required by AS 43.50.080, pay to the department the excise for the calendar
8 month covered by the return, deducting four-tenths of one percent of the total tax due,
9 which the licensee shall retain to cover the expense of accounting and filing returns.
10 Cigarettes upon which the excise is imposed are not again subject to the excise when
11 acquired by another person. The excise tax is levied at the following rates:

12 (1) on and after the effective date of this bill section and through

13 June 30, 2000 - 52 1/2 mills;

14 (2) after June 30, 2000, and through June 30, 2003 - 64 1/2 mills;

1 (3) after June 30, 2003, and through June 30, 2006 - 76 1/2 mills:

2 and

3 (4) after June 30, 2006 - 76 1/2 mills plus an additional 12 mills

4 during each succeeding three-year period, the increase to be effective on the first

5 day of the succeeding three-year period.

6 * Sec. 2. AS 43.50.090(a) is amended to read:

7 (a) There is levied an excise tax of two and one-half mills on each cigarette
8 imported or acquired in the state. Each licensee shall, at the time of filing the return
9 required by AS 43.50.080, pay to the department the excise for the calendar month
10 covered by the return, deducting four-tenths of one percent of the total tax due, which
11 the licensee shall retain to cover the expense of accounting and filing returns.
12 Cigarettes upon which the excise is imposed are not again subject to the excise when
13 acquired by another person. [THE EXCISE TAX IS LEVIED AT THE FOLLOWING
14 RATES:

15 (1) ON AND AFTER THE EFFECTIVE DATE OF THIS BILL
16 SECTION AND THROUGH JUNE 30, 2000 - 52 1/2 MILLS;

17 (2) AFTER JUNE 30, 2000, AND THROUGH JUNE 30, 2003 - 64 1/2
18 MILLS;

19 (3) AFTER JUNE 30, 2003, AND THROUGH JUNE 30, 2006 - 76 1/2
20 MILLS; AND

21 (4) AFTER JUNE 30, 2006 - 76 1/2 MILLS PLUS AN ADDITIONAL
22 12 MILLS DURING EACH SUCCEEDING THREE-YEAR PERIOD, THE
23 INCREASE TO BE EFFECTIVE ON THE FIRST DAY OF THE SUCCEEDING
24 THREE-YEAR PERIOD.]

25 * Sec. 3. AS 43.50.090 is amended by adding a new subsection to read:

26 (d) At the time of a change in the amount of tax under (a) of this section, the
27 department shall give public notice of the change. The department shall also provide
28 notification of the change to all persons licensed under this chapter.

29 * Sec. 4. AS 43.50.190(a) is amended to read:

30 (a) On [THERE IS LEVIED AN EXCISE TAX OF 12 MILLS ON] each
31 cigarette imported or acquired in this state, there is levied an excise tax at the

1 following rates:

2 (1) on and after the effective date of this bill section and through
3 June 30, 2000 - 62 mills;

4 (2) after June 30, 2000, and through June 30, 2003 - 74 mills;

5 (3) after June 30, 2003, and through June 30, 2006 - 86 mills; and

6 (4) after June 30, 2006 - 86 mills plus an additional 12 mills during
7 each succeeding three-year period, the increase to be effective on the first day of
8 the succeeding three-year period.

9 * Sec. 5. AS 43.50.190 is amended by adding a new subsection to read:

10 (c) At the time of a change in the amount of tax under (a) of this section, the
11 department shall give public notice of the change. The department shall also provide
12 notification of the change to all persons licensed under this chapter.

13 * Sec. 6. AS 43.50.300 is amended to read:

14 Sec. 43.50.300. Excise tax levied. An excise tax is levied on tobacco products
15 in the state at the rate of 100 [25] percent of the wholesale price of the tobacco
16 products. The tax is levied when a person

17 (1) brings, or causes to be brought, a tobacco product into the state
18 from outside the state for sale;

19 (2) makes, manufactures, or fabricates a tobacco product in the state
20 for sale in the state; or

21 (3) ships or transports a tobacco product to a retailer in the state for
22 sale by the retailer.

23 * Sec. 7. AS 43.50.300 is amended by adding new subsections to read:

24 (b) The amount in (a) of this section changes, as provided in (b) - (d) of this
25 section, according to and to the extent of changes in the Consumer Price Index for all
26 urban consumers for the Anchorage Metropolitan Area compiled by the Bureau of
27 Labor Statistics, United States Department of Labor. The index for January of 1998
28 is the reference base index.

29 (c) The amount changes on July 1 of each even-numbered year in an amount
30 equal to the percentage of change, calculated to the nearest whole percentage point,
31 between the index for January of that year and the most recent index used to change

1 the amount in (a) of this section. However, the amount does not change if the amount
 2 required by (b) - (d) of this section is that currently in effect as a result of earlier
 3 application of (b) - (d) of this section.

4 (d) If the index is revised, the percentage of change is calculated on the basis
 5 of the revised index. If a revision of the index changes the reference base index, a
 6 revised reference base index is determined by multiplying the reference base index
 7 applicable by the rebasing factor furnished by the Bureau of Labor Statistics, United
 8 States Department of Labor. If the index is superseded, the index referred to in (b) -
 9 (d) of this section is the one represented by the Bureau of Labor Statistics as reflecting
 10 most accurately changes in the purchasing power of the dollar for Alaska consumers.

11 (e) At the time of a change in the amount of the tax under this section, the
 12 department shall promptly give public notice of the change. The department shall also
 13 provide notification of a change to all persons licensed under this chapter.

14 * Sec. 8. AS 43.50.330(b) is amended to read:

15 (b) The licensee shall remit with the return the tax due under AS 43.50.300
 16 for the month covered by the return, after deducting four-tenths of one percent of the
 17 tax due, which the licensee shall retain to cover the expense of accounting and filing
 18 the return.

19 * Sec. 9. AS 43.50.090(d), added by sec. 3 of this Act, is repealed.

20 * Sec. 10. CONDITIONAL EFFECT OF CERTAIN SECTIONS. Sections 2, 4, 5, 8, and
 21 9 of this Act take effect only if

22 (1) a court enters a final judgment that the amendment made to
 23 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes violates the
 24 prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska, against dedication of
 25 the proceeds of a state tax or license; and

26 (2) either the time for appeal of that judgment expires or, if an appeal is taken,
 27 the court enters a final order on appeal that AS 43.50.090(a), as amended by sec. 1 of this
 28 Act, violates art. IX, sec. 7, Constitution of the State of Alaska.

29 * Sec. 11. CONDITIONAL RETROACTIVITY OF CERTAIN PROVISIONS. If secs. 2
 30 and 4 of this Act take effect under sec. 10 of this Act, then the amendments to
 31 AS 43.50.090(a) and 43.50.190(a) made by secs. 2 and 4 of this Act are retroactive to October

1 1, 1997, and the revenue derived from the levy of mills per cigarette of the tax levied under
2 AS 43.50.090(a), as amended by sec. 1 of this Act, for cigarettes sold after October 1, 1997,
3 that exceeds two and one-half mills shall be credited to the tax levied under AS 43.50.190(a),
4 as amended by sec. 4 of this Act.

5 * Sec. 12. Sections 1, 3, 6, 7, and 8 of this Act take effect October 1, 1997.

6 * Sec. 13. If secs. 2, 4, 5, and 9 of this Act take effect under sec. 10 of this Act, they take
7 effect on the later of (1) the date a court enters a final judgment that the amendment made to
8 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes violates the
9 prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska, against dedication of
10 the proceeds of a state tax or license, and (2) the expiration of any time for appeal of that
11 judgment, or, if an appeal is taken, upon entry of a final order on the appeal that
12 AS 43.50.090(a), as amended by sec. 1 of this Act, violates art. IX, sec. 7, Constitution of the
13 State of Alaska. The attorney general shall promptly notify the lieutenant governor and the
14 revisor of statutes of a judgment described in this section.

**ARBA****Anchorage Restaurant and Beverage Association****CHARR****Alaska Cabaret, Hotel, Restaurant and Retailers Association****3400 Spenard Rd., Suite 9
Anchorage, AK 99503****(907) 274-8133 or 1-800-478-2427
FAX (907) 274-8640****TO: Mr. Larry Myers
State of Alaska, Department of Revenue****FROM: Mary Beth Whitehurst
CHARR****COVER PLUS 30 PAGES****DATE: 2/14/97****COMMENTS:****Hard copy to follow by regular mail.**



*Alaska Cabaret, Hotel,
Restaurant & Retailers Association*

*2400 Spenard Road, Suite 9 • Anchorage, Alaska 99503
(907) 574-8123 • Fax: (907) 574-8040
Toll Free in Alaska (800) 476-1427*

February 14, 1997

Mr. Larry Meyers
State of Alaska, Department of Revenue
Income and Excise Audit Division
550 West 7th Avenue, Suite 560
Anchorage, AK 99501-3556

Dear Mr. Meyers,

Please find enclosed the updated "Estimated Revenue Effects of a Proposed \$1 Per Package Increase in the Cigarette Tax Rate in Alaska," originally prepared by Barents Group LLC, in December 1995.

I hope this updated report will clarify any questions raised from the first report. However, please note, that the changes do not affect the results of the original analysis.

Sincerely,

Mary Beth Whitehurst
Interim Director, CHARR

**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

PREPARED BY:

**BARENTS GROUP LLC
OF KPMG FEAT MARWICK LLP
WASHINGTON, D.C.**

FEBRUARY 13, 1997

PREFACE

Barents Group LLC of KPMG Peat Marwick LLP was asked by the Alaska, Cabaret, Hotel, Restaurant and Retail Association to reexamine a proposal by the Governor Tony Knowles to increase the State cigarette tax by \$1 per package from \$0.29 to \$1.29 starting in fiscal year 1998. This report updates our previous report, *The Estimated Revenue Effects of a Proposed \$1 Increase in the Cigarette Tax Rate in Alaska*, dated December 11, 1995. This report which describes our findings, has an Executive Summary, four parts, and a technical appendix. Part 1 is an introduction, Part 2 describes the methodology used to evaluate the Department of Revenue's analysis, Part 3 describes our results, and Part 4 provides our conclusions.

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EXECUTIVE SUMMARY

Buents Group LLC of KPMG Peat Marwick LLP was asked by the Alaska Cabaret, Hotel, Restaurant, and Retail Association to reexamine a proposal by Governor Tony Knowles to increase the State cigarette tax by \$1 per package from \$0.29 to \$1.29 starting in fiscal year 1998. The Alaska Department of Revenue estimates that this proposal will increase cigarette tax revenues by \$36.5 million in fiscal year 1998 and by \$40.1 million annually for the period 1999 to 2003 (and beyond).

KPMG Barents found shortcomings in the Department of Revenue's estimating procedures that lead to an overstatement of the net revenue impact of the proposal. Based upon our review of the extensive academic literature on this issue, the Department of Revenue assumed an unrealistically low responsiveness of cigarette consumers to changes in the price of cigarettes. The Department of Revenue also did not consider the tendency for consumer responsiveness to increase with time.

In summary, KPMG Barents found that the Department of Revenue overstated potential revenue gains of the proposed tax increase by over \$5 million (16 percent) in FY 1998 and by \$16 million (63 percent) in FY 2003. 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 \$12 million over the six year period.

In addition to raising less revenue than anticipated, the proposed tax increase will also be quite regressive by raising taxes equal to a much greater share of income of those with the lowest incomes than it does of those with higher incomes. Further, the tax increase will cause relative prices to change throughout the State's economy as a result of changes in the quantity of cigarettes consumed. That is, as smokers change their spending on cigarettes there will be corresponding changes in their non-cigarette consumption. These changes in demand will lead to price effects that will have consequences for smokers and non-smokers alike.

1. INTRODUCTION

Alaska Governor Tony Knowles has proposed a \$1 per package increase in the State cigarette tax beginning in fiscal year 1998. Governor Knowles has stated that the reason for this tax increase is to deter young people from smoking, and although he hopes the tax will not raise any money, any revenue raised will flow to the General Fund Education Account and the Dedicated School Fund. The Alaska Department of Revenue estimates that total cigarette excise taxes will increase to \$51.7 million in FY 1998 and \$55.2 million thereafter.

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) raising less money than the Department of Revenue is estimating; (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; (4) deterioration in the distribution of income due to the regressive nature of the tax; and (5) as smokers change their consumption of cigarettes in response to the tax change, relative prices of other goods will change impacting not only smokers, but non-smokers as well.

- ◆ The Department of Revenue estimates that a \$1 per package increase in the cigarette tax will raise an additional \$37 million in FY 1998 and \$40 million per year during the period FY 1999 through FY 2003.¹ These estimates, however, are based upon assumptions that overstate the revenue potential of the tax with the result that the tax increase will raise less money than is estimated.
- ◆ The Department of Revenue assumes a "demand elasticity" much lower than reported in most peer reviewed, professional journals. The scientific evidence suggests that following the proposed tax increase, taxable cigarette sales, and hence tobacco tax revenues, would fall much more than the Department of Revenue estimates.
- ◆ The Department of Revenue 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 approximately 9 percent share of cigarette sales in the State occurs through military bases.
- ◆ 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.

¹ The Governor's proposal is estimated to raise \$44 million annually by taxing cigarettes and other tobacco products. Our analysis focuses only on the cigarette tax. These estimates are consistent with the estimates used in the Governor's State of the Budget Address which was delivered on January 16, 1997.

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.
- Finally as cigarette taxes increase and the consumption of cigarettes falls, smokers will change their purchases of other goods and services. These changes in demand will cause relative prices to shift in ways that increase the cost of some items and reduce the cost of others. That is, as smokers change their purchasing patterns, both smokers and non-smokers will be affected by the proposed cigarette tax increase.

In summary, we find that the Department of Revenue overstates potential revenue gains of the proposed tax increase by 17 percent in FY 1998 and by FY 2003, overstates potential revenue gains by 66 percent. In addition, the decline in local tax revenues collected by Anchorage, Juneau, and Fairbanks, which the Department of Revenue does not discuss, will be approximately \$2 million per year. Indeed, revenues may be even lower due to increased bootlegging. Also, the tax increase will fall most heavily on the lower-income portion of the State's population. Finally, as smokers change their consumption patterns, relative price changes will affect smokers and non-smokers alike.

2. METHODOLOGY

The central relationship in this study is the demand for taxable cigarettes. This relationship explains how cigarette consumers react to changes in the price of a pack of cigarettes.¹ This relationship also describes how changing consumer preferences affect demand. Finally, the demand for taxable 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.

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 1933.² 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 -1.033.³ We assume that the Department of Revenue used an implied demand elasticity of -0.4⁴, which is at the low end of the estimate range of all the peer reviewed publications.⁵ Moreover, elasticities tend to increase over time, as consumers learn to adjust to price changes. The Department of Revenue ignores this effect.

As a simple example, assume the average retail price of cigarettes is \$2 per pack.⁷ A \$1 per pack tax increase will raise the price by 50 percent. A price elasticity of -0.4, as assumed by the Department of Revenue, implies a 19 percent⁸ drop in consumption; i.e., the percent decline in demand is equal to -0.4 multiplied by the percent increase in price. On the other hand, a short-run elasticity of -0.619 implies a 29-percent drop in demand, and a long-run elasticity of -1.033 implies a 49-percent drop in demand. This drop in demand for taxed cigarettes 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. Such differences in estimating future consumption indicate that the Department of Revenue has overstated potential tax collections.

¹ This is the elasticity of demand for cigarettes. See Technical Appendix.

² See References.

³ See Appendix Table A.3 for full list of elasticities.

⁴ KPMG Baroni uses real (i.e., inflation adjusted) prices in estimating the revenue impact of the proposed tax increase. As a result, the implied price elasticity used by the Department of Revenue is -0.427.

⁵ The Department of Revenue does not explicitly identify its elasticity; however, it can be inferred from their data. See Technical Appendix.

⁷ In performing our analysis we used \$2.14, the price as of November 1996 provided by the Tobacco Institute. We use \$2 per pack in the examples to simplify the presentation.

⁸ The Department of Revenue assumes a one-time 18.3 percent decline in demand.

3. 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. KPMG Barents prepared its estimates in nominal dollars to be consistent with the Alaska Department of Revenue and to provide the most relevant analysis.

Table 1

Estimated Tax Collections Under a \$1 per Pack Increase

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003
	-----\$ Millions----->					
KPMG Barents estimate	31.4	31.9	29.3	26.7	24.2	24.6
Department of Revenue's estimate	36.5	40.1	40.1	40.1	40.1	40.1
Department of Revenue's overstatement	5.1	8.2	10.8	13.4	15.9	15.5
Percentage overestimate	16.4%	25.6%	36.8%	50.1%	65.9%	63.1%
Local revenue loss not estimated by Department of Revenue	1.4	1.6	1.8	2.0	2.3	2.3

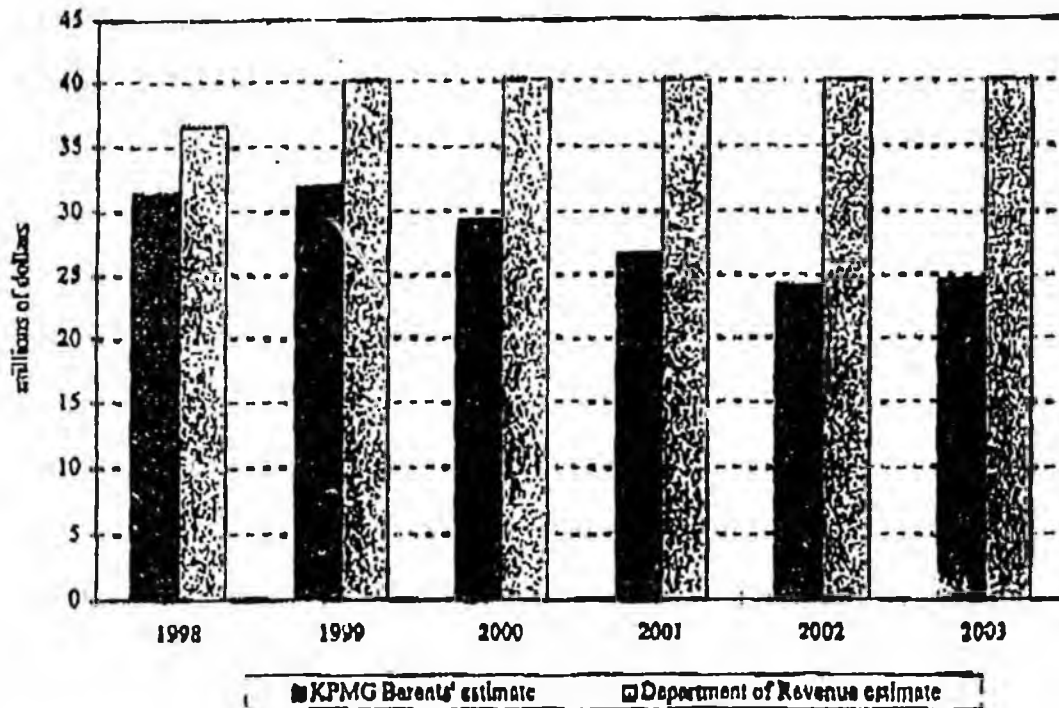
The KPMG Barents estimate shows the likely change in cigarette tax revenue resulting from the \$1 per pack increase in the State tobacco tax.⁹ Table 1 shows the tax increase beginning in FY 1998, which implies a net revenue gain of \$31.4 million. The revenue gain increases slightly in FY 1999 due to lags in tax collections and then decreases until by FY 2003, the additional tax revenue is only \$24.6 million above the amount that otherwise would have been collected. Table 1 also shows the amount and the percentage by which the Department of Revenue's calculations exceed the KPMG Barents estimate.

⁹ All values are in nominal dollars. That is, they are not inflation adjusted.

In FY 1998, the Department of Revenue overestimates tax revenues by \$5.1 million (16 percent over the KPMG Barents estimate); by FY 2003, the Department of Revenue exceeds the KPMG Barents forecast by \$15.5 million (63 percent over the KPMG Barents estimate). Figure 1 shows both sets of estimates in nominal dollars.

Figure 1

**Comparison of KPMG Barents' Revenue Estimates
with Department of Revenue's Estimates**



Appendix Table A-1 shows in detail how we prepared the estimates and the methodology is provided in the Technical Appendix.

Local Tax Effects

The proposed \$1 tax increase will impair the revenue collection efforts of Alaska's three largest municipal governments: Anchorage, Fairbanks, and Juneau.

Table 2 shows the local tax effects. The annual decline in collections ranges between \$1 and \$2 million with about 87 percent of the impact occurring in Anchorage. Over the six year period, Anchorage collections will decline by a total of \$10 million, Fairbanks will lose just over \$1 million, and Juneau will lose \$287,000. Collections for these three municipal governments will decline by a total of \$11.5 million over the six year period.

Table 2

**Estimated Impact of \$1 State Cigarette Tax Increase
on Local Tax Collections**

City	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	Total
	←-----\$ Thousands-----→						
Anchorage	-1,180	-1,386	-1,594	-1,805	-2,018	-2,030	-10,013
Fairbanks	-145	-170	-196	-222	-249	-250	-1,233
Juneau	-34	-40	-46	-52	-58	-58	-287
Total Local Taxes	-1,359	-1,597	-1,836	-2,079	-2,324	-2,538	-11,523

Military Sales and Bootlegging

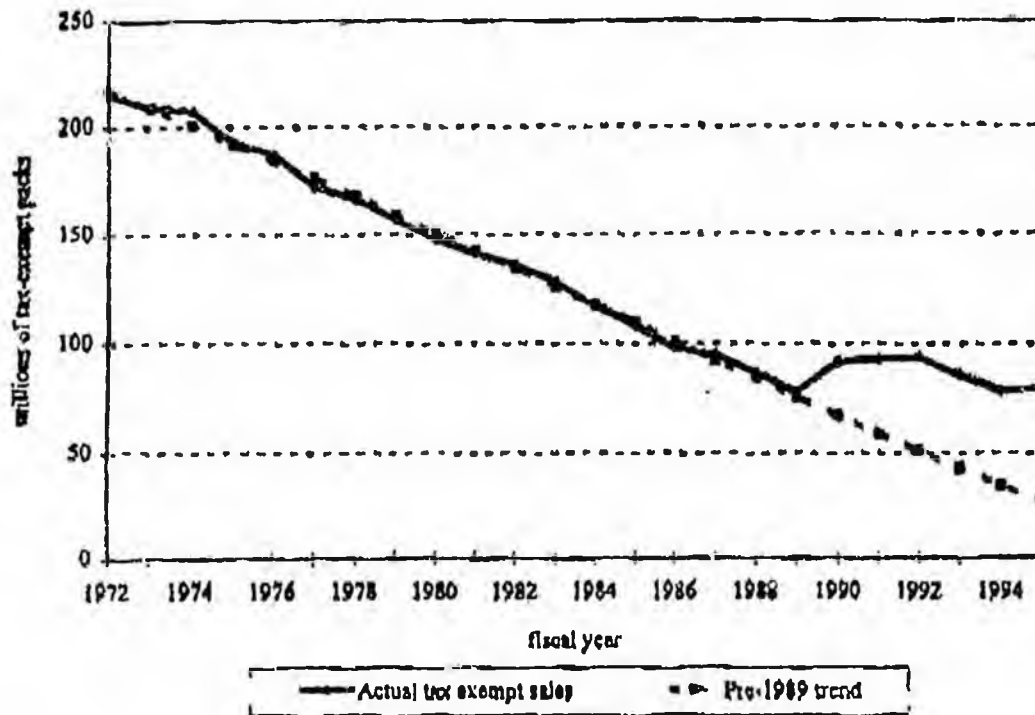
The proposed tax increase would make the combined State plus federal cigarette tax far higher in Alaska than in any other state.¹⁰ Assuming a retail price of \$2 per pack in Alaska, this amounts to a 50 percent increase in the price of cigarettes.¹¹ Consequently, consumers of cigarettes sold in Alaska 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 retail organized smuggling. 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 retail purchases. Similarly, there is only one Indian reservation in Alaska (tribal land on Annette Island) where State and federal cigarette taxes are not levied. This jurisdiction is relatively small and isolated, and we would not expect it to be a major source of bootlegged 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,

¹⁰ Washington currently has the highest state cigarette tax rate at 82.5 cents per pack.

¹¹ See The Tobacco Institute, 1995, p. 199 for the average retail price of cigarettes in Alaska.

Figure 2

Tax-Exempt Cigarette Sales in California, 1972-1995¹⁶

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.¹⁷ This increase can be clearly seen in Figure 2. Also notable in Figure 2 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).

¹⁶ 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 1994-95," 1996.

¹⁷ 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.

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. The pricing policy covering cigarettes sold at military commissaries was changed in November 1996 to be generally consistent with prices charged at military exchanges. No data are yet available indicating the impact of this change in sales of cigarettes at military bases in Alaska.

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 1996, approximately 4.7 million cigarette packs were sold on military bases in Alaska.¹² During the same year, taxable unit sales at civilian outlets were 52.7 million packs.¹³ Thus, military sales are approximately 9 percent of taxable sales.¹⁴

The cities of Anchorage and Fairbanks are likely to be more affected by bootlegging than the State as a whole given their proximity to military bases. Anchorage has three military bases within a ten mile radius, and Fairbanks has two military bases within a 30 mile radius.¹⁵

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.

¹² Source: Industrywide Data on Sales. Marketing and Management Information, Inc.

¹³ Source: Alaska Department of Revenue.

¹⁴ These figures are significantly lower than those provided in our previous report. We now understand the data provided to us that were used in the earlier report were in error and should be disregarded.

¹⁵ Source: Evinger, William R., ed. *Directory of U.S. Military Bases Worldwide*, Phoenix: Oryx Press, 1993

those with low incomes 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 incomes in taxes than do lower income groups.

Consider an Alaska resident who smokes one pack of cigarettes per day. That smoker currently pays \$105.85 in excise taxes per year²⁰. Under the proposed tax increase, that smoker will pay \$470.85 in excise taxes per year — an increase of \$365. This increase will affect those with lower incomes disproportionately. Figure 3 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 \$24,650²¹. Thus, on average, the excise tax of \$470.85 per year represents almost 2 percent of average personal income.

²⁰ 365 days x \$0.29 current taxes = \$105.85.

²¹ \$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.

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 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.¹⁸

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 drive more sales underground; and that the most likely channel for these transactions would involve bootlegging from military installations. If this occurs, it is likely that the elasticity assumptions used in Table 1 (-0.619 short run; -1.033 long run) would be too small. Increasing these elasticities would further reduce the expected net increases in tax revenue from the proposed \$1 per pack tax.

Increased Indian Bootlegging Sales

In November of 1996, the United States Court of Appeals for the Ninth Circuit ruled that the Native Village of Venetie Tribal Government occupies "Indian country."¹⁹ This designation entitles the Native Village of Venetie to the same rights and privileges as other Indian reservations. Currently, no Federal or State excise taxes are levied on Indian reservations. While the implications for other native villages governed under the Alaska Native Claims Settlement Act are unclear and would have to be determined on a case by case basis, this case sets a clear precedent. Clearly, the more locations in which tax-free cigarettes are available, the greater the potential for bootlegging. To the extent that more Alaska Native Villages are ruled to occupy Indian country, the opportunity for increased bootlegging may increase dramatically.

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 Governor's proposed \$1 tax increase will fall disproportionately on those least able to pay it.

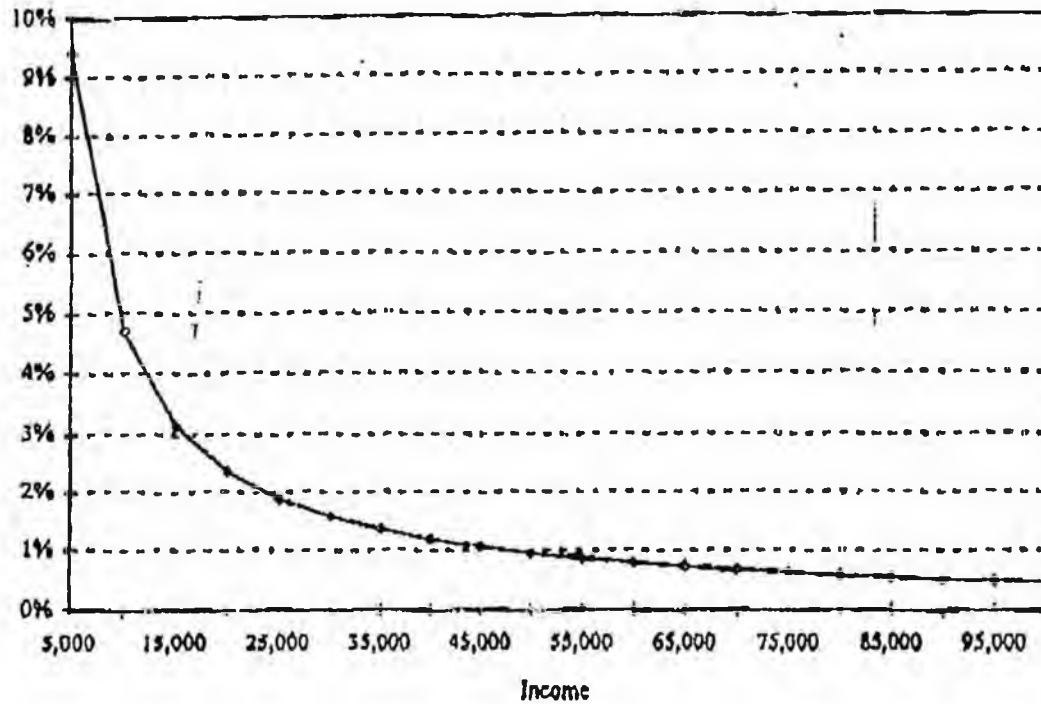
One way to measure the regressivity of a tax system is to look at the relative tax paid by each income group. The burden of a regressive tax will fall more heavily on those with lower incomes than on those with higher incomes. That is, under a regressive tax regime,

¹⁸ See Wall Street Journal, December 8, 1993, and Linquist, Avey, Macdonald, and Baskerville, 1994.

¹⁹ State of Alaska ex rel Yukon Flats School District, Unalakleet/Neeser Construction JV, Unalakleet Native Corporation, Neeser Construction Company, and Gerald Neeser v. Native Village of Venetie Tribal Government a/k/a The Native Village of Venetie, The Venetie Tax Court, The Venetie Tax Commission, Gideon James, Lawrence Roberts, Larry Williams, Ernest Erik, Lincoln Trint, John Titus and David Case, 101 F.3d 1286

Figure 3

**Percentage of Income Spent on
Cigarette Excise Taxes by a 1-Pack per Day Smoker
Following the Proposed \$1 Tax Increase**



Price Impact on Non-Smokers

While the State's estimates of the revenue that could be raised by the \$1 per pack tax increase are overstated, the revenue that is raised will have distorting effects on the rest of the State's economy. These effects will cause relative prices to shift in ways that increase the cost of some items and reduce the cost of others. That is, both smokers and non-smokers will be affected by the proposed cigarette tax increase.

If, for example, the demand for cigarettes falls significantly, smokers will use the money no longer spent on cigarettes to buy other goods and services. As the demand for these items increases, their prices will naturally be bid up. In this case, we would also expect the relative price of cigarettes (before tax) to fall. On the other hand, if smokers spend more money on cigarettes, because of the higher after-tax price, they will have less money to spend on other goods and services, which may cause their prices to fall. While the measurement of the magnitude, and even the net direction, of these effects is outside the scope of this report, it is important to understand the basic conclusion that the State tax increase will affect more residents than just those who choose to smoke.

4. CONCLUSION

This report shows that the Department of Revenue overstates the revenue potential of the proposed \$1 per package increase in the State cigarette tax. This is because the Department of Revenue assumes an unrealistically low demand elasticity for cigarettes. The Department of Revenue also does not take into account 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.

We find that the Department of Revenue overstates potential tax revenues from the proposed tax increase by \$5 million (16 percent) in FY 1998, and that this overestimate grows to \$16 million (63 percent) by FY 2003. Consequently, the proposed tax increase would raise less revenue than is estimated by the Department of Revenue. The proposed tax is also 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 six year period, these local taxes will decline by approximately \$12 million. This tax increase will also particularly harm those with lower incomes. Because of the regressive nature of tobacco taxes, the proposed increase will adversely affect those State residents least able to afford it. Finally, as smokers change their consumption patterns, relative prices of other goods and services will change with resulting impacts, either positive or negative, on nonsmokers.

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

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

or

$$E_d = \frac{\text{Percentage Change in Quantity}}{\text{Percentage Change in Price}}$$

The Department of Revenue assumes that the \$1 increase in State excise taxes would result in an 18.5 percent decline in cigarette consumption. In order to be used in the KPMG Barents model, the percentage decline had to be converted into an effective price elasticity. The price elasticity for the Department of Revenue was calculated so as to be able to duplicate their revenue estimates.

The estimated price of a pack of cigarettes for FY 1997 is \$2.14 and for FY 1998 is \$3.14. The Department of Revenue assume cigarette sales of 52.7 million in FY 1997 and sales of 42.9 in FY 1998. Dividing the percentage change in quantity by the percentage change in price results in an effective price elasticity of -0.4.²²

²² Using the real (i.e., inflation adjusted) prices instead of nominal prices results in an effective price elasticity of -0.427.

Instead of using only the price elasticity of demand used by the Department of Revenue, 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 Table A-1

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 2002 the revenue impact is identical to that in long-run Scenario (2c). Similarly, the initial revenue impact in FY 1998 in the KPMG Barents estimates is assumed to equal the FY 1998 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 (4c) represent models similar to those used by the Department of Revenue and use a price elasticity of -0.4. The overestimates caused by the Department of Revenue's misspecifications are found by subtracting the KPMG Barents estimate (Scenario 1) from Department of Revenue Scenario (4c). The amount of overestimation is also indicated in the table as Scenario (5).

5. Appendix Table A-2

Appendix Table A-2 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-3

Appendix Table A-3 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.

APPENDIX TABLE A-1

Scenarios (cig. tax rev.; mil.):	1998	1999	2000	2001	2002	2003
1. KPMG Barents' estimate	31.39	31.94	29.31	26.72	24.17	24.60
Assumed short-run to long-run elasticity phase-in rate	0	25%	50%	75%	100%	100%
2a. \$1 state tax increase; E=-1.033	35.11	38.05	38.56	39.07	39.60	40.13
2b. No state tax increase; E=-1.033	15.02	15.13	15.23	15.33	15.43	15.53
2c. #1a minus #1b (netting out long-run price effects)	20.09	22.92	23.33	23.75	24.17	24.60
3a. \$1 state tax increase; E=-.619	46.52	50.14	50.54	50.94	51.36	51.77
3b. No state tax increase; E=-.619	15.13	15.19	15.25	15.31	15.37	15.43
3c. #2a minus #2b (netting out short-run price effects)	31.39	34.95	35.29	35.54	35.99	36.34
4a. \$1 state tax increase; E=-.4	51.81	55.39	55.39	55.39	55.39	55.39
4b. No state tax increase; E=-.4	15.28	15.28	15.28	15.28	15.28	15.28
4c. State of Alaska's revenue impact estimate:	36.53	40.11	40.11	40.11	40.11	40.11
5. Overestimate (compared to baseline, #1):	5.14	8.17	10.80	13.39	15.94	15.51
Percentage overestimate:	16%	26%	37%	50%	66%	63%

APPENDIX TABLE A-2
 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	1923-1951	-0.25 and -0.68
Stene	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
Tennant	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
Koutsourakis	1963	Time-series Aggregate tobacco consumption international results	1950-1959	-0.026 to -0.951
Vernon, et al.	1967	Time-series 19 equation econometric model of the tobacco industry	1949-1966	-0.43

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

Author	Year	Type of analysis	Time Period	Price Elasticity
Schneider, Klein and Murphy	1981	Time-series	1930-1978	-1.2
Young	1983	Time-series Ridge regression	1929-1973	-0.33 to -0.34
Sumner and Alston	1984	Time-series Generalized least squares	1946-1983	-0.29
Sullivan	1985	Panel Generalized least squares	1955-1982	-0.66
Baltagi and Levin	1986	Panel Hausman-Taylor estimation	1963-1980	-2.215
Porter	1986	Time-series Two stage least squares	1947-1982	-0.05 to -0.29
Baltagi and Goel	1987	Time-series Quasi-experimental method	1956-1983	-0.114 to -0.917
Kao and Tremblay	1988	Time-series Two stage least squares	1953-1980	-0.50 to -1.0
Russo	1989	Cross-section Tobit maximum likelihood	1980	-0.57
Chaloupka	1991	Time-series Two stage least squares	1976-1980	-0.37 to -0.27

END

Author	Year	Type of analysis	Time Period	Price Elasticity
Wasserman et al.	1991	Time-series Generalized linear model	1975-1985	-0.283 to 0.059
Keeler, Ha and Barrett	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
Reckie	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 Pessler	1995	Time-series for Cross-section of states Nonlinear least squares estimation	1950-1986	-1.30

Author	Year	Type of analysis	Time Period	Price Elasticity
Tremblay and Tremblay	1995	Time-series Two stage least squares and weighted two stage least squares	1955-1990	-0.404 to -0.429 -0.706 to -0.745 (1990)

APPENDIX TABLE A-3
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	2%	238
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
Kotzeb Air National Guard Base	At Anchorage IAP off Raspberry Road, approximately 5 miles from downtown.	1,200		245
Trarckson 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 250 miles South West of Anchorage; 0.5 miles from Town of King Salmon. Not Accessible by ground transportation.	190		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: Dryx Press, 1995.

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Withdraw

0-LS0001\B.1
Chenoweth
2/25/97

#1

A M E N D M E N T

OFFERED IN THE HOUSE

TO: CSHB 1(HES)

By Rep. Gene Theriault

1 Page 4, following line 13:

2 Insert a new bill section to read:

3 **** Sec. 9. FLOOR STOCK TAXES.** (a) There is imposed on every person engaged in
4 business in this state as a distributor of cigarettes a floor stock tax. The floor stock tax is
5 imposed once on the cigarettes that are in the person's possession or under the person's
6 control at 12:01 a.m. on the date that is the effective date of this section. The tax is imposed
7 at the rate required under AS 43.50.090(a), as amended by sec. 1 of this Act, less any tax
8 paid or owed on the same product under AS 43.50.010 - 43.50.190 at the rate in effect on
9 the date before the effective date of this section.

10 (b) There is imposed on every person engaged in business in this state as a distributor
11 of tobacco products other than cigarettes a floor stock tax. The floor stock tax is imposed
12 once on those tobacco products that are in the person's possession or under the person's
13 control at 12:01 a.m. on the effective date of this section. The tax is imposed at the rate
14 required under AS 43.50.300, as amended by sec. 6 of this Act, less any tax paid or owed
15 on the same product under AS 43.50.300 - 43.50.390 at the rate in effect on the date before
16 the effective date of this section.

17 (c) The provisions of AS 43.05 and AS 43.10 apply to the administration,
18 enforcement, and collection of the floor stock tax levied by this section.

19 (d) The Department of Revenue shall adopt regulations as necessary to implement
20 this section.

21 (e) In this section,

22 (1) the definitions of AS 43.50.170 apply to (a) of this section; and

23 (2) the definitions of AS 43.50.390 apply to (b) of this section."

24 Renumber the following bill sections accordingly.

1 Page 4, line 24:

2 Delete "sec. 9"

3 Insert "sec. 10"

4 Page 4, line 30:

5 Delete "and 7"

6 Insert "7, and 9"

7 Page 4, line 31:

8 Delete "sec. 9"

9 Insert "sec. 10"

Adopted

#2

AMENDMENT

By Rep. Grove thereicault

OFFERED IN THE HOUSE
TO: CSHB 1(HES)

- 1 Page 1, line 8, following "deducting":
- 2 Insert "⁴~~three-tenths~~ of"

- 3 Page 2, line 10, following "deducting":
- 4 Insert "three-tenths of"

- 5 Page 4, following line 12:
- 6 Insert a new bill section to read:
- 7 "* Sec. 8. AS 43.50.330(b) is amended to read:
- 8 (b) The licensee shall remit with the return the tax due under AS 43.50.300
- 9 for the month covered by the return, after deducting ⁴~~three-tenths~~ of one percent of
- 10 the tax due, which the licensee shall retain to cover the expense of accounting and
- 11 filing the return."

- 12 Renumber the following bill sections accordingly.

- 13 Page 4, line 14:
- 14 Delete "and 8"
- 15 Insert "and 9"

- 16 Page 4, line 24:
- 17 Delete "sec. 9"
- 18 Insert "sec. 10"

- 19 Page 4, line 30:

- 1 Delete "and 7"
- 2 Insert "7, and 8"

3 Page 4, line 31:

- 4 Delete "and 8"
- 5 Insert "and 9"
- 6 Delete "sec. 9"
- 7 Insert "sec. 10"

Failed

0-LS0001\B.6
Chenoweth
2/26/97

#3

AMENDMENT

OFFERED IN THE HOUSE
TO: CSHB 1(HES)

By Rep Theriault

1 Page 1, line 4, through page 3, line 11:

2 Delete all material and insert:

3 **** Section 1.** AS 43.50.090(a) is amended to read:

4 (a) There is levied an excise tax of 38 [TWO AND ONE-HALF] mills on
5 each cigarette imported or acquired in the state. Each licensee shall, at the time of
6 filing the return required by AS 43.50.080, pay to the department the excise for the
7 calendar month covered by the return, deducting one per cent of the total tax due,
8 which the licensee shall retain to cover the expense of accounting and filing returns.
9 Cigarettes upon which the excise is imposed are not again subject to the excise when
10 acquired by another person.

11 *** Sec. 2.** AS 43.50.090(a) is amended to read:

12 (a) There is levied an excise tax of two and one-half [38] mills on each
13 cigarette imported or acquired in the state. Each licensee shall, at the time of filing
14 the return required by AS 43.50.080, pay to the department the excise for the calendar
15 month covered by the return, deducting one per cent of the total tax due, which the
16 licensee shall retain to cover the expense of accounting and filing returns. Cigarettes
17 upon which the excise is imposed are not again subject to the excise when acquired
18 by another person.

19 *** Sec. 3.** AS 43.50.190(a) is amended to read:

20 (a) There is levied an excise tax of 47 1/2 [12] mills on each cigarette
21 imported or acquired in this state."

22 Renumber the following bill sections accordingly.

23 Page 3, line 22, through page 4, line 22:

1 Delete all material and insert:

2 **** Sec. 5. CONDITIONAL EFFECT OF SECTIONS 2 AND 3.** Sections 2 and 3 of this
3 Act take effect only if

4 (1) a court enters a final judgment that the amendment made to
5 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes
6 violates the prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska,
7 against dedication of the proceeds of a state tax or license; and

8 (2) either the time for appeal of that judgment expires or, if an appeal
9 is taken, the court enters a final order on appeal that AS 43.50.090(a), as amended by
10 sec. 1 of this Act, violates art. IX, sec. 7, Consitution of the State of Alaska."

11 Renumber the following bill sections accordingly.

12 Page 4, line 24:

13 Delete "and 4"

14 Insert "and 3"

15 Delete "sec. 9"

16 Insert "sec. 5"

17 Page 4, line 25:

18 Delete "and 4"

19 Insert "and 3"

20 Page 4, line 29:

21 Delete "sec. 4"

22 Insert "sec. 3"

23 Page 4, line 30:

24 Delete "1, 3, 6, and 7"

25 Insert "1 and 4"

26 Page 4, line 31:

- 1 Delete "secs. 2, 4, 5, and 8"
- 2 Insert "secs. 2 and 3"
- 3 Delete "sec. 9"
- 4 Insert "sec. 5"

Withdrawn

0-LS0001\B.4
Chenoweth
2/26/97

#4

AMENDMENT

OFFERED IN THE HOUSE
TO: CSHB 1(HES)

Representative John Davies

- 1 Page 4, following line 12:
- 2 Insert a new bill section to read:
- 3 **** Sec. 8.** AS 43.50.390(4) is amended to read:
- 4 (4) "tobacco product" means
- 5 (A) a cigar;
- 6 (B) a cheroot;
- 7 (C) a stogie;
- 8 (D) a perique;
- 9 (E) snuff and snuff flour;
- 10 (F) smoking tobacco, including granulated, plug-cut, crimp-cut,
- 11 ready-rubbed, and any form of tobacco suitable for smoking in a pipe or
- 12 cigarette;
- 13 (G) chewing tobacco, including cavendish, twist, plug, scrap,
- 14 and tobacco suitable for chewing; or
- 15 (H) an article or product made of tobacco or a tobacco
- 16 substitute, but not including a cigarette as defined in AS 43.50.170 or nicotine
- 17 transdermal systems and nicotine resin complexes:"

- 18 Renumber the following bill sections accordingly.

- 19 Page 4, line 14:
- 20 Delete "and 8"
- 21 Insert "and 9"

- 22 Page 4, line 24:

1 Delete "sec. 9"

2 Insert "sec. 10"

3 Page 4, line 30:

4 Delete "and 7"

5 Insert "7, and 8"

6 Page 4, line 31:

7 Delete "and 8"

8 Insert "and 9"

9 Delete "sec. 9"

10 Insert "sec. 10"

filed

AMENDMENT 5

OFFERED IN THE HOUSE
TO: CSHB 1(HES)

By Rep. Therriault

- 1 Page 1, line 4, through page 3, line 11:
- 2 Delete all material and insert:
- 3 **** Section 1.** AS 43.50.090(a) is amended to read:
- 4 (a) There is levied an excise tax of 52 1/2 [TWO AND ONE-HALF] mills on
- 5 each cigarette imported or acquired in the state. Each licensee shall, at the time of
- 6 filing the return required by AS 43.50.080, pay to the department the excise for the
- 7 calendar month covered by the return, deducting one per cent of the total tax due,
- 8 which the licensee shall retain to cover the expense of accounting and filing returns.
- 9 Cigarettes upon which the excise is imposed are not again subject to the excise when
- 10 acquired by another person.
- 11 *** Sec. 2.** AS 43.50.090(a) is amended to read:
- 12 (a) There is levied an excise tax of two and one-half [52 1/2] mills on each
- 13 cigarette imported or acquired in the state. Each licensee shall, at the time of filing
- 14 the return required by AS 43.50.080, pay to the department the excise for the calendar
- 15 month covered by the return, deducting one per cent of the total tax due, which the
- 16 licensee shall retain to cover the expense of accounting and filing returns. Cigarettes
- 17 upon which the excise is imposed are not again subject to the excise when acquired
- 18 by another person.
- 19 *** Sec. 3.** AS 43.50.190(a) is amended to read:
- 20 (a) There is levied an excise tax of 62 [12] mills on each cigarette imported
- 21 or acquired in this state."
- 22 Renumber the following bill sections accordingly.
- 23 Page 3, line 22, through page 4, line 22:

1 Delete all material and insert:

2 **** Sec. 5. CONDITIONAL EFFECT OF SECTIONS 2 AND 3.** Sections 2 and 3 of this
3 Act take effect only if

4 (1) a court enters a final judgment that the amendment made to
5 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes
6 violates the prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska,
7 against dedication of the proceeds of a state tax or license; and

8 (2) either the time for appeal of that judgment expires or, if an appeal
9 is taken, the court enters a final order on appeal that AS 43.50.090(a), as amended by
10 sec. 1 of this Act, violates art. IX, sec. 7, Consitution of the State of Alaska."

11 Renumber the following bill sections accordingly.

12 Page 4, line 24:

13 Delete "and 4"

14 Insert "and 3"

15 Delete "sec. 9"

16 Insert "sec. 5"

17 Page 4, line 25:

18 Delete "and 4"

19 Insert "and 3"

20 Page 4, line 29:

21 Delete "sec. 4"

22 Insert "sec. 3"

23 Page 4, line 30:

24 Delete "1, 3, 6, and 7"

25 Insert "1 and 4"

26 Page 4, line 31:

- 1 Delete "secs. 2, 4, 5, and 8"
- 2 Insert "secs. 2 and 3"
- 3 Delete "sec. 9"
- 4 Insert "sec. 5"

faint

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Chenoweth
2/26/97

#6

AMENDMENT

OFFERED IN THE HOUSE
TO: CSHB 1(HES)

By Rep. Theriault

- 1 Page 1, line 13:
- 2 Delete "52 1/2 mills"
- 3 Insert "38 mills"

- 4 Page 1, line 14:
- 5 Delete "64 1/2 mills"
- 6 Insert "50 mills"

- 7 Page 2, line 1:
- 8 Delete "76 1/2 mills"
- 9 Insert "62 mills"

- 10 Page 2, line 3:
- 11 Delete "76 1/2 mills"
- 12 Insert "62 mills"

- 13 Page 2, line 15:
- 14 Delete "52 1/2 MILLS"
- 15 Insert "38 MILLS"

- 16 Page 2, lines 16 - 17:
- 17 Delete "64 1/2 MILLS"
- 18 Insert "50 MILLS"

- 19 Page 2, lines 18 - 19:

- 1 Delete "76 1/2 MILLS"
- 2 Insert "62 MILLS"

- 3 Page 2, line 20:
- 4 Delete "76 1/2 MILLS"
- 5 Insert "62 MILLS"

- 6 Page 3, line 2:
- 7 Delete "62 mills"
- 8 Insert "47 1/2 mills"

- 9 Page 3, line 3:
- 10 Delete "74 mills"
- 11 Insert "59 1/2 mills"

- 12 Page 3, line 4:
- 13 Delete "86 mills"
- 14 Insert "71 1/2 mills"

- 15 Page 3, line 5:
- 16 Delete "86 mills"
- 17 Insert "71 1/2 mills"

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF REVENUE

INCOME AND EXCISE AUDIT
P. O. BOX 110420
JUNEAU, AK 99811-0420
FAX. (907) 465-2375

February 26, 1997

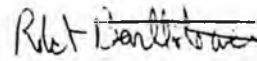
The Honorable Gene Therriault
Alaska State Legislature
State Capital, Room 511
Juneau, Alaska 99801

Dear Chairman Therriault:

You have asked us to respond to the question "are nicotine gum or patches subject to the tobacco products tax"? AS 43.50.390 (4) provides the definition of tobacco products. These particular products do not meet the definitions listed. Current industry practice and the Department of Revenue's position is that nicotine gum and patches are not subject to the state's tobacco tax.

Please let me know if you require additional information.

Sincerely



Robert N. Bartholomew
Assistant Director

97-17

AMEND. TO # 1

~~115~~
DAVIES

p 1 line 20 after section:

insert "including, if necessary, a transitional provision delaying the date all or part of the tax may be due!"

CS FOR HOUSE BILL NO. 1(HES)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - FIRST SESSION

BY THE HOUSE HEALTH, EDUCATION AND SOCIAL SERVICES COMMITTEE

Offered: 2/14/97
Referred: Finance

Sponsor(s): REPRESENTATIVES BUNDE, Ivan, Croft, Porter, Hudson

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to taxes on cigarettes and tobacco products; and providing for
2 an effective date."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 * Section 1. AS 43.50.090(a) is amended to read:

5 (a) There is levied an excise tax [OF TWO AND ONE-HALF MILLS] on each
6 cigarette imported or acquired in the state. Each licensee shall, at the time of filing
7 the return required by AS 43.50.080, pay to the department the excise for the calendar
8 month covered by the return, deducting one percent of the total tax due, which the
9 licensee shall retain to cover the expense of accounting and filing returns. Cigarettes
10 upon which the excise is imposed are not again subject to the excise when acquired
11 by another person. The excise tax is levied at the following rates:

12 (1) on and after the effective date of this bill section and through
13 June 30, 2000 - 52 1/2 mills;

14 (2) after June 30, 2000, and through June 30, 2003 - 64 1/2 mills;

1 (3) after June 30, 2003, and through June 30, 2006 - 76 1/2 mills;

2 and

3 (4) after June 30, 2006 - 76 1/2 mills plus an additional 12 mills
 4 during each succeeding three-year period. the increase to be effective on the first
 5 day of the succeeding three-year period.

6 * Sec. 2. AS 43.50.090(a) is amended to read:

7 (a) There is levied an excise tax of two and one-half mills on each cigarette
 8 imported or acquired in the state. Each licensee shall, at the time of filing the return
 9 required by AS 43.50.080, pay to the department the excise for the calendar month
 10 covered by the return, deducting one percent of the total tax due, which the licensee
 11 shall retain to cover the expense of accounting and filing returns. Cigarettes upon
 12 which the excise is imposed are not again subject to the excise when acquired by
 13 another person. [THE EXCISE TAX IS LEVIED AT THE FOLLOWING RATES:

14 (1) ON AND AFTER THE EFFECTIVE DATE OF THIS BILL
 15 SECTION AND THROUGH JUNE 30, 2000 - 52 1/2 MILLS;

16 (2) AFTER JUNE 30, 2000, AND THROUGH JUNE 30, 2003 - 64 1/2
 17 MILLS;

18 (3) AFTER JUNE 30, 2003, AND THROUGH JUNE 30, 2006 - 76 1/2
 19 MILLS; AND

20 (4) AFTER JUNE 30, 2006 - 76 1/2 MILLS PLUS AN ADDITIONAL
 21 12 MILLS DURING EACH SUCCEEDING THREE-YEAR PERIOD, THE
 22 INCREASE TO BE EFFECTIVE ON THE FIRST DAY OF THE SUCCEEDING
 23 THREE-YEAR PERIOD.]

24 * Sec. 3. AS 43.50.090 is amended by adding a new subsection to read:

25 (d) At the time of a change in the amount of tax under (a) of this section, the
 26 department shall give public notice of the change. The department shall also provide
 27 notification of the change to all persons licensed under this chapter.

28 * Sec. 4. AS 43.50.190(a) is amended to read:

29 (a) On [THERE IS LEVIED AN EXCISE TAX OF 12 MILLS ON] each
 30 cigarette imported or acquired in this state, there is levied an excise tax at the
 31 following rates:

1 (1) on and after the effective date of this bill section and through
 2 June 30, 2000 - 62 mills;

3 (2) after June 30, 2000, and through June 30, 2003 - 74 mills;

4 (3) after June 30, 2003, and through June 30, 2006 - 86 mills; and

5 (4) after June 30, 2006 - 86 mills plus an additional 12 mills during
 6 each succeeding three-year period, the increase to be effective on the first day of
 7 the succeeding three-year period.

8 * Sec. 5. AS 43.50.190 is amended by adding a new subsection to read:

9 (c) At the time of a change in the amount of tax under (a) of this section, the
 10 department shall give public notice of the change. The department shall also provide
 11 notification of the change to all persons licensed under this chapter.

12 * Sec. 6. AS 43.50.300 is amended to read:

13 **Sec. 43.50.300. Excise tax levied.** An excise tax is levied on tobacco products
 14 in the state at the rate of 100 [25] percent of the wholesale price of the tobacco
 15 products. The tax is levied when a person

16 (1) brings, or causes to be brought, a tobacco product into the state
 17 from outside the state for sale;

18 (2) makes, manufactures, or fabricates a tobacco product in the state
 19 for sale in the state; or

20 (3) ships or transports a tobacco product to a retailer in the state for
 21 sale by the retailer.

22 * Sec. 7. AS 43.50.300 is amended by adding new subsections to read:

23 (b) The amount in (a) of this section changes, as provided in (b) - (d) of this
 24 section, according to and to the extent of changes in the Consumer Price Index for all
 25 urban consumers for the Anchorage Metropolitan Area compiled by the Bureau of
 26 Labor Statistics, United States Department of Labor. The index for January of 1998
 27 is the reference base index.

28 (c) The amount changes on July 1 of each even-numbered year in an amount
 29 equal to the percentage of change, calculated to the nearest whole percentage point,
 30 between the index for January of that year and the most recent index used to change
 31 the amount in (a) of this section. However, the amount does not change if the amount

1 required by (b) - (d) of this section is that currently in effect as a result of earlier
2 application of (b) - (d) of this section.

3 (d) If the index is revised, the percentage of change is calculated on the basis
4 of the revised index. If a revision of the index changes the reference base index, a
5 revised reference base index is determined by multiplying the reference base index
6 applicable by the rebasing factor furnished by the Bureau of Labor Statistics, United
7 States Department of Labor. If the index is superseded, the index referred to in (b) -
8 (d) of this section is the one represented by the Bureau of Labor Statistics as reflecting
9 most accurately changes in the purchasing power of the dollar for Alaska consumers.

10 (e) At the time of a change in the amount of the tax under this section, the
11 department shall promptly give public notice of the change. The department shall also
12 provide notification of a change to all persons licensed under this chapter.

13 * **Sec. 8.** AS 43.50.090(d), added by sec. 3 of this Act, is repealed.

14 * **Sec. 9. CONDITIONAL EFFECT OF CERTAIN SECTIONS.** Sections 2, 4, 5, and 8
15 of this Act take effect only if

16 (1) a court enters a final judgment that the amendment made to
17 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes violates the
18 prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska, against dedication of
19 the proceeds of a state tax or license; and

20 (2) either the time for appeal of that judgment expires or, if an appeal is taken,
21 the court enters a final order on appeal that AS 43.50.090(a), as amended by sec. 1 of this
22 Act, violates art. IX, sec. 7, Constitution of the State of Alaska.

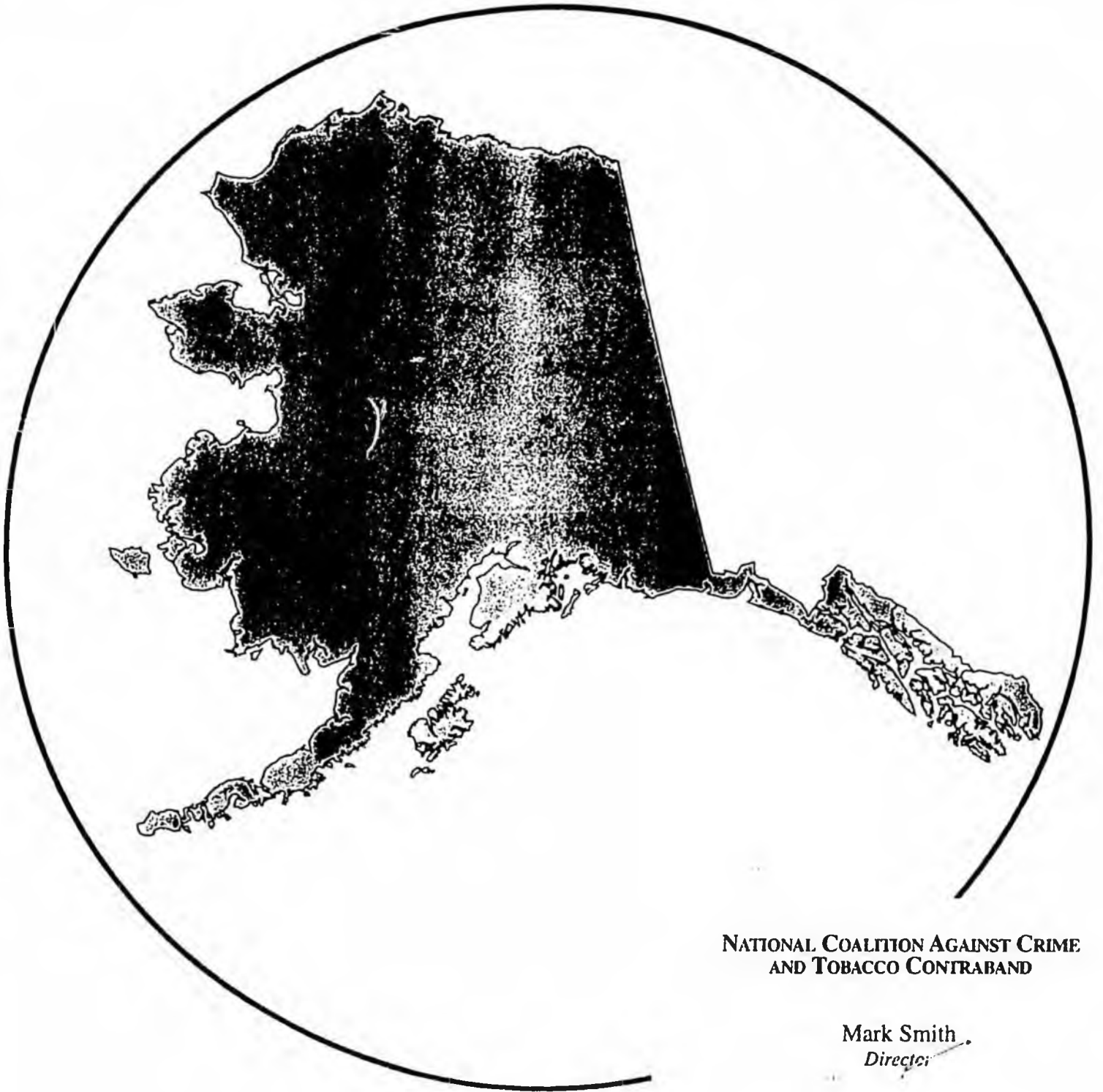
23 * **Sec. 10. CONDITIONAL RETROACTIVITY OF CERTAIN PROVISIONS.** If secs. 2
24 and 4 of this Act take effect under sec. 9 of this Act, then the amendments to AS 43.50.090(a)
25 and 43.50.190(a) made by secs. 2 and 4 of this Act are retroactive to October 1, 1997, and
26 the revenue derived from the levy of mills per cigarette of the tax levied under
27 AS 43.50.090(a), as amended by sec. 1 of this Act, for cigarettes sold after October 1, 1997,
28 that exceeds two and one-half mills shall be credited to the tax levied under AS 43.50.190(a),
29 as amended by sec. 4 of this Act.

30 * **Sec. 11.** Sections 1, 3, 6, and 7 of this Act take effect October 1, 1997.

31 * **Sec. 12.** If secs. 2, 4, 5, and 8 of this Act take effect under sec. 9 of this Act, they take

1 effect on the later of (1) the date a court enters a final judgment that the amendment made to
2 AS 43.50.090(a) by sec. 1 of this Act changing the rate of taxation on cigarettes violates the
3 prohibition set out in art. IX, sec. 7, Constitution of the State of Alaska, against dedication of
4 the proceeds of a state tax or license, and (2) the expiration of any time for appeal of that
5 judgment, or, if an appeal is taken, upon entry of a final order on the appeal that
6 AS 43.50.090(a), as amended by sec. 1 of this Act, violates art. IX, sec. 7, Constitution of the
7 State of Alaska. The attorney general shall promptly notify the lieutenant governor and the
8 revisor of statutes of a judgment described in this section.

Impact of Alaska Cigarette Tax



NATIONAL COALITION AGAINST CRIME
AND TOBACCO CONTRABAND

Mark Smith
Director

601 Pennsylvania Ave., NW • Suite 900
Washington, DC 20004

(202) 434-8179

copy on file

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Raise Alaska's Cigarette Tax?

ALREADY AT THE EDGE

Given the emergence of a major underground black market for cigarettes in both the U.S. and Canada -- and particularly in jurisdictions that raise taxes well above the average -- Alaskan officials should carefully consider the *unintended consequences* of raising the current cigarette tax.⁽¹⁾

→ Facts are 7-8% of sales!

Current Cigarette Market -- 45% From Military Bases (No Taxes)

Alaska already is well on its way to becoming a tax-avoidance market. According to a recent study by independent accounting firm Peat Marwick for the *Alaska Cabaret, Hotel, Restaurant and Retail Association*, 45% of all cigarettes in Alaska are purchased tax-free on military bases.⁽²⁾ Even as deep discounts on cigarettes are ending at military commissaries, many Alaskans will continue to save more than \$6 a carton -- simply by buying tax-free cigarettes from military bases.⁽³⁾

With nearly half the market already consuming tax-free cigarettes, raising the cigarette tax would only make the situation worse. Based on what has happened elsewhere when cigarette taxes were raised, it is reasonable to consider that Alaska would suffer the following consequences:

Unintended Consequences of a Tax Hike:

1. A significant shift of Alaska's remaining 55% taxable share of the market to the U.S. Military market -- significantly reducing state revenues over what would normally be projected;⁽⁴⁾
2. Creation of a huge incentive for smugglers seeking illegal profits, with corrupting influence on both consumers and the existing military markets as illegal distribution schemes flourish; and an increase in street crime as cigarettes become more costly due to the high tax;⁽⁵⁾ and
3. An increase in youth smoking rates as illegal sources of tax-free cigarettes become more readily available (as documented by Canada), as smugglers and suppliers of illegally distributed cigarettes from Military bases do not ask for age identification.⁽⁶⁾

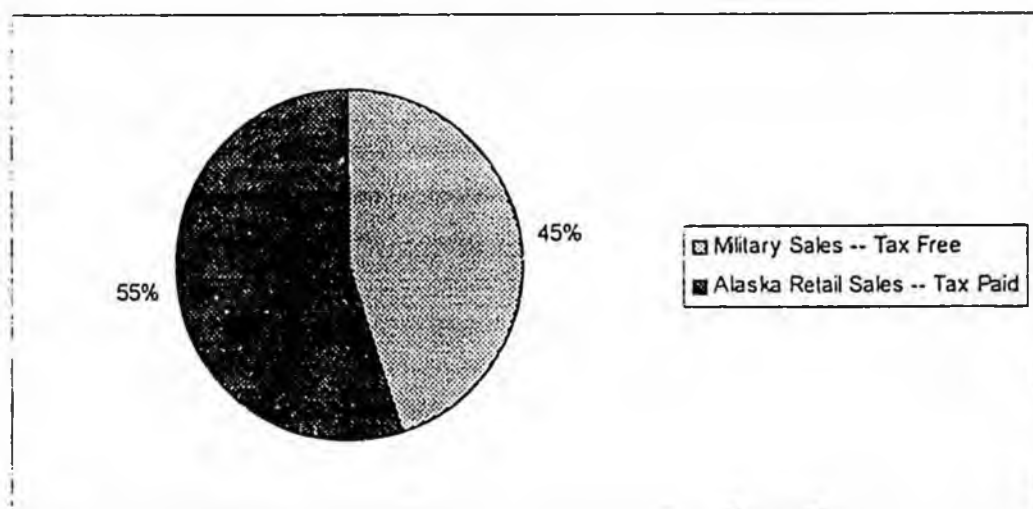
The Tax-Free Military Market

Military stores are tax-exempt, collecting no state taxes. With more than 56,000 military personnel in Alaska, including retirees and dependents, the opportunity to buy cigarettes tax free at the bases is great -- and could become an even greater source for tax-free cigarettes in the future.⁽⁷⁾ Although sales to non-family civilians are illegal, military personnel can, and are, selling bootleg cigarettes to civilians off-base. A tax increase will only make the situation worse.⁽⁸⁾

Key Factors:

- 50% of the entire civilian population is concentrated in Anchorage, Juneau and Fairbanks and can easily travel to a military base.
- Alaska has 14 military installations
- More than 10% of the entire Alaskan population lives or works on a military base: 24,559 active military personnel, 32,189 dependents and 7,393 civilian employees.⁽⁹⁾

Current Alaska Cigarette Sales:



According to the studies, approximately 45% of all cigarettes consumed in Alaska are obtained through a military base. This means that no Alaska state cigarette tax is paid and no local cigarette taxes are paid. Meanwhile, just 55% of all cigarettes consumed in Alaska are purchased at off-base retail stores.⁽¹⁰⁾

Military Influence

One reason for the high cigarette sales volume at military installations in Alaska is the relatively *high* ratio of military personnel-to-resident population:⁽¹¹⁾

Alaska: 4.2%

military-to-resident
population ratio

USA: 0.5%

military-to-resident
population ratio

Military Sales Soar When States Raise Cigarette Tax

When states increase the cigarette tax sales on military bases rise, often dramatically.

- California: 18% increase in military sales
- Michigan: 53% increase in military sales⁽¹²⁾

When California raised its state cigarette tax 25 cents a pack in 1989, military cigarette sales jumped 18% that year. When Michigan raised its cigarette tax 50 cents a pack, sales on the two major military bases in the state surged 53%.

WARNING: "FLASHPOINT"

For most of the state's population, Alaska already exceeds the dangerous "flashpoint" at which illegal smuggling is triggered. The U.S. Congress' Advisory Commission on Intergovernmental Relations first determined in 1977 that smuggling is caused by a wide disparity in the price of cigarettes in various jurisdictions. A 1985 study by this group concluded that a 23-cent difference (now 35 cents with inflation) between states creates an opportunity for organized smuggling. For a carton of cigarettes, the "flashpoint" for encouraging wide-spread cross border sales and outright smuggling is triggered when consumers can save more than \$3.50 a carton. Alaska already exceeds the flashpoint with its abundance of tax-free military bases readily available to most citizens.

Alaska's Tax Already Far Exceeds "Flashpoint"

<u>Location</u>	+	<u>Retails' Price</u>	+	<u>State</u>	+	<u>Local Taxes</u>	=	<u>Total Cost</u>
Anchorage*		\$14.80		\$2.90	+	\$2.70		\$20.40
Fairbanks		\$14.80		\$2.90	+	\$1.00		\$18.70
Juneau		\$14.80		\$2.90	+	\$.90		\$18.60
Alaska-other		\$14.80		\$2.90				\$17.70

...in competition with...

Alaska	\$14.80	- 0 -	<u>\$14.80</u>
Military**			

TOTAL TAX AVOIDANCE: \$5.60

* State tax of 29 cents a pack, or \$2.90 for a carton of 10 packs, plus the local tax in Anchorage (27 cents a pack, or \$2.70 a carton), Fairbanks (10 cents a pack, \$1 a carton) or Juneau (9 cents a pack, or 90 cents a carton).

** Cigarette sales on Alaska Military bases account for about 45% of all cigarettes sold in Alaska. Excise taxes are not collected on Military Bases, nor in Native American smoke shops or duty-free stores. Note that the \$14.80 per carton includes the federal cigarette tax of 24 cents a pack, or \$2.40 for a carton.

Lessons Learned From Canada, Michigan, Washington

Alaskan elected officials might ask, "Where else have cigarette taxes been raised," and, more importantly, "What was the experience there?"

There is no doubt that the elected officials who proposed major cigarette tax increases in Michigan, Washington State and Canada meant well. Essentially, they wanted to raise some additional revenue, and discourage behavior that they believed to be harmful. Unfortunately, they are now living with the legacy of the unintended consequences of the high tax:

Case Studies

- Michigan: cigarette taxes raised to 75 cents per pack -- store break-ins surge; sales down 30 percent; Detroit Free Press declares smuggling epidemic. People don't quit smoking; they simply turn to **the underground market that is flourishing**. Some legislators begin calling for a tax rollback to end the flow of crime.⁽¹³⁾
- Washington State: cigarette taxes raised to 82.5 cents -- sales down 20 percent; Indian sales way up; officials establish task force to stem flood of smuggled products; *many retailers and wholesalers fear for the future of their businesses.*⁽¹⁴⁾
- Canada: high cigarette taxes lead to national crisis...Canada's Prime Minister says: "*Smuggling is threatening the safety of our communities and the livelihood of law-abiding merchants. It is a threat to the very fabric of Canadian society.*" On Feb. 9, 1994, cigarette taxes were slashed and smuggling was effectively eliminated. With no underground market to take stolen goods, smuggling-related store robberies and break-ins almost ceased entirely.⁽¹⁵⁾

More Than Lost Business & Revenue -- More Crime

More than a two years after increasing its cigarette taxes, Michigan is reeling from a smuggling epidemic. In a major front page story, the Detroit Free Press describes the situation this way: "*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.*"⁽¹⁶⁾

With cigarette sales now down more than 30 percent in the state, and the underground market now developed, thieves have a quick and profitable place to fence their stolen cigarettes. Many retailers are reporting a record number of break-ins. According to the Associated Press, those who suffer include not only retailers who lose revenues, but local law-enforcement, which now has another major crime element to deal with.⁽¹⁷⁾

Tempting Profits For Organized Crime

The current price difference between Alaska and its many military bases and ports of entry make the state an appealing proposition for illegal cigarette traffickers.

- For a smuggler, that represents a potential profit of \$200,000 or more for just one truck-container load. Just a regular van could bring a smuggler a quick \$20,000 profit.⁽¹⁾
- Every tax-evaded cigarette obtained in Alaska from a military base means a loss of 29-cents per pack to the state government in excise taxes, (plus a loss of local cigarette taxes in Alaska's major cities), a loss of 8 cents per pack in state sales taxes, a loss in income taxes to the state from retailers and their employees from the loss in legal sales, higher costs for crime prevention and law enforcement, and a loss to Alaska as a whole as more and more people find it acceptable to evade what they consider unfairly high taxes.
- California example: With a hard-to-control border with Mexico and a growth of organized crime dealing with diverting cigarettes meant for export, California's illegal cigarette market now exceeds 20 percent -- or one of every five cigarettes is being purchased illegal. California's tax? Just 37 cents a pack. But enough for the criminal element to get involved in the illegal distribution of cigarettes.⁽²⁾ What's worse, smugglers don't ask for age identification. Kids now have greater access to cigarettes.

Notes

1. Sources: Cigarette tax evasion -- August 1995 presentation to Federation of Tax Administrators, tobacco tax conference, Chicago, by Robert L. Shepherd, deputy commissioner, Office of Tax Enforcement, New York State Department of Taxation & Finance. Specific cigarette smuggling studies: "Cigarette Smuggling in the United States," a report on a three-month investigation, led by former Rodney Stamler, former assistant commissioner of the Royal Canadian Mounted Police, Lindquist Avey, Macdonald, Baskerville (Forensic Financial Investigators), August 1994.
2. Alaska cigarette tax study -- December 11, 1995, by Barents Group LLC of KPMG Peat Marwick LLP, Washington, D.C. for the Alaska Cabaret, Hotel, Restaurant and Retail Association. Military data from military scanning audits -- 45 million packs. Tax-paid sales according to Alaska revenue department data were 53.6 for a total of 98.6 million packs. Note that the military sales percentage and total number of packs could be much higher because data scanning were not completed at Elmendorf Air Force Base.
3. Alaska's state cigarette tax is 29 cents a pack (\$2.90 a carton). The Anchorage local cigarette tax is 27 cents a carton (\$2.70 a carton). Fairbanks is 10 cents a pack (\$1 a carton), Juneau is 9 cents a pack (90 cents a carton). The state sales tax, calculated after all other taxes are paid, is 4%. Consumers

who obtain cigarettes via Military Bases pay no state and local taxes. Savings range from \$6.41 (Anchorage) to as low as \$3.61 per carton.

4. Alaska cigarette tax study -- December 11, 1995, by Barents Group LLC of KPMG Peat Marwick LLP, Washington, D.C. for the Alaska Cabaret, Hotel, Restaurant and Retail Association.
5. The U.S. Congress' Advisory Commission on Intergovernmental Relations first determined in 1977 that smuggling is caused by a wide disparity in the price of cigarettes in various jurisdictions. A 1985 study by this group concluded that a 23-cent difference (now 35 cents with inflation) between states creates an opportunity for organized smuggling. For a carton of cigarettes, the "flashpoint" for encouraging wide-spread cross border sales and outright smuggling is triggered when consumers can save more than \$3.50 a carton. Alaska already exceeds the flashpoint with its abundance of tax-free military bases readily available to most citizens.
6. Despite new evidence, many anti-smoking advocates still maintain that raising tobacco taxes reduces consumption of cigarettes -- most notably, they believe, among young people. They base their case on surveys by health institutions, academia and economists who consistently fail to include evidence about the changing nature of the American marketplace, evidence which shows the extent to which consumers are avoiding higher taxes. An analysis of new research conducted by both public and private organizations since 1994 suggests that the practice of raising tobacco taxes leads to no overall reduction in smoking -- and in fact actually increases youth access to tobacco products:

"The Survey on Smoking in Canada," conducted by Statistics Canada on behalf of Health Canada (Canadian Federal Government), Tobacco Demand Reduction Strategy, 1994-1995; Maclean's news magazine, February 21, 1994, p.16, coverage of Canada's cigarette tax rollback effort to reduce smuggling, interviews with Canadian Health Minister Diane Marleau; "Cigarette Tax Evasion in New York State," August 1995 presentation to Federation of Tax Administrators, tobacco tax conference, Chicago, Robert L. Shepherd, deputy commissioner, Office of Tax Enforcement, New York State Department of Taxation & Finance; "Cigarette Smuggling in the United States," a report on three-month investigation, Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), August 1994; "Smuggling in the State of Michigan," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1995; "Smuggling in Western United States," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1996.

7. Source: Evinger, William R., ed. Director of U.S. Military Bases Worldwide, Phoenix: Oryx Press, 1995.
8. Source: Alaska cigarette tax study -- December 11, 1995, by Barents Group LLC of KPMG Peat Marwick LLP, Washington, D.C. for the Alaska Cabaret, Hotel, Restaurant and Retail Association: "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 non-military residents. Average per capita consumption in Alaska is 161 packs per year. 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 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.

9. Source: Evinger, William R., ed. Director of U.S. Military Bases Worldwide, Phoenix: Oryx Press, 1995.
10. Alaska cigarette tax study -- December 11, 1995, by Barents Group LLC of KPMG Peat Marwick LLP, Washington, D.C. for the Alaska Cabaret, Hotel, Restaurant and Retail Association. Military data from military scanning audits -- 45 million packs. Tax-paid sales according to Alaska revenue department data were 53.6 for a total of 98.6 million packs. Note that the military sales percentage and total number of packs could be much higher because data scanning were not completed at Elmendorf Air Force Base.
11. Source: Statistical Abstract of the United States, 1992.
12. Source: California and Michigan revenue departments.
13. Detroit Free Press, Feb. 17, 1995.
14. "Cigarette Smuggling in Oregon," a report on a three-month investigation, led by Rodney Stamler, former assistant commissioner of the Royal Canadian Mounted Police, Lindquist Avey, Macdonald, Baskerville (Forensic Financial Investigators), October 25, 1996 (includes investigation of Washington State and California). Source for statements by retail community: Washington State Association of Neighborhood Stores, public legislative hearings, November 1995.
15. Toronto Globe & Mail, Feb. 9, 1994, coverage of Canada's cigarette tax rollback.
16. Detroit Free Press, Feb. 17, 1995.
17. Associated Press (Michigan), Dec. 12, 1994.
18. An 18-wheeled tractor-trailer-container can hold 765,000 packs of cigarettes. If purchased with no state excise taxes on a military base, or through a legal Free Trade Zone, or legally at a tax-free Indian smoke shop, or through any number of illegal tax-free means, the tax savings if sold in Alaska -- at the current tax rate -- would be \$221,850 (765,000 packs X 29 cents tax per pack). After expenses, it is reasonable to expect this operation would net a profit of at least \$200,000 per truck load. A simple van could clear \$20,000.
19. "Cigarette Smuggling in Oregon," a report on a three-month investigation, led by Rodney Stamler, former assistant commissioner of the Royal Canadian Mounted Police, Lindquist Avey, Macdonald, Baskerville (Forensic Financial Investigators), October 25, 1996 (includes investigation of Washington State and California).

###

ALASKA:

Tax Savings Per Carton On Cigarettes Purchased
Through Tax-Free, Military-Base Channels

**Alaska Non-
Metropolitan Areas**

\$290

savings per carton through
military-base channels

Fairbanks

\$390

savings per carton through
military-base channels

Anchorage

\$560

savings per carton through
military-base channels



Juneau

\$380

savings per carton through
military-base channels

Current Alaska Cigarette Sales

45%

Military-Tax Free

55%

Retail-Tax Paid

100%

Total Sales

New Research Sheds Light On Tobacco Tax Issue

Despite new evidence, many anti-smoking advocates still maintain that raising tobacco taxes reduces consumption of cigarettes -- most notably, they believe, among young people. They base their case on surveys by health institutions, academia and economists who consistently fail to include evidence about the changing nature of the American marketplace, evidence which shows the extent to which consumers are avoiding higher taxes. (1)

An analysis of new research conducted by both public and private organizations since 1994 suggests that the practice of raising tobacco taxes leads to no overall reduction in smoking -- and in fact actually increases youth access to tobacco products. (2)

As policy makers discover the extent of the growing problem with contraband tobacco in America -- tax-evaded cigarettes brought into a jurisdiction in ways ranging from casual cross-border excursions to sophisticated international organized crime rings -- the case for raising tobacco taxes needs to be reconsidered. Especially in light of the outdated assumptions currently put forth by anti-smoking advocates.

#1. *Old Assumption:* "Higher Tax Means Fewer Smokers"

"Higher excise taxes on cigarettes would significantly reduce the number of youth who smoke." (3) And, "Pricing policy is perhaps the single most important element of an overall comprehensive strategy to reduce tobacco use, and particularly to reduce tobacco use among children." (4)

New Evidence: Higher Tax Encourages Smuggling

With higher taxes, people don't smoke less, they simply change their buying patterns - to purchase low-cost brands, to cross the border for lower tax products, or to turn to the underground market. (5) Smuggled, tax-free or tax-evaded cigarettes are readily available in most markets, especially in states that have raised the cigarette tax. One of every four cigarettes, 25% of the entire market, in Michigan has been smuggled; in California and Washington State, it is estimated that 20% of each market is tax evaded; in New York, one of every five, or 20% of all cigarettes are sold illegally. (6) According to an October 1996 study by the independent Washington-based Tax Foundation. "Cross-border shopping for cigarettes (to avoid high taxes) increased an astounding 454% between 1980 and 1994, while cigarette smuggling increased 295% during the same period." (7)

#2. *Old Assumption: Lowering The Tax Means More Smokers*

"If the 50% cut in the price of cigarettes that went into effect (February 1994) in Quebec is implemented across the country, it would cause at least 840,000 more people to start smoking -- 175,000 of them teenagers." According to a study by Robert Allen, a visiting professor at Harvard University. (9)

Background: After years of practicing a high-tax tobacco policy, Canada faced a crisis in 1994. More than one-third of its entire cigarette market was smuggled. Canada's Prime Minister said, "Smuggling is threatening the safety of our communities and the livelihood of law abiding merchants. It is a threat to the very fabric of society. On Feb. 9, 1994, cigarette taxes were slashed and smuggling was effectively eliminated. (9)

New Evidence: Tax Cuts Eliminated Smuggling & Access By Youth

In the year following massive cuts in cigarette taxes in Canada, official national surveys by the Canadian Health Department found that the tax cut did not encourage more smoking. The surveys found that "Overall there has been no substantial change in the smoking behavior of Canadians... It found that "the prevalence for the 15-19 year old age group remained essentially unchanged throughout the four (survey) cycles, fluctuating between 29 and 26%. For those aged 20-24, however, the figures demonstrate a decline from 40% in May 1994 to 34% in February 1995. This represents a net decrease of 110,000 smokers." (10)

When cigarette taxes were reduced, smoking did not increase. Conversely, when cigarette taxes were increased in years running up the smuggling crisis, smoking did not decrease. Smokers avoided the high tax by buying smuggled cigarettes. In terms of youth smoking, Canadian Health Minister Diane Merleau said that the government's decision to cut taxes would actual reduce consumption among youngsters. "It will end the smuggling trade and force children to rely on regular stores for their cigarettes -- where they will be forbidden to buy them until they turn 19. In that way, consumption among teenagers can be more readily controlled and will likely drop," she said. (11)

**#3. *Old Assumption: Economic models*
can project how high taxes lowers smoking**

As cited in Coalition on Smoking OR Health Fact Sheet, "Tobacco Taxes and Kids,"
"For every 10% increase in cigarette prices, studies find a 12-14% decrease in youth
consumption." (12)

The implication is that there is a simple formula for reducing smoking. That all policy
makers have to do to reduce tobacco use, especially among young people, is to
simply raise the cigarette tax.

***New Evidence: 1) Actual market information, 2) legal sales data, and
3) Government consumption data point to major smuggling***

Economic models are only as good as the information available at the time. The
trouble with many of these economic projections is that they are based on "tax-
reported sales" and not on actual consumption. Yes, "legal" tax-paid sales may drop
12-14% with such as increase in taxes. But, with higher taxes, people are not
smoking less, they simply buy over the border or turn to the underground market to
avoid the high tax -- none of which is considered by the economic models.

For example, an analysis of New York Revenue Department data show that the per
capita legal, tax-paid sales of cigarettes in New York is 70.5 packs a year. But
studies by the U.S. Centers' for Disease Control indicates that per capita consumption
in New York is 97.4 packs, which is just slightly above the national average. Where
are the missing packs coming from? Answer: New Yorkers purchase them illegally.
The numbers indicate that today, nearly 27 percent of New York's entire cigarette
market is contraband -- sales that have avoided New York State's high cigarette
tax. (13)

What it means: When taxes rise, smuggling and illegal distribution networks infiltrate
the marketplace. With inexpensive, tax-free cigarettes available, few people quit
smoking because of higher prices. And, unfortunately with cigarettes being sold
illegally in the street and out of the trunks of cars, kids have greater access to
smuggled products -- and smugglers don't ask for age-identification. (14)

#4. *Old Assumption: The Answer Is To Raise Cigarette Taxes And Give Revenue to "Tobacco Control" Advocates*

"Results from several U.S. states...that have levied a significant tobacco excise tax show that cigarette consumption decreases when an excise tax is part of a comprehensive tobacco control program...After California passed a 25-cents per pack tax in 1989 and earmarked the revenue for education and prevention, smoking prevalence decreased 17 %." (15)

The message to elected officials is this: Raising the tax "*solves the problem.*" But earmarking the new cigarette tax revenue and giving it to tobacco control advocates "*really solves the problem.*"

New Evidence: tax hikes encourage major underground markets; "tobacco control" has had little impact

Prop 99 was a 1988 California ballot measure that raised the state cigarette tax by 250 percent. Since its inception, more than \$750 million in new cigarette tax revenue has been provided for anti-smoking education campaigns, the hiring of tobacco control personnel and a statewide advertising campaign to educate the public about tobacco. Those involved with the program claim that the combination of higher taxes and "*tobacco control efforts*" have resulted in consumption of cigarettes to drop by more than 27 percent since Prop 99 passed. (16)

Smoking has declined in California. But it has declined everywhere else, not just in California. Since the 1988 passage of Prop 99, smoking has declined about 15.1 percent nationally. It may be reasonable to assume that had there been no cigarette tax increase and the Prop 99 tobacco education programs it paid for, the decline in health-conscious California would have been at least 15 percent. (17) But now new evidence also suggests that the "decline in smoking" above the national average in California may not be a decline at all, but a diversion to the **illegal underground market.**

Data from the California Board of Equalization do show a major decline -- about 27 percent -- but what has been measured is only a decline in legally purchased, tax-paid cigarettes. What has not been considered until now is the underground market that has developed since Prop 99. With revenue department officials now (1995) estimating that as **much as 7 percent to 18 percent** of the entire cigarette market has gone underground, it is probable that smoking has not declined in California beyond the national average. Other experts say the smuggling rate has grown to between 20-25%. (18)

The Case For Raising Tobacco Taxes

Does raising the cigarette tax encourage kids to quit smoking, or discourage them from starting? No, not if one looks at the evidence, especially at investigative studies that show what is really happening in the market place. But it doesn't take expensive studies or exhaustive analysis. One of the best sources of information on youth smoking is the federal government. A look at Government-reported youth smoking incidence (the percentage of kids smoking cigarettes) collected from *the 1993 and 1995 Youth Risk Behavior Surveys by the U.S. Centers for Disease Control* clearly indicates that tax increases did not decrease youth smoking rates. In fact, the Government studies show that in some states that raised cigarette taxes, the percentage of kids that are smoking actually increased:⁽¹⁹⁾

From the Centers For Disease Control Data Survey, 1993-1995

- **Illinois:** Legislators in May 1993 raised the state cigarette tax more than 45%. Following the tax increase the incidence of youth smoking increased more than 22%, according to the Centers for Disease Control.⁽²⁰⁾
- **Hawaii:** The state increased its cigarette tax to 60 cents a pack, one of the highest in the nation. What do federal government statistics show? Between 1993 and 1995, the percentage of kids smoking actually went up 14.9%.⁽²¹⁾
- **Nebraska:** Cigarette taxes were increased more than 25% in July 1993. In the two years following that tax hike, the percentage of youth smoking increased 11.3%.⁽²²⁾

Notes:

1. "Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths," Institute of Medicine, National Academy of Sciences, September, 1994; Frank J. Chaloupka and Michael Grossman, "Price, Tobacco Control Policies and Youth Smoking," presentation to the 71st Annual Conference of the Western Economic Association International, July 1, 1996; J. Wasserman, et. al., "The Effects of Excise Taxes and Regulations on Cigarette Smoking," Journal of Health Economics, 1991, Vol. 10, p. 43-65; E.M. Lewit and D. Coate, "The Potential for Using Excise Taxes to Reduce Smoking," Journal of Health Economics, 1982, p. 121-145.

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2. "The Survey on Smoking in Canada," conducted by Statistics Canada on behalf of Health Canada (Canadian Federal Government), Tobacco Demand Reduction Strategy, 1994-1995; Maclean's news magazine, February 21, 1994, p.16, coverage of Canada's cigarette tax rollback effort to reduce smuggling, interviews with Canadian Health Minister Diane Marleau; "Cigarette Tax Evasion in New York State," August 1995 presentation to Federation of Tax Administrators, tobacco tax conference, Chicago, Robert L. Shepherd, deputy commissioner, Office of Tax Enforcement, New York State Department of Taxation & Finance; "Cigarette Smuggling in the United States," a report on three-month investigation, Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), August 1994; "Smuggling in the State of Michigan," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1995; "Smuggling in Western United States," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1996.
3. Frank J. Chaloupka and Michael Grossman, "Price, Tobacco Control Policies and Youth Smoking," presentation to the 71st Annual Conference of the Western Economic Association International, July 1, 1996, using the University of Michigan's "Monitoring the Future" data from the years 1992-1994.
4. "Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths," Institute of Medicine, National Academy of Sciences, September, 1994.
5. "Dramatic Rise in Cigarette Smuggling -- Disparity in State Cigarette Excises Leads to Rise in Cross-Border Activities," The Tax Foundation, October 1996.
6. "Cigarette Tax Evasion in New York State," August 1995 presentation to Federation of Tax Administrators, tobacco tax conference, Chicago, Robert L. Shepherd, deputy commissioner, Office of Tax Enforcement, New York State Department of Taxation & Finance; "Cigarette Smuggling in the United States," a report on three-month investigation, Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), August 1994; "Smuggling in the State of Michigan," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1995; "Smuggling in Western United States," Lindquist Avey Macdonald Baskerville (Forensic Financial Investigators), October 1996.
7. "Dramatic Rise in Cigarette Smuggling -- Disparity in State Cigarette Excises Leads to Rise in Cross-Border Activities," The Tax Foundation, October 1996.
8. Study, Robert Allen, visiting professor of economics, Harvard University, January 1994, as reported in Maclean's news magazine, February 21, 1994, p. 14, coverage of Canada's cigarette tax rollback effort to reduce smuggling.
9. Toronto Globe & Mail, February 9, 1994, coverage of Canada's cigarette tax rollback; Maclean's news magazine, February 1994, coverage of Canada's cigarette tax rollback effort to reduce smuggling.
10. "The Survey on Smoking in Canada," conducted by Statistics Canada on behalf of Health Canada (Canadian Federal Government), Tobacco Demand Reduction Strategy, 1994-1995.
11. Maclean's news magazine, February 21, 1994, p.16, coverage of Canada's cigarette tax rollback effort to reduce smuggling, interviews with Canadian Health Minister Diane Marleau.

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12. As cited in Coalition on Smoking OR Health Fact Sheet, "Tobacco Taxes and Kids," 1994.
13. Data sources: New York State Revenue Department, 1995 reports on tax-paid sales of cigarettes; Consumption data: U.S. Centers for Disease Control, 1992-1993 (most recent data available).
14. Maclean's news magazine, February 21, 1994, p.16, coverage of Canada's cigarette tax rollback effort to reduce smuggling, interviews with Canadian Health Minister Diane Marleau.
15. As cited in National Cancer Institute Fact Sheet, "The Impact of Cigarette Excise Taxes on Smoking Among Children and Adults," August 1993.
16. San Diego Union, March 22, 1994, from five-year assessment of campaign, released to the Associated Press by Stanton A. Glantz, University of California at San Francisco.
17. Source: State Revenue Departments official cigarette taxation statistics. 1989 tax stamped packs: 26.2 billion; 1994 tax stamped packs: 22.9 billion = decline of 15.1 percent.
18. Los Angeles Times, March 15, 1995, "Police Arrest 14 For Smuggling Cigarettes," (According to Board of Equalization spokesperson, "Our best estimate is that the annual impact these smugglers have is somewhere between \$50 million to \$125 million" lost revenue to state from total revenue of \$700 million. Note: \$49 million loss would be 7 percent smuggling rate; \$126 million loss would be an 18 percent smuggling rate.) Also note that law enforcement officials state privately that the smuggling rate has grown to between 20-25% in California.
19. Tax data from Illinois, Hawaii and Nebraska state revenue departments. Youth smoking data from the 1993 and 1995 Youth Risk Behavior Surveys (covering grades 9-12) published by the U.S. Centers for Disease Control. According to the CDC, while most states participate in the voluntary data collection, all states did not participate leaving data for some states unavailable.
20. Tax data from the Illinois state revenue department. Youth smoking data from the 1993 and 1995 Youth Risk Behavior Surveys (covering grades 9-12) published by the U.S. Centers for Disease Control.
21. Tax data from the Hawaii state revenue department. Youth smoking data from the 1993 and 1995 Youth Risk Behavior Surveys (covering grades 9-12) published by the U.S. Centers for Disease Control.
22. Tax data from the Nebraska state revenue department. Youth smoking data from the 1993 and 1995 Youth Risk Behavior Surveys (covering grades 9-12) published by the U.S. Centers for Disease Control.



DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

24 February 1997

Eleventh Air Force
5800 G St, Ste 101
Elmendorf AFB AK 99506-2130

Ms Shari Kochman
Deputy Legislative Director
P.O. Box 110001
Juneau, AK 99811-0101

Dear Ms Kochman

Throughout the DoD and across Alaska the military is very supportive of efforts to reduce the use of tobacco products. We will continue to cooperate closely with law enforcement agencies, to include the Alaska Department of Revenue, to prevent misuse of military facilities and privileges. For example, Elmendorf AFB, the largest military facility in the state, currently has a four carton limit on single purchases of cigarettes and does not plan to change that policy. Additionally, patrons are notified by signs posted in the tobacco products section that the resale of untaxed tobacco products is unlawful. We will take action against violators, military as well as civilian. For reference, last year approximately 260,000 cartons of cigarettes were sold at Elmendorf AFB. Sales are monitored throughout the year for unusual trends. We will continue to monitor our sales and work to prevent abuse.

Sincerely

Timothy S. Brady
TIMOTHY S. BRADY
Colonel, USAF
Vice Commander

REPRESENTATIVE
TERRY MARTIN
VICE-CHAIRMAN
BUDGET & AUDIT COMMITTEE
MEMBER
HOUSE FINANCE COMMITTEE

Alaska State Legislature



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Distributed by Rep. Terry Martin

The first printing of this article occurred about 40 years ago.

TEENAGERS & SMOKING

by Ben Solomon
Editor, Leadership Library

Tobacco is a loaded lethal weapon and time pulls the trigger. It is a HABIT FORMING DRUG sold to teenagers, adolescents and adults alike. Any 8-year-old can buy all he can pay for from a vending machine. Cigarettes contain nicotine, a highly poisonous alkaloid, carbon monoxide, acrolein, ammonia, phosphoric acid and tars -- all highly dangerous to the human system. If you smoke a pack a day you inhale 400 milligrams of nicotine a week WHICH IN A SINGLE INJECTION WOULD KILL YOU QUICK AS A BULLET.

Smoking ruins your wind (especially of teenagers), interferes with your appetite and makes you less fit. Every cigarette shortens your life 25 minutes*; it is a dangerous fire hazard, it will make you less successful in school and surveys have already shown that teenage smokers partake of fewer school activities. It gives girls a tobacco smell which boys don't like; a pack a day costs at least \$150 per year, and whether you know it or not smoking starts you on the road to a variety of diseases which will cost you from 10 to 20 years of your future life. WOULD YOU PUT ANYTHING IN YOUR CAR ENGINE THAT HAS BEEN CONDEMNED BY THE NATION'S BEST AUTOMOTIVE ENGINEERS? CAR ENGINES CAN BE PURCHASED FOR A FEW HUNDRED DOLLARS BUT LUNGS ARE RATIONED, ONE PAIR TO A CUSTOMER. So ponder well whether the risk entailed is worth the pleasure derived.

We know that fear or scare headlines are not effective in motivating teenagers. Accidents always happen to the "other fellow". Deadly diseases after forty are hardly of any interest to youngsters in buoyant



health and radiant youthful spirit. But some of the following statements by the world's leading medical experts and students of this subject might help some of our boys and girls to stop smoking, to reduce their smoking, or better still, NEVER TO START. The following remarks are verbatim statements from surveys and study commissions and the research of individual specialists:

The British Ministry of Health and British Medical Research Council based on 19 investigations of smoking and lung cancer, state that A DEFINITE RELATIONSHIP OF CAUSE AND EFFECT EXISTS.

"STOP SMOKING OR STOP BREATHING," says Dr. Walter C. Alvarez, senior consultant, Mayo Clinic.

"THE DECREASE IN SEXUAL ACTIVITY of men in their 30's can very often be traced to excessive smoking." Dr. Alton Ochsner, head of the famous Ochsner Clinic in New Orleans.

The American Cancer Study of 187,000 men between 50 and 70 years of age revealed that the death rate was 52% HIGHER in heavy smokers.

"NINETY-FIVE PER CENT of all deaths from lung cancer are traceable to smoking." (Ochsner)

"It is rare for a NON-SMOKER to develop cancer of the lungs." (Ochsner)

Dr. Arnold S. Jackson, President of the National College of Surgeons, says, "90% OF MY ULCER PATIENTS ARE CHAIN SMOKERS."

"Every SINGLE CIGARETTE cuts 25 minutes off your life." Dr. Raymond Pearl of John Hopkins University.

"Smoking two cigarettes will cause a 15 TO 30 SECOND DELAY in the time the eyes require to adjust themselves to see in dim light." Dr. C. Schard of the Mayo Clinic.

In the Hammond-Horn studies, "79% of all deaths among smokers were HEART TROUBLE deaths."

A study of Harvard College alumni (started in 1938 as Harvard Sophomores) revealed that "smokers are physically LESS MASCULINE, are lower in physical fitness or hard muscular work, are more frequently shy and have more traits of self-consciousness and inhibitions than non-smokers."

Marie Currie, in her Memorial Foundation Study of 141 schools in London revealed that "Smoking starts as early as 8 years of age but there are many inveterate addicts 13 to 14 years old. The more the children smoke, the less their success in work, games and studies."

"The law allows tobacco companies to make tobacco addicts by the millions. In 95% of the cases death from lung cancer is traceable to smoking, mostly about the age of 55. Other diseases from smoking are smokers cough, smokers throat, smokers larynx, smokers asthma." (Ochsner)

Teenagers are in a hurry to grow up and smoking represents maturity to them. In their youthful eyes it is a symbol of virility and independ-

ence. They want to be one of the smoking crowd and rate; never to be different from the rest; to impress others with their independence, and they have the money to buy all they want from the very attractive and ever present vending machines. It gives them something to do with their hands; all their friends and parents smoke and all this overcomes any fears or scare, censure or ridicule from grownups.

Tobacco, of course, has its friends, not only in the industry itself but among citizens in general and some professional men. The Industry Journal "Tobacco" observed that "the disturbing factor is that the New York City school system's anti-smoking education drive is somewhat successful and that other cities might follow its lead. This might deter other children from ever becoming smokers."

The president of the Lorillard Tobacco Co. stated that "to move our products from shelf to use it is necessary to slant our appeal so that all groups are attracted, especially young adults who in their formative years are setting their future life patterns."

Of course the health claims that the industry used to use have been stopped by law, but fictitious surveys, paid testimonials, the slick tests and the trick tests, the double talk and the classical and symphonic -- yea, operatic commercials, are still with us. It would hardly pay for the public to learn the hardpan facts about tobacco. The industry would not even like teenagers to know that the Lucky Strike songstress ("Be Happy -- Go Lucky") doesn't smoke at all. This reminds us of the operatic star who some years ago in a paid testimonial claimed that "--cigarettes never hurt his throat". Of course they didn't, he never smoked any; in fact he didn't smoke at all.

ACTION

Let's see what can be done about smoking and teenagers.

1. Teenagers like to imitate their parents and it has already been proven by various surveys that most of our teenagers who smoke started because their parents did. Parents' threats, prohibitions and punishments won't prevent their youngsters from smoking if the parents themselves give their children a wrong example. **EXAMPLE TEACHES MORE AND SURE THAN PRECEPT.** Furthermore if medical surveys and the statements of the world's leading experts don't convince you the parent to stop smoking how do you expect your teenager to be convinced?
2. What can executives, supervisors, directors, play leaders, in our various public and private youth-serving agencies do about this problem? It is a real problem and many things have been tried with more or less success.

Some agencies PROHIBIT SMOKING entirely and this of course must include all the STAFF. It is highly ineffective to teach others the hazards of smoking, especially the young, if the teacher himself is a smoker. In some agencies the leaders allow the older teenagers to smoke if they have written permission from their parents and in that case they provide a special room for that activity. This parent's permission should be received in writing but you can be sure that

this is not a very good answer to the problem because too many parents are themselves apathetic about whether or not their youngsters smoke.

3. Another thing that might be used is EDUCATIONAL TALKS about tobacco, revealing the hazards in simple language and bringing it down to the youngsters' level of interest. Possible lung cancer at age 55 is of much less interest to a youngster than smoking's effect on his athletic ability TODAY. It is also somewhat effective to expose the hypocrisy of the false claims made by the tobacco companies, the methods used in their trick testing, the facts behind the paid testimonials, because this is a type of education that will really reach the young mind.
4. The schools can carry on an effective smoke education campaign. The HEALTH hazards to the individual, the FIRE hazards, the COSTS, yes, even the SOCIAL hazards might be pointed out to youngsters. Many boys (as previously mentioned) don't like girls who smell of tobacco, and many girls feel the same way about boys. The classroom is an excellent place to expose the fake trick tests, the misleading advertising, the clever and devious methods that tobacco companies use to lure the youngster to its product.

"School Activities" magazine tells the interesting story of a Student Council group which reduced smoking in its school by working with the various schoolboy hangouts (lunchrooms, hamburger joints, dine-and-dance places, etc.) The student organization had very attractive signs made which they distributed to these hangouts for display on their walls. They wrote articles in the school paper, made assembly talks, and in some cases were successful in inducing the younger children to stay away from the cigarette vending machines. The plan was so successful that many other lunchrooms and school hangouts ASKED for the signs.

5. One girls' college in Poughkeepsie, N.Y., has a REKOMSON CLUB (spell it backwards) which is officered by some of the most popular girls on the campus. The club claims phenomenal success in reducing the number of smokers. Maybe this idea can spread to our high schools.
6. But more important than all these efforts to reduce smoking among teenagers might be some of the following suggestions:
 - a. The government might OUTLAW lying, fake, trick testimonials.
 - b. It has been suggested that smoking should be PROHIBITED just as we prohibit the possession and use of narcotics. TOBACCO IS AN ADDICTIVE DRUG AND MAKES DRUG ADDICTS OUT OF EXCESSIVE SMOKERS.
 - c. The hazards of smoking should be PRINTED on each pack of cigarettes.
 - d. It has also been proposed that ALL tobacco ADVERTISING be banned as they do in Sweden.
 - e. Cigarette SLOT MACHINES CERTAINLY SHOULD BE BANNED because any 8-year-old with the price can get cigarettes too easily.

Sweden has special clinics to help cigarette addicts quit. They start off by teaching the addict to inhale less, to throw away longer butts, and gradually to break the habit sharp. The schools, churches, social

agencies and citizens use the radio, press, TV and other media for educational work along these lines aiming their material directly at young people and their parents.

THE BEST ADVICE

STOP SMOKING OR NEVER START.

1. Stop abruptly, completely and permanently.
2. Understand why you smoke and what the harm is.
3. Support your resolution. Gloria Swanson, the actress, quit smoking and then BET ONE OF HER FRIENDS \$10,000 THAT SHE WOULD NOT START AGAIN. Every time she thinks of taking a cigarette she thinks of losing \$10,000 and to date she has kept her resolution not to smoke.
4. Time your break. While you are ill is one good time to start. Dwight D. Eisenhower quit sharp and was all the better for it.
5. Expect withdrawal symptoms after you quit. Remember you are breaking a DRUG HABIT. Be prepared to fight these symptoms.
6. Adopt substitute habits if you need them; candy, an apple, raisins, water.
7. Count your blessings; realize how much smoking hurt you and cost you and you didn't know it until you stopped.
8. Help others to stop smoking.. That will help you also.
9. Don't rely on filters. Don't inhale if you do take a cigarette. Don't hold smoke in your mouth.
10. Be wary of cigarette advertising. It has been condemned by the Federal Trade Commission and by the Better Business Bureau. It has been ridiculed by responsible advertising publications and denounced by the American Medical Association who do not accept cigarette advertising in their Journal, which by the way, cost the A.M.A. \$150,000 a year in lost advertising revenue.

Cigarette smoke contains various types of drugs, POISONOUS DRUGS, addictive drugs. TEACH TEENAGERS NOT TO BECOME DRUG ADDICTS. We have become a nation of coughers, sneezers, sniffers, splitters and the greatest consumers of tobacco products in the world.

And most of our smokers start in the teen ages.

STOP SMOKING OR STOP BREATHING.**

* Dr. Raymond Pearl of John Hopkins University
** Dr. Walter C. Alvarez, Mayo Clinic

SEE OTHER SIDE FOR OUR 8 NEW BOOKS

STATE OF ALASKA
1997 LEGISLATIVE SESSION

FISCAL NOTE

No. 1
Bill Version: CSHB 1 (STA)
(H) Publish Date: 2/5/97

Revision Date: 2/4/97 Dept. Affected: Revenue
Title: Increase Tobacco Taxes BRU: Revenue Operations
Sponsor: Representative James Component: Income and Excise Audit
Requestor: (H) STA COMPONENT SERIAL NO. 113

Expenditures/Revenues: (Thousands of Dollars)

OPERATING EXPENDITURES	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
PERSONAL SERVICES	30.0	30.0	30.0	30.0	30.0	30.0
TRAVEL	0.5	0.5	0.5	0.5	0.5	0.5
CONTRACTUAL	6.5	1.5	1.5	1.8	1.5	1.5
SUPPLIES	0.5	0.5	0.5	0.5	0.5	0.5
EQUIPMENT	4.0	0.0	0.0	0.0	0.0	0.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	41.5	32.5	32.5	32.8	32.5	32.5
CAPITAL EXPENDITURES						
CHANGE IN REVENUES	28,938.8	43,408.2	43,408.2	50,262.3	50,262.3	50,496.6

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	41.5	32.5	32.5	32.8	32.5	32.5
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other						
TOTAL	41.5	32.5	32.5	32.8	32.5	32.5

Estimate of any current year (FY97) cost \$ 0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

(See Attached Analysis)

Prepared by: B. Cottrell / Rep. Jeannette James Phone: 465-3743
Division: _____ Date: 2/11/97
Approved by Commissioner: Jeannette James Date: 2/4/97
Agency: Legislature

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Alaska Department of Revenue
Income and Excise Audit Division

Increase Tobacco Taxes

HB **1**

0-LS0127\E

January 17, 1997

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DRAFT BILL ANALYSIS

Section 1 increases the School Fund portion of the cigarette tax rate by \$1.00 per pack of 20; from 2.5 mills per cigarette (\$.05 per pack) to 52.5 mills per cigarette (\$1.05 per pack) through FY 2000. Combining this rate with the 12 mills per cigarette (\$.24 per pack) levied under AS 43.50.190, which goes to the General Fund, the total tax rate on a pack of cigarettes would increase from \$.29 to \$1.29. After June 30, 2000 the School Fund portion increases to 64.5 mills per cigarette (\$1.29 per pack) so the total tax rate on a pack of cigarettes increases from \$1.29 to \$1.53 through FY 2003. After June 30, 2003 the School Fund portion increases to 76.5 mills per cigarette (\$1.53 per pack) so the total tax rate on a pack of cigarettes increases from \$1.53 to \$1.77 through FY 2006. After June 30, 2006 the school fund portion increases to 88.5 mills (\$1.77) plus an additional 12 mills (\$.24) during each succeeding three-year period.

Section 2 This section only takes effect if section 1 of this act is ruled unconstitutional (see section 10). If so, the statute would be amended back to how it was prior to the bill passage.

Section 3 directs the Department of Revenue to give public notice of changes in cigarette tax rates under AS 43.50.090 at the time these tax rates are changed.

Section 4 This section only takes effect if section 1 is ruled unconstitutional (see section 10). If so, this section increases the General Fund portion of the cigarette tax rate by \$1.00 per pack of 20; from 12 mills per cigarette (\$.24 per pack) to 62 mills per cigarette (\$1.24 per pack) through FY 2000. Combining this rate with the 2.5 mills per cigarette (\$.05 per pack) levied under AS 43.50.090, which is dedicated to the School Fund, the total tax rate on a pack of cigarettes would increase from \$.29 to \$1.29. After June 30, 2000 the General Fund portion increases to 74 mills per cigarette (\$1.48 per pack) so the total tax rate on a pack of cigarettes increases from \$1.29 to \$1.53 through FY 2003. After June 30, 2003 the General Fund portion increases to 86 mills per cigarette (\$1.72 per pack) so the total tax rate on a pack of cigarettes increases from \$1.53 to \$1.77 through FY 2006. After June 30, 2006 the General Fund portion increases to 86 mills (\$1.96) plus an additional 12 mills (\$.24) during each succeeding three-year period.

Alaska Department of Revenue
Income and Excise Audit Division

Increase Tobacco Taxes

HB 1

0-LS0127E

January 17, 1997

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Section 5 This section only takes effect if section one is ruled to be unconstitutional (see section 10). If so, this section directs the Department of Revenue to give public notice of changes in cigarette tax rates under AS 43.50.190 at the time these tax rates are changed.

Section 6 increases the tobacco products tax rate from 25% to 100% of the wholesale price of the tobacco products.

Section 7 creates a new section under AS 43.50 (AS 43.50.365) to increase the tobacco product tax rate applied to the wholesale price by the Anchorage CPI on July 1 of each even numbered year. The starting point of the index is January 1, 1998.

Section 8 creates a new section under AS 43.50 (AS 43.50.380) to direct the Department of Revenue to give public notice of changes in tobacco product tax rates under AS 43.50.365 at the time these tax rates are changed.

Section 9 This section only takes effect if section 1 is ruled unconstitutional (see section 10). If so, this section repeals the public notice provision for changes in the cigarette tax rates under AS 43.50.090 that were made in section 3 of this bill.

Section 10 provides for sections 2, 4, 5 and 9 of this Act only taking effect if dedication of the proceeds of the cigarette tax to the School Fund is found to be unconstitutional.

Section 11 establishes an effective date of October 1, 1997 for sections 1, 3, and 6-8 of this act.

Section 12 establishes an effective date of which ever of the following comes later: (1) when a court enters a final judgement that the amendment under section 1 of this act is unconstitutional or (2) when the time for appeal has expired or upon entry of a final order on the appeal that section 1 is unconstitutional.

OPERATING EXPENDITURES

Department of Revenue is requesting operating funds to cover ½ the costs of a Revenue Auditor III position. With such a large increase in taxes due the state (increase from \$17 to \$50 million annually), the department anticipates increased taxpayer noncompliance.

Alaska Department of Revenue
Income and Excise Audit Division

Increase Tobacco Taxes

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With significantly higher levels of tax, it is possible that taxpayers will look for loopholes or other methods of tax avoidance. This position will be responsible for ensuring that all taxpayers are identified and that taxpayers are filing and paying the proper amount of tax. The projected annual salary costs for the ½ portion of this position comes to \$30.0. This amount would be used to fill a currently vacant auditor position.

The department is also requesting one time FY 98 funding of \$5.0 for contractual funds to cover costs of public notice of rate increases, forms revisions and postage, and \$4.0 for equipment (\$3.5 for computer costs and \$.5 for office equipment). The recurring costs will be \$2.5 to cover travel, contractual and supplies, except for FY 01 where an addition \$.3 will be necessary to cover public notice of the tax rate increase.

REVENUE COLLECTED

The attached spreadsheet details revenue projections from rate increases in this bill.

Alaska Department of Revenue
Income and Excise Audit Division
Projected Revenue Increases from Change In Tobacco Tax Rates

Increase Tobacco Taxes
 HB 1
 0-LS0127E
 January 17, 1997
 Page 5 of 5

	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04
Cigarettes							
<i>Elasticity Factor</i>	-18.7%	0.0%	0.0%	-23.0%	0.0%	0.0%	-27.4%
Consumption (packs of cigarettes)	28,625,595 *	42,938,393	42,938,393	40,587,582	40,587,582	40,587,582	38,249,415
Rate	\$1.29	\$1.29	\$1.29	\$1.53	\$1.53	\$1.53	\$1.77
Cigarette Tax	<u>\$36,927,017</u>	<u>\$55,390,527</u>	<u>\$55,390,527</u>	<u>\$62,068,389</u>	<u>\$62,068,370</u>	<u>\$62,068,370</u>	<u>\$67,701,485</u>
Less 1.0% Commission	<u>(369,270)</u>	<u>(553,905)</u>	<u>(553,905)</u>	<u>(820,884)</u>	<u>(620,884)</u>	<u>(820,884)</u>	<u>(877,015)</u>
Net Cigarette Tax	\$36,557,747	\$54,836,622	\$54,836,622	\$61,447,685	\$61,447,686	\$61,447,686	\$67,024,450
FY 97 Projected Cigarette Tax	<u>(10,083,937) *</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>	<u>(15,125,905)</u>
Net Cigarette Tax Increase	\$28,473,810	\$39,710,717	\$39,710,717	\$46,321,780	\$46,321,781	\$46,321,781	\$61,898,646
Increase to School Fund	\$29,473,810	\$39,710,717	\$39,710,717	\$46,321,780	\$46,321,781	\$46,321,781	\$61,898,646
Tobacco Products							
<i>Elasticity Factor</i>	-18.5%	0.0%	0.0%	-19.8%	0.0%	-20.7%	0.0%
Consumption (Whole Pr. 1996 \$)	\$3,591,648 *	\$5,387,473	\$5,387,473	\$5,314,097	\$5,314,097	\$5,240,722	\$5,240,722
Rate	100%	100%	100%	106%	106%	112%	112%
Tobacco Products Tax	<u>\$3,591,648</u>	<u>\$5,387,473</u>	<u>\$5,387,473</u>	<u>\$5,632,943</u>	<u>\$5,632,943</u>	<u>\$5,869,609</u>	<u>\$5,869,609</u>
Less 1.0% Commission	<u>(35,916)</u>	<u>(53,875)</u>	<u>(53,875)</u>	<u>(56,329)</u>	<u>(56,329)</u>	<u>(58,696)</u>	<u>(58,696)</u>
Net Tobacco Products Tax	\$3,555,732	\$5,333,598	\$5,333,598	\$5,576,614	\$5,576,614	\$5,810,912	\$5,810,912
FY 97 Projected Tob. Prod. Tax	<u>(1,090,715)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>	<u>(1,636,073)</u>
Net Tobacco Prod. Tax Increase	\$2,465,016	\$3,697,526	\$3,697,526	\$3,940,641	\$3,940,641	\$4,174,839	\$4,174,839
Increase to General Fund	\$2,465,016	\$3,697,526	\$3,874,810	\$3,874,810	\$4,008,360	\$4,008,360	\$4,119,043
Cigarette and Tob. Products							
Net Cigarette and Tobacco Tax	\$40,113,479 *	\$60,170,220	\$60,170,220	\$67,701,312	\$67,701,313	\$67,937,978	\$73,671,073
Net Cig. and Tob. Increase	<u>\$28,938,827 *</u>	<u>\$43,408,242</u>	<u>\$43,408,242</u>	<u>\$60,262,321</u>	<u>\$60,262,322</u>	<u>\$60,496,621</u>	<u>\$66,073,386</u>

*Note: The bill's effective date results in the tax increase covering 8 months in FY 98.



Alaska State Legislature

Income Tax Audit Div

Please enter into the record my testimony to the AK Dept. of Revenue
committee name

committee on HB 1 - 1-16-97, dated 2/25/97
bill/subject

The cigarette tax is just another band-aid for a bigger problem. Many laws have already been passed that have not worked. Some people and they will find another way to satisfy their needs. You're creating another market place that you'll have less control over.

It is not the government's place to always regulate. It's people's choice. I choose to be a non-smoker. I've lived with smokers who decided to stop & they did.

If you pass another tax that is not needed then at least dedicate to someone not just the children.

Statistics show that all ages are affected by cigarettes (1st & second hand smoke); therefore,

Signed: BARBARA BROADWATER (next page)
Testifier

Representing (Optional)

RN 875082 WASILLA AK 99687

Address

NA

Phone No.

It would be appropriate to dedicate the
 Tax collected just to schools ^{fund_s bonds} & "the children".
 After all not all adults smokers have
 children in school. That would be a tax
 adults would not benefit from. That's
 not ~~compassionate~~ compassionate or
 logical if you care about people's health
 & the risk that they take from their own
 decision to smoke. Taxation is not
 the answer. Put it before the voters.

Your statistics about polls or not
 correct. We ~~had~~ ^{were} never polled ~~and~~ and do
 not appreciate ~~the~~ not being able to be
 included in your numbers. We are registered
 voters.

TKO PHARMACY

TEL: 907-513-1675

Feb 25.97 16:27 No.001 P.01

FEB 25-07 TUE 15:20

P.01

Return to 316-6180

376-6180



Alaska State Legislature

Please enter into the record my testimony to the Finance Committee
 committee name
 committee on H.B. 1 on Tobacco & Cigarette tax dated _____
 bill/subject

Re: Cigarette tax:

I understand the American Cancer Society supports the cigarette tax. I support whatever the Amer. Cancer Society says on this issue. I believe way too many Alaskans smoke cigarettes. We need to try to discourage young people from starting to smoke. The tax might help in this regard.

Hopefully the tax funds could be used to help finance health care in Alaska.

Signed: Doug Bartko Doug Bartko
 Testifier

Representing (Optional)
490 E. Railroad Ave.
 Address
Box 373 7675
 Phone No.



Alaska State Legislature

House Finance Committee

AK Dept. of Revenue

Health, Education & Social Services

Please enter into the record my testimony to the Health, Education & Social Services committee name

committee on # Cigarette & HB 1 Tobacco Tax dated 2/14/97 & 1/16/97
bill/subject

I support a tobacco tax because:

1) The higher cost will make cigarettes less attractive to young children/teenagers; especially less attractive to ~~those~~ those who have not yet started smoking, but tempted.

2) The higher cost of cigarettes would add one more good reason for smokers to switch to the Nicotine Patches, which are designed to help people stop smoking. At present, smokers complain that the Nicotine Patches are more expensive than cigarettes themselves, in the short term, so they have no incentive to switch. The tax would equalize the two more.

3) The tax revenue can be used to reimburse the

Signed: [Signature]
Testifier

Representing (Optional)

P.O. Box 672029, CHUGUAK, AK 99567

Address

745-8432

Phone No.

Cont'd
on
back

~~Education will not~~

Thank you for your attention.

~~Education will not~~
~~Education will not~~
~~Education will not~~

State for years of health care cost related to tobacco caused illnesses.

More importantly, the money can go towards education and intervention programs.

~~the effect of~~ Education will alter behavior even if ~~education~~

cost doesn't; so why not add the tax for the reason of using the revenue for education? Where else should the education money come from?

* Of course, smoking is one's free choice, but isn't paying for the unreimbursed ambulance & hospital cost? Why not use the tax to pay for this?

Tobacco Tax Bill Analysis

**Presentation to the
20th Alaska Legislature**

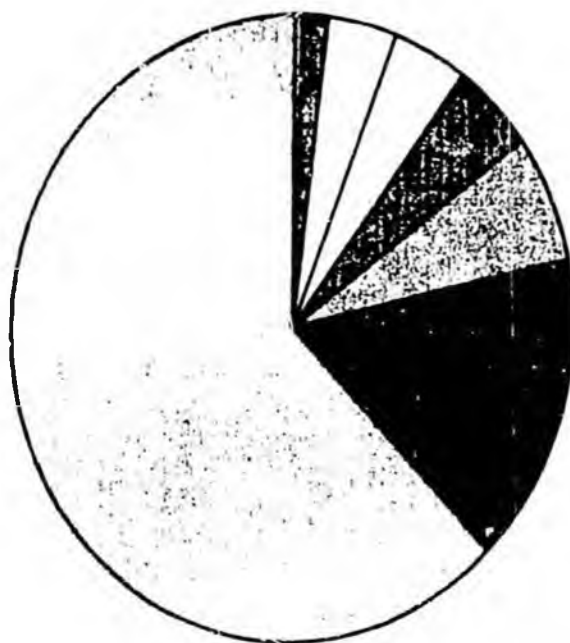
Tobacco Usage

- Tobacco usage is the number one cause of preventable death and disease in the US, accounting for more than **419,000 deaths each year.**
- **23% of deaths** of Alaskans 35 years of age or older in 1991 were **attributable to smoking.**

Health Impact of Smoking

Number of Deaths in USA

Cigarette
Smoking 418,690

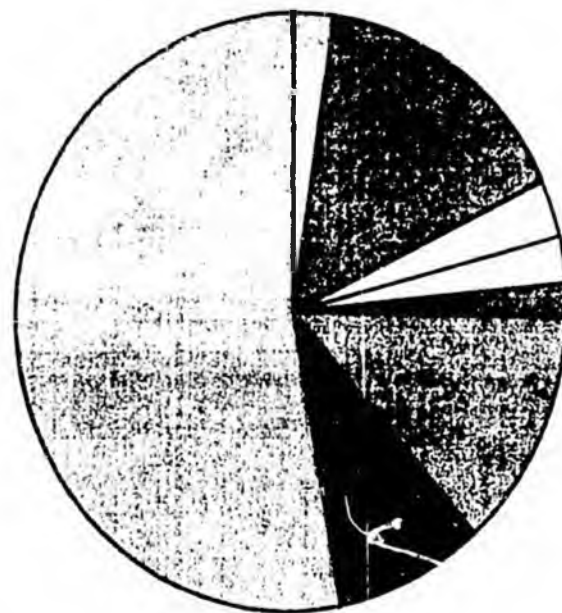


- Fires
- Illegal Drugs
- Homicides
- AIDS
- Suicides
- Mot. Veh. Accidents
- Alcohol
- Cigarette Smoking

Health Impact of Smoking

Number of Deaths in Alaska

Cigarette
Smoking 1,416



- Fires
- Firearms
- Aircraft crashes
- AIDS
- Falls
- Mot. Veh. Accidents
- Alcohol
- Cigarette Smoking

Youth Tobacco Usage

- **83%** of adult smokers report that they started smoking before the age of 20.
- **21%** of Alaskan high school students reported they regularly smoked in the last month.
- **25%** of Alaskan middle school students reported smoking at least one cigarette in the last month.

Youth Tobacco Vendors Survey

- **64%** of Alaska tobacco merchants complied with tobacco restriction laws in 1996.
- The federal government mandates an **80% compliance rate** by the year 2000 under the Synar Amendment.
- Tobacco vendors refused to sell to 14-15 year olds **71%** of the time, while 16-17 year olds were refused **58%** of the time.

Alaska Native Tobacco Use

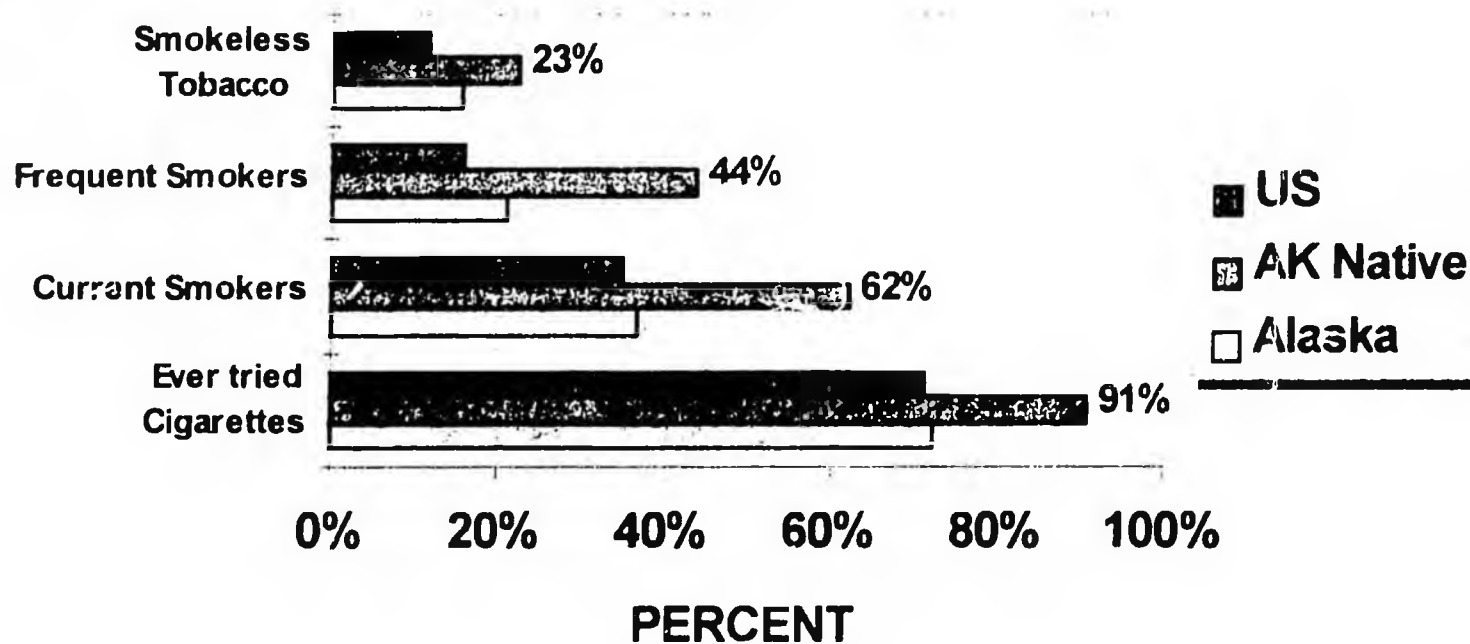
- Today Alaska Natives have some of the highest rates of tobacco use in the world, **47% for men** and **39% for women**.
- Alaska Natives account for **23%** of **smoking related deaths** while they account for **17%** of the **state's population**.

Alaska Native Tobacco Use

- Alaska Natives have the **highest cancer mortality rate** of any Indian Health Service Area.
- The lung cancer death rate among AK Native women is **three times** the national average.
- Tobacco use among Alaska native youth is higher than non-native youth.

Alaska Native Tobacco Use

Tobacco Use Among High School Students
Alaska and US
1995



Alaska Native Tobacco Use

- **41%** of Alaska Native boys and **32%** of Alaska Native girls were using smokeless tobacco weekly.
- Among the boys, **45%** started using tobacco before the age of 8.

Health Related Costs of Smoking, A Drain on the Economy

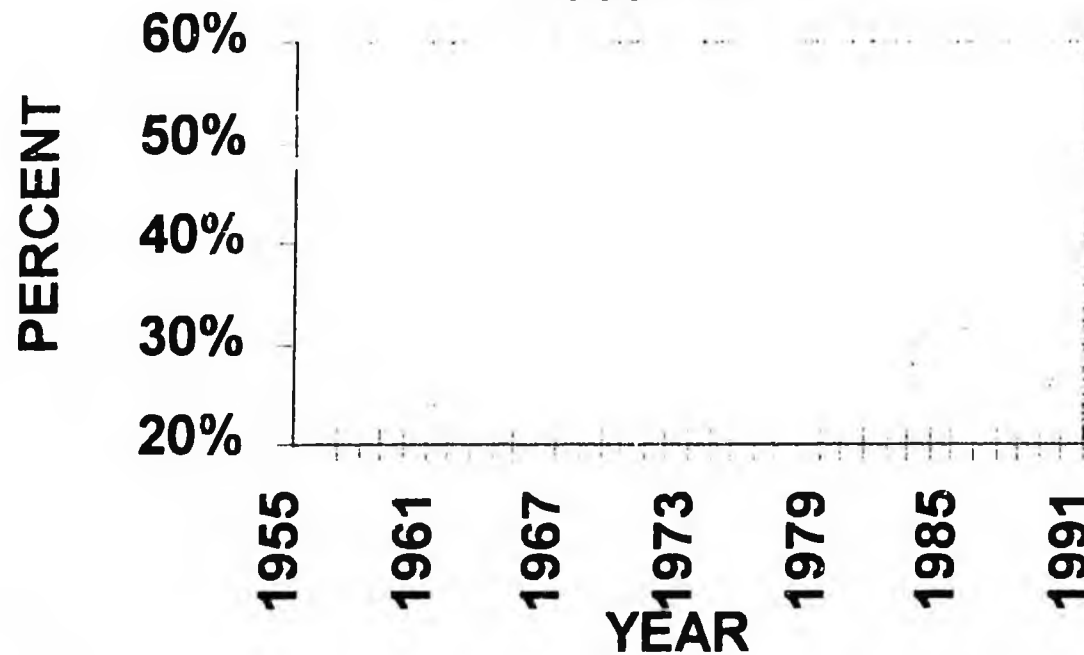
- Total direct medical costs for smoking related illnesses for Alaskans aged 35 years or older in 1993 was **\$96.5 million**.
- **\$23 million** of the direct medical care costs for smoking related illness was paid by **Medicaid** in Alaska.
- Meanwhile, the state collected only **\$15.6 million** in cigarette tax revenues in 1993 (excludes taxes on smokeless tobacco).

Alaska Tobacco Tax History

- The state of Alaska has taxed tobacco since territorial days, when a 5 cents per pack tax was levied on cigarettes to help fund school construction.
- The current tax level of 29 cents per pack has been in place since 1989.
- In 1989 Alaska ranked 17th among the 50 states and District of Columbia on the amount of tobacco tax levied.
- Currently Alaska is ranked 28th among the states on tobacco taxes levied.

Tobacco Taxes in the US

**Tobacco Taxation in the US
Average Cigarette Tax as a Percentage
of Retail Price
1955-1991**



Impact of Tobacco Taxes

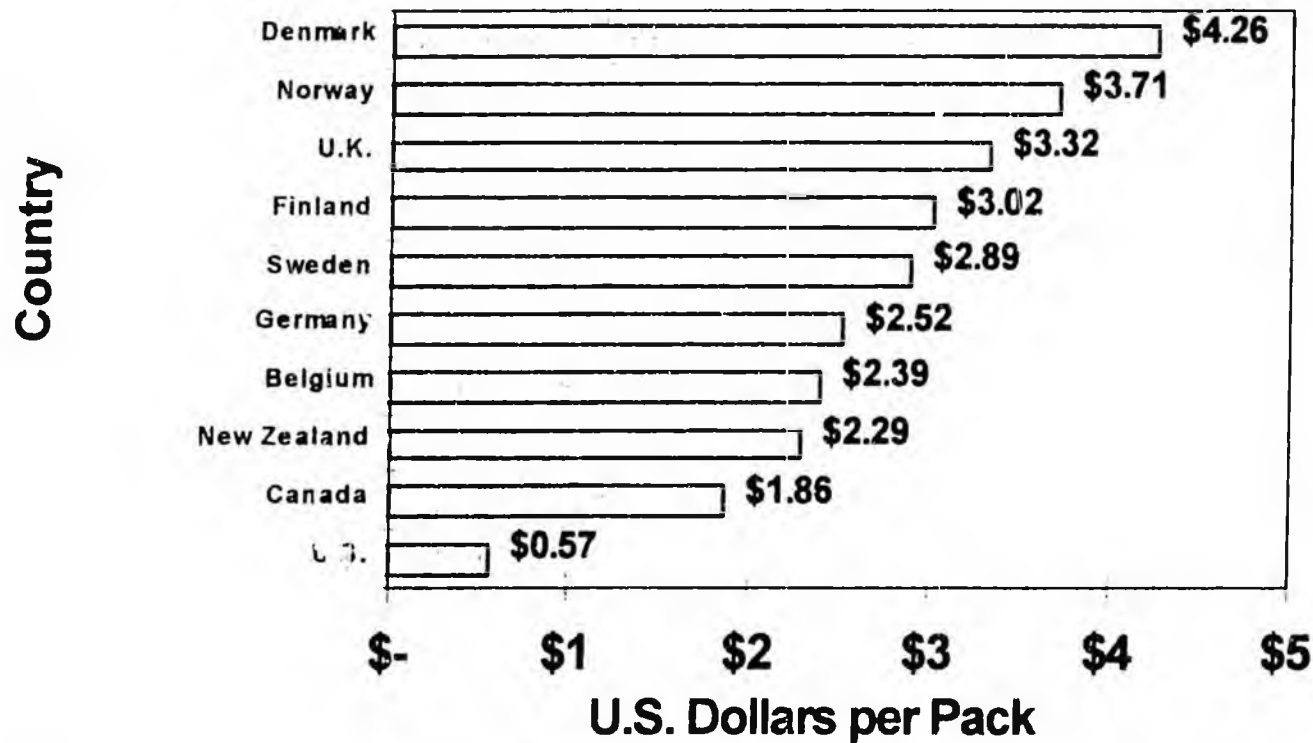
- For every 10% increase in tobacco prices, youth tobacco consumption will fall by at least 10%.
- For every 10% increase in tobacco prices, general consumption will fall by 4%.
- **At current adult smoking rates**, approximately **18,000** of Alaskans currently under the age of 18 will die prematurely of a tobacco related illness.

Impact of Tobacco Taxes

- A \$1.00 per pack tax increase would reduce youth smoking in Alaska by an estimated **32%**.
- The tobacco tax would prevent **5,700** premature deaths among Alaskans currently under the age of 18.

Tobacco Tax Rate Comparison

Taxes on Cigarettes
in Major Industrialized Nations
March 22, 1995



The Time is Right

- The groundwork is in place.
- There is broad public support. **75%** of Alaskans surveyed support the \$1.00 per pack tax.
- This included: 75% of “conservatives”, 75% of “moderates”, 73% of “liberals” and **55% of smokers.**

Community Support

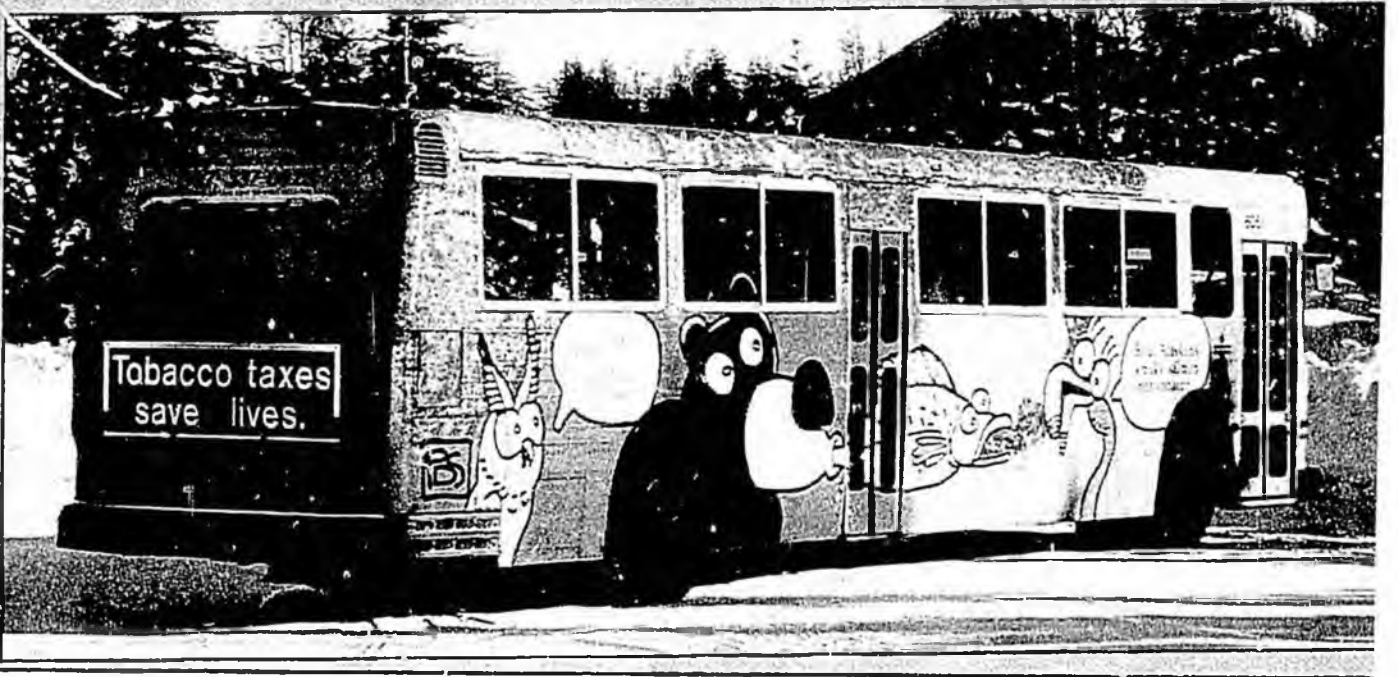
- The tax is also supported by: C. Everett Koop, MD., former Surgeon General, 280 individuals and over 50 organizations that make up the **Alaska Tobacco Control Alliance** including: the Alaska Native Health Board, the American Cancer Society, and the American Heart Association.



LASKA MEDICINE

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AMERICAN SOCIETY FOR CIRCUMPOLAR HEALTH**

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BUSINESS AND ADVERTISING

Alaska State Medical Association
4107 Laurel Street
Anchorage, Alaska 99508
Phone 907/562-2662.

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About the cover: The Alaska Tobacco Control Alliance bus (part of the Anchorage People Mover system) has been carrying a tobacco-free message since February 1995. The sign on the back of the bus, which currently reads "Tobacco Taxes Save Lives," is changed periodically. The bus was designed by Peter Dunlap-Shohl. Painting was done by Alaska Neon Design. Funding is provided by the Robert Wood Johnson Foundation through a grant to the Alaska Native Health Board. Photos were taken by Chris Arend.

TOBACCO:

Alaska's Most Preventable Health Problem

I wish to thank the Alaska State Medical Association for devoting an entire issue of this journal to tobacco, and for the opportunity to be guest editor. The response of contributors both within and outside of Alaska, the staff at the ASMA office, and others, has been overwhelmingly enthusiastic and prompt.

Tobacco-related death and disease impose an embarrassing black mark on the health record of this century. As the articles in this issue dramatically demonstrate, Alaska's tobacco statistics are among the worst in the nation. This is particularly embarrassing because Alaska has led the nation in other health issues.

Earlier in this century, medical providers were used to PROMOTE the sale of tobacco. (See accompanying samples of cigarette advertisements*). The industry currently expends nearly \$6 BILLION to promote tobacco — a product that when used as directed is guaranteed to kill you. Medical providers have been replaced by Joe Camel and others. Nonetheless, we owe it to our

patients, friends, and families to do all we can to eliminate this 20th Century scourge. As deeply ingrained as it is in our society, and with the amount of money leveled at its promotion, this is an ambitious task.

In this issue we have tried to provide as much Alaska-specific data as possible, provide some historical perspective on the problem here, discuss the multi-faceted approaches to tobacco control, and bring comments from tobacco control experts and organizations "outside".

As medical providers having been used in the past to promote the product, let's now "take the lead" and join the Trampling Tobacco Project, the Alaska Tobacco Control Alliance, the Citizens to Protect Kids from Tobacco, the volunteer health organizations, and others, and work toward a Tobacco Free Alaska by the year 2000.

Anne P. Lanier, MD, MPH

*Pictures of tobacco advertisements were graciously provided by D.O.C (Doctors Ought to Care) 5615 Kirby Drive, Suite 440, Houston, TX 77005.



Editorial

This issue of *Alaska Medicine* is devoted to tobacco related papers. We present historical and cultural perspectives as well as epidemiological data along with statistical data to illustrate that increasing the cost of tobacco results in decreasing the use rate. A recent poll shows that approximately 3/4 of Alaskans support an increase in the current excise tax on tobacco products. This effort should be regarded as a health measure, not a revenue enhancer. It is hoped that no additional revenue will be collected.

In addition to the usual references to the various smoking related cancers and chronic respiratory diseases, my experience as a state medical examiner prompts me to mention deaths due to house fires, and carbon monoxide deaths from smoldering cigarettes.

All members of the state legislature will be furnished a copy of this issue. We hope they will read it and realize that they have an opportunity to make a highly significant contribution to the health of Alaskans for many years to come.

Donald R. Rogers, MD

Funding for the cover photograph and extra pages in this special issue was provided by the Alaska Native Health Board through its SmokeLess States grant from the Robert Wood Johnson Foundation.

Historical Notes on the Introduction of Tobacco into Alaska

Robert Fortuine, MD⁽¹⁾

THE NORTH PACIFIC REGION

In July 1741, Georg W. Steller, Bering's physician and naturalist, stepped ashore in Alaska, at Kayak Island near the mouth of Prince William Sound. There he left a pound of tobacco and a Chinese pipe at an abandoned Native house site in exchange for a few artifacts he had carried away. A few weeks later, the Russians again offered Chinese pipes and tobacco, this time in person, to some Aleuts who had paddled out to meet their ship in the Shumagin Islands. A sailor even offered one of the Aleuts a lighted pipe, which was said to "displease" him (1). Captain Chirikov, in command of Bering's other vessel, also offered pipes and tobacco to some Aleuts, probably on the island of Adak, but they simply placed the gifts on their baidarkas and paddled away (2).

By 1778, one of Cook's surgeons was able to write that the people of Unalaska "perfectly understood the use of tobacco, which they asked for by that name . . . (3) Few if any did not smoke, chew, or take snuff. Lieutenant King noted that they preferred tobacco to "all other things;" in fact, some of the Aleut women were willing to bestow sexual favors on members of the crew in exchange for a leaf or two of tobacco (4).

Early Russian fur traders who came to the Aleutians sometimes used tobacco as a gift, a reward, or as an

inducement to service, and before long the Aleuts had developed a craving for it (5,6). Since, however, in those early years tobacco was in short supply, the Russians kept it principally for their own enjoyment. The Aleuts seemed to prefer their tobacco in the form of snuff, (7) and there were reports that they would work very hard, often under hazardous conditions, to obtain even a small supply. In the 1820s, the Orthodox missionary Father Veniaminov reported that often more than half of a hunter's income was spent on tobacco, either for chewing or for snuff (8).

Russians also introduced tobacco as an article of trade to the Natives of Kodiak Island perhaps as early as the 1760s (9). Dr. Merck, who visited in the 1780s, found the Koniag eager for snuff, although women less than men (10). By the early 1800s the Kodiak islanders were passionately fond of tobacco and cursing the Russians for having made them so dependent on it. Shortly after 1800 they were using it primarily as snuff placed in the mouth; few sniffed it and no one smoked, according to Davydov (11). Captain Lisianskii around the same time noted that a Koniag would go twenty miles out of his way for a pinch or two of snuff (12). The Russian-American Company also regularly used tobacco as a treat or as an incentive for their Aleut and Koniag hunters stationed at Sitka or at the posts on the Kenai Peninsula. When a new fort was established at Nushagak in 1818, the trader was encouraged to use tobacco among the local Natives to show the good will of the Russians (13).

(1) Biomedical Program, University of Alaska Anchorage. This paper is an abridgment and adaptation of Chapter 16 of my book *Chills and Fever: Health and Disease in the Early History of Alaska*. Fairbanks: University of Alaska Press, 1989.

The people of Cook Inlet and Prince William Sound were presumably introduced to tobacco by the English, Russian, and perhaps Spanish explorers and traders who frequented this region in the 1780s and 1790s. The habit, however, did not seem to catch on at first, for both Meares and Billings reported that the Natives showed no interest in the tobacco they offered in trade. (14,15)

In precontact times, the Indians of Southeastern Alaska were known to have cultivated a tobacco-like plant which they mixed with lime and chewed. Lieutenant Whidbey of Vancouver's expedition observed the plant being grown in Chatham Straits, the only crop the Tlingit were known to cultivate. (16) They dried the leaves of this plant over a fire, then ground them up and pressed them into cakes. It was always chewed, rather than smoked or inhaled. After the 1780s, as intensive trade with European ships began, the native plant fell into disuse in favor of the European product, which the Indians found stronger and easier to obtain. They soon learned to smoke it as well as chew it. Tobacco began to take on a ceremonial value and was sometimes used after a shamanistic ceremony. (17) or given to the relatives and friends of a sick man. The Russians handed it out generally as a reward. (18) Tobacco became increasingly popular in the region, and soon leaf tobacco mixed with pulverized bark was being regularly smoked in short, carved wooden or clay pipes. (19)

NORTHERN ALASKA

Curiously, tobacco first reached northern Alaska not by European ships but over traditional trade routes with the Chukchi of Eastern Siberia. According to Ray, the tobacco originated in Circassia, Poland, or Sweden and became an article of trade in the 1750s. (20) Nikolai Daurkin, a Chukchi who visited the Diomedes in the 1760s, reported that the first request of the Natives was for leaf tobacco, for which they were willing to trade expensive furs. (21) In 1789 a large trading market was established at Anyui on the Kolyma River, where the Alaskans traded their furs for tobacco and other European goods, which then passed through several more Native middlemen before reaching the Seward Peninsula. (22)

This trade continued to flourish throughout the nineteenth century, with the major focus on the north coast of Kotzebue Sound and at Port Clarence on the Seward Peninsula. From there tobacco was distributed to the north coast and into the interior via the major river systems. (23)

In the vicinity of Kuskokwim Bay Captain Cook encountered Eskimos in 1778 who were unfamiliar with the use of tobacco. Likewise, when Billings' ship visited Cape Rodney in 1791 the Eskimos were eager to trade for many European goods, but apparently not tobacco.

(24) Yet in 1816 the Eskimos of St. Lawrence Island greeted Otto von Kotzebue with a chorus of pleas for tobacco, which they immediately put into their mouths. Later he saw them smoking small stone pipes, about the size of a thimble. (25) The Russians traded freely with the Siberian Yupik of St. Lawrence Island, who were willing to give up an elaborately decorated gut parka for a few leaves, the amount one might consume in a morning. (26) The Eskimos of Shishmaref Inlet also clamored for tobacco, which they seemed to enjoy chewing as well as smoking. This love of tobacco impressed the captain, who found it remarkable that the weed had penetrated where no European vessel had visited. (27)

When a decade later Captain Beechey landed on St. Lawrence Island and at Cape Prince of Wales, he again found tobacco to be the great object of all trade. On one occasion his sailors bought four hundred pounds of caribou meat for four pounds of tobacco. The differing habits of the Natives of the region are illustrated by Beechey's observation that the northern Eskimos generally smoked a short pipe, while some to the south of Bering Strait chewed tobacco, and the St. Lawrence Islanders took it as snuff. The tobacco was often of poor quality and extended with dried wood. (28)

The first European to reach Barrow, also in 1826, found tobacco well known and readily marketable. Eleven years later Thomas Simpson of the Hudson's Bay Company encountered Eskimos to the east of Barrow who immediately clamored for tobacco, of which they were all —men, women, and children—"inordinately fond." At Barrow he found tobacco to be the "grand article in demand." A single inch of it was equivalent in trade to the most valuable articles they possessed. (29)

Robert F. Spencer has presented interesting information on the role of tobacco in traditional Barrow culture. The small pipes they used were of the Siberian or Russian type and were cleaned before use, with a caribou hair placed in the bowl to prevent tobacco flakes from entering the stem. Men's pipes were small and portable, while those of women had longer stems. Bowls might be made of ivory, metal, or clay. Nearly everyone used tobacco in some form, including the children. Besides smoking, many chewed the leaves. (30)

Further south the Eskimos also used tobacco that they had obtained in trade from Siberia and perhaps later from the Russians in the Aleutians, Kodiak, and Prince William Sound. Khromchenko in 1821 found the Bristol Bay and southern Norton Sound Eskimos to be heavy tobacco users, (31) while Glazunov, who in 1833 was the first European to explore the interior of southwestern Alaska, found the Natives already passionately fond of tobacco, which they smoked and took as snuff. (32)

Nelson offers considerable detail on the tobacco habits of the Eskimos of the Seward Peninsula and

southward. The women did not often smoke tobacco, but rather chewed it or used it as snuff, whereas the men used all three methods. For chewing, the tobacco was cut into shreds on special boards, mixed with ashes from a tree fungus (obtained from interior Indians), then rolled into pellets, or quids, which they held in their cheek pouch. For smoking, the tobacco was cut very fine. A small tuft of fur was placed at the bottom of the pipe bowl, then a wad of tobacco was stuffed in on top. After lighting the pipe with flint and steel, the smoker took two or three deep draws and held the smoke in the lungs as long as possible. When the oily tobacco extract remaining in the pipestem was cleaned out, it was added to the chewing quids for extra flavor and strength. For snuff the tobacco was finely shredded, thoroughly dried, and then ground into powder in a wooden mortar and pestle. The snuff was then sifted to remove the larger particles. Snuff could either be sniffed or placed inside the lip.(33)

On St. Lawrence Island, near the end of the nineteenth century, Bruce described the Eskimos as "complete slaves to tobacco." All of the men and most women smoked, as well as most children over six. Many of the women also chewed, always swallowing the juice. Old chewing quids were dried and smoked, to extract the last hint of flavor. Snuff was made from finely ground tobacco mixed with pulverized charcoal. He concluded: "An Eskimo who is without tobacco is as wretched as a confirmed drunkard without his whiskey, and he will go to as great extremes to secure it as he would to procure food for himself and family."(34)

Most Athabascan Indians of the interior adopted tobacco directly or indirectly from the Russians. For example, the Han Indians of the upper Yukon were in contact with Russian traders as early as the 1840s, and traveled long distances to obtain tobacco and snuff in exchange for furs.(35) Likewise, the Upper Tanana and the Ahtna groups probably received tobacco in trade from the Russians in Prince William Sound, as well as from the Klutane region,(36) while the Upper Kuskokwim Indians probably obtained it from the Tanaina living around Cook Inlet. The tribes bordering the Eskimos, such as the Ingalik, probably first received tobacco in trade from the Eskimos.(37)

Several of the Athabascan groups also smoked the dried leaves of an indigenous plant, probably even before the arrival of Europeans.(38) The Tanaina chewed a mixture of fungus and cottonwood bark (*Populus balsamifera*), (39) and similar combinations of ashes, dried fungus, or local plants were known from other groups. The Eskimos imported from the Indians the fungus they used for mixing with tobacco.(40)

Athabascan men seemed to be very fond of smoking, at least along the Yukon, and often inhaled deeply,(41) using the small Chinese-type pipe also favored by the

Eskimos. Women and children, as well as the men, found delight in chewing.(42)

METHODS OF TOBACCO USE

The Alaska Natives used tobacco in ways that were likely to have been harmful to health. Moreover, the tobacco available to the Natives was crude and the result of primitive methods of curing, and the Natives often adulterated it further with questionable substances such as lime, charcoal, moss, and fungi to "extend" it. Most Natives—men, women, and children—used tobacco whenever they could obtain it, presumably over their lifetime. The tobacco was used and re-used in various ways for economy's sake until the last traces of nicotine and other toxins were extracted.

Murdoch reported that at Barrow nursing children of two or three years were often pacified with a quid of tobacco.(43) Along the Kobuk River mothers sometimes took a child from the breast and put a quid of tobacco or a pipe in its mouth.(44) George Adams had an Athabascan child of five ask him for a chew of tobacco and go off with it as pleased as if it were a piece of candy.(45) Others report Eskimo children of four or five smoking a pipe, taking snuff, or chewing a quid.

The Native manner of smoking must have been particularly harmful. Although several descriptions are available, perhaps the most detailed is that of Capt. C. L. Hooper of the Revenue Cutter *Corwin*:

"The pipe is lighted with flint, steel and tinder, and the native commences to draw vigorously, swallowing the smoke, which he retains in his lungs as long as possible. A fit of coughing follows, which I at first thought would certainly terminate the life of the smoker in several instances. It is not an unusual occurrence for a native, who has been without tobacco for a long time, to retain the smoke in his lungs until he falls over senseless, having the appearance of a person under the influence of opium. This state lasts but a few minutes, however, when the same performance is gone through with again." (46)

Other early accounts speak of "a momentary stupefaction,"(47) "a stage similar to intoxication,"(48) and "a state of unconsciousness or stupor."(49) Adams described how the Athabascans along the Yukon "give two or three whiffs, drawing the smoke down into their lungs, and slowly exhaling it, for a minute after exhaling the smoke, they set like on in a stupor. Their heads drop on their breasts and breathe like one with a severe attack of the Athma [sic]. The young ones when learning to smoke cough for some minutes after smoking very violently. . . ." (50) Seemingly, the stronger the tobacco, the more highly it was regarded. When Glazunov distributed some pipe tobacco and snuff, at the conclusion of a

meeting with Indians along the Yukon, "Some were so much dazed by the smoke that they fell unconscious, while others inhaled such a quantity that they could not stop sneezing." (51)

Whatever the hazards of tobacco use, it is clear that the Alaska Natives derived much pleasure from it, and, unfortunately for their health, still do. Adelbert von Chamisso, the German poet and naturalist on the Kotzebue voyage, perhaps described it best:

"Whoever does not suspect the magic which dwells with [tobacco], let him watch the Eskimo fill his small stone pipe with the precious herb, which he has thriftily mixed half and half with wood shavings, let him see him carefully light it, then eagerly with closed eyes and long, deep puffs breathe the smoke into his lungs and blow it out again into the air. Meanwhile the eyes of all are fixed on him and the one next to him is already stretching out his hand to receive the instrument so that he too may draw a puff of happiness. . . ." (52)

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Historic Ceremonial and Medicinal Use of Tobacco Among American Indians

Donald H. Reece⁽¹⁾

Tobacco was often used by shamans and in agricultural rites. It was used in the harvesting of crops to bless the harvest. Such a ceremony linked tobacco and the fertility of the land, a strong psychological bond made still stronger by tobacco-induced altered states of consciousness and supernatural visions. The rising smoke of tobacco was regarded as a method by which communication with the gods/creator might be facilitated. The Iroquois believed that smoke carried their petitions to the Great Spirit. The Delaware sacrificed tobacco to ensure success in the hunt. The Crow worshipped the sun, the moon, and tobacco. It was the only thing cultivated to "ensure the continued welfare of the people." Among the Ojibwa/Chippewa, tobacco was placed on a rock to alert the spirit to ward off storms. As stereotypes suggest, tobacco was commonly used to bind agreements between tribes, and it often accompanied invitations to individuals or families. Tobacco was also given as payment to a shaman, obligating him to fulfill the requests of his client.

There was a great deal of ceremony and spirituality involved in the traditional use of tobacco. "In Pawnee ceremonies the pipe was always tamped with an arrow captured from the enemy. It was forbidden to pack it with the fingers, as the gods might think that the man who did so offered himself with the tobacco and take his life." This example illustrates what power tobacco was believed to have had and its overall importance.

In addition to its ceremonial uses, tobacco was traditionally employed medicinally by many different tribes. Accounts from tribes from different areas of the country describe tobacco being used in very similar, if not identical, ceremonies. It served as an analgesic and a treatment for earaches. It was chewed as a remedy for toothaches. Open wounds and the bites of insects or snakes were treated with tobacco because of its presumed antiseptic properties. The Winnebago and the Seminole, along with other tribes, scattered tobacco while repeating prayers to exorcise

spirits or ward off the evil influences that caused disease. One Native practice was to blow tobacco smoke into the ear to kill the "Woodland insect" that was believed to cause insanity by drying up the brain. Tobacco was also heralded as a remedy by some for asthma, rheumatism, chills, fevers, intestinal disorders, child birth pains, and headaches.

Study of the calumet, an elaborately decorated clay shaft to which a pipe bowl might be attached, seems to be one of the better ways to assess traditional tobacco use. It was different from other pipes in that the calumet was the source of great ceremonialism and was held to be sacred. The calumet was said to have had the potential to make friends out of mortal enemies and to have provided for peaceful interactions between strangers.

Sources from early periods support the idea that pre-European contact smoking was minimal among American Indians and that they smoked only in moderation for medicinal or spiritual reasons. Pawnee use of tobacco prior to European contact was strictly sacred and ceremonial. The same is said of the Zuni.

An examination of the early smoking practices of some tribes such as the Northern Paiute of the Great Basin reveals that the early Native peoples understood tobacco much better than did the Europeans and later Americans, even after a few hundred years' use. Smoking was practiced only by men; "young boys would not smoke because they were afraid it would impede their ability to pursue game." This suggests that, although tobacco did have spiritual importance in their lives, its powerful physical effects as well as relative scarcity proscribed its use for individual pleasure.

Tobacco continues to play a requisite role in at least two contemporary religious healing ceremonies with deep roots in the past: (1) The Peyote religion (or Native American Church) and (2) the Plains Sun Dance.

(1) Tobacco Control Coordinator, Indian Health Service, Cancer Prevention & Control Program, Headquarters West, 5300 Homestead Road, Albuquerque, NM 87110

The opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Indian Health Service.

Anchorage Clears the Air

How Anchorage Came to Ban Smoking in All Buildings Operated by City Government Including Public Schools

Rodman Wilson, MD⁽¹⁾

January 1, 1987. That was the great day when the Municipality of Anchorage, Alaska, moved boldly to protect the public and its 3,910 city employees by outlawing smoking in all 123 municipally operated buildings. It even decommissioned all smoking lounges. The ordinance establishing the new workplace rule applied equally to 75 public schools and their grounds beginning July 1, 1987.

How did this come to pass? What led the city of Anchorage to do this?

The story began in 1983 when the health and social services departments, housed together in a separate building, decided to eliminate smoking progressively over a nine-month period. These departments wanted to protect the many children, young women and others who came to the building each day for services, wanted to make the workplace safer for employees, and desired finally to be an example to others in the community. The plan did not reach its initial goal of total abolition of smoking but did succeed in confining it to one room in the basement of the five-storied health department building.

Impelled independently, but noting the health department's action, the Alaska Native Medical Center banned smoking altogether in its hospital in Anchorage on January 1, 1986. This was the first hospital in Alaska to do so. Soon afterwards, smoking was barred in almost all other Indian Health Service facilities and other hospitals in the nation.

Prior to this, in 1984, a state statute concerning smoking in public places became law in Alaska. Among other features it allows "a person in charge" of a building to prohibit smoking or, alternatively, to designate certain portions as smoking or no-smoking, making, however, "reasonable accommodations for the needs of the smokers and non-smokers."

The Municipality of Anchorage found this law unworkable. There was no way to subdivide buildings salubriously. Smoke refused to be gerrymandered. Obeying natural rather than man's law, it diffused freely under doors, over dividers, and through so-called smoke-eaters to occupy, like a drop of ink in a bowl of water,

whatever space is available. It also circulated and recirculated to all floors through heat-ventilation-air conditioning (HVAC) systems.

Accordingly, after listening to a presentation in September, 1986 by Robert Rosner, brought to Anchorage by the American Lung Association of Alaska from the Smoking Policy Institute of Seattle University, Mayor Tony Knowles decided to submit to the Anchorage Assembly an ordinance to prohibit smoking altogether in city operated buildings and schools. The ordinance was endorsed unanimously by the Anchorage School District Board on November 24 and was approved by the Assembly by a vote of 8-3 on December 9 after intense public debate and two spirited public hearings.

Most persuasive of many arguments proffered were those relating to health and public safety. School Board and Assembly members came to realize that breathing someone else's smoke is, indeed, harmful. One week after passage of the ordinance, United States Surgeon General Koop released his forceful report, entitled, "The Health Consequences of Involuntary Smoking." This comprehensive document incriminated sidestream smoke as causing or accelerating numerous childhood and adult disorders including cancer.

Also convincing was the economic argument that it costs an employer several hundred to several thousand dollars more annually to have a smoker on the job than an employee who does not smoke. Costs are in extra time off sick, more permanent disability, early retirement, early death, extra costs for cleaning, shorter life of floor coverings, furniture and precision instruments, increased HVAC costs, and higher premiums for fire, life, and health insurance. Finally, it was realized that morale would improve once divisive wrangling about smoking in the workplace ceased.

How did the new ordinance work? Surprisingly well. Enforcement was not a problem. Obviously, non-smokers were pleased. They constituted at the time 77% of city employees. Among the 23% who smoked, some forsook cigarettes in the fall in anticipation of the new rule. Others made New Year's resolutions to quit. Still others enrolled in one of several smoking-cessation courses offered in town. Spouses signed up too. By prearrangement, tuition was partially underwritten as a

(1) Dr. Wilson was public health director for the Municipality of Anchorage in the mid-1980s. Currently he is acting executive director of ASMA.

benefit of the municipal health insurance plan. Actual numbers of these several cohorts were not amassed. Others, incorrigibly addicted to tobacco, continued to smoke, though not on "company time" except when in the field. And during their breaks, they huddled outside entry doors or around the corner, as they still do, to smoke. Finally, a few workers said that they would quit their jobs, but probably not many did. Jobs were scarce in Anchorage that winter.

Shortly after passage of the ordinance, several businesses and other governmental units followed the city's then radical approach to workplace safety by banning smoking. Among them were several banks, an oil company, a long-distance telephone company, many stores, and the Alaska Court System.

One of the unions representing city employees challenged the new law on the ground that it violated agreed upon conditions of work. The union was represented at

arbitration by a prominent Anchorage attorney and brought as its star witness a "scientist" under contract to the Tobacco Institute. His every argument against the ordinance was vigorously countered by the city. The city won. Health and safety superceded convenience of workers.

Dr John Middaugh, State of Alaska Epidemiologist, declared that the move by the Municipality of Anchorage was the greatest step on behalf of public health in Alaska since 1977, when eight percent of school children were turned away from school because their immunizations were not up-to-date. Enforcing compliance with that, then new, requirement put Alaska at the forefront nationally in suppression of childhood infectious diseases. The city's sapient move against smoking, like that of the Alaska Native Medical Center, showed public and private entities across the country the way to heightened workplace safety.

AMENDED AND APPROVED

Date: 12-9-86

Submitted by: Chairman of Assembly at
the request of the Mayor
Prepared by: Department of Law
For Reading: October 28, 1986

ANCHORAGE, ALASKA
AO NO. 86-186

AN ORDINANCE AMENDING SECTION CHAPTER 16.90 OF THE ANCHORAGE MUNICIPAL CODE AND PERTAINING TO SMOKING IN MUNICIPAL STRUCTURES.

THE ANCHORAGE ASSEMBLY ORDAINS:

Section 1. Section 16.90.010 of the Anchorage Municipal Code is repealed and reenacted to read as follows:

16.90.010 Smoking in (PUBLIC PLACES) municipal structures.

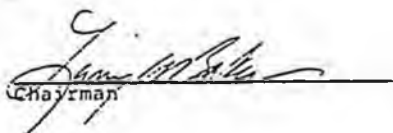
- A. Except as provided in subsection B of this section, it shall be unlawful for a person to smoke a cigarette, cigar or pipe or to offer tobacco for sale in any indoor place of a building, structure or other real property which is owned, leased or otherwise used or operated by the municipality.
- B. A structure which is owned, leased or used by the municipality and operated by an independent contractor may contain smoking areas designated in accordance with Alaska Statutes 18.35.300 - .350.

Section 2. This ordinance shall become effective on

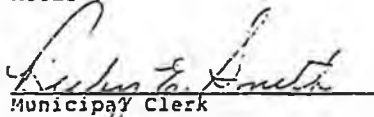
January 1, 1987/ except that it shall become effective on July 1, 1987 for the Anchorage School District.

PASSED AND APPROVED by the Anchorage Assembly this 9th

day of December, 1986.


Chairman

ATTEST:


Municipal Clerk

Smoking Attributable Mortality and Economic Costs in Alaska 1992-94

Catherine Schumacher, MD, MSPH⁽¹⁾

ABSTRACT

Tobacco is one of the leading preventable cause of death in the United States and Alaska. Alaska has one of the highest smoking prevalences. The Smoking-Attributable Mortality, Morbidity and Economic Cost software developed by the Centers for Disease Control and Prevention was used to estimate the deaths and economic impact due to smoking in Alaska.

In Alaska during the three year period 1992-94, 1416 deaths were estimated to be attributable to smoking, accounting for 19.8% of the 7159 deaths during that time. Direct medical care costs in 1993 due to smoking related illnesses were estimated at \$96.5 million. Additional smoking related costs include indirect mortality costs of \$183.2 million and indirect morbidity costs of \$15.9 million. The total economic cost attributable to smoking related illness for 1993 is estimated to be \$295.6 million. In summary, for the time period 1992-94, smoking was estimated to result in 470 deaths per year and in economic costs of almost \$300 million per year.

INTRODUCTION

Tobacco is one of the leading preventable cause of death in the United States (1). The U.S. Centers for Disease Control and Prevention (CDC) estimate that smoking kills approximately 419,000 people in the U.S. each year (2). Deaths that are related to cigarette smoking include a portion of: cardiovascular disease; cancers of the lung, larynx, oral cavity, esophagus, pancreas, bladder, kidney and cervix; chronic bronchitis, emphysema, and other respiratory deaths (2,3). Smoking also results in deaths in the perinatal period because maternal smoking causes a portion of low birth weight infants and preterm deliveries, and has been associated with SIDS.

Alaska has one of the highest smoking prevalence rates in the United States. Alaska's smoking rates (28.1% among men and 25.0% among women) are similar to those found in Nevada and in the tobacco-growing states (4,5). Alaska Natives (46.5% among men and 39.3% among women) have even higher smoking rates (6).

(1) Alaska Division of Public Health, Section of Epidemiology, PO Box 240249, Anchorage, Alaska 99524.

To estimate the deaths and economic impact of smoking in Alaska, we used the Smoking-Attributable Mortality, Morbidity and Economic Cost (SAMMEC) software developed by CDC (3). SAMMEC uses attributable risk formulas to estimate the deaths from neoplastic, cardiovascular, respiratory, and pediatric deaths associated with cigarette smoking. SAMMEC software uses relative risks for current and former smokers for each of the causes of death shown in Table 1.

METHODS

Mortality

SAMMEC was used to estimate the deaths attributable to smoking for Alaska adults (age \geq 35 years) and infants (age $<$ 1 year) using the 1992-94 mortality data for Alaska. Age-specific smoking prevalences for all races were obtained from the 1994 Behavioral Risk Factor Surveillance Survey (7). Alaska Native prevalence rates were obtained from the 1991-93 combined data from the Alaska Behavioral Risk Factor Surveillance Survey (6) (Table 2).

Economic Costs

Direct health care costs are the costs for prevention and treatment of smoking related diseases. CDC has been using a new method to calculate direct medical care costs which has not yet been included in the SAMMEC software (8). CDC used the method to estimate that in 1990, \$76 million was spent in Alaska on smoking related illnesses, which represented 6.13% of Alaska's total health care costs for that year (9,10). In order to estimate the 1993 direct health care costs for Alaska, that percentage was applied to the total medical care costs estimated for 1993. Nationally, about 7.1% of health care costs are attributable to smoking (11).

The SAMMEC program was used to calculate the indirect mortality costs, which are the foregone wages and salaries for persons who die prematurely from smoking related causes for 1993. The national 1990 expected lifetime earnings and housekeeping services by age and sex were used. Indirect morbidity costs were also estimated using SAMMEC, which are the lost earnings and productivity for persons disabled by smoking related illnesses.

Table 1				
Relative Risks* for Death Attributable to Smoking for Current and Former Smokers, by Disease Category and Sex Used by SAMMEC Software Program				
Disease Category (ICD-9 code)**	Male Relative Risk		Female Relative Risk	
	Current Smokers	Former Smokers	Current Smokers	Former Smokers
Adult Diseases (≥ age 35)				
Neoplasms				
Lip, oral cavity, pharynx (140-149)	27.5	8.8	5.6	2.9
Esophagus (150)	7.6	5.8	10.3	3.2
Pancreas (157)	2.1	1.1	2.3	1.8
Larynx (161)	10.5	5.2	17.8	11.9
Trachea, lung, bronchus (162)	22.4	9.4	11.9	4.7
Cervix uteri (180)	--	--	2.1	1.9
Urinary Bladder (188)	2.9	1.9	2.6	1.9
Kidney, other urinary (189)	3.0	2.0	1.4	1.2
Cardiovascular Diseases				
Hypertension (401-404)	1.9	1.3	1.7	1.2
Ischemic heart disease (410-414)				
Age 35-64:	2.8	1.8	3.0	1.4
Age 65+:	1.6	1.3	1.6	1.3
Other heart disease (390-398, 415-417, 420-429)	1.9	1.3	1.7	1.2
Cerebrovascular Diseases (430-438)				
Age 35-64:	3.7	1.4	4.8	1.4
Age 65+:	1.9	1.3	1.5	1.0
Atherosclerosis (440)	4.1	2.3	3.0	1.3
Aortic aneurysm (441)	4.1	2.3	3.0	1.3
Other arterial disease (442-448)	4.1	2.3	3.0	1.3
Respiratory diseases				
Pneumonia and influenza (480-487)	2.0	1.6	2.2	1.4
Bronchitis and emphysema (491-492)	9.7	8.8	10.5	7.0
Chronic airway obstruction (496)	9.7	8.8	10.5	7.0
Other respiratory diseases (010-012, 493)	2.0	1.6	2.2	1.4
Pediatric Diseases (age < 1 year)				
Short gestation, low birthweight (765)		1.8***		
Respiratory distress syndrome (769)		1.8		
Other respiratory conditions (770)		1.8		
Sudden infant death syndrome (798)		1.5		
Burn deaths	50% of total burn deaths			

* Relative to never smokers.

** International Classification of Diseases, Ninth Revision.

***Relative risk for infants born to a smoking mother versus infants born to a non-smoking mother.

Table 2.

Smoking Prevalences Used in SAMMEC Calculations

	Gender	Age (Years)	Percent Current Smokers	Percent Former Smokers
All Races*	Men	35-64	26.7	36.5
		65+	25.6	49.5
	Women	35-64	30.0	30.1
		65+	17.4	36.2
		Child-bearing ages 18-44***	25.0	
Alaska Native**	Men	35-64	44.7	34.8
		65+	38.4	36.7
	Women	35-64	39.2	24.8
		65+	13.2	21.1
			Child-bearing ages 18-44***	44.2

* Alaska Behavioral Risk Factor Surveillance System, 1994

** Alaska Behavioral Risk Factor Surveillance System, 1991-1993

*** Smoking prevalences used to estimate infant deaths due to maternal smoking

Table 3.

**Total Number of Deaths and Smoking Related Deaths by Gender and Cause
Alaska Residents: 1992-94**

Cause of Death (ICD-9)*	Male		Female		Total	
	Number (%)	Total	Number (%)	Total	Number (%)	Total
Cardiovascular (390-448)	374 (30.8%)	1214	159 (20.0%)	796	533 (26.5%)	2010
Cancer (140-208)	358 (38.3%)	933	188 (26.0%)	722	546 (33.0%)	1655
Respiratory (460-519)	138 (52.8%)	261	121 (50.0%)	242	260 (51.7%)	503
Perinatal (740-79, 798.0)	8 (7.8%)	103	6 (6.0%)	101	14 (6.9%)	204
Total (All Causes)	920 (21.0%)	4376	496 (17.8%)	2780	1416 (19.8%)	7159

*International Classification of Diseases, Ninth Revision.

RESULTS

Mortality

An estimated 1416 deaths during the three year period 1992-1994 were attributable to smoking, accounting for 19.8% of the 7159 deaths during that time (Table 3). Smoking accounted for 26.5% of all cardiovascular disease deaths, 33.0% of all cancer deaths, 51.7% of all respiratory deaths, and 6.9% of deaths from perinatal causes.

Of the 1402 deaths attributable to smoking among adults, 912 were men, and 490 were women (Table 3). Among women, smoking accounted for a smaller percentage of total deaths caused by cardiovascular disease and by cancer than did smoking among men. The percentage of respiratory deaths were similar in men and women. Alaska Natives account for 23.2% (329) of the smoking related deaths, although they account for 16.5% of the state's population (12). The distribution of smoking related deaths for Alaska Natives is similar to that seen for all Alaskans (Table 4).

Economic Costs

Direct medical care costs in 1993 due to smoking related illnesses were estimated to be \$96.49 million (Table 5). Additional smoking related costs were an indirect mortality cost of \$183.2 million and indirect

In the U.S. in general, men have been smoking longer than women and most smoking deaths are caused by long term use of cigarettes. Because smoking rates are now similar for men and women, women may have higher smoking attributable mortality in the future. Alaska Natives are at even higher risk because of their higher smoking rates.

The majority of Alaska smokers (83.7%) began smoking between 10 and 20 years of age (13). In the U.S., by the 1980's, almost no regular smoking began after the age of 18 (14). Therefore, efforts to decrease tobacco use in the U.S. are being directed towards school-age children and adolescents, including limiting advertising and access to cigarettes (15). Additional tobacco control efforts include developing and enacting strong policies for clean indoor air, increasing excise taxes, and increasing educational efforts.

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Table 4.

**Total Number of Deaths and Smoking Related Deaths in Alaska
Alaska Natives: 1992-94**

Cause of Death (ICD-9)*	Number (%)	Total
Cardiovascular (390-448)	105 (27.0%)	388
Cancer (140-208)	115 (35.3%)	326
Respiratory (460-519)	68 (43.6%)	156
Perinatal (790-779,798.0)	7 (10.9%)	64
Total (All causes)	329 (18.0%)	1829

*International Classification of Diseases, Ninth Revision.

morbidity cost of \$15.94 million. The total economic cost attributable to smoking related illness for 1993 is estimated to be \$295.63 million.

DISCUSSION

During 1992-94, there were an average of 470 smoking related deaths each year in Alaska which resulted in economic costs approaching \$300 million. Smoking results in more deaths than AIDS, alcohol, aircraft crashes, falls, firearms and motor vehicle crashes (Figure 1).

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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

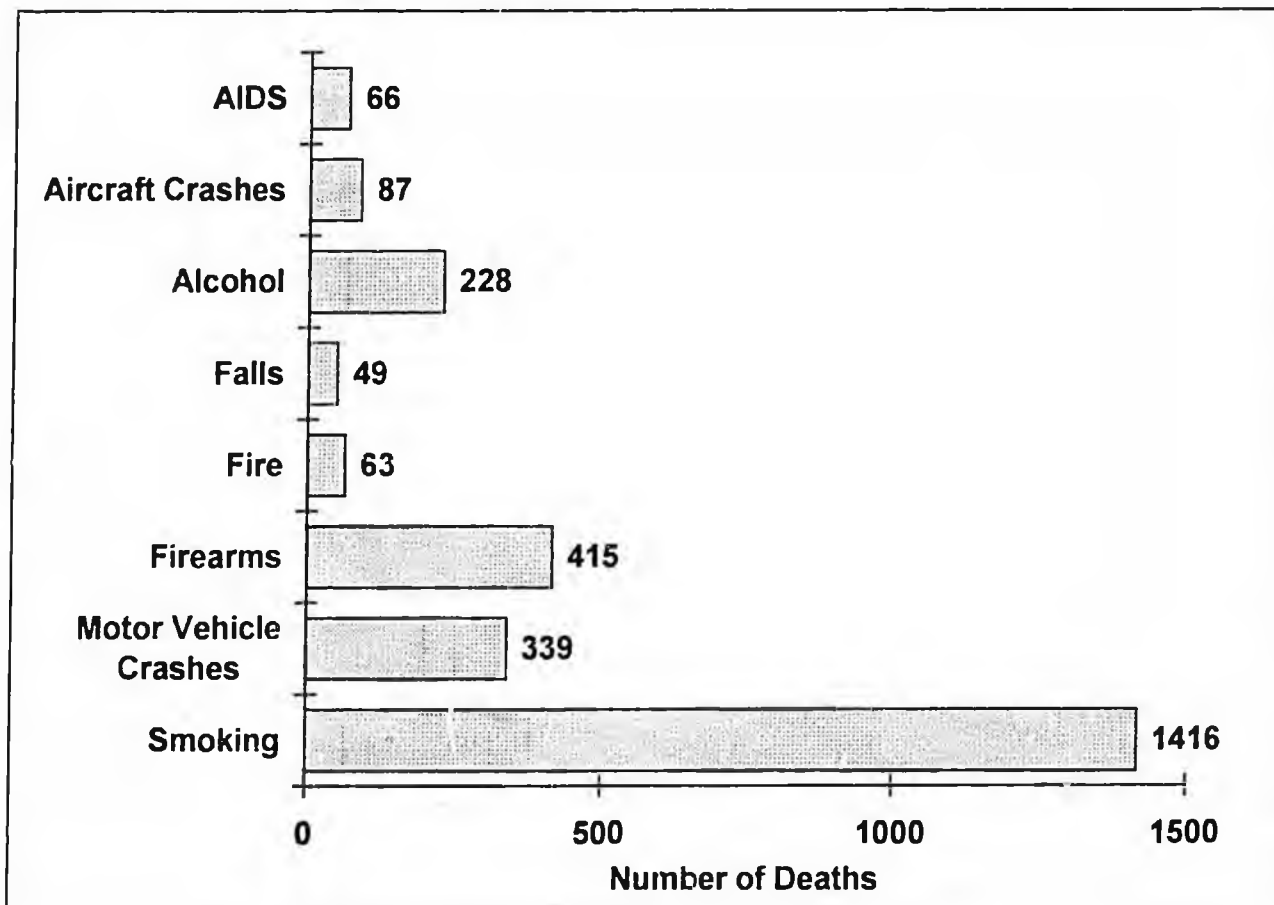


Figure 1: Alaska Resident Deaths by Selected Cause : 1992-94. Mortality Data for Alaska Residents 1992-94, provided by the Bureau of Vital Records, Alaska Division of Public Health. ICD-9 Codes: Aircraft crashes: 840-845; AIDS 42-44 ; Alcohol 291, 303, 305, 357.5, 535.3, 425.5, 790.3, 860, 571.0-571.3; Falls 880-888; Fires 890-899; Firearms 922,955,965,970,985; Motor vehicle crashes 810-825.

Prevention That Works

Peter Nakamura, MD⁽¹⁾

ABSTRACT

The solution to the problem of tobacco use is complicated when adolescents are faced with numerous risk factors. Alaska has a partnership between federal, state, and private interest groups and individuals who are committed to addressing the problem. This partnership is being expanded through the creation of additional local alliances. Each of the partners has influenced state policies on the control of the use of tobacco products. Because of the difficulty in changing adolescent behavior through education and information there is a need to decrease access to the offending products. A proven way to decrease access and adolescent use of tobacco products is raising the cost of the products through higher excise taxes.

THE PROBLEM

Simply stated, the problem is the increased economic burden to the state and to individuals, decreased quality of life, increased morbidity and early demise associated with tobacco use. It is difficult to imagine anyone who is not at least aware of the basic problem.

Unfortunately, we have a major hiatus between knowledge and practice. I recently had the good fortune to hear Judge Dennis A. Challeen (1) lecture on how people of good sense end up in court. The good judge starts with the explanation that you and most readers of this article are NORPs. A NORP is a normal ordinary responsible person. We take information and process it in a way that leads to the correct choice. Unfortunately, most NORPs undergo NORP WARPS. These are best described as out of character behavior followed by self-correction and return to responsibility. It is during these WARPS that NORPS commit acts that can get them in trouble with the law or other standards set by society. Think of the loyal and faithful husband who was caught in a compromising position the one time he wandered beyond the bounds of holy matrimony. He can be paying for that action for the rest of his life.

This gets us to the underlying cause of THE PROBLEM. Teens are JUNIOR NORPs experiencing a MEGA NORP WARP. This is the time in which they are most

vulnerable to high risk experimentation. Nearly 84% of Alaskan adults who smoke started smoking between the ages of 10 and 20. In Alaska, 27% of 12th grade girls and 18% of 12th grade boys reported daily use of cigarettes in a 1989 survey (2).

A SOLUTION

Just imagine if we had no automobiles and roads. The consequence would be that we would have no auto accidents and no traffic violations. The same can be said for tobacco and problems related to its use. However, automobiles, roads, and tobacco will be with us until we come up with a better means of daily transportation and a substance that is equally addictive and as well financed as tobacco.

Tobacco industry advertising has been extremely successful in affecting teenage use of tobacco. (3) Education efforts have not been equally efficient in reversing the trend. Limiting access to tobacco, alcohol, unhealthy practices and high risk behaviors are effective ways to assist our JUNIOR NORPs through the MEGA NORP WARP.

An analysis of countries around the world shows the powerful relationship between price and consumption. (4) The Canadian experience has demonstrated a direct negative correlation between increased tobacco tax and teenage use of cigarettes (Figure 1).

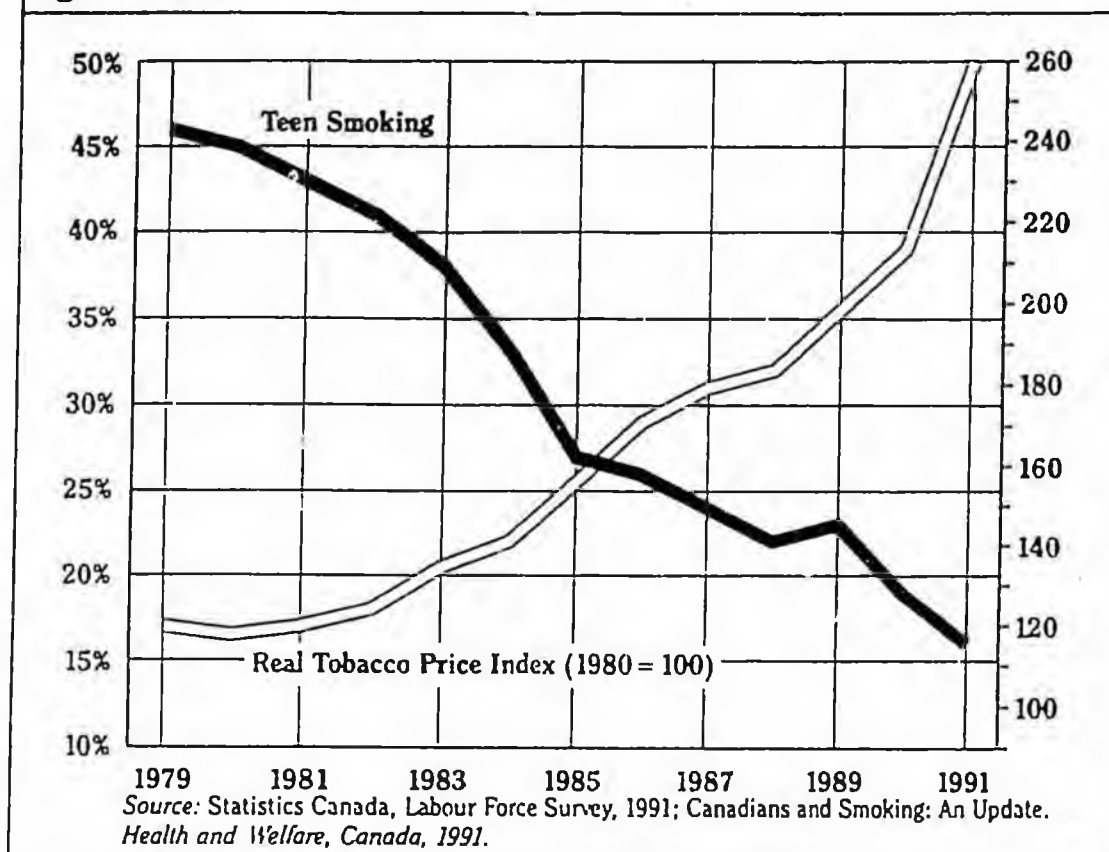
FEDERAL POLICY

The Food and Drug Administration (FDA) Commissioner David Kessler has called smoking addiction among young people "a pediatric disease" and an "epidemic." There has been no progress in reducing teenage smoking rates in the last decade despite continuing progress against adult smoking. The most recent data indicate that smoking among young people actually increased since 1991, with the largest increase among the youngest smokers. There was a 30% increase in smoking among 8th graders between 1991 and 1994. Between 1970 and 1986, the use of snuff increased 15 times and the use of chewing tobacco increased four times among male adolescents ages 17-19. (5)

On August 10, 1995, President Clinton announced proposed rules that will allow the FDA to affect the sale

(1) Director, Division of Public Health, State of Alaska, Dept. of Health & Social Services, Juneau, AK 99801.

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



and distribution of nicotine-containing cigarettes and smokeless tobacco product to children and adolescents

The regulations would not only reduce children and adolescent access but will also affect the amount of positive imagery that makes these products so appealing to them. Cigarette vending machines, free samples, mail-order sales, and self-service displays would be prohibited. The objective of the proposed rule is to help the nation meet "Healthy People 2000" objectives on the adolescent use of tobacco products.

Federal Law (the Synar amendment) mandates state level enforcement of laws reducing youth access to tobacco products and requires states to reduce adolescent access to tobacco products. Failure to do so will result in the withdrawal of federal alcohol and substance abuse grant funds. (6) Because of the huge tobacco industry war chest, Federal policies leading to the funding of local tobacco control activities has been critical. CDC and other federal agencies have supported local capacity for tobacco prevention and control activities. CDC has funded 5-year grants to states for Initiatives to Mobilize for the Prevention and Control of Tobacco Use (IMPACT). The Federal Environmental Protection Agency (EPA) provided special funding to the Alaska Health Fairs for health displays, to the Cancer Society for staffing of Smokeless Class 2000.

Not everyone agrees with the role of government in setting health policy, but no one can deny that many of the positive changes experienced could not have taken place without such action. It is, however, critical that the public influence the directions taken by government policy. About fifteen years ago in my efforts to initiate a smoke-free environment in the Portland Federal Building, I found the greatest obstacles to be federal regulations, policies, and personal bias. Thanks to the Clean Indoor Air Act and related regulations, we no longer have to endure irritating and harmful smoke in our work environment, can travel in smoke-free planes, and enjoy a meal without the stench or acrimonious pall of tobacco smoke.

STATE POLICY

Governor Knowles has committed this administration to reducing adolescent use of tobacco. Based on the awareness that high cost of tobacco products will reduce the use of tobacco products by children, he has endorsed an increase in the state tobacco tax. Governor Knowles has stated his hopes that the higher tax "doesn't raise a single dollar" because it is successful in reducing tobacco use.

The role of Alaska's Department of Health and

Social Services in the prevention of tobacco use is within statutory obligations for promoting and preserving public health. The state has a responsibility for compiling data and for producing appropriate information to guide the formulation of sound policy. The state should also provide technical support and access to resources needed for constructive statewide and community based interventions.

The Division of Public Health Behavioral Risk Factor Surveillance System (BRFSS) (7) supported by state and federal funds has for several years collected and analyzed risk behavior information. Information from this and the Youth Behavior Risk Survey recently conducted through the joint effort of the Department of Education and Division of Public Health are reported in this issue. Information gained through these sources as well as other data bases such as the Bureau of Vital Statistics, the Alaska Native Cancer Registry maintained for many years by Dr. Anne Lanier, and the Report of Cancers in Alaska Natives (8) will be available to assist in developing sound tobacco policy for our state.

State tobacco control policy is guided by the Alaska Cancer Control Plan (9) and Healthy Alaskans 2000 (10). The focus of the policy is on reducing youth access to tobacco products, limiting tobacco product advertising, clean air, early childhood education, and the support of tobacco control advocacy activities.

The primary state role in tobacco control activities has been one of facilitation and support and often to get out of the way of the many organizations and individuals committed to the elimination of tobacco use. The Division of Public Health has been successful in competing for federal funds which have in turn been used to support community prevention activities and a statewide tobacco control coalition of over 220 organizational and individual members. The Alaska Tobacco Control Alliance (ATCA) advises the Division of Public Health on strategies, goals, and activities important to the reduction of tobacco use. An additional function of the Alliance is to provide a forum for statewide communication, advocacy, and the coordination of state tobacco control and prevention activities. The number one public policy goal of the ATCA is a major increase in tobacco tax rates.

The impressive membership of the ATCA steering committee includes representatives of: Alaskans for Drug Free Youth, Municipality of Anchorage, Bristol Bay Area Health Corporation, Tanana Chief's Conference, State of Alaska Division of Alcoholism and Drug Abuse, Yukon-Kuskokwim Health Corporation, KD Consulting, Nome Community Center, Alaska Native Health Board, Alaska Area Native Health Service, Alaska Health Fair, American Lung Association, Rural CAP Headstart, Alaska Dental Society, State of Alaska Sitka

Teen Resource Center, Anchorage School District, Department of Health and Social Services, Division of Public Health, Alaska State Medical Association, Alaska Public Health Association, and the Alaska Council on the Prevention of Alcohol and Drug Abuse.

The Alaska Tobacco Control Program presently funds six local tobacco alliances (Juneau, Sitka, Ketchikan, Unalaska, Bethel, and Nome). The goal for FY97 is to establish a total of 20 tobacco alliances located in communities of 2,500 or more. These 20 alliances will reach 71% of the population in Alaska.

We Alaskans have a clearly defined problem with tobacco use and we can measure the adverse outcomes (see Schumacher in this issue). We have a federal-state-community partnership and a commitment to deal with the problem. However no solution can be achieved without addressing the highly seductive and highly addictive nature of tobacco products. Simple guidance and education are not enough to influence them into making the "right" choice.

Reducing access to health risk products is one of the most effective measures available, and raising the cost of tobacco products through a higher excise tax is a proven method.

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The Prevalence of Tobacco Use Among Alaska Adults

Patricia Owen⁽¹⁾

Diane E. Ingle⁽²⁾

Catherine Schumacher, MD, MSPH⁽²⁾

ABSTRACT

The Alaska Division of Public Health monitors the prevalence of smoking and other tobacco use among Alaska adults through the Alaska Behavioral Risk Factor Surveillance System, a telephone survey performed in cooperation with the U.S. Centers for Disease Control and Prevention (CDC). A total of approximately 1530 interviews are completed each year in Alaska by specially trained interviewers.

The prevalence of smoking among Alaska adults in 1994 (28.9%) was second highest in the U.S. Alaska Natives have higher smoking rates (42.9%). Overall, smoking rates have declined in the last three decades nationally. However, in recent years, little change has been found in the prevalence of smoking among adults. Alaska's rate of smokeless tobacco use has also been higher than the national rate of use. The majority of Alaska smokers (83.7%) began smoking between 10 and 20 years of age. In 1994, an estimated 121,000 Alaska adults aged 18 and older were current smokers.

INTRODUCTION

Because tobacco is one of the leading preventable causes of death and disease in the U.S. and in Alaska, the Alaska Division of Public Health monitors the prevalence of smoking and other tobacco use in Alaska through the Alaska Behavioral Risk Factor Surveillance System (BRFSS). The Alaska Division of Public Health implemented the BRFSS in 1990 with a point-in-time survey and has collected data continuously since January 1991. The survey is performed in cooperation with the U.S. Centers for Disease Control and Prevention (CDC) and gathers state based information about health related behaviors of Alaska adults through an ongoing telephone survey.

We report information from the Alaska BRFSS about smoking and other tobacco use among Alaska adults.

- (1) BRFSS Coordinator, Section of Community Health and Emergency Medical Services, AK Division of Public Health, PO Box 110616, Juneau, AK 99811-0616.
- (2) AK Division of Public Health, Section of Epidemiology, PO Box 240249, Anchorage, AK 99524.

METHODS

Alaska is one of the 50 states or territories participating in the nationwide BRFSS. Specially trained interviewers conduct 128 interviews each month using a standard BRFSS questionnaire. Interviews are conducted over the telephone using randomly selected telephone numbers. Respondents are selected from among the adult members of the household (age 18 years and older). A total of approximately 1530 interviews are completed each year in Alaska. Data are analyzed by the CDC and the Alaska Division of Public Health, and are weighted to adjust the survey sample to represent the state adult population. Alaska uses a stratified sampling design, in which the state is divided into four regions.

The BRFSS does not include persons living in institutions, such as dormitories, barracks or nursing homes. In addition, households without telephones are excluded. Telephone coverage is about 92% in Alaska although coverage varies by region (1).

Current smokers are defined as those who have ever smoked 100 cigarettes and who smoke now. In this report, we use the 1994 BRFSS data unless otherwise stated (2).

RESULTS

1994 Results

The prevalence of smoking among Alaska adults in 1994 (28.9%) was second highest in the U.S.; Nevada had the highest prevalence (29.1%). The national range was 15.0%-29.1%, with a median of 22.6% (3). Men were more likely to be smokers than were women (31.8% of men versus 25.7% of women). The age group with the highest smoking prevalence rates (37.6%) is 18-24 years.

Married persons were less likely to be smokers than persons who were divorced, widowed or never married (Table 1). Education was strongly related to smoking status (Table 2). Only 10% of college graduates reported smoking as compared to 44.5% of those with less than a high school education. Employment is also related to smoking; individuals who reported being out of work were most likely to be smokers (Table 3).

Table 1. Smoking Prevalence by Marital Status	
Marital Status	% Current Smokers
Married	23.4
Divorced	35.6
Widowed	34.8
Never Married	39.7
Unmarried couple	38.2

Table 3. Smoking Prevalence by Employment Status	
Employment	% Current Smokers
Employed	28.1
Out of work	41.1
Homemaker	25.5
Student	28.6
Retired/unable to work	28.5

Table 2. Smoking Prevalence by Education	
Level of Education	% Current Smokers
Some high school or less	44.5
High school graduate or GED	37.3
Some college or technical school	31.1
College graduate	10.2

Table 4. Alaska Adults Who Have Quit Smoking	
Smoking Status	%
Ever smoked 100 cigarettes	55.9
Quit smoking	48.2*
Quit in past year	30.9**
Quit 1-15 years ago	46.6**
Quit over 15 years ago	22.5**

In Alaska, persons living in the bush area were more likely to be smokers (Figure 1).

* Among those who ever smoked
** Among those who quit smoking

Smoking Prevalence among Alaska Natives

Alaska Natives had higher smoking rates than the state rate (42.9% versus 26.6%)(1991-1993 BRFSS). BRFSS data showed that 46.5% of Alaska Native men smoke and 39.3% of Alaska Native women were current smokers.

Trends in Alaska Smoking

In Alaska, smoking rates have declined. In 1982, a point-in-time survey found that 37% of adult Alaskans were current smokers, including 40% of men and 35% of women (4). The decline in smoking in Alaska corresponds to a national decline (5). In recent years, the BRFSS has shown little change in the prevalence

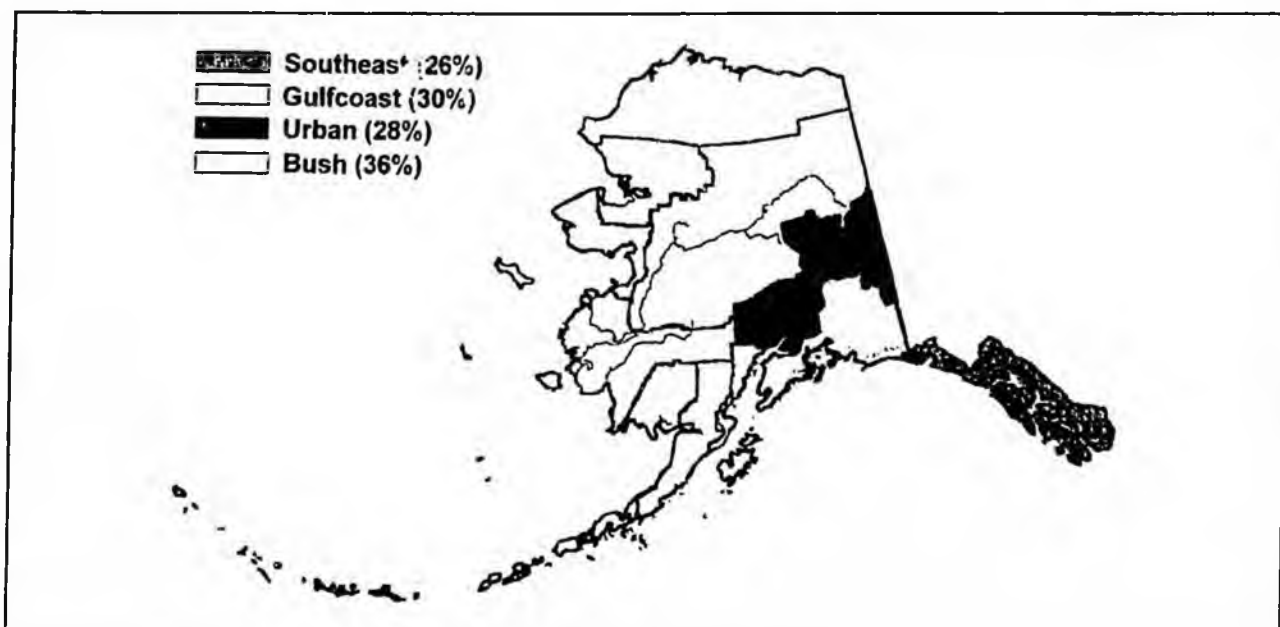


Figure 1: Smoking Prevalence in Alaska by Region: 1994 Behavioral Risk Factor Survey.

of smoking among adults. In 1991, 1992, 1993 and 1994 the prevalence of smoking was 26.0%, 28.0%, 25.8% and 28.9%,¹ respectively.

Smoking Practices

About one-half of Alaskans who have ever smoked have quit (Table 4). Among current smokers, 74.0% reported they would like to stop smoking (1993 BRFSS data). In 1994, half of all Alaska adults who smoked had tried to stop for at least 1 day in the past year.

The majority (83.7%) of Alaska smokers began smoking between 10 and 20 years of age (6). Almost 20% of those who have smoked in the past 30 days smoke more than 1 pack per day (Table 5).

Smokeless Tobacco

Current use of smokeless tobacco (chewing tobacco or snuff) was reported by 9.5% of Alaska men and 1.3% of women. Alaska's rate of smokeless tobacco use was higher than the national rate (5), based on 1991 data (Table 6). Use of smokeless tobacco products was higher among Alaska Natives (11.3%) than among the state as a whole (8.4%; 1991-93 BRFSS). The prevalence of smokeless tobacco use was highest in the Bush area (14.0% of men and 9.5% of women).

DISCUSSION

An important Year 2000 Health Objective for the Nation is to reduce cigarette smoking to a prevalence of no more than 15% of people aged 20 and older (7). In Alaska, 28.6% of adults aged 20 and older are current smokers, almost twice the Year 2000 Objective. Clearly, Alaska has a long way to go.

Alaska has one of the highest smoking prevalence rates in the United States. Alaska's smoking rates are similar to those found in Nevada and in the tobacco-growing states(5). Alaska Natives have even higher smoking rates. An estimated 121,000 Alaska adults aged 18 and older are current smokers.²

Smokeless tobacco use (chewing tobacco and snuff) is also higher in Alaska. The consumption of smokeless tobacco has been increasing in the United States, and most new users are adolescent boys (10,11,12). Smokeless tobacco is a major risk factor for oral cancer (13). Additionally, smokeless tobacco products contain nicotine, and their use can support nicotine addiction and may lead to cigarette use.

Almost all Alaska smokers, as well as U.S. smokers, began smoking before 20 years of age. Efforts to

¹ The data for 1994 include people who smoke irregularly (about 1%).

² Using 1994 population age 18 and older and smoking prevalence of 28.9%.

Table 5.
Cigarette Consumption by Alaska Smokers

Packs per Day Smoked	Percent*
1/2 or less	29.8
More than 1/2 to 1	51.0
More than 1	18.9

*Among those who have smoked in past 30 days

Table 6.
**Current Use of Smokeless Tobacco
Comparison of Alaska and U.S., 1991**

	Percent Current Users	
	U.S.*	Alaska**
Men	5.6%	9.5%
Women	0.6%	0.9%

* National Health Interview Survey (5)
**Alaska Behavioral Risk Factor Surveillance System, 1991 data.

decrease tobacco use in the U.S. are being directed towards school-age children and adolescents, including limiting advertising and access to cigarettes (14). Additional tobacco control efforts include developing and enacting strong policies for clean indoor air, increasing excise taxes and increasing educational efforts.

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(continued on page 51)

Tobacco Use in Rural Alaska and the Trampling Tobacco Project

Darleen N. Beltz⁽¹⁾

Unlike in the "lower 48 states," where tobacco was originally grown and has been used ceremoniously by Native Americans since ancient times, tobacco has a relatively recent history among Alaska Natives (see Fortuine and Reece in this issue).

What historians find particularly striking about tobacco use in Alaska Native communities is the use of tobacco by children, some of whom are very young. Tobacco has been used on teething children to alleviate the child's discomfort. Alaska Native people have stated that they did not know that tobacco was unhealthy, and that they wouldn't have used it had they known. Within their communities, tobacco has been so accepted that its use has not been questioned.

A traditional practice of some of the Native cultures is to have a potlatch for a member of the clan who has died. At this potlatch food and other items such as tobacco are given to the invited guests. Another tradition was the burning as an offering food and other things liked by the individual who had died. By including tobacco, it became accepted and honored.

Reincarnation is a belief of some of the Alaska Native cultures. If a child has been named after a loved one who has died, the child is considered to be the reincarnated individual. The child may be offered foods that the person liked, because they feel the child is asking for it. In the past it might have been a favorite food, such as berries or fish. Tobacco has crept into this part of the culture such that if the deceased individual had used tobacco, it, too, would be offered to the child.

Some time after its introduction, tobacco began to take on a ceremonial value in some Alaska Native groups as a gift at potlatches or other ceremonial events. Today, such ceremonial use continues in some communities.

Despite the fact that tobacco use has long been a cultural norm in most Alaska Native communities, concern about health effects has been growing in recent years. The good news is that more and more Alaska Natives are expressing a desire to quit tobacco, to avoid exposure to second-hand smoke, and to help prevent children from becoming addicted to nicotine.

The Alaska Tobacco Control Alliance (ATCA) is a group of Alaskan people concerned about the use of

tobacco in their communities and their state. Members of ATCA come from the Indian Health Services, Alaska Office of Health Promotion, American Lung Association, American Cancer Society, American Heart Association, the Native regional health corporations, tribal organizations, private for-profit organizations, private non-profit organizations, and individuals. It is from this group that the Trampling Tobacco Project developed. The Project is funded by a grant from the Robert Wood Johnson Foundation specifically to reach Alaska's rural people. The Centers for Disease Control also support Northwest Portland Indian Health Board in its proposal to work with Alaska in developing clean indoor air policies in Alaska Native rural communities.

The Alaska Native people, as other indigenous people, have been negatively affected by the infiltration of the beliefs of other cultures and epidemics. This is exemplified by "The Great Death," which refers to the 1900 Alaska influenza epidemic. This epidemic killed up to 60% of Eskimo and Athabaskan people. The loss of so many people disrupted Native communities, leading to a generation of people born out of great suffering, confusion, desperation, heartbreak and trauma. The world of Native people had collapsed. Their way of life was in question and their medicine men had not been able to conquer the disease.

This set the stage for modern Natives to develop an attitude which some still hold. For example, not to talk about death or to act as if it had never happened. Today this attitude is the way some deal with disease and death. This new Native questioned his own way of life and embraced the new culture, abandoning his own. They were willing to be a part of the new world and to be lead.

Today, Native people are seeing the value of their past way of life and are bringing back some of the traditions to fit into the world they now live in. They are taking back control of their lives, but some beliefs are still present that will have to be changed.

In May 1995 rural Alaska Natives from around the state met in Anchorage and organized a group called STUN (Stop Tobacco Use Now). They addressed three areas: 1) sharing concerns about tobacco use; how tobacco use is a problem in their community; 2) attitudes, values, customs, and practices that contribute to tobacco use; and 3) what can be done to reduce tobacco use. The strategic plan which was developed addresses six aspects of the tobacco issue: 1) norms and social

(1) Technical Advisor for Tobacco Control, Alaska Native Health Board, 1345 Rudakof Circle, Anchorage, Alaska.

attitudes; 2) psycho-social dynamics; 3) cultural; 4) confrontational issues; 5) tribal leadership and clergy support and 6) education.

At the meeting, STUN members discussed the difficulty of approaching elders on tobacco use. Some stated that they felt guilty in asking people to give up tobacco because there are other substances that the Native people are being asked to give up that are perceived as being even more destructive to the Native way of life than tobacco, such as drugs and alcohol.

The STUN members stated that not only did many of the Native people not realize that tobacco was a health risk, some did not know that tobacco causes cancer. People were not intentionally hurting their children by offering them tobacco. Tobacco had become a part of the community, therefore it was important that action be taken at the community level. The norm would have to be changed by informing people and encouraging all leaders to be positive role models.

Even if leaders used tobacco, they should not use tobacco in the presence of children, and should discourage youth from smoking and chewing, limit sales of tobacco to children and develop clean indoor air policies.

Many of the health providers in the community also use tobacco because it has been socially accepted. The members stated that they need to be able to develop support programs to assist the providers and other community members in quitting.

A STUN member stated that Native people learn by watching, so when the time comes for a child to act, he/she does it correctly the first time. A concern for Native people in dealing with smoking cessation classes is that

they should be able to succeed the first time. If they fail, they feel discouraged and are unlikely to try again.

The members stated it was important for them to continue to combat tobacco use in their communities and agreed to continue to stay in contact with each other. The members have been holding monthly teleconferences, brainstorming ideas as to what they could do to reach their community leaders. They agreed to develop a video from each region, and to combine the segments into one and make it available to all. The video will include testimonials of persons suffering from tobacco-related diseases and of persons who have tried to quit, both successfully and unsuccessfully. A resource packet has been developed and has been sent out to 150 communities to assist these and other anti-tobacco advocates in their work against tobacco use. Forty members of STUN have been trained in the "Community Oriented Tobacco Project." This curriculum, developed by rural Alaska Native communities for rural people, involves the school, a community member, and a tobacco coordinator who work together with the community in educating and motivating people to combat tobacco use. The Trampling Tobacco Project also sponsors an Iditarod musher, supports tobacco control PSAs and media events, and provides mini-grants for community tobacco control projects.

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Logo for Trampling Tobacco Project designed and made by Anne Marie Holen, Alaska Native Health Board.

Tobacco Use Among Alaska Youth

Michele A. Hansen, MPH, CHES⁽¹⁾
Catherine Schumacher, MD, MSPH⁽¹⁾
Diane E. Ingle⁽¹⁾
John P. Middaugh, MD⁽¹⁾
Helen L. Mehrkens, BS, CHES⁽²⁾

ABSTRACT

The Youth Risk Behavior Survey (YRBS) is a national school-based survey used to monitor health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth and adults in the United States. Tobacco use is one of the behaviors monitored. Both high school and middle school surveys were administered to a representative group of Alaska high school and middle school students for the first time in 1995. Surveys were administered in a confidential and anonymous manner, taking care to assure student privacy. A total of 1,634 high school students and 1,265 middle school students completed surveys.

The survey found that Alaska high school students have smoking rates higher than the national rate and that Alaska Native youth have even higher smoking rates. Furthermore, smoking is not uncommon among Alaska middle school students.

Among high school students, 36.5% were current smokers (had smoked in the past 30 days) and 21.1% had smoked on 20 or more of the previous 30 days. Boys were more likely than girls to report having used chewing tobacco or snuff in the 30 days prior to the survey (23.5% of boys and 6.7% of girls). Smokeless tobacco use increased with grade level so that 29.1% of high school senior boys had used smokeless tobacco products within the previous 30 days. Over 60% of Alaska Native students reported smoking in the previous 30 days, 43.7% reported smoking 20 or more of the previous 30 days and 22.5% reported using chewing tobacco or snuff in the previous 30 days. Over half of middle school students reported having tried smoking at least once; about one-fourth smoked at least one day in the past 30 days and 5.6% smoked on 20 or more of the past 30 days.

INTRODUCTION

The Youth Risk Behavior Survey (YRBS) was implemented by the Alaska Division of Public Health and the Alaska Department of Education in 1995 in cooperation with the National Centers for Disease Control and Prevention (CDC) (1). The YRBS is a national survey developed by the Division of Adolescent and School Health at CDC in collaboration with 71 state and local departments of education and 19 federal agencies. The survey is a component of a larger national effort to assess priority health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth and adults in the United States. The YRBS survey examines six categories of adolescent behavior: behaviors that result in unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors; dietary behaviors, and physical activity. We report information from the Alaska YRBS about smoking and other tobacco use among Alaska youth.

METHODS

The YRBS was administered to a sample of Alaska high school (grade 9-12) and middle school (grades 7-8) students during the spring of 1995. The high school survey consisted of 84 multiple choice questions; the middle school of 54 multiple choice questions. Students filled out the surveys during regular class time.

All public schools in Alaska with students in grades 9-12 for the high school survey and students in grades 7-8 for the middle school survey were eligible to be selected in the sample. Special education and English as a second language classes were excluded at the classroom level. Group home, correspondence and correctional schools were also excluded from the sample. A sufficient number of students were selected to give a $\pm 5\%$ margin of error for each question.

A two-stage sample design was used. In the first stage sampling, schools were selected from all public schools at the high school and middle school level in proportion to their enrollment size. For the second stage

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- (1) Alaska Division of Public Health, Section of Epidemiology, P.O. Box 240249, Anchorage, Alaska 99524.
 - (2) Alaska Department of Education, Div of Teaching and Learning Support, Juneau, Alaska 99801-1894.

sampling, classes of a required subject or a required school period were randomly selected. All students in the selected classes were eligible to participate in the survey. Students, parents, schools and school districts had the opportunity to decline participation.

Teachers were given a script to read to students which established guidelines for student privacy and anonymity and the importance of the survey. Each student was given an unmarked envelope in which to seal his or her survey before turning it in. These survey envelopes remained sealed until received at a central state collection site.

The state survey was analyzed by the CDC and Westat, Inc, a CDC contractor. Analysis included the scanning of the surveys and performance of extensive edit checks to identify survey inconsistencies. The data were weighted to adjust the survey sample to represent the state youth population. The weighted data make it possible to generalize the results to all Alaska middle and high school students defined by the sample.

At the same time that Alaska implemented the YRBS, a national YRBS was conducted at the high school level. At the time of this report, the 1995 national results are still being analyzed. Therefore, the report provides the 1993 national high school results as a comparison (1). A national YRBS at the middle school level has not been done. Therefore, national comparisons are not available for the middle school results.

RESULTS

Participation

At the high school level, 38 schools were selected. Of the 38 schools, 31 chose to participate in the survey resulting in a school response rate of 82%. Within the schools that participated, the student response rate was 78%, resulting in 1,634 respondents (Table 1). At the middle school level, 40 schools were selected as part of the statewide sample. Of the 40 schools, 32 participated, resulting in a middle school response rate of 80%. At this level, 80% of the sampled students completed the surveys, resulting in 1,265 respondents (Table 2).

High School Results

Alaska high school students were more likely to be current smokers and frequent smokers than were U.S. students (Table 3). Smoking rates were similar for boys and girls. Alaska students who are older and in higher grades were more likely to be frequent smokers (smoking 20 or more days of the previous 30 days) (Table 4). However, almost 20% of ninth graders were frequent smokers.

Of Alaska high school students who had smoked in the past 30 days, the most common ways of obtaining cigarettes were: borrowed from someone else, someone

Table 1.
Demographic Characteristics of High School Respondents: 1995 Alaska Youth Risk Behavior Survey

		Unweighted Number	Weighted Percent
Age(years)*	<=15	597	36.5
	16-17	821	48.1
	>=18	215	15.3
Sex*	Male	821	47.6
	Female	807	52.4
Grade	9th	497	29.8
	10th	383	25.8
	11th	477	23.0
	12th	269	21.0
	Ungraded/other	8	0.4
Race	White-not Hispanic	1147	68.3
	Black-not Hispanic	87	5.2
	Hispanic or Latino	53	3.3
	American Indian or Alaska Native	184	15.0
	Asian or Pacific Islander	75	4.3
	Other	62	3.9

*numbers may not total 1,634 because of missing responses

Table 2.
Demographic Characteristics of Middle School Respondents: 1995 Alaska Youth Risk Behavior Survey*

		Unweighted Number	Weighted Percent
Age (years)	<=12	200	15.8
	13	591	46.8
	>=14	474	37.4
Sex**	Male	651	52.3
	Female	608	47.7
Grade**	7	636	50.6
	8	606	48.0
	Other	15	1.3

*the middle school questionnaire did not include a question on race/ethnicity.

**numbers may not total 1,265 because of missing responses

Table 3.

Cigarette Smoking Among Alaska and U.S. High School Students: 1995 Alaska Youth Risk Behavior Survey and 1993 U.S. Youth Risk Behavior Survey

	Total		Boys		Girls	
	Alaska 1995	U.S. 1993**	Alaska 1995	U.S. 1993**	Alaska 1995	U.S. 1993**
%* ever tried smoking	72.1	69.5	71.4	70.1	72.8	68.7
%* smoked on \geq 1 of the past 30 days	36.5	30.5	36.4	29.8	36.5	31.2
%* smoked on \geq 20 of the past 30 days	21.1	13.8	21.4	14.0	20.6	13.5

* Percent of all high school students
 **Source: Reference 1

asked to show proof of age.

Boys were more likely than girls to report having used chewing tobacco or snuff in the 30 days prior to the survey (Table 6). Alaska girls were more likely to use smokeless tobacco than were U.S. girls. Smokeless tobacco use increased with grade level, so that 29.1% of high school senior boys had used smokeless tobacco products within the previous 30 days. However, the data suggested that frequent use (use on 20 or more of the previous 30 days) was more common among boys aged 16 and 17 (Table 7).

Alaska Native students reported higher rates of smoking and of smokeless tobacco use than the state rate. Over 60% of Alaska Native students reported smoking in the previous 30 days, 43.7% reported smoking 20 or more of the previous 30 days and 22.5% reported using chewing tobacco or snuff in the previous 30 days (Table 8).

Table 4.

Percent of Alaska High School Students Who are Frequent Smokers* by Age and Grade: 1995 Alaska Youth Risk Behavior Survey

	%** Frequent Smokers
Age 15 or less	16.9
Age 16-17	22.1
Age 18+	27.5
Grade 9	19.7
Grade 10	17.8
Grade 11	23.1
Grade 12	24.7

*Frequent smokers = smoked on 20 or more of the previous 30 days
 **Percent of all high school students

else bought the cigarettes, or the student purchased his/her own cigarettes (Table 5). Few used vending machines. Those aged 18 and older were more likely to buy their own cigarettes in stores, whereas younger students were more likely to borrow cigarettes. Even so, almost 12% of students aged 15 or less bought cigarettes in a store. Of students who bought cigarettes in a store in the 30 days prior to the survey, only 31% reported being

Table 5.

Usual Source of Cigarettes for Alaska High School Students: 1995 Alaska Youth Risk Behavior Survey

Usual Source of Cigarettes	%*
Borrowed	28.0
Bought at a store	26.3
Someone else bought	26.1
Some other way	12.6
Stole them	5.1
Vending machine	1.9

* % of students who smoked in past 30 days.

Table 6.

Use of Chewing Tobacco and Snuff among Alaska and U.S. Students: 1995 Alaska Youth Risk Behavior Survey and 1993 U.S. Youth Risk Behavior Survey

	%*
Alaska Boys	23.5
U.S. Boys**	20.4
Alaska Girls	6.7
U.S. Girls**	2.0

*% of all high school students who used chewing tobacco or snuff in the past 30 days
 **Source: Reference 1

Table 7.**Use of Chewing Tobacco and Snuff among Alaska High School Boys by Age and Grade: Alaska 1995 Youth Risk Behavior Survey**

	%* who are current users**	%* who are frequent users***
Age 15 or less	16.5	5.5
Age 16-17	26.1	8.2
Age 18+	29.8	6.6
Grade 9	19.6	7.0
Grade 10	22.0	6.5
Grade 11	25.3	8.3
Grade 12	29.1	6.2

*Percent of all high school boys

**Current use = used at least once in past 30 days

***Frequent use = used on 20 or more of the previous 30 days

Table 8.**Tobacco Use by Alaska Native High School Students: 1995 Alaska Youth Risk Behavior Survey**

	%
%* who ever tried cigarette smoking	90.7
%* who smoked in the past 30 days	61.9
%* who smoked on 20 or more of the past 30 days	43.7
%* who have used chewing tobacco or snuff in the previous 30 days	22.5

*Percent of all Alaska Native high school students

Table 9.**Tobacco Use by Alaska Middle School Students: 1995 Alaska Youth Risk Behavior Survey**

	%
%* who ever tried cigarette smoking	58.3
%* who smoked in the past 30 days	24.8
%* who smoked on 20 or more of the past 30 days	5.6
%* who have ever used chewing tobacco or snuff	30.3

*Percent of all Alaska middle school students (Grades 7 and 8)

Middle School Results

Over half of middle school students have tried smoking at least once; about one-fourth smoked at least one day in the past 30 days and 5.6% smoked on 20 or more of the past 30 days (Table 9). The results are similar for boys and girls, with the exception of smokeless tobacco use. Boys are more likely to report ever having used chewing tobacco or snuff than are girls (37.3% versus 22.1%).

The most common way middle school students obtained cigarettes is by borrowing them from someone else (77.2% of smokers); very few middle school smokers reported purchasing cigarettes at a store or vending machine.

DISCUSSION

Alaska adults have one of the highest smoking prevalence rates in the United States, similar to those found in Nevada and in the tobacco-growing states (2). The YRBS results indicate that Alaska high school students also have smoking rates higher than the national rate. Alaska Natives have even higher smoking rates. Furthermore, smoking is not uncommon among Alaska middle school students.

Smokeless tobacco use (chewing tobacco and snuff) is also used commonly by Alaska high school boys. The consumption of smokeless tobacco has been increasing in the United States, and most new users are adolescent boys (3,4,5). Smokeless tobacco is a major risk factor for oral cancer (6). Additionally, smokeless tobacco products contain nicotine, and their use can support nicotine addiction and may lead to cigarette use.

The majority of Alaska smokers (83.7%), began smoking between the ages of 10 and 20 years (7). Tobacco prevention education within schools is one of many interventions that can be effective at preventing tobacco use among youth. A 1994 Alaska School Health Education Profile survey conducted by the Alaska Department of Education found that 83% of secondary school principals reported that health education was a graduation requirement in their school (8). However 61% also reported that students were only required to take one health class from grade 6 through graduation.

Health education theories often are based on the premise that behavior change involves a certain level of knowledge about a behavior, attitudes that are supportive of the desirable behaviors and having the skills necessary to use the desirable behaviors. The School Health Education Profile found that 90% of health teachers teaching tobacco use prevention reported teaching to increase students' knowledge, 87% taught to improve students' attitudes and 76% taught skills to increase healthy behaviors (8).

An important Healthy People 2000 objective is for

no more than 4% of boys age 12-24 years to be current users of smokeless tobacco (9). Although the YRBS only measures youth who are in school, Alaska's estimate of 23% among high school boys indicates that we have a long way to go.

The statewide YRBS provides descriptive data on the *what, who, where* and *when* of tobacco use among Alaska students. The questions of *why* and *how* cannot be answered by this survey. However, the YRBS for the first time provides our state with baseline data that is comparable to the nation.

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Tobacco Erases 30 Years of Progress:

Preliminary analysis of the effect of tobacco smoking on Alaska Native birth weight

Neil J. Murphy, MD⁽¹⁾
Steve W. Butler, MS⁽²⁾
Kenneth M. Petersen, MD⁽³⁾
Victorie Heart, RNC, MS⁽⁴⁾
Colleen M. Murphy, MD⁽¹⁾

ABSTRACT

Objective: Investigate the relationship between tobacco and/or alcohol use and Alaska Native birth weight.

Methods: Data on weight, tobacco smoking and alcohol use among Alaska Natives were abstracted from 1989-91 Indian Health Service natality records based on birth certificates.

Results: Birth certificate data were available for 9,175 live births. Single live births were analyzed for 8,994 Alaska Natives. In women with no tobacco smoking the mean birth weight of their infants was 3,571 g; 1-5 cigarettes/day 3,429 g; 6-10 cigarettes/day 3,332 g ($p < .05$); and > 10 cigarettes/day 3,260 g ($p < .05$). Infants of Alaska Natives who reported no alcohol and no tobacco use had a mean birth weight of 3,579 g; alcohol use but no tobacco use 3,452 g; no alcohol but tobacco use 3,388 g; and both alcohol and tobacco use 3,281 g. ($p < .001$)

Conclusions: The mean birth weight of infants born to Alaska Native women with the highest use of tobacco were reduced by over 300 g compared to non-smoking Alaska Native women. Mean infant birth weight of tobacco smoking Yup'ik women in 1989-91 were reduced by over 400 g, comparable to weights reported in the 1960s.

INTRODUCTION

In 1960-62 a cohort study in Southwest Alaska revealed a profile of birth weight and infant mortality similar to a third world country with low birth weights, and infant mortality four times greater than that of U.S. whites (1). In 1980, 20 years after the original study, mean birth weight and infant mortality were similar to that of U.S. whites, due in part to improved health care and immunizations (2).

Maternal tobacco smoking during pregnancy has been shown to decrease infant birth weight, both with maternal smoking (3-5) and exposure to environmental tobacco smoke (ETS) (6,7). Birth weight is further decreased with the combined use of tobacco and alcohol (8). As reported in this journal and elsewhere in the literature, tobacco smoking and ETS have been associated with increased pediatric respiratory disease (7, 9) and sudden infant death syndrome (10).

This study reports the relationship of tobacco smoking and alcohol use and Alaska Native birth weight.

METHODS

This review of single Alaska Native live births is based on Indian Health Service natality information. The data set is derived from State of Alaska Bureau of Vital Statistics birth certificate data for 1989, 1990, and 1991.

The Yup'ik Inuit predominantly comprise the population reported for the Yukon Kuskokwim Delta Service Unit; Inupiaq Inuit in Kotzebue, Barrow, and Norton Sound Service Units; Athabascan Indian in Interior Service Unit; Tlingit, Haida, and Tsimshian are included as Southeast Coastal Indians from Mt. Edgecumbe and Annette Island Service Units; and Aleuts are included in the mixture of Alaska Natives at the Alaska Native Medical Center (ANMC). Tobacco smoking and alcohol intake were recorded by the birth attendant from

- (1) Alaska Area Native Health Service, Alaska Native Medical Center, Department of Obstetrics and Gynecology, Anchorage, Alaska 99501
- (2) Alaska Area Native Health Service, Division of Planning, Evaluation and Health Statistics
- (3) Alaska Area Native Health Service, Alaska Native Medical Center, Department of Pediatrics
- (4) Alaska Area Native Health Service, Maternal Child Health Coordinator

prenatal records without regard to trimester of use. Smokeless tobacco use was not recorded during the years reported.

Mean weights for each category were compared using a two sided t-test with $p < .05$ for statistical significance.

RESULTS

The total number of Alaska Native births reviewed was 9,175 (3021 for 1989, 3099 for 1990, and 3055 for 1991). Of the 8,994 Alaska Native single live births, there were 4,093 female and 4,195 male births of 20 or more weeks gestation. The overall mean birth weight was 3,501 g. The mean birth weights by race were: Southeast Coastal Indian 3,581 g ($n = 1,171$, SE 16.7) ($p < .05$); Athabascan Indian 3,489 g ($n = 902$, SE 18.0); Yup'ik Inuit 3,471 g ($n = 1,879$, SE 13.2); Inupiaq Inuit 3,468 g ($n = 1,763$, SE 13.5); and ANMC 3,475 g ($n = 3,262$, SE 9.9).

Tobacco smoking status was reported in 8,435 women. For all Alaska Native births of women who reported no tobacco smoking the mean birth weight was 3,571 g ($n = 5,477$, SE 7.33); 1-5 cigarettes/day 3,429 g ($n = 1,025$, SE 16.4); 6-10 cigarettes/day 3,332 g ($n = 1,324$, SE 15.2, $p < .05$); and > 10 cigarettes/day 3,260 g ($n = 609$, SE 24.5, $p < .05$) (Figure 1.)

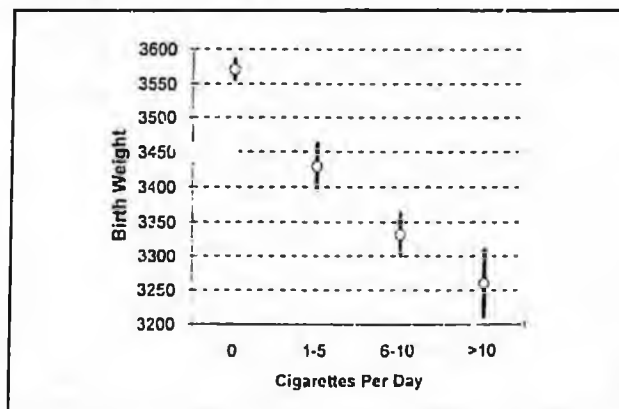


Figure 1. 1989-1991 Alaska Native mean birth weight in grams by number of cigarettes per day (bar indicates 95% confidence interval)

For Yup'ik Inuit who reported no tobacco smoking the mean birth weight was 3,512 g ($n = 1,360$, SE 14.6); 1-5 cigarettes/day 3,464 g ($n = 116$, SE 48.5); 6-10 cigarettes/day 3,248 g ($n = 86$, SE 74.4, $p < .05$); and > 10 cigarettes/day 3,110 g ($n = 25$, SE 132.4, $p < .05$) (Figure 2).

All Alaska Native births were categorized by use of alcohol as well as tobacco. Among Alaska Native women who reported no alcohol and no tobacco use the mean birth weight was 3,579 g ($n = 5,632$, SE 7.1); alcohol use but no tobacco 3,452 g ($n = 4,864$, SE 8.9, $p < .001$); no alcohol but tobacco use 3,388 g ($n = 5,120$, SE 7.5, $p < .001$); and both alcohol and tobacco use 3,281 g ($n = 5,376$, SE = 7.7, $p < .001$) (Figure 3).

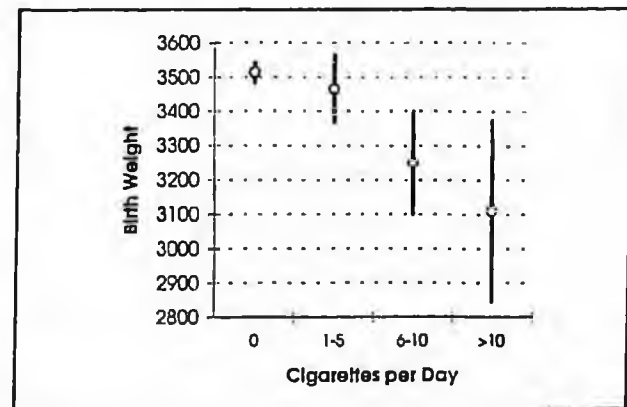


Figure 2. 1989-1991 Yup'ik Inuit mean birth weight in grams by number of cigarettes per day (bar indicates 95% confidence interval)

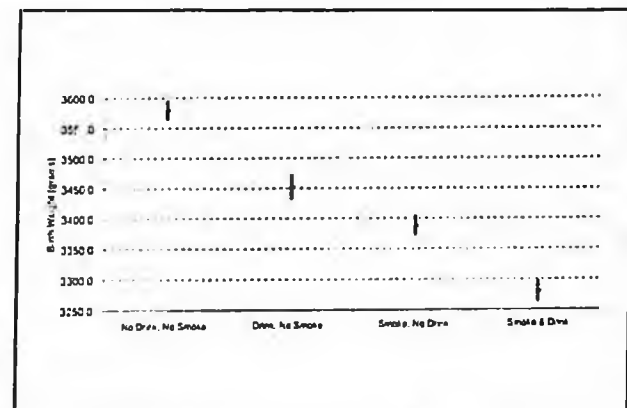


Figure 3. 1989-1991 Alaska Native mean birth weight in grams by tobacco smoking and use of alcohol (bar indicates 95% confidence interval)

DISCUSSION

The mean birth weight of infants born to tobacco smoking Alaska Native women was lower than the mean birth weight of infants born to non-smoking Alaska Native women. Women who reported the highest use of tobacco had infants whose weights were 300 or more grams lower. The mean 1989-91 birth weights of tobacco smoking Yup'ik women were lower than the mean birth weight for non-smoking Yup'ik women by over 400 g. The mean 1989-91 birth weights of tobacco smoking Yup'ik women was similar to the birth weights reported in 1960-62, when the infant mortality in the Yup'ik was 4 times that of U.S. whites (1,2).

The observed lower birth weights with maternal tobacco smoking among Alaska Native mirrors that reported in North American Natives (3), as well as other populations (4,5). Decreased birth weight has also been reported with ETS. (6,7) The mean Alaska Native birth weights were also observed to be significantly lower with the combined use of alcohol and tobacco, as previously reported in Denmark (8). As shown in this journal and elsewhere in the literature, maternal smoking and

ETS have been associated with increased pediatric hospitalization for respiratory disease (7, 9) and sudden infant death syndrome (10). These data are more chilling for the future when one considers that Alaska Natives currently have one of the highest rates of smoking in North America (11).

The mechanism of decreased birth weight in maternal tobacco use appears in part to be associated with vascular constriction and decreased uteroplacental blood flow (12-15). Cotinine serum levels have been quantitatively associated with decreased mean fetal birth weight (16). Ultrastructural changes in placental villi and fetal capillaries have been documented in smoking mothers and hypoxia, nicotine and carbon monoxide have been shown to pass the placental barrier (17).

Though both alcohol and tobacco use are preventable causes of decreased birth weight, these data confirm that smoking makes a quantitatively larger contribution (3). Public health measures in Alaska should concentrate on elimination of maternal tobacco and alcohol intake, as well as exposure to passive smoking, during pregnancy.

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Association between Maternal Smoking and Severe Respiratory Syncytial Virus Infections and Sudden Infant Death Syndrome

Rosalyn Singleton, MD⁽¹⁾

RESPIRATORY SYNCYTIAL VIRUS

Studies have clearly demonstrated that maternal smoking is associated with increased risk of lower respiratory illness (LRI) in the first few years of life. Respiratory syncytial virus (RSV) is the most common cause of lower respiratory illness, usually bronchiolitis or pneumonia, in infants and young children. Respiratory syncytial virus-related LRI is responsible for 100,000 hospitalizations and 5,000 deaths in the U.S. annually (1). In Alaska Natives, rates of RSV-associated hospitalization for children less than one year of age are 2 to 50 times the rates reported in other U.S. populations (2).

Passive smoke exposure has been shown to increase airway hyperresponsiveness in young infants and is related to persistent wheezing in grade school asthmatic children. In a case control study by McConnochie and Roghmann, any passive smoking and maternal smoking were statistically significant predictors of bronchiolitis (3). In a case control study by Duff et al, comparing actively wheezing children under two years of age to children without respiratory symptoms, a larger proportion of wheezing patients than controls were exposed to tobacco smoke, and most of the smoke-exposed children had cotinine levels (> 10 ng/ml) suggestive of heavy smoke exposure (4). A threshold level at which passive smoke exposure becomes clinically significant in causing or aggravating airway hyperresponsiveness has not been defined. Higher rates of asthma and increased usage of asthma medications have been documented in children exposed to mothers who smoke at least one-half pack of cigarettes per day. McConnochie and Roghmann found that maternal smoking was a powerful predictor of wheezing even in older children up to age 13 (5).

SUDDEN INFANT DEATH SYNDROME

A population-based study conducted in Sweden assessed risk factors for sudden infant death syndrome (SIDS). All infants surviving the first week of life were included ($n = 279,938$). The overall rate of SIDS was 0.7 per 1000 first-week survivors; maternal smoking doubled

the risk. There was a clear dose-response relationship. It is estimated that in some developed countries smoking may be the single most important preventable risk factor for sudden infant death syndrome (6).

Maternal smoking was established as a risk factor in a U.S. study published in 1993 that compared 485 SIDS cases with 1,800 control infants. Results showed that the risk of succumbing to SIDS was four times higher for babies whose mothers smoked during pregnancy than for those whose mothers did not (7). Infants of mothers who smoked after the baby's birth also had a greater risk of SIDS, as did infants in households where the father or another family member smoked, and the increased risk was dose related (8).

In the 1988 National Maternal and Infant Health Survey, review of a number of demographic, prenatal, and environmental factors showed that, among characteristics generally thought to be risk factors, only maternal smoking during pregnancy was independently associated with SIDS. Data from this nationally representative sample indicate that if women refrained from smoking while pregnant, up to 30% of SIDS might be prevented (9).

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(continued on page 51)

(1) Alaska Area Native Health Service, 250 Gambell Street, Anchorage, Alaska 99501.

Smokeless Tobacco and Oral Disease

James C. Singleton, DDS, PC⁽¹⁾

The oral effects of smokeless tobacco are numerous. They include: oral and esophageal cancer; gum disease with early tooth loss; tooth decay; and halitosis (1). Women who do not smoke but use snuff chronically, are 50 times more likely to develop oral cancer than non-users (2). Young people are not immune from developing cancer and pre-cancerous lesions at the site of contact with the tobacco. The figure below shows marked leukoplakia in a 13-year-old Alaskan smokeless tobacco user.



Nationally there has been a dramatic increase in the use of moist snuff, especially in young people (3). Among Alaska Natives, there is widespread use of cigarettes and smokeless tobacco by both children and adults which exceeds the national average. Smokeless tobacco use among Alaska Native children has been reported in 13% of kindergarten children, increasing to 30% in high school (4). Results of a more recent study indicate that as many as 68% of children 7-11 years old reported they had used snuff in the past and as high as 52% had used it recently (5). There was no statistically significant difference in use between boys and girls. Use increased with age and positive correlations were found with peer and family use. When these same children were questioned, 96% said they understood that smokeless tobacco products could cause oral cancer!

The Oral Health Survey conducted by the Indian Health Service in 1991 showed that in the Alaska Area the number of observable oral soft tissue changes found in school children which could be attributed to the use of smokeless tobacco was 30% when all forms of oral

manifestations were included (6). Three-fourths of these lesions are reversible within a year if the habit is discontinued.

Other studies substantiate the fact that smokeless tobacco use in American Indians and Alaska Native children is considerably higher (30-40%) than the same age group in the general population (5). Rates of occasional use of smokeless tobacco by American Indians and Alaska Natives are high even among the very young—74% of the girls and 90% of the boys reported weekly use of smokeless tobacco began using it before the age of 10.

It is obvious that children are not capable of comprehending the lifelong consequences of using snuff, nor have they developed the refusal skills necessary to avoid this dangerous habit. Use by family members, peers, and community leaders encourages children to model those they look up to. Experimentation generally leads to chemical addiction. Abstinence from smokeless tobacco results in signs and symptoms of nicotine deprivation that are similar to those seen in smokers after they stop smoking. Anecdotal reports of kindergartners placing a pinch of snuff in carbonated beverages and downing it to get a caffeine enhanced nicotine buzz are perfect examples of the type of experimentation and progression to more powerful medications and combinations. This progression has lead investigators to label snuff as a "gateway" substance since it frequently leads to the use of cigarettes, alcohol, and illicit drugs.

Even more alarming is the fact that in the communities where these surveys were conducted, family and community leaders did not consider smokeless tobacco use by children to be a major health concern. Unless the concern of these individuals can be raised; the future of American Indian and Alaska Native will include poor oral health.

Recognizing the above, community oriented prevention strategies are needed. Successful programs include the development of coping and refusal skills, emphasis on recognition of short term health consequences, and the inclusion of influential community role models. As health care providers we cannot allow children to be passive participants in their own destruction. Until they reach the age where they can make informed independent decisions about their own health they must be protected and encouraged by those responsible for their care.

(continued on page 51)

(1) Area Pediatric Dental Consultant, Alaska Native Medical Center, 250 Gambell St., Anchorage, Alaska 99501.

Nutrition and Smoking Cessation

Charlotte Stefanich, MS, RD, CHES⁽¹⁾

The fear of weight gain serves as a barrier for many clients who have a desire to stop smoking. This fear is founded on common knowledge and documented changes. The average weight gain following smoking cessation is about ten pounds and 15 % of women may gain thirty pounds or more (1). The physician's challenge is to help clients manage their expectations and behaviors to keep the weight gain to a minimum.

PHYSIOLOGICAL MECHANISMS

The smoker has a higher total energy expenditure than the non-smoker. The metabolic rate increases under the influence of nicotine. Caffeine also increases this rate, so frequently smokers have two agents acting to increase their caloric expenditure. Nicotine does not seem to have an appetite suppressant effect, nor does transdermal nicotine prevent weight gain. Smokers also have increased levels of lipoprotein lipase, the enzyme which facilitates removal of lipid from the blood and entry through the capillary wall into the adipose cell. This level does not decrease immediately at cessation of smoking and may be a factor in the weight gain that is common after quitting (2).

The use of dexfenfluramine or fluoxetine did not prevent the weight gain associated with smoking cessation. The serotonergic drugs reduced initial weight gain following smoking cessation, but when they were discontinued, weight increased. Clients had a total weight gain similar to those who had not had drug therapy (3). Helping clients reframe the weight gain as the weight they would be if they had not been a smoker has been suggested (4). It is important to emphasize that the health risks from smoking remain greater than those from additional weight.

Components in cigarette smoke are implicated in free radical mechanisms of protein damage. To compensate for this, the Recommended Dietary Allowance for ascorbic acid (Vitamin C) is forty milligrams more per day for the smoker (5). Functions of other anti-oxidants such as Vitamin E and beta carotene in damage prevention are being studied.

Smoking also influences the olfactory and taste sensations associated with food. Self-reported feelings

of hunger increase during cessation even by clients who were treated with nicotine replacement. As most smokers consume more calories, alcohol and sugar but less vitamins than non-smokers, these feelings are often dealt with by eating high sugar, high fat foods.

Nicotine also decreases the lower esophageal sphincter pressure resulting in frequent bouts of heartburn or esophagitis. Tobacco cessation reduces or eliminates these symptoms although they may continue during the withdrawal period. Cutting down on acid foods, fatty foods, and caffeine may help alleviate these problems.

BEHAVIORAL CHANGES

Part of the challenge in stopping smoking is the replacement of the hand to mouth activity. It is important to alert the client about avoiding the substitution of high calorie foods for cigarettes. Clients also need to recognize that often food serves as the trigger for a cigarette. Caffeine consumption parallels cigarettes smoked. Caffeine must also be factored into the total smoking cessation experience, as caffeine withdrawal also produces symptoms.

MANAGING WITHDRAWAL

Food choices during withdrawal can alleviate symptoms or promote greater discomfort. Heartburn may be decreased with a low fat diet and increased fluid intake. Smokers should be encouraged to monitor their food choices using the USDA Food Guide Pyramid just as they monitor their smoking behavior (Figure 1). The first cup of coffee should be accompanied by a nutrient containing food rather than a cigarette. Help the client review activities and times which elicit smoking. Have them list options which can be pursued to change either place, environment, or mental attitude in those situations.

Certainly exercise should be pursued as an alternative for sedentary smokers. Adding movement will keep the energy expenditure at a higher level and promote pulmonary and cardiovascular fitness. It needs to be a component of any healthy lifestyle. Help clients identify those activities they are willing to pursue so that they will be an enjoyable part of their day. Ask questions about exercise patterns on subsequent visits to emphasize their importance. In Alaska, the smoker who plans to quit needs to identify activity options for all seasons.

(1) Registered Dietician, Dietary Dept., Alaska Native Medical Center, 250 Gambell Street, Anchorage, Alaska 99501.

Walking is the easiest and least stressful exercise and requires little preparation. Traditional activities from berry picking to skiing should be encouraged.

POST-WITHDRAWAL NUTRITION

Relapse is a reality. Most clients attempt to quit smoking many times before they are successful. Each one of these attempts should be framed as a learning experience, rather than a failure. Certainly this is true of the client who has gained weight in initial attempts. Clients can develop better dietary and exercise patterns. Those changes may play a role in harm reduction from continued smoking.

There are many educational materials available which can be used to help guide a person's food and exercise choices. The American Cancer, Heart, and Lung Associations, the National Cancer Institute, the Cooperative Extension Agency and hospital patient education departments are some sources. Such materials increase clients' awareness of appropriate steps to take in stopping smoking. See the sample patient hand-out on this page.

For clients needing or requesting personalized dietary information connect them with a dietitian in your community. More intensive programs of intervention with group support or one-on-one counseling are also available in many places. Most of these feature healthy lifestyle changes which contain a nutrition component.

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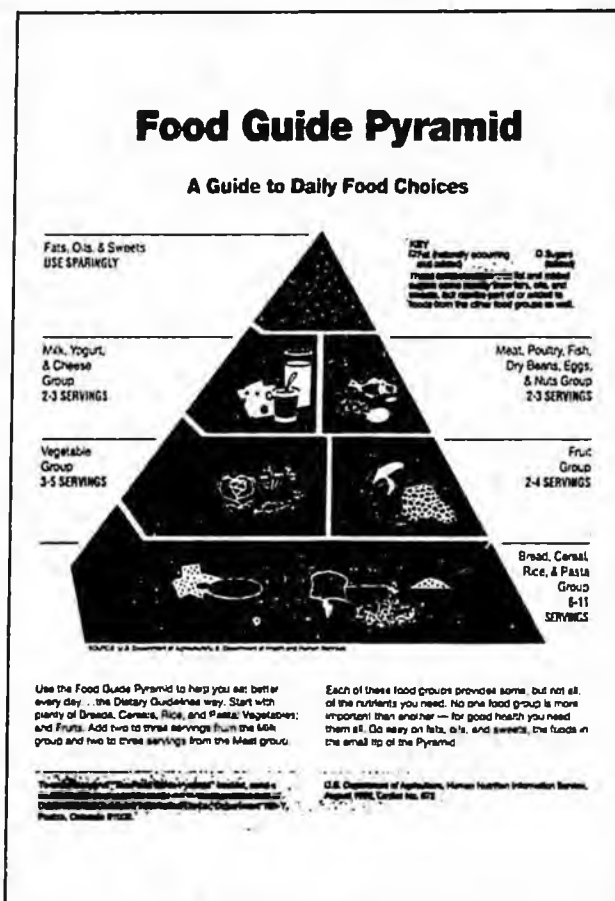


Figure 1. USDA Food Pyramid.

WHY WEIGHT ?

Be aware of when you eat and when you smoke.
Does one act trigger the other?

Choose other things to do as you quit-

- Walk
- Hike
- Swim
- Join an athletic club and attend classes
- Learn a new skill

Follow the Food Guide Pyramid

Choose fruits and vegetables as between meal foods

Chew sugarless gum

Drink water daily

Cut down on coffee, tea, soda, and chocolate

Learn to relax

Increase in Lung Cancer in Alaska Natives:

How high will the rates go?

Anne P. Lanier, MD, MPH⁽¹⁾

Cancer of the lung has risen dramatically among Alaska Natives in recent years. It is now THE leading cause of cancer death in Alaska Native men and women. This is a remarkable fact considering that cancer was reported to occur infrequently in this population as recently as the middle of the century. Lung cancer is now the most frequently diagnosed cancer in Alaska Native men, and ranks second in women. It is also the cancer for which the rates are increasing most rapidly. In 1950, one cancer death in an Alaska Native was recorded to the Territory's office of vital statistics (1). Lung cancer deaths in Alaska Natives now approach 30 per year (2).

In 1969 (the first complete year of data in the Alaska Native Tumor Registry), six patients were diagnosed with lung cancer. In 1995 there were 45, yet the population increase from 1970 to 1990 was less than double (51,000 to 86,000).

Several early physicians were impressed by the low occurrence of lung cancer in the Alaska Native population and reported their findings. In the late 1950s and early 1960s, E. Fuller Torrey found only four cases of lung cancer among 170 cancer patients seen at the Indian Health Hospitals in Anchorage and Mt. Edgecumbe from 1956-1961 (3). Regarding the findings for lung cancer, he stated that "the low incidence is striking".

M. Walter Johnson reviewed cases at the Alaska Native Medical Center and found only nine patients with lung cancer diagnosed during the seven year period, 1969-73. There were five men (all heavy smokers), four women (one of whom was a smoker)(4). All four cancers in women were adenocarcinoma. Robert Fortuine reviewed cancer data for the Bethel region for the years 1957-67. Among 85 patients diagnosed with cancer at the Bethel hospital during those years, five had lung cancer, four of the five patients were men (5).

Figure 1 compares incidence rates for lung cancer in Alaska Natives for the last 25 years with those of the US. Rates for AN are from the Alaska Native Tumor Registry. US data are for the White population and are taken from the National Cancer Institute's SEER (Statistics, Epidemiology and End Results) program; a nationwide system of population-based tumor registries in the US (6). The SEER program has been in existence since

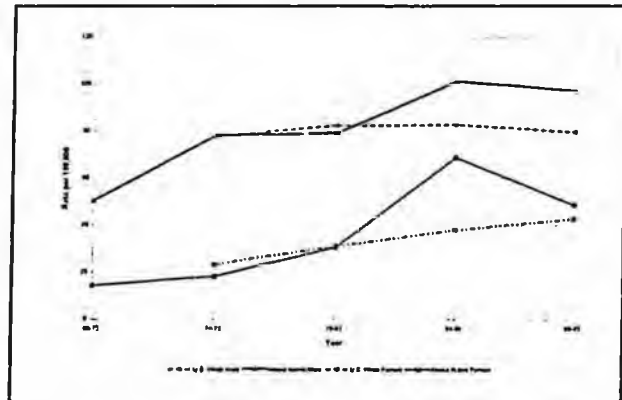


Figure 1. Incidence rates of lung cancer for men and women, Alaska Native vs. US Whites (rates age-adjusted to the US 1970 population).

1973. Cancer incidence data are not available for the non-Native population of Alaska. The figure indicates that Alaska Native rates for lung cancer were below the US in the sixties, caught up in the seventies, and now exceed US rates for both men and women.

Rates of deaths from lung cancer are available for a longer period of time. Figure 2 compares death rates from lung cancer for Alaska Natives and US whites for most of the 20th century. The curves for lung cancer in Alaska Natives parallel those of US whites. However, the curves are shifted to the right indicating that, compared to the US in general, the increase in lung cancer death rate began about 20 years later in Alaska Native men, and about 10 years later in women. Although there is little information about past tobacco use patterns in Alaska, reported delay of frequent regular use of to-

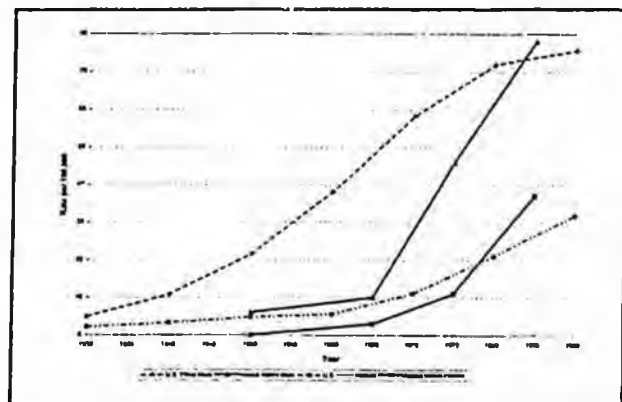


Figure 2. Death rates for lung cancer for men and women, Alaska Native vs. US (rates age-adjusted to the US 1970 population)

(1) Alaska Area Native Health Service, Indian Health Service, 250 Gambell Street, Anchorage, Alaska 99501.

bacco in rural Alaska until after World War II (in contrast to after World War I in the "lower 48") would explain the delayed rise in lung cancer death. As other articles in this issue document, the prevalence of current smokers in Alaska Natives is nearly double that of the national average. In addition a large number of adults (nearly 30%) are ex-smokers. It is impossible to predict exactly when the lung cancer epidemic will peak or how high it will go, but tobacco related deaths now exceed the national average. This is particularly regrettable since lung cancer and other tobacco-related deaths are PREVENTABLE.

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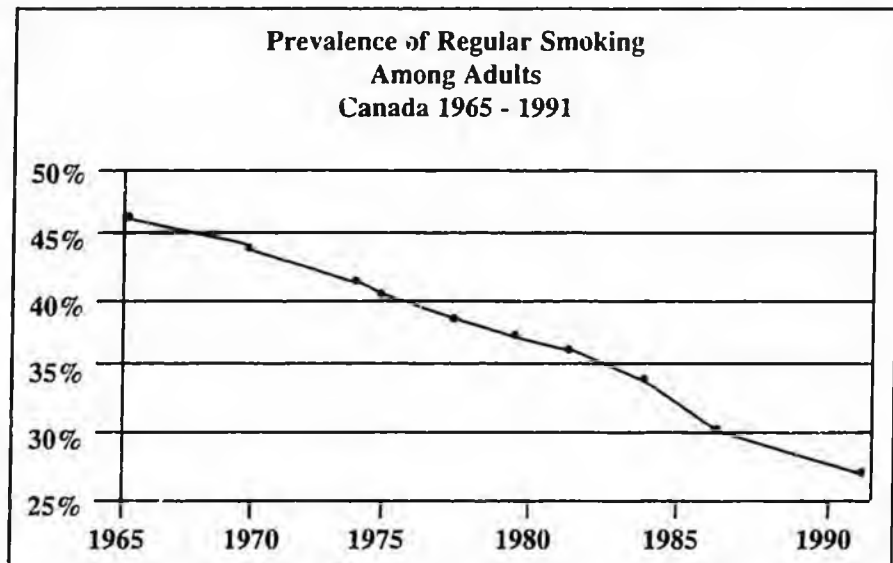
Tobacco Taxes: The Canadian Experience

David T. Sweanor⁽¹⁾

Tobacco control efforts in Canada are now generally considered to be among the most effective in the world. During the past decade, not only were taxes increased to among the highest in the world, but tobacco advertising was banned, prominent warnings were placed on packages, and legislated protection from environmental tobacco smoke has been implemented for a great many areas. As a result of all these measures, Canada has seen a reduction in tobacco consumption that is greater than any other major country has ever accomplished in any ten year period. There has also been an accelerating pace to this decline (see graph).

This report concentrates on taxation policy. That is not to say that other factors have not been an important part of Canada's reduction in tobacco use over the past 10 years. But the evidence suggests that, of all elements, the single most effective policy has been increasing taxes.

It is generally recognized in economic theory, as well as in every day life, that purchasing decisions are influenced by changes in the price of goods. Economists talk about the degree of responsiveness of demand to changes in price as a product's "price elasticity of demand." American research has suggested that tobacco products show a price elasticity of about -0.4 among adults. The research also indicated that young people were particularly price-sensitive. In fact, the most comprehensive look at teenagers in the United States indicated a price elasticity of -1.4. What these figures mean is that every 10% increase in the "real" (i.e., inflation adjusted) price of tobacco would reduce adult consumption by about 4% and youth consumption by about 14%. Canadian experience with raising taxes during the past decade has led to estimates of price



elasticity that are very much in line with the earlier American research.

Prevalence declines in Canada have been very significant over time, and particularly steep during the time of rising prices. An analysis of major prevalence surveys from the Canadian government shows a clear trend. Prevalence of regular smoking has fallen much more quickly as prices rose in the past 10 years. Prevalence of regular smoking among adults in Canada decreased from 46% in 1965 to 26% in 1991. The average annual decline in regular smoking up until 1981 was approximately 1.5%. Between 1981 and 1991, when taxes increased significantly, the average annual decline increased to approximately 3.2%.

The research on the effects of tobacco price increases indicated that young people were more price-sensitive than adults. The Canadian experience confirms this view. The most telling indication of price-sensitivity is shown when we juxtapose teenage smoking trends and the real price of cigarettes (see Nakamura this issue).

The relationship between price and demand is such that the tobacco tax increases, while reducing consumption, led to massive increases in tobacco tax revenue. From the standpoint of any government, the revenue gains are enhanced by the fact that taxes make up only a portion of the final selling price. Therefore an increase in the tax represents a proportionately smaller increase

(1) Senior Legal Counsel, Non-Smoker's Rights Association, 130 Albert Street, Suite 1903, Ottawa, Ontario, Canada, K1P 5G4.

in overall price. This means that a government with a tobacco tax that currently represents 20% of the retail price of cigarettes could double its tax per pack while total sales would be expected to decline by only about 8%. The net revenue gain would be in the range of 84%.

The Canadian experience has been replicated elsewhere. This report is intended as a case study in using tax policy as a key element in a comprehensive tobacco prevention and control strategy. The industry knows every bit as well as the health lobby that increases in tobacco tax are the single most potent of all currently used measures to reduce tobacco consumption.

Due to cigarette smuggling caused by low U.S. tobacco taxes, the Canadian government announced a rollback in its federal tax on February 8, 1994. The rollback reduced the federal excise tax by between 50 cents and \$1.00 (CD) per pack. Quebec, Ontario, New Brunswick, Nova Scotia and Prince Edward Island also reduced provincial taxes in this range.

The tax rollback was a response to growth in cigarette smuggling resulting from the tax discrepancy between Canada and the U.S. Canadian manufacturers shipped large quantities of tobacco products free of Canadian taxes to the northern United States, from where smugglers would bring them back into Canada. The fact that Canadian cigarettes are a different blend from American, and that there is very little demand in

Canada for the American style means that virtually all cigarettes smuggled into Canada originated from Canada. Smuggled cigarettes represented between 20 and 30 percent of the total Canadian market, and a higher percentage in Quebec, Ontario and New Brunswick.

The tobacco industry warns that the U.S. will face a smuggling problem similar to Canada's if the U.S. raises tobacco taxes. In fact, a higher U.S. federal tax would eliminate smuggling along the Canadian border. By balancing out price discrepancies, such a tax increase would substantially reduce the small amount of bootlegging that occurs between states, between Native American reservations and states, and between military bases and states.

Alaska should not encounter a smuggling problem like Canada's if a tax increase is enacted. Alaska's population is not close to a low tax jurisdiction since the big tax reductions happened in Eastern Canada. The Western provinces refused to lower taxes and have avoided any significant smuggling problems.

This article is a synopsis of the following report:

Swenor DT, Martial LR, Dossetor JB. The Canadian tax experience: A case study. The Non-Smokers' Rights Association (Canada) and The Smoking and Health Action Foundation (Canada). August, 1993.

Alaskans Voice Strong Support for Tobacco Tax Increase

Anne Marie Holen⁽¹⁾

Almost three-quarters of Alaskans 18 and over support a major increase in state tobacco tax rates, according to a recent survey conducted by Mathematica Policy Research of Princeton, New Jersey. The survey was funded by the Robert Wood Johnson Foundation which supports tobacco control activities in Alaska through a SmokeLess States grant to the Alaska Native Health Board.

The survey was conducted to assess public support for a \$1 per pack increase in the state cigarette tax. Such an increase has been specified in several bills introduced in the Alaska Legislature this session, and was included in the recommendations of the Long Range Financial Planning Commission as a way to raise new revenue and reduce future health care costs in the state by discouraging tobacco consumption.

Because initial publicity in Alaska about the tobacco tax proposal was largely in the context of addressing the state's fiscal gap, the survey included questions about that issue. Responses revealed that 74% of Alaskans have heard about the fiscal gap and that 72% believe that the fiscal gap can be closed only with a mix of spending cuts and new revenue sources.

The survey also provided side-by-side comparisons of public support for various measures to reduce the fiscal gap. From the responses, it is clear that alcohol and tobacco taxes are by far the most popular sources for new revenue. When asked to choose between alcohol and tobacco taxes, 31% indicated a preference for a tobacco tax, 29% for an alcohol tax, and 40% had no preference. When compared to other measures such as a motor fuels tax, state income tax, and state sales tax, preference for a tobacco tax increase ranged from 68% to 76%.

Other questions and answers include the following:

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?

	Tobacco Use			Political View			
	Non-users	Users	Both	Liberals	Mod-erates	Conserv-atives	
Strongly Favor	26%	49%	60%	Strongly Favor	53%	52%	45%
Somewhat Favor	29%	25%	24%	Somewhat Favor	20%	23%	30%
Somewhat Oppose	9%	5%	4%	Somewhat Oppose	1%	8%	5%
Strongly Oppose	30%	16%	9%	Strongly Oppose	17%	15%	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?

	Tobacco Use			Political View			
	Non-users	Users	Both	Liberals	Mod-erates	Conserv-atives	
Strongly Favor	81%	53%	72%	Strongly Favor	74%	73%	72%
Somewhat Favor	12%	19%	14%	Somewhat Favor	10%	15%	14%
Somewhat Oppose	1%	7%	3%	Somewhat Oppose	2%	3%	2%
Strongly Oppose	6%	17%	9%	Strongly Oppose	8%	9%	10%

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?

	Tobacco Use			Political View			
	Non-users	Users	Both	Liberals	Mod-erates	Conserv-atives	
Higher Rate	8%	8%	8%	Higher Rate	5%	8%	5%
Same Rate	84%	79%	83%	Same Rate	81%	79%	89%
Lower Rate	4%	9%	6%	Lower Rate	9%	8%	4%

[After reading pro- and anti-tax arguments] Now that you've heard this information, 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?

	Tobacco Use			Political View			
	Non-users	Users	Both	Liberals	Mod-erates	Conserv-atives	
Strongly Favor	70%	31%	58%	Strongly Favor	55%	60%	59%
Somewhat Favor	13%	20%	15%	Somewhat Favor	18%	15%	15%
Somewhat Oppose	5%	9%	7%	Somewhat Oppose	6%	6%	6%
Strongly Oppose	9%	37%	18%	Strongly Oppose	20%	17%	17%

CONCLUSION

The results of the Mathematica survey are consistent with data from other states which show strong public support for major increases in tobacco taxes. The Coalition on Smoking OR Health, comprised of the American Cancer Society, American Lung Association, and American Heart Association at the national level, has recommended an increase in federal cigarette excise

(1) Alaska Native Health Board Trampling Tobacco Project, 1345 Rudokof Circle, Anchorage, AK 99508.

taxes of \$2 per pack, with an additional minimum \$1 per pack cigarette tax imposed in each state. Currently, although Alaska has one of the highest rates of smoking and smoking related deaths in the country, the state cigarette tax is below the national average. If the tobacco tax legislation being considered by the Alaska Legislature is enacted into law, Alaska will become the first state to break the \$1 per pack barrier for state cigarette taxes.

Criminal Deception

Ronald M. Davis, MD⁽¹⁾

On November 10-12, 1995, the Northeastern University School of Law in Boston sponsored a conference entitled "Attorneys General Conference on Tobacco, Youth and the Public Health: Opportunities for Action." The purpose of the conference was to bring together Attorneys General (or their representatives) to discuss state lawsuits against tobacco companies seeking reimbursement for state costs from smoking-attributable disease (principally health care costs in the Medicaid program). At the time the states of Florida, Minnesota, Mississippi and West Virginia had launched such suits. Since then Massachusetts has joined the fray, and several other states are considering similar action. The conference was attended by Attorneys General or their representatives from the states involved in this litigation, as well those from a few dozen other states that were contemplating filing their own suits, or simply interested in gathering information.

I was asked to speak to the group on evidence that the tobacco industry markets its products to kids. Given the limited time available to address this broad topic, I decided to focus on evidence from the industry's marketing, advertising, and promotional activities. I did not review the internal industry documents that indicate the industry's interest in marketing their products to kids nor the scientific studies that demonstrate the impact of their promotions on youth. My presentation was organized along 17 different lines of evidence pointing in the direction of tobacco industry targeting of kids (see box).

CASH

At the outset it's important to consider the sheer volume of tobacco industry spending on cigarette marketing. In 1993 cigarette companies spent \$6.03 billion to advertise and promote cigarettes, a twelve-fold increase over the \$0.49 billion spent in 1979. When expenditures are adjusted for inflation, they still increased by 450% during this time period (1).

The expenditures in 1993 are equivalent to \$190 per second. Imagine if that sum of money were made available to health advocates to sell health, instead of to the tobacco industry to sell death and disease.

This level of spending does not, by itself, speak to the

(1) Director, Center for Health Promotion and Disease Prevention, Henry Ford Health System, One Ford Place, 3C, Detroit, MI 48202-3450; and editor of the journal *Tobacco Control*.

issue of industry targeting of youth. But it is likely to have a huge impact on youth, by contributing to the ubiquity of cigarette advertising and promotion (see below).

Tobacco Industry Targets Youth

Cash
pRomotion
ubiquity
Marlboro miles . . .
Imagery
Niche marketing
Athletics
Language

product placement
 vending machines
Copyright infringement
celebrities
Product giveaways
Toys
Instructions
violations of TV ad ban
international

PROMOTIONS

Cigarette companies are shifting their marketing dollars from traditional forms of print advertising (on billboards, in magazines and newspapers, and at the point of sale) to promotional activities such as distribution of coupons and free samples, and sponsorship of sporting, cultural, and entertainment events. The proportion of the cigarette industry's expenditures on advertising and promotion that have been devoted to promotional activities has increased from 30% in 1980 to 84% in 1993 (1). Many of these promotions, such as free sample distribution and sponsorship of sporting events, reach children and teenagers (2-5), a fact that cannot be unknown to the industry.

UBIQUITY

As mentioned above, the cigarette industry spends a huge amount on advertising and promotion. With this largess cigarette companies are able to blanket our environment with images and messages that glamorize

smoking. Tobacco billboards along our highways and in our communities are impossible for people — young and old — to ignore. Tobacco signs in stores (doors, clocks, change dishes, and so on), on grocery baskets, in trains and buses, at car races and tennis tournaments, in movies, on clothing, at video arcades, and on toys, are only a small portion of the pro-smoking cues to which we are regularly exposed.

The 1989 Surgeon General's report on smoking and health pointed out that "the ubiquity and familiarity of tobacco advertising and promotion may contribute to an environment in which tobacco use is perceived by users to be socially acceptable, or at least less socially objectionable and less hazardous than it is in fact." (6) Common sense dictates that this effect would apply to potential users (including children) as well as to current users.

MARLBORO MILES

A particularly pernicious type of promotion that has proliferated in recent years are cigarette continuity programs (or "frequent smoker" programs). These are promotional campaigns that provide free or discounted products (usually bearing tobacco brand names) to consumers for proof-of-purchase coupons or equivalent "currency" such as Marlboro Miles and Camel Cash. Recent evidence confirms the popularity of these campaigns among children and teenagers (7-10).

IMAGERY

The imagery in cigarette advertising makes it obvious that youth are a key target. Joe Camel describes smooth dating moves. The Marlboro man epitomizes the rugged individualism to which many young people aspire. An ad for Kool cigarettes shows a young, smug-looking couple — wearing jeans, tank tops, and high-top tennis shoes — standing next to a motorcycle, sending an unspoken message about rejecting authority (Figure 1). Sexual themes and imagery in cigarette ads heighten the raging hormones of our kids. Virginia Slims, Super Slims, Silva Thins, Capri, and other women's brands tout the thinness of the cigarette, a thinly veiled message to young girls and women about the weight-losing effect of smoking.

NICHE MARKETING

Tobacco companies use specific media to target niches in the marketplace, including youth. In the late 1960s the industry offered to voluntarily pull its advertising from television and radio because of its "substantial audience of young people" (11). Nevertheless, it advertises heavily in *Glamour*, one fourth of whose

readers are girls under age 18, and in *Sports Illustrated*, one third of whose readers are boys under age 18. For a number of years R.J. Reynolds was the exclusive advertiser in a magazine called *Moviegoer*, which was distributed free in hundreds of movie theaters around the country; one half of those who attend movie theaters are less than 21 years of age (3).

ATHLETICS

The cigarette industry's voluntary advertising code includes a provision stating that "Cigarette advertising shall not ... show any smoker participating in, or obviously just having participated in, a physical activity requiring stamina or athletic conditioning beyond that of normal recreation" (12). However, a Kent ad shows a male tennis player, presumably having just finished his match, with a cigarette (Figure 2). A Vantage ad shows a female ballet dancer, who appears to have just completed a vigorous workout, with a cigarette (Figure 3). Cigarettes are heavily advertised in newspaper sports sections, and at times the separation between editorial and advertising content becomes blurred (e.g., a Marlboro Sports Calendar, showing game schedules under a Marlboro banner). Sports associations lend their good name to cigarette promotions (e.g., Winston NBA sweepstakes, and NFL lighters provided free with the purchase of Winston cigarettes). Teenage sports enthusiasts are no doubt affected by these promotions.

LANGUAGE

Cigarette advertisers speak to youth in their own language. A simple two-letter word — YO — takes up one half of a full-page ad for Merit cigarettes. A tough-looking blond in a skin-tight suit, holding a cigarette, is "Totally Kool." Parliament ads promote the cigarette's "Perfect Recess." What do children think of, when they hear the word "recess"?

PRODUCT PLACEMENT

For years cigarette companies paid hefty sums of money for cigarettes and their brand names to be shown in movies. Perhaps the most well known example — and the most egregious — is the \$40,000 spent by Philip Morris to place the Marlboro name throughout the kids' movie "Superman II" (13).

The manufacturer of Lark cigarettes reportedly paid \$300,000 to place Lark images in the James Bond movie "License to Kill." After this arrangement became known and was criticized, the movie producer added a Surgeon General's health warning to the movie — shown at the end of the movie, after the credits.

Other examples, including several movies popular

among kids, have been catalogued by Stop Teenage Addiction to Tobacco (STAT) (Springfield, MA).

VENDING MACHINES

Vending machines are another way in which children are encouraged to smoke. If we, as a society, were serious about enforcing the laws that exist in all 50 states prohibiting the sale of tobacco to minors, would we allow cigarette sales through vending machines? Would we ever consider the sale of alcoholic beverages through vending machines? If the tobacco industry were truly not interested in recruiting kids, wouldn't they support a ban on cigarette vending machines? Instead, we have a situation where most cigarette vending machines are unsupervised, uninspected, and unregulated. Some vending machines even sell cigarettes and candy out of the same machine!

The rules proposed by the Food and Drug Administration to curb minors' access to tobacco and their exposure to tobacco promotions would ban cigarette vending machines (14). The rules have been challenged in court by many tobacco and advertising interests.

COPYRIGHT INFRINGEMENT

Cigarette brand names are used on products targeted to kids. The best example is candy cigarettes, which come in several varieties (e.g., bubble gum, chocolate, or a hard sugary candy) (15). Candy cigarettes are often sold with brand names that are identical to those of real cigarettes, and with packaging and logos that are strikingly similar to those of their tobacco counterparts. In other cases, minor changes are made to the brand names (e.g., Cool instead of Kool, Lucky Spike instead of Lucky Strike, Pell Mell instead of Pall Mall, L&N instead of L&M). Research indicates that candy cigarettes may encourage smoking initiation among youth (16).

When the matter of candy cigarettes is raised, cigarette companies are always quick to point out that they don't manufacture these products. That may be true, but if these companies were not interested in kids, wouldn't they take action against this obvious copyright infringement?

Egregious examples are also seen in other countries with respect to American cigarettes. In Thailand, for instance, Winston kites and Marlboro school notebooks (Figures 4 and 5) have been distributed. In these cases, R.J. Reynolds and Philip Morris are guilty of one of two sins: 1) direct pandering to children, or 2) impotent action to prevent offensive copyright infringement.

CELEBRITIES

In their voluntary advertising code, the cigarette companies agreed to avoid the use of testimonials from

athletes or other celebrities perceived to appeal to the young (5). But double standards abound. In Japan, the famous actor James Colburn appears in youth-oriented television commercials for Lark cigarettes. Closer to home, smokeless tobacco companies, which are not bound to the cigarette code, show no restraint in using athletes and other celebrities to hawk their products. Many famous athletes have been featured prominently in smokeless tobacco promotions, including Walt Garrison (football/Dallas Cowboys), Terry Bradshaw (football/Pittsburgh Steelers), George Brett (baseball/Kansas City Royals), Sparky Lyle (baseball/Texas Rangers), and Tom Seaver (baseball/Cincinnati Reds). In one ad, musician Charlie Daniels says, "When our band's cookin', the music smokes. But not me. Because like a lot of my friends I use smokeless tobacco." (17)

PRODUCT GIVEAWAYS

Non-tobacco products are often given away with the purchase of cigarettes. Many of these products have special appeal to children and adolescents, including sun glasses, cassette tapes, caps, a long cylindrical tube for cans of beer or soft drinks (with a shoulder strap for ease of carrying), and lighters with a picture of the helmet of the local professional football team (and the official logo of the National Football League).

From 1980 to 1993, cigarette industry expenditures for "specialty item distribution" increased from \$69 million to \$756 million. The proportion of total cigarette advertising and promotional expenditures devoted to these product giveaways increased during this period from 5.6% to 12.5% (1).

TOYS

Tobacco product brand names appear on toys and games. Philip Morris has distributed Marlboro frisbees at the gift shop at its Richmond, Virginia headquarters (Figure 6). Toy race cars emblazoned with the names of cigarettes (e.g., Marlboro) and smokeless tobacco products (e.g., Skoal, Copenhagen, Chattanooga Chew) have been sold in toy stores throughout the United States (Figure 7). Newport basketball games are seen in video arcades (18).

Overseas examples are evident too. In Buenos Aires, Argentina, on the occasion of the Eighth World Conference on Tobacco and Health in 1992, I picked up a toy Camel car (a photograph of which was published in Tobacco Control (19)). Three years later, at the next World Conference on Tobacco and Health, in Paris, I purchased a similar product. Also in Paris, I came across a Formula One children's ride, in which different "kiddie cars" bore stickers for Marlboro, Winston, and Camel (20).



Figure 1. A Koool ad -- targeting senior citizens?



Figure 2. Kent tennis player -- is this "normal recreation"?



Figure 3. Vantage ballet dancer -- is this "normal recreation"?



Figure 4. A Winston kite from Thailand

In some cases these promotions occur by direct action of the cigarette company (e.g., the Marlboro frisbee). In other cases cigarette company involvement may be more indirect, but again, these companies could prevent the use of their brand names in children's products through licensing arrangements or legal action, if they were truly interested in avoiding the youth market.

INSTRUCTIONS

Some smokeless tobacco advertising provides instructions on how to use the product. This clearly indicates that at least some advertising is aimed at recruiting new users, contradicting the "party-line" statements by tobacco and advertising industry spokespersons that the only effects of tobacco advertising are to promote brand loyalty and brand switching.

Former Dallas Cowboys star Walt Garrison, for example, "answers your questions about smokeless to-

bacco" in *Parade* magazine (June 8, 1980) and in other publications (21). One answer to a question states, "At first you could feel a slight irritation on the gum, and the tobacco may move around your mouth more than it should, and you might work up too much saliva. But learning is part of the fun, and these things pass with practice. Two weeks should make you a 'pro.'"

Similarly, a brochure distributed at the point of sale, with the headline "It's as easy as 1-2-3", gave instructions on how to use Skoal Bandits (21).

VIOLATIONS OF TV AD BAN

Cigarette advertising on television and radio was banned in 1971. Smokeless tobacco advertising in the broadcast media was banned in 1986. Nevertheless, these products continue to be promoted on television in a variety of ways. Tobacco sponsorship of athletic events, such as Marlboro car races or Virginia Slims tennis tournaments, leads to repeated mentions of the



Figure 5. A Marlboro school notebook from Thailand.



Figure 6. A Marlboro frisbee sold by Philip Morris.



Figure 7. Skoal Bandit toy car "For ages 10 to adult."



Figure 8. Salem sponsors a breakdance contest in Malaysia.

brand name by announcers and graphic displays of the brand name on the television screen throughout the broadcast. Signs and billboards at the events are captured by television cameras, and, in fact, these signs are often placed at strategic locations to maximize the likelihood that they will be picked up by cameras. Patches bearing the brand name appear on athletes' clothing, which often find their way onto television during the athletic competition and post-competition interviews. On February 23, 1995, the ABC program "Day One" aired a segment showing how sponsors of NASCAR car races train their racers (and presumably others who wear their emblems, such as pit crews) to slip the sponsor's name into a sound bite, and their emblems into camera shots, during media interviews (22). In one 94-minute broadcast of the 1989 Marlboro Grand Prix, the Marlboro name was seen or mentioned 5,933 times, and the name was seen for a total of 46.2 minutes, or 49% of the total broadcast time (4). How can the tobacco

industry do this and at the same time profess to have volunteered to withdraw cigarette advertising from television and radio because of its "substantial audience of young people" (11)?

Last year the Justice Department, after two and a half decades of ignoring violations of the ban on broadcast cigarette advertising, began to take action against Philip Morris for placing cigarette signs near scoreboards and in other locations where they were likely to be captured by television cameras. However, this action does not extend to some sports (e.g., car racing) where tobacco sponsorship is dominant, and does not yet involve other cigarette companies.

INTERNATIONAL

Examples are given above where U.S. tobacco companies market their products overseas so as to appeal to, and lure in, very young customers. Other examples

include advertisements promoting free tickets to a rock concert in Taiwan for returning five empty packs of Winston, Salem sponsorship of a break dance contest in Malaysia (Figure 8), and Salem sponsorship of television concerts in Hong Kong by U.S. pop stars Madonna and Paula Abdul (23).

CONCLUSION

The evidence that tobacco companies are targeting kids — presented only in abbreviated form here — is abundant. The industry's advertising and promotional campaigns demonstrate a callous, reckless, immoral disregard for the health and welfare of our children. When one considers evidence beyond marketing practices — from internal industry documents, patent applications, testimonials from researchers formerly employed by the industry, and so on (14) — a pattern emerges that can be summed up by two words: criminal deception.

The manufacture, promotion, sale, and use of tobacco products need to be regulated and controlled in a manner proportionate to the enormity of the damage they wreak on public health, the economy, the environment, and society. And the manufacturers and their co-conspirators — and the individuals who run those companies — must be held liable for the harm they cause.

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Tobacco Control and the American Medical Association

Thomas P. Houston, MD⁽¹⁾

More than 400,000 Americans die prematurely each year from the combined effects of active smoking and exposure to environmental tobacco smoke (ETS). Smoking is the major cause of lung cancer, of deaths from emphysema and chronic bronchitis, and is a principal cause of heart disease and stroke. About one-half of smokers die from a tobacco-related illness or condition - almost 25% of the total deaths in the U.S. (1).

The decision to assume the enormous risks of smoking is not usually one made by informed adults. Nearly 90% of new smokers are under the legal age for purchase of tobacco products. Three thousand children begin regular smoking daily. Children discount the regular risks of smoking, overestimate their ability to quit, and believe that smoking is much more the norm among adults and their peers than is really the case.

Since 1847, the mission of the American Medical Association (AMA) has been "to promote the science and art of medicine and the betterment of public health." Former Surgeon General Dr. C. Everett Koop has described tobacco use as "the nation's number one public health problem." In the context of public health, tobacco use prevention and control has become an increasingly important part of the AMA's strategy.

The first mention of tobacco in the "Digest of Official Actions of the AMA House of Delegates" comes in a 1960 resolution for the AMA to "clarify its position regarding the harmful effects of tobacco ... and take a lead position in an educational campaign aimed at the youth of the United States." In the early 1980's, the volume of resolutions increased markedly. The actions called for were much more pointed and action oriented. Since then, the AMA has begun to act in ways that promote tobacco control principles, such as supporting a \$2 increase in the federal excise tax on cigarettes. Prevention and control of tobacco use is one of the key issues in the American Medical Association's 1994-1996 strategic corporate plan.

In general, four key areas exist for policy development in tobacco control: curbing youth access to tobacco, protecting the public from the hazards imposed by ETS, restricting tobacco industry advertising and promotion, and encouraging higher excise taxes on tobacco products.

(1) Director, Department of Preventive Medicine & Public Health, American Medical Association, 515 N. State St, Chicago, IL 60610.

YOUTH ACCESS

The National Cancer Institute estimates that at current teen smoking rates, five million American children will die prematurely from having begun to smoke. In many states communities have enacted laws that would keep children from purchasing tobacco. The key tobacco industry strategy is to introduce weak legislation at the state level which expressly preempts communities from passing their own effective laws or ordinances. Specifically the industry opposes effective legal barriers such as licensing tobacco vendors and giving local authorities enforcement power.

The industry prefers: legislation which provides fines only for those who "knowingly" sell tobacco to children; outlawing public health research and investigative reporting about illegal sales; holding the child purchaser not the merchant-seller responsible for the illegal sale. Lobby and state testimony by medical society members should be focused on meaningful legislation that will actually prevent tobacco sales to children.

ENVIRONMENTAL TOBACCO SMOKE

In 1993 environmental tobacco smoke (ETS) was officially classified as a Class A carcinogen by the Environmental Protection Agency. ETS causes 50,000 premature deaths annually. The serious public health threat of ETS demands attention from the health community as well as government agencies. Since laws that restrict smoking in business and public places reduce consumption, the tobacco industry will fight them to increase its profits. Health providers and medical societies should actively support clean indoor air regulations and legislation.

PROMOTION

The tobacco industry spends over \$5 BILLION yearly to promote its products! Recently much of this has been directed at youth. Overall, 85% of youth purchases are focused on the most highly advertised brands in the US — Marlboro, Camel, Newport. Promotion of the race car circuit, clothing and trinkets with brand logos, and distribution of free samples have increased dramatically in recent years. Monitoring youth activities targeted by the industry and countering them with pro-health

messages can be useful strategies for organized medicine.

TAXATION

Since the landmark Surgeon General's report in 1964, taxes on tobacco, adjusted for inflation, have *dropped* about 28%. The percentage of the retail price of tobacco attributed to taxes has dropped from 50% to 25%. Since 1964, tobacco industry profits have risen considerably because of frequent, substantial raises in the wholesale prices of cigarettes. In recent years, tobacco price increases have risen at about three to four times the rate of inflation, or about 12% per year.

Tobacco pricing makes a difference in consumption and can be a potent force in saving lives, particularly among young people. A 10% increase in price leads to about a 4% drop in smoking (2). The AMA and other voluntary health agencies estimate that a \$1 increase in the federal excise tax on tobacco would eventually save one million lives. The AMA strongly advocates increased taxes on tobacco products as a way to reduce the number of teen smokers.

The AMA recognizes that success in tobacco control is more likely to occur at the state and local level, especially considering the powerful influence of the tobacco industry in Washington, DC. The AMA's House of Delegates not only accepts policy recommendations from state medical societies, but has passed several statements calling for action on their part. One such recommendation encourages state societies to "attempt to raise the state excise tax on tobacco products (490, 948)."

In some states, such as North Carolina and Texas, medical societies have created tobacco control subcommittees as an official part of the society structure to propose policy and develop action plans designed to impact tobacco use (3). In coordination with the lobbying and educational activities traditionally taken on by most state medical societies, such efforts can be very productive in targeting tobacco control issues such as tobacco pricing.

Involvement with other groups such as the local chapters of the American Cancer Society, American Heart Association, American Lung Association, Hospital Association, Dental Society, and state chapters of medical specialty societies is also very effective. Alaska has a very active statewide tobacco control coalition, Alaska Tobacco Control Alliance (ATCA). Active participation of the medical society at both state and local levels is needed.

Finally, a word about action and activism. For too long, organized medicine has been accused of armchair activism — of only being involved in traditional activities that are safe, comfortable, and avoid risk. It is too

little, too late to be content with generic smoking cessation advice to our patients or sponsoring a health booth at the county fair. We must take our message outside the walls of the office and hospital, to confront the industry and its apologists directly (4,5). Testimony from the health community at city council hearings on the benefits of a tobacco tax increase can refute the propaganda and scare tactics of the tobacco industry. Medical societies can make a tobacco tax increase a special priority, and shepherd an ordinance through the system. The media is a very useful way to reach the public — most newspapers welcome editorials and letters on tobacco control issues from physicians and medical societies. The potential to make a difference is present if we take the time to get involved. Together, the AMA and its partners in the states have an opportunity to make a difference, working to ease the human and economic toll taken by tobacco.

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About the cover: Kasatochi Island, Aleutian Islands. Kasatochi is the summit of a volcano whose crater is water filled. Since the surface of the water is approximately 130 feet above sea level (satellite observations), the water is almost certainly fresh. Kasatochi is located just north of the west end of Atka. Photo courtesy of Donald R. Rogers, M.D., Anchorage, Alaska.

Smoking Cessation Products and Programs

Harry A. Lando, Ph.D.⁽¹⁾

Smoking cessation programs have improved significantly over the past 30 years. Hundreds of studies have examined formal approaches to smoking cessation. More detailed reviews of these studies are available elsewhere (1,2). Several types of options are available. There are face-to-face programs which have been offered primarily in small groups and which are most commonly based upon behavioral principles. There are smoking cessation aids and products of which nicotine replacement is currently the only category recognized by the Food and Drug Administration as effective. Other popular approaches have included hypnosis and acupuncture. Programs offered by the voluntary health organizations and by commercial providers have tended to emphasize behavioral techniques.

BEHAVIORAL TREATMENT TECHNIQUES

Smoking and other tobacco use was seen for many years as essentially a learned activity. More recently smoking has become recognized as a physical addiction (3). Behavioral aspects of smoking are still seen as critical, however. One behavioral treatment approach involves aversion. Positive results have been obtained with rapid smoking (e.g., requiring smokers to take a puff every 6 seconds for as long as they can tolerate the procedure) (4,5). Concerns have been expressed about the potential risks of rapid smoking and about its high level of unpleasantness, however. Reduced aversion techniques have shown promise including "focused smoking" in which the patient smokes at a regulated but slower rate and smoke holding in which patients hold cigarettes in the mouth and throat while breathing through the nose (6,7).

Additional behavioral techniques have included con-

tingency contracting in which participants typically self-administer rewards or punishments depending upon abstinence. Most current behavioral approaches emphasize coping techniques as part of multicomponent intervention (8,9). Participants develop a repertoire of behavioral and cognitive activities to counter smoking in high-risk situations.

Nicotine fading has been used as a nonaversive preparation technique for cessation. Gradual reduction in numbers of cigarettes does not appear to work very well beyond a common "stuck point," often 10 to 12 cigarettes per day (10). An alternative is to switch brands over several weeks or to use commercially available nicotine reduction filters to progressively lower rated tar and nicotine levels (11,12). Results for nicotine fading have been mixed, with some studies showing no effect.

The most successful behavioral programs have incorporated multiple interventions. Emphasis has been placed both upon initial preparation for quitting and longer-term maintenance. Long-term abstinence rates for these multicomponent treatments have approached 50 percent (8, 7), although more recent outcomes have tended to be less favorable (13).

A focus of many comprehensive behavioral programs is upon relapse prevention following the quit date (14). Slips are viewed as a natural part of the learning process in quitting. Results for relapse prevention have been mixed, but the overall findings generally do not reveal significant treatment effects. Lando et al. (15) achieved positive results in relapsed smokers using two brief supportive telephone calls. Self-reported 6-month abstinence rates were 13% for those who received telephone support and only 6% for those who did not receive support. Differences between telephone support and control conditions were no longer significant at 18 months, however. In a subsequent study, more intensive telephone support also was found to significantly increase recycling among relapsers. Two years following the initial intervention, 26% of those who had relapsed in the telephone support condition were abstinent, as compared to 18% of relapsers who did not receive telephone support.

HYPNOSIS AND ACUPUNCTURE

There are numerous approaches to smoking cessation that are not primarily behavioral. Two commonly advertised methods include hypnosis and acupuncture.

(1) Division of Epidemiology, University of Minnesota, 1300 South Second St., Suite 300, Minneapolis, MN 55454-1015. Preparation of this article was facilitated by Grant #R01HL48121 from the National Heart, Lung, Blood Institute. Much of the content of this article was condensed from Chapter 11 of *Nicotine Addiction: Principles and Management*, edited by C. Tracy Orleans and John Slade, New York: Oxford University Press, 1993. This chapter was written by Harry A. Lando and was entitled "Formal Quit Smoking Treatments."

Unfortunately, there are few good studies of either of these methods and overall results tend to be disappointing. These methods appear to pose little risk, however, and some patients may benefit from expectations of successful outcome.

PHARMACOLOGIC APPROACHES

By far the most intensively studied pharmacologic methods have involved nicotine replacement. The largest number of studies have been done on nicotine gum, followed by nicotine patch. Recent work has been done with other forms of nicotine replacement including nicotine nasal spray and nicotine inhalers. Although these newer products appear promising, few published studies are available. Both nicotine gum and nicotine patch improve treatment outcomes. The patch may be preferable for most patients partly because the results of patch studies have tended to be somewhat more positive than those for gum, and partly because compliance tends to be better for patch (16). Meta-analyses have indicated that nicotine gum increases abstinence by about 60% on the average compared to placebo controlled trials. Meta-analyses of nicotine patch studies show an approximate doubling of success rates. However, to date no study has directly compared the effectiveness of nicotine gum and patch. Currently nicotine replacement products are available only by prescription, but the Food and Drug Administration has approved 2 mg gum for over-the-counter use.

Some evidence suggests that clonidine may be effective in facilitating smoking cessation, especially among women, but the findings have not been consistent. Several studies have shown no effect for clonidine in either women or men. Clonidine is not approved by the FDA for smoking cessation. It does appear to diminish cravings, but its value is limited by unpleasant and sometimes severe side effects including dry mouth, fatigue, and dizziness. Some anxiolytics have been demonstrated to reduce withdrawal and may be useful especially for depressed smokers. However, data are very limited and the FDA does not recognize these drugs for smoking cessation.

VOLUNTARY HEALTH ORGANIZATIONS AND COMMERCIAL PROGRAMS

Voluntary Health Organizations

Major nonprofit organizations offering smoking cessation programs include the American Cancer Society, the American Lung Association, and the Seventh-Day Adventist Church. The American Cancer Society FreshStart program consists of four, one-hour group sessions. Content of this program has been recently revised. The American Lung Association program consists of seven

90-minute to 2-hour group sessions in addition to an initial orientation over a seven-week period. Both programs include considerable behavioral content.

Lando et al. (17) compared these two methods. Abstinence rates at 12-month follow-up were 19% and 12% for the American Lung Association and American Cancer Society programs, respectively. It should be noted, however, that the American Cancer Society groups are considerably less intensive and therefore presumably less costly to run. The absence of a specific target date for quitting in the American Cancer Society method may detract from effectiveness.

The Seventh-Day Adventist Church has sponsored Five-Day-Plans which are the oldest of the nonprofit programs (18). These programs do not emphasize cognitive-behavioral strategies but instead focus on psychological and physical components of nicotine dependence. An estimated 14 million smokers in more than 150 countries have attended Five-Day-Plans. The program is held on consecutive days and includes five 90-minute to 2-hour lectures. Recently the Five-Day-Plan has been revised to 8 sessions over a 3-week period. This program (now called the "Breathe-Free Plan to Stop Smoking") also offers supportive telephone calls 1 week, 3, 6 and 12 months after completion of the program.

Schwartz (2) reported summary outcome data based on 14 evaluations of the Five-Day-Plan. These data indicated a median 1-year abstinence rate of 26%. Results might be less favorable for the current population which appears to consist of a greater proportion of harder core smokers. Outcome data for the revised program currently are not available.

Commercial Programs and Products

A number of commercial programs are available, usually concentrated in larger metropolitan areas. Most programs tend not to be highly profitable and therefore do not remain active. Smokenders, Schick Smoking centers, Smokeless, and Smoke Stoppers are among the best known national programs. In evaluating commercial methods, it again appears that the most successful are those that include multicomponent cognitive-behavioral techniques. Some commercial treatments claim extremely high rates of success. Few external evaluations of proprietary methods are available, however. There is no clear evidence that commercial clinics are more effective than those offered by other organizations. Because commercial programs cost more they may attract more committed smokers. Furthermore, a sizable clinic fee may represent an additional motivation for quitting. New products are continually being introduced as aids to smoking cessation. Currently, none of these products are recognized as effective.

SELF - HELP

Self-help interventions for smoking cessation can consist of anything from purely self-help to rather intense, but still self-administered methods. The exact definition of self-help can be somewhat ambiguous. Self-help interventions most often consist of written materials. A major emphasis of these materials is usually on coping strategies, especially in high risk situations. Self-help materials also are available in other formats including audio and video tapes. Some promising results have been obtained with computerized programs that attempt to tailor cessation messages to the individual smoker. Overall, self-help methods in isolation have had limited impact in improving abstinence outcome. Outcomes have been improved, however, when self-help approaches have been supplemented with additional intervention, most notably nicotine replacement and supportive telephone calls.

EVALUATION STANDARDS

It is increasingly important that health professionals be well informed about smoking cessation services and products. They should be skeptical in evaluating claims of effectiveness. Program and product evaluations should be based on a minimum of 6-month and preferably 12-month follow-up. Providers may not deliberately misreport their abstinence data (although this does sometimes occur), but they may present very misleading figures. Thus some programs report end-of-treatment success, based on outcomes only a few days after a target quit date. End-of-treatment abstinence figures of 60% abstinence can translate into 1-year outcomes as low as 5-10%.

Participant attrition also must be considered (19). Programs can dramatically manipulate their outcomes by failing to count nonrespondents to follow-up. Assume, for example, that a program attracts 100 individuals of whom 50 complete the treatment, 30 respond to the follow-up, and 20 report abstinence. Claimed abstinence based on these results could be as high as 67%, whereas 20% abstinence would be a more valid outcome figure.

Resources for additional information are available both locally and nationally. Local resources are listed elsewhere in this issue and include the American Cancer Society, the American Lung Association, and the state health department. The National Cancer Institute provides a toll-free information line (1-800-4CANCER). Information and materials also are available through the U.S. Office On Smoking and Health (1-770-488-5705), the American Medical Association (1-312-464-5000), and the American Society of Addiction Medicine (1-301-656-3920).

SUMMARY AND CONCLUSIONS

Behavioral treatment techniques have facilitated smoking cessation, with intensive multicomponent interventions sometimes producing long-term abstinence rates approaching 50%. There is little evidence that either hypnosis or acupuncture are effective. Both nicotine gum and nicotine patch significantly improve treatment outcomes, although patch is easier for patients to use correctly. Self-help programs may be of benefit, however, smoking cessation products other than nicotine replacement show little evidence of effectiveness. Health professionals should be informed consumers and should be skeptical in evaluating claims for commercial programs or products. Additional information and materials are available from a number of sources including the National Cancer Institute, the U.S. Office on Smoking and Health, and the voluntary health organizations.

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Alaska State Legislature


Interim:
145 Main Street Loop #223
Kenai, Alaska 99611
(907) 283-7095
(907) 283-3075 (fax)
(907) 262-7574 (h)



Session:
State Capitol
Juneau, Alaska 99801
(907) 465-2693
(fax) (907) 465-3835

Representative Gary L. Davis

MEMORANDUM

TO: Members of the 20th Alaska Legislature
FROM: Representative Gary Davis 
DATE: February 25, 1997
RE: Tobacco Tax

I'm in the middle of running a survey in my district on the tobacco tax. It is important for me to know where my constituents stand on the issue.

Rather than a mail-out, I took out an ad in the local paper and so far, the ad has run 2 times. It will be coming out again the beginning of March in a different publication that I hope will reach another sector of the voting public.

I have tallied up the responses to date and included the results. For your information, I have attached a copy of the ad.

One letter that I was particularly impressed by argues against the tax. The author makes some good points worth noting. Another letter, supporting the tax, addresses the concerns of those opposing the tax.

As with any "survey" there are several views on how they can be phrased, interpreted, and tallied. I have made little effort to "professionalize" this survey, I just thought it may be informative. I am not implying that you should interpret it in any particular fashion.

Any follow-up or future responses will be available from my office.



Representative Gary Davis wants to know...

"What are your views on the
proposed \$1 additional tax on
a pack of cigarettes?"

- The intent of this tax is to reduce teen smoking.
- It is estimated to generate \$40 million/year in new revenues.

Tell me what YOU think.

Do you support the tax? _____ YES _____ NO

Your name _____

Address _____

City _____

Please cut & mail or fax your response to:

Representative Gary Davis

State Capitol, Room 513

Juneau, AK 99801

Or call me at (800) 463-2693

Or Fax to 1-907-465-3835

representative_gary_davis@legis.state.ak.us



THANK YOU FOR PARTICIPATING

AGAINST TAX

284

PREVALENT ARGUMENTS

No new taxes

What will be taxed next?

Crime and Black Market will rise.

It's a prejudiced tax

Legislature dictating morals.

Deal with issue from a health perspective and not through money.

\$1 won't make a difference to kids that have disposable incomes.

Enforce current laws, already illegal for people under 19 to possess tobacco.

Will not work out to the original intent of the bill.

**Many of the No responses were non-smokers

**Several noted they would consider the tax is the money was spent on education on the harm of tobacco, alcohol, drugs, etc.

FOR TAX

126

PREVALENT ARGUMENTS

Crime if not always a result of taxes.

Bad habits don't make people criminals, not all will steal.

Tax is worth it even if it only saves a few lives. Every life counts.

Will make children think twice, and it may turn some around.

Smoking affects others so to implement tax would help all.

Will help defray medical costs or services to smokers.

Tax will make tobacco cost prohibitive.

Less access of cigarettes to teens.

**Several for the tax were teenagers tired of being around smoke all the time when being with friends. Any little bit will help in decreasing the amount of teens who smoke.

**Quite a few of the respondent's for the tax were people working in some way in the medical profession.

**Many others have had family/friends die of smoking related disease and would like to see some help in curbing smoking.

Comments from one 16 year old who called in, he supported the tax and took offense to adults saying he would just steal for cigarettes. He is not a thief and if he did not have the extra dollar, he simply would not buy a pack of cigarettes. He admits smoking is a bad habit and he is addicted but he wants to stress he is honest and would not resort to crime to feed his habit. He thinks the extra dollar is a deterrent and will help.

The Hidden Cost of the Tobacco Tax

Good intentions do not make good public policy. Instead of achieving their desired purpose, laws imposed without regard to their social and economic implications often have unanticipated consequences far worse than the original problem. Take for example, the "sin tax" a tax placed on items such as alcohol and cigarettes to both deter their use and raise revenue. America has attempted to regulate social behavior through the imposition of economic penalties since the Puritans, with abysmal results. Often, as in the case with Prohibition from 1919-1933, these penalties have increased consumption of the "vice" in question rather than lowering its use, while spawning opportunities for the lawless to profit. The tobacco tax raises two types of questions: first, is a tax on tobacco an effective economic tool to both raise revenue and discourage behavior? and second, should we empower the government to regulate personal morality when society as a whole is not endangered by the behavior?

Past history shows that sin taxes do not provide effective vehicles for revenue production or behavior deterrence. Increase in a tax (\$1.00 a pack in the case of tobacco) for an item in high demand will not result in an immediate cessation of demand. Instead, high taxes, and thus higher prices, encourage consumers to create underground markets to avoid the financial penalties imposed by the tax. The cases of Canada and Michigan illustrate this point. Canada, after raising its tobacco taxes, saw an increased problem with smuggling and violence along its borders. With smugglers able to make a profit of \$800 from a case of cigarettes, the temptation to engage in contraband trade proved too difficult to resist. In three months at the end of 1993 and the beginning of 1994, over 120 people were arrested for possession of bootleg cigarettes (Chicago Tribune, Feb. 4 1994). Eventually, the Canadian government capitulated and cut the tax in half. Michigan school finance reforms in 1994 resulted in the tripling of the cigarette tax from \$.25 to \$.75 a pack. From March of 1994 to March of 1996, it is estimated that Michigan lost around \$144 million in revenue due to smuggling operations. This loss prompted the introduction of a bill in 1996 to stamp all cigarettes brought into the state to provide a way of identifying smuggled tobacco.

As a deterrent, the tax will most likely have a negligible effect on one population group (teenagers) while damaging another group (the poor). The bulk of a teenager's money is

discretionary. With no mortgage payments or other loans, and with parents to provide for their basic necessities, teenagers have the luxury of spending money only on things they want instead of things they need to survive. Thus, they are less likely to abstain from purchasing tobacco merely because the price has gone up than other population groups. The poor, on the other hand, need the bulk of their income to provide for their basic needs. Thus, the impoverished who are nicotine addicts will be faced with the unpleasant choice of buying food or satisfying their addictions. Thus, the tax will have a small effect on those who can most afford it (teenagers and the wealthy) while harming disproportionately those who can least afford it (the poor).

The tobacco tax harms society in another, less obvious way. If the tax discourages the purchase of the product through "legal" venues, and presumably increases bootleg traffic of the commodity, the merchant selling the product will lose revenue. This lost revenue will force him to cut back on all other areas of his business, including inventory and wages. Ultimately, a diversion of the consumption from traditional channels to illegal ones could result in lost jobs and investment.

Finally, the tax presents a dilemma for lawmakers. The tobacco tax proceeds in Alaska will be used for education and children's health, important budgetary items. This puts policy makers in a difficult position. While attempting to regulate behavior by decreasing consumption, they are still relying on this consumption to generate revenue. Thus, they are caught between the public health goal of decreasing tobacco consumption, and the fiscal goal of funding programs. Their incentive is to increase the very behavior they are claiming to decrease.

Allowing the government to levy a punitive tax on tobacco sets a dangerous precedent. Heart disease kills more than lung cancer, so should the government tax the intake of fat? What about alcohol, sugar, or painkillers? Providing the government with the license to determine standards of personal morality when the regulated behavior places no danger on society removes responsibility from our basic social units and places it with the state. Questions of personal morality should be dealt with in the family, in the church, in the club, or in any other educational or cultural institution. Government should only address those questions that smaller units of society are incapable of addressing. Ceding the power of moral persuasion to a central state can only weaken personal freedoms. A government espousing morality may not always espouse traditional morality. Because of its powerful position, governments can impose whatever version

of "morality" they see fit, whether or not these judgments happens to correspond with popular standards of morality.

Although cessation of smoking is an admirable public health goal, imposing a tobacco tax will provide only a cursory solution, while eliciting unintended social, moral, and political consequences. This does not mean that society should stop the campaign against smoking, merely, that governments at any level are not the proper or the effective institutions to wage a moral war against a personal vice.

Rebecca L. Hultberg

907.283.3335 (daytime)

907.283.6275 (evening)

Rep. Gary Davis
State Capitol, Room 513
Juneau, AK 99801

February 13, 1997

My view on the proposed tax is that it is not nearly high enough to even begin to address the drain on the economy and society that cigarette smoking causes.

There is a lot of rhetoric being flung around by the opponents of the tax, but very little substantive information. Just for your edification, I would like to address several points that have come up lately with facts rather than opinion and lies.

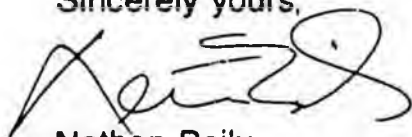
1. "The tax won't work"-This is basic tobacco industry prevarication. Their own research indicates that the basic law of supply and demand works for cigarettes too; in fact, that is why they so oppose the tax: it will cost them.
2. "They will be smuggled in."-Another red herring. Obviously, not from Canada. Indian sales? The Native community is very much in favor of the tax. It's simply not an issue except in the minds of very desperate, greedy, predatory marketers.
3. "It's social engineering"-So what if it is? The tobacco industry has "had its way" with society for nearly a hundred years, it's about time to turn the tables on them. Addiction is the worst form of social engineering. Legislators are in the business of social engineering. To deny so is just hypocritical.
4. "It hurts poor people."-Yeah, we all know how much the tobacco industry cares about the poor. Poor people get sick from smoking and we all end up paying for their health care. Smoking hurts everyone.
5. "It's a personal choice."-This is the one that really makes me want to gag. There is little, if any, choice in the smoking addiction. If 90% of smokers want to quit but cannot, where's the choice?

Alaskan legislators can take a stand and make a difference. Legislators in several states have watched what is going on here and are introducing bills to raise their taxes substantially too. The facts are clear: A large boost in the tax will save lives.

The tobacco industry made the decision to keep pushing drugs back in the sixties when their own research as well as the Surgeon General's report spelled out the truth about smoking. To my way of thinking, the moral thing to do would have been to have declared an end to this dreadful business of addiction. Instead, they continued to lie for thirty years while devising more and more insidious ways to entice young people into a lifetime of smoking. The U.S. Congress has been complicit in this very offensive campaign, please do not let yourself or your cohorts add to the travesty by watering down this proposal.

Pass HB 1, undiluted, and put the proceeds into anti-smoking campaigns.

Sincerely yours,



Nathan Baily
P.O. Box 3337
Kenai, AK 99611
(907) 283-3984



Representative Mark Hanley
Alaska State Legislature

MEMORANDUM

DATE: February 25, 1997
TO: All House Finance Committee Members
FROM: Representative Mark Hanley *MA*
RE: Information from Jan's Distributing, Inc.

My office received a request from Jan's Distributing, Inc. to distribute copies of a fax to all Finance members (please see the attached cover letter). As of 1 p.m., Tuesday, February 25, 1997, we have received approximately 150 pages of signatures. These signatures will be kept on file in my office for you or your staff to review at your convenience.



JAN'S DISTRIBUTING, INC.

Box 140856

Anchorage, Alaska 99514

243-JANS

Fax 243-5744

1-800-478-9898

TO ALL REPRESENTATIVES ON THE FINANCE COMMITTEE:

Following this letter are a few signatures of people who are opposed to the tobacco tax. We receive these petitions on a daily basis. These are coming from our concerned customers who we service weekly. They are very concerned about theft and violence at their retail locations across the state. If none of these names are in your district, please be patient because I know that in time we will receive some that are, because we service about 500 customers across the state.

If you have any questions, please call me at 1(800) 478-9898.

Sincerely,

Bobby Scott
Sales Supervisor
Jan's Distributing



NEA-ALASKA

Affiliated with the National Education Association

NEA-ALASKA

POSITION STATEMENT - HB 1

NEA-Alaska supports passage of HB 1 increasing the tax on cigarettes and tobacco products.

Passage of the measure will address two positive goals.

*First, the increase in the cost of tobacco products will serve as a deterrent to use by students.

*Second, proceeds from the tax will be used to maintain our schools and school facilities.

The NEA-Alaska Board of Directors voted to support this tax initiative. We recommend its passage and appreciate the sponsors who have introduced the measure.

2-25-97

THE TOBACCO INSTITUTE

1225 BUCHHEIM STREET • SUITE 400
SACRAMENTO, CA 95811
916/444-2200 • 916/444-6211 FAX

DANIEL M. HOWIE
Vice President
916/444-3404

The Tobacco Institute, on behalf of its member companies, respectfully submits the following statement in opposition to House Bill 431.

THE ECONOMIC EFFECTS OF INCREASING THE ALASKA CIGARETTE TAX BY \$1.00 PER PACK

Alaska is considering a tax proposal that would raise the current cigarette tax by \$1.00/pack, or to \$1.29c/pack. That tax is compounded in Anchorage, Fairbanks and Juneau, by local excise taxes. In Anchorage, where over 40% of the Alaska population resides, the local cigarette tax is 26 cents/pack. An Anchorage smoker would thus pay \$1.55/pack, or \$15.55 per carton, in cigarette taxes. To put things in perspective, the Alaska cigarette tax would be nearly 5 times larger than the average state cigarette tax (32 cents/pack) and nearly double the current top cigarette tax.

When cigarette taxes reach such a stupendous level, many of the familiar problems associated with excise taxes become sharpened. Tax evasion is a prime example. This proposal provides powerful incentives for smuggling. Smugglers bringing in cigarettes from lower tax states could make over \$10 per carton in profits. A small container-load would have a profit potential in excess of \$50,000. Alaska already has a well documented tax evasion problem with military bases. There are over 50,000 military personnel, including retirees and dependents, buying cigarettes free of state taxes at these bases. A 1996 study by Peat Marwick found that an astounding 45 million packs of cigarettes are sold through military bases in Alaska. This represents an incredible 84% of taxable reported sales in Alaska (53.6 million packs).

With tax saving opportunities such as these, Alaska would become like Canada. In 1993, the Canadian government estimated that smuggling accounted for almost 50% of all cigarette sales. In 1994, their cigarette tax was reduced in the major provinces by over \$2.00/pack in order to break this smuggling epidemic. In announcing the cuts, the Canadian Prime Minister Jean Chretien said: "Smuggling is threatening the safety of our communities and the livelihood of law-abiding merchants. It is a threat to the very fabric of Canadian society."

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By encouraging a massive underground market, Alaska would also make it more difficult to keep cigarettes out of the hands of youth. Black marketers do not respect youth access laws any more than they do tax laws. The surest way to control youth sales is by working with legitimate retailers, not smugglers. By creating an illegal market, Alaska would simply be making those efforts more difficult.

Another casualty would be Alaska's legitimate retailers. According to the Peat Marwick study, retailers could eventually lose 52% of their sales. In Canada, retailers had lost so much that they protested by selling smuggled smokes to hordes of delighted smokers at cut-rate prices. The huge drop in Alaska sales will also mean substantially lower revenues for the government than forecasted by Alaska's Long Range Financial Planning Commission. Peat Marwick found that the Commission overestimated revenues by 129%.

The enormous tax increase would unfairly punish a minority population for goods and services designed to benefit all of Alaskan society. An average smoker would pay over \$800 per year in state cigarette taxes. For the 30% of Alaskan households making \$30,000 or less, this is an incredible burden to bare. What other demographic group in Alaska pays this much in total taxes?

SMOKING AND TAXES

There exists an incorrect assumption that high state cigarette taxes discourage cigarette consumption.

On close examination, that assumption is without foundation. Smoking rates within a given state are a function of a variety of demographic and cultural factors. Price is not considered to be one of them. In fact, economists have proven statistically that cigarette consumption is insensitive to price and taxes. As economists put it, taxes have a very inelastic, or unresponsive effect on cigarette demand. Clearly there are more powerful forces in play.

Utah, for example contradicts the assumption of low taxes equaling higher consumption. Utah has the lowest adult smoking rate in the country. It also has a cigarette excise tax that is lower than the national average. When one takes into account the presence and cultural influence of the Mormon population - a group that vigorously opposes cigarette smoking - the contradiction is easy to understand.

Opponents of tobacco products point to the apparent connection between low tax states and high rates of tobacco consumption. They fail to mention that many of the low tax states also grow tobacco. The strong tobacco heritage of these states and the relative social acceptability of tobacco there easily account for the marginally higher consumption rates.

In fact, the smoking rates of the 10 states with the lowest cigarette taxes are not as significant as one is led to believe. On average, about 25% of adults smoke in the ten low tax states, compared to the national average of 22%. This is not a large difference, and is most likely explained by the heritage of tobacco growing, not taxes.

State taxable cigarette sales are a good indicator of patterns across states. Consider per capita sales in Massachusetts (77 packs/per year) versus per capita sales in New Hampshire (158 packs/ per year). Since cigarette taxes are significantly higher in MA (51 cents/pack) than in New Hampshire (25 cents/pack and no sales tax) this pattern would seem to buttress the assumption that higher taxes equal lower consumption. But is it reasonable to believe the NH residents really smoke double the amount of cigarettes compared to smokers in MA? The answer is clearly no. What is the reason for this discrepancy? Tax evasion.

New Hampshire is a well known consumer's mecca - a place for consumers from high tax states to stretch the family budget. A 1995 study by Price Waterhouse found that nearly 40% of New Hampshire's cigarette sales were sold to consumers from another state- mostly people from Massachusetts. In fact, along the MA-NH border the number of people employed (per 1000 of population) in tobacco, alcohol beverage, and gas retailing is about 2 times greater in New Hampshire compared to Massachusetts. When adjustments are made for such tax evading sales, adult smoking rates are practically the same in both states.

In Washington State, the same tax evasion dynamic is at work. Even though the Washington cigarette tax is very high, data shows that adult smoking rates are actually higher in Washington compared to low tax Oregon and Idaho. However, using taxable sales as an indicator, we see that Washington's per capita cigarette sales of 65 packs is much lower than in Oregon (95 packs) and Idaho (78 packs).

The reason?

Washington's residents have known for 20 years or more that the way to beat sales and excise taxes is to head for the Indian reservations, military bases, and bordering states. A recent study by Washington's Department of Revenue estimates that a staggering 27% of Washington cigarette sales represent such tax evading sales. When these tax evading sales are factored in, actual Washington cigarette consumption rises to over 85 packs per capita - close to the average per capita consumption for the Northwest.

The basic lesson is that when cigarette taxes are raised by a large amount, consumers take advantage of our fiscal federalism and shop in a state or tax free zone where they can save money. When the dust settles few people have

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

PREPARED BY:

**BARENTS GROUP LLC
OF KPMG PEAT MARWICK LLP
WASHINGTON, D.C.**

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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 2000². 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.

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 1933⁴. 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 -1.033⁵. 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.

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 than 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.

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

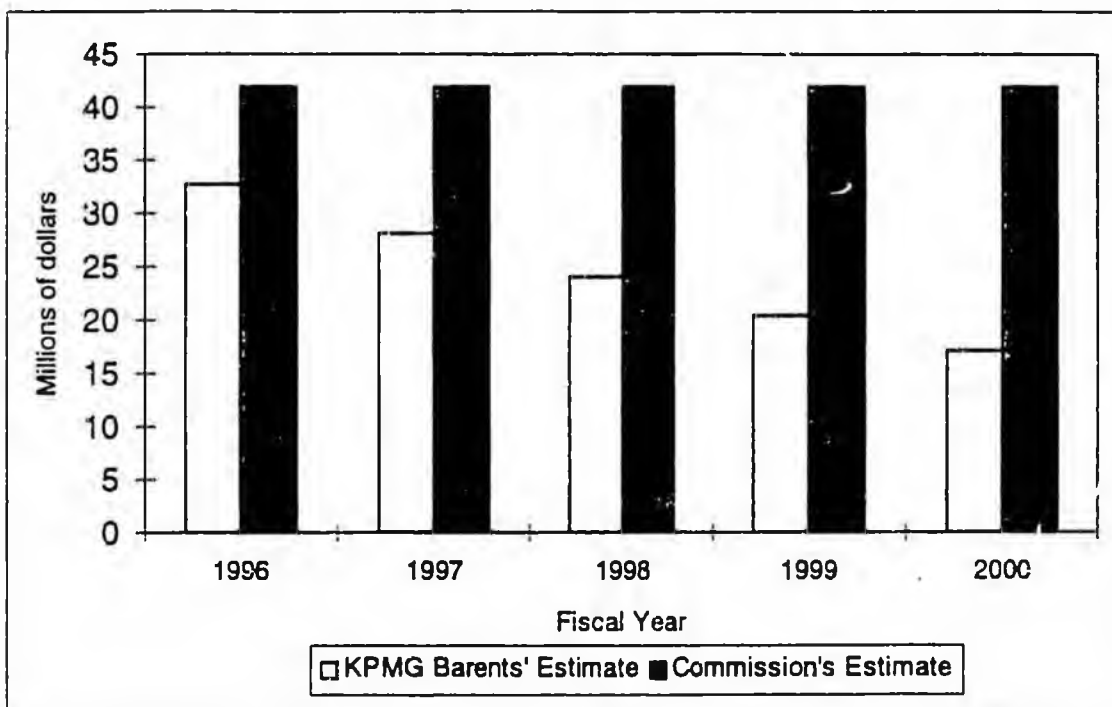
The KPMG Barents estimate expressed in real dollars shows the likely change in cigarette taxes from the \$1 per pack increase in the State tobacco tax. The tax increase begins in FY 1996 with a net real revenue gain for the State of \$32.6 million. This

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

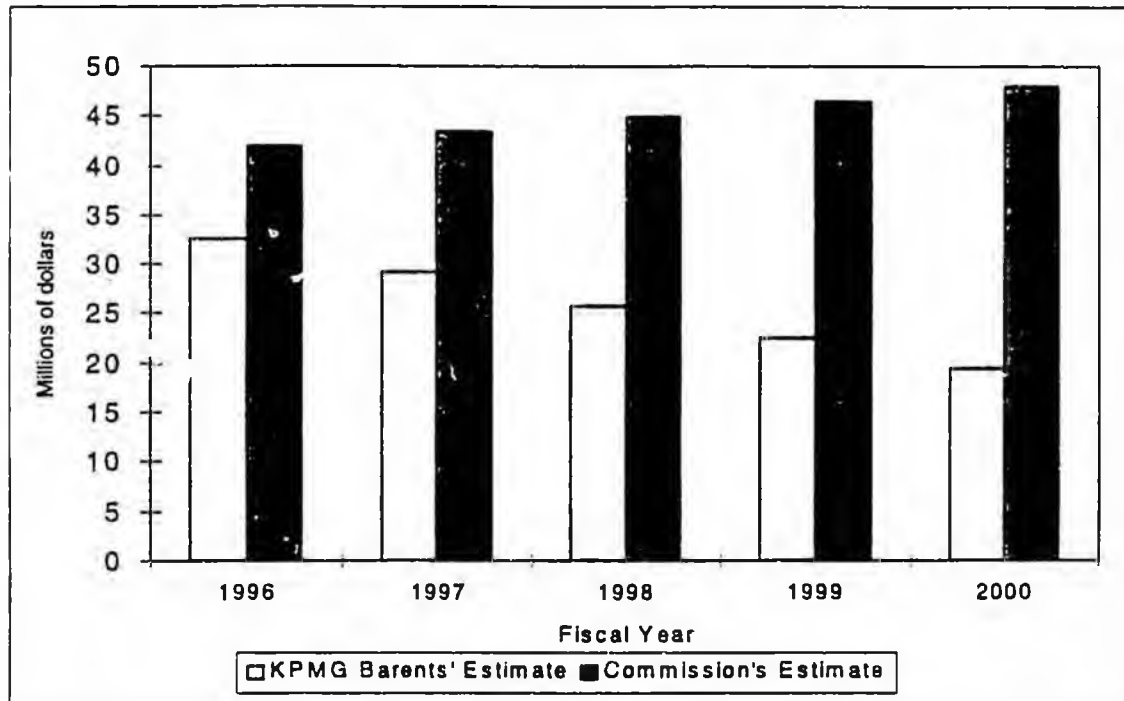
¹⁴ All values in the table are in nominal dollars. That is, they are not in real (i.e., inflation-adjusted) dollars.

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 2000¹⁶. 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

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 556,000²⁴ non-military residents. Average per capita consumption in Alaska is 161 packs per year²⁵. 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.

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.

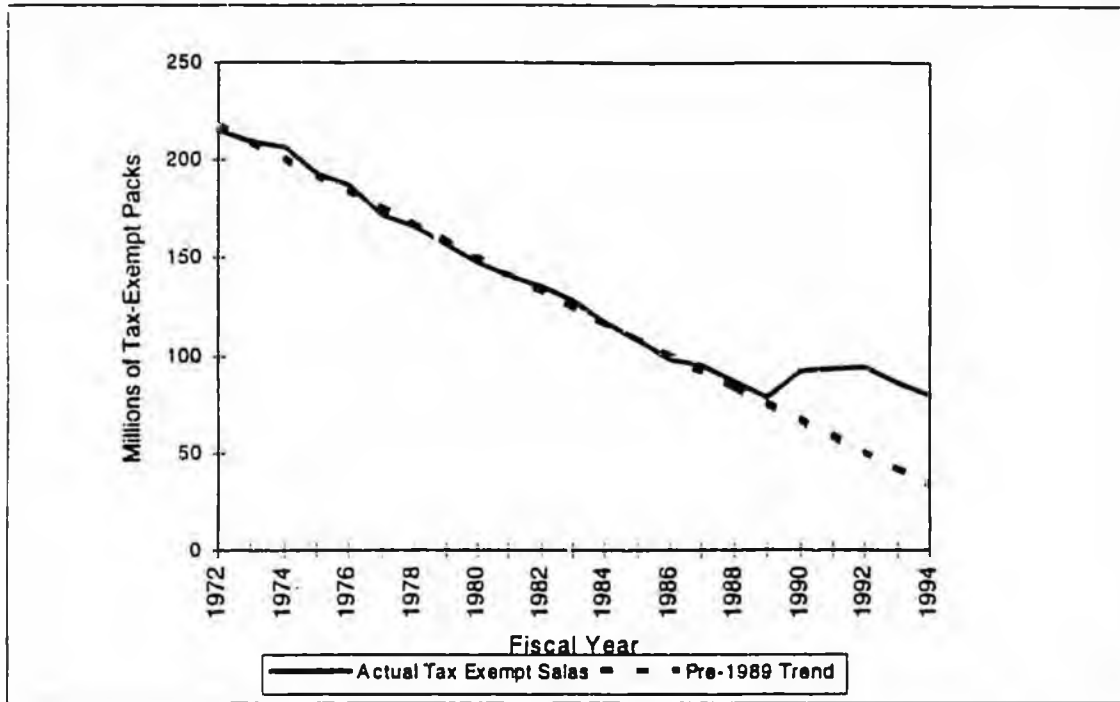
²³ Approximately half of the resident population of Alaska is concentrated in Anchorage, Juneau, and Fairbanks and can easily travel to a military base.

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, 1972-1994²⁶



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

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 year²⁹. Under the proposed tax increase, that smoker will pay \$470.85 in excise taxes per year - an increase of \$365. This increase 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 \$24,650³⁰. Thus, on average, the excise tax of \$470.85 per year represents almost 2 percent of real personal income.

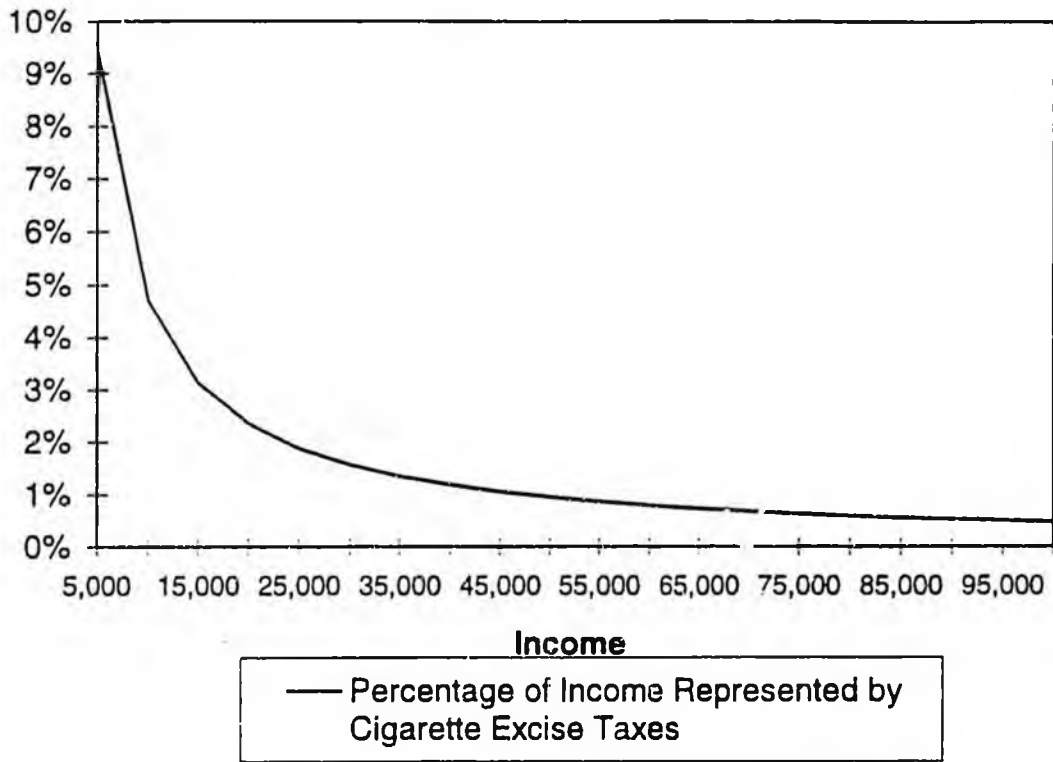
²⁸ See Wall Street Journal, December 3, 1993, and Linquist, Avey, Macdonald, and Baskerville, 1994.

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 $P = \$2.009/\text{pack}$, $Q = 52.8$ 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 forecasts³¹ 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.

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

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

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**

<i>Name of Base</i>	<i>Location</i>	<i>Active Duty Personnel</i>	<i>Dependents</i>	<i>Civilian Personnel</i>
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

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 Stampler, 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
6. 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
6. Wyoming — 12 cents
7. Tennessee — 13 cents
8. Indiana — 15.5 cents
9. Alabama — 16.5 cents
10. Missouri, West Virginia — 17 cents

Stampler, 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

1/2

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 custom-



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.

ers 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 be-

fore 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.

2/2

■ ANOTHER VIEW

Excise Taxes: the Impact on Economics, Crime

By Dr. John E. Bernhoud, 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 22.5 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 \$2.65 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, \$311.6 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 critical 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 budget is to cut spending. There is no such thing as a "good" tax to raise. ■

Dr. John E. Bernhoud 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 co-workers 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

REASON

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 increased 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 Manes, 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 of 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 ciga-

rette-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.



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FEB. 19, 1995

Detroit Free Press

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► AT ISSUE

Michiganers 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 cigarette sales is because people are smoking less. But sales are up sharply in several states with lower taxes.



State Police Detective Sgt. James Ward, left, and a federal agent take stock last week of a rental 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 rental 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 reduction 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



The JR Tobacco Outlet in Statesville, N.C., will sell as many 200 cartons as it can — and it's 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 "caravans" 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 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.

Whe 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.

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 in organized rings and by individuals who want a save money for themselves and friends.

Retailers who 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 \$7.30 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 buy 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-cent-per-pack tax when they buy cig-

arettes from manufacturers. Retailers buy from the distributor and pass the tax on to consumers.

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

All distributors must label the shipping cases with their names and addresses and show that the tax has been paid. Michigan and North Carolina are one 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 Florida.

Q. Where do people buy their 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 nine convenience stores in Washtenaw County trafficking in illegal cigarettes.

by Chris Christoff

"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 JR. 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

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."

Trailing 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 300,000 fewer customers visited the company's stores from May through December last year.

The lure of cheap smokers 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 Chautauque 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 stratified 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.

ALASKA TOBACCO CONTROL ALLIANCE

Post Office Box 110614

Juneau, AK 99811-0614 • 907/465-3140 fax: 465-2770

Alaska Tobacco Control Alliance

Resolution to Support an Increase in the Tobacco Tax

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

• 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.

ALASKA TOBACCO CONTROL ALLIANCE

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!"**

TOBACCO USE BY YOUTH:

PATTERNS AND PREVENTION

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 23.9% 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

¹Centers 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.

²Centers for Disease Control and Prevention. 1994.

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

⁴Centers for Disease Control and Prevention. 1994.

⁵Gallup Organization, 1992.

⁶Teenage Attitudes and Practices Survey, 1993.

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

⁸Alaska 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

⁹Institute of Medicine. 1994.

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

¹¹Centers for Disease Control and Prevention. 1994.

¹²Centers for Disease Control and Prevention. 1994.

¹³Automatic 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.

¹⁴Centers for Disease Control and Prevention. 1994.

¹⁵Americans for Nonsmokers' Rights. "Youth Access to Tobacco" (fact sheet). Berkeley, CA, 1992.

Tobacco Use by Youth: Patterns and Prevention (page 3)

▶ **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
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(907) 276-5864

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

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

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

²U.S. Centers for Disease Control and Prevention, *Morbidity and Mortality Weekly Report*, Vol. 43 No. 55-1, June 10, 1994.

³Alaska Division of Public Health. October 1994.

⁴Alaska Division of Public Health. October 1994.

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

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

⁷Alaska 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

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

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

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

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

¹²Centers for Disease Control and Prevention. 1994.

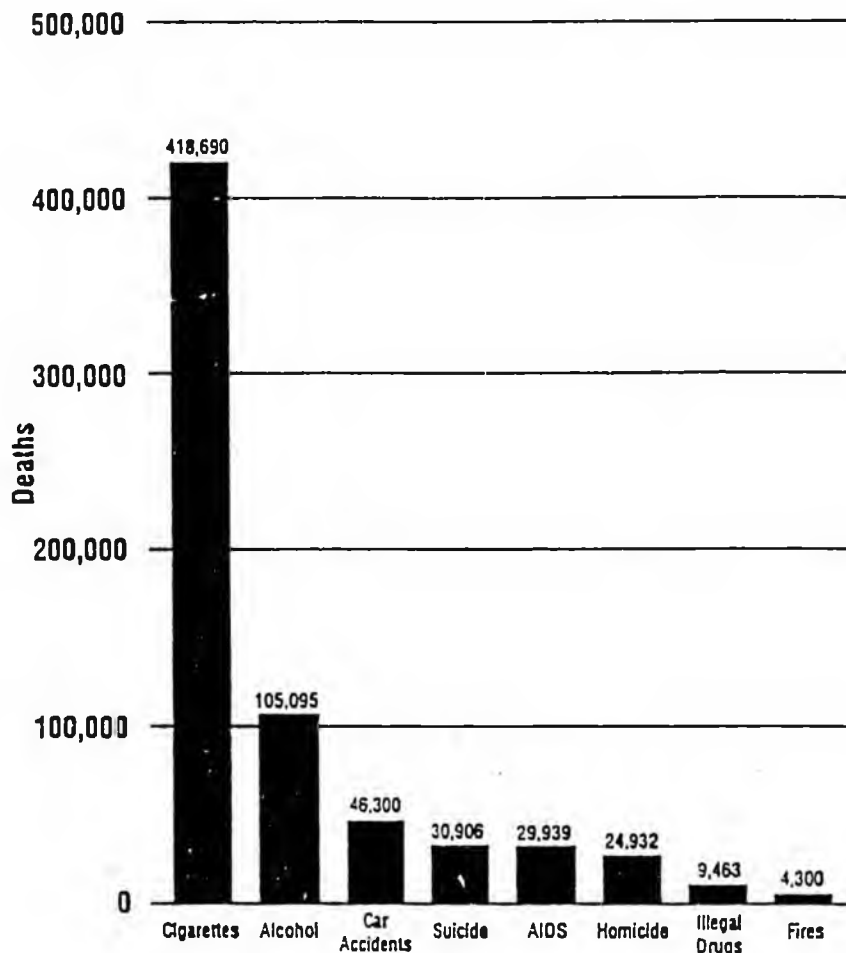
¹³U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1994.

¹⁴Centers 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**

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

¹⁶Alaska 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**

¹⁷Alaska Division of Public Health. October 1994.

¹⁸Alaska Division of Public Health. October 1994.

¹⁹Alaska Division of Public Health. October 1994.

²⁰Centers for Disease Control and Prevention. 1994.

²¹Centers for Disease Control and Prevention. 1994.

²²Glantz, SA and Parnley, 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.

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."

- 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 Heart Association



AMERICAN LUNG ASSOCIATION

Alaska Native Health Board



CITIZENS TO PROTECT KIDS FROM TOBACCO

Nothing Kills Like Tobacco

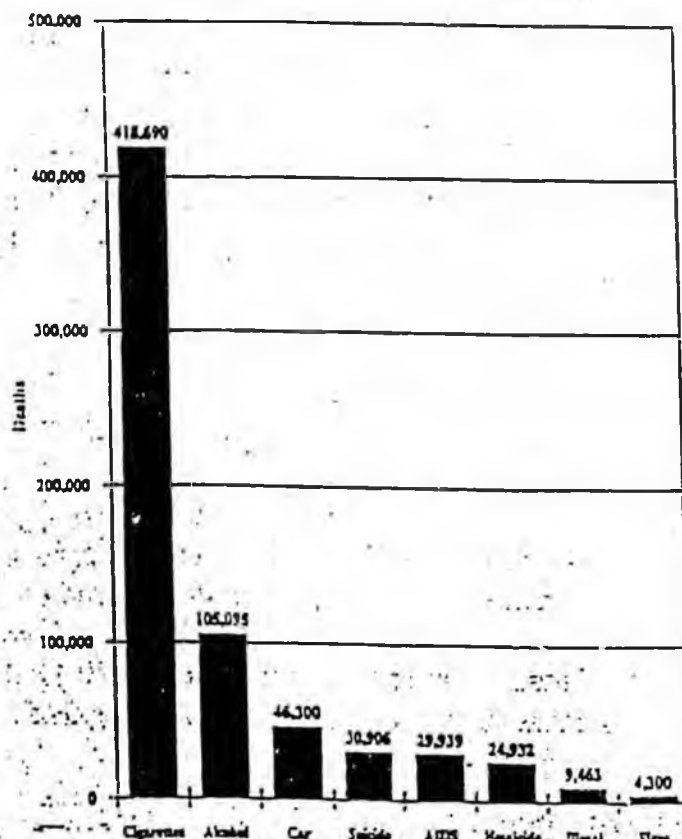
❖ Tobacco kills far more Americans than alcohol, car accidents, suicide, homicide, AIDS, heroin and cocaine combined.

❖ 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



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

8. 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.

9. Preventing Tobacco Use Among Young People: A Report of the Surgeon General (1994), p. 272.

10. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).

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12. C. Everett Koop, "A Tax That's Good for You," *The Washington Post* (September 21, 1993).

13. Centers for Disease Control and Prevention, U.S. Dept. of Health and Human Services, 1990 data.

14. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).

15. U.S. Department of Health and Human Services, "Children and Tobacco: The Facts," August 10, 1995.

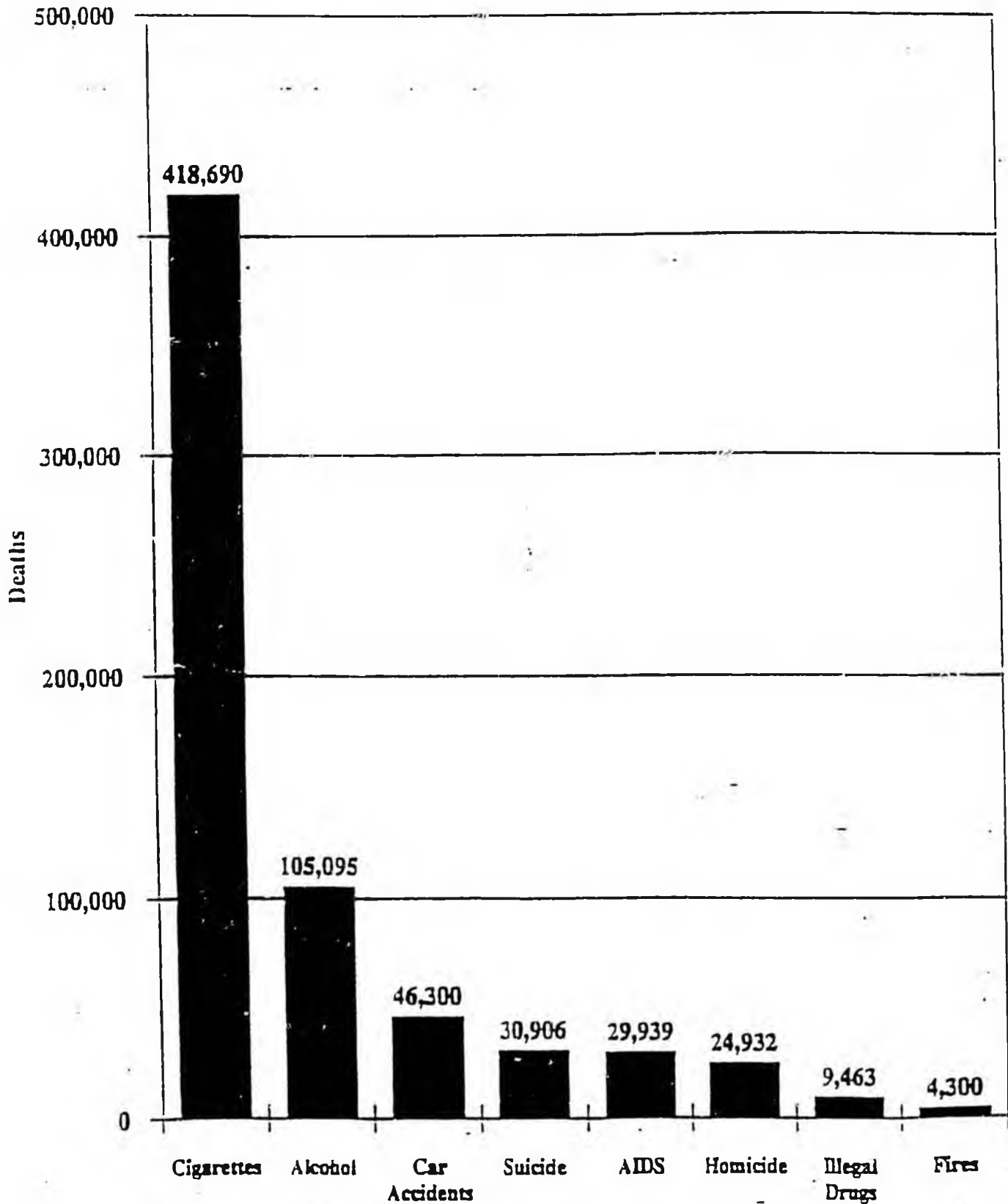
16. Coalition on Smoking OR Health, "Saving Lives and Raising Revenue," (Washington, D.C.: Coalition on Smoking OR Health, 1995).

17. U.S. Centers for Disease Control and Prevention, "Morbidity and Mortality Weekly Report," Vol. 43, No. SS-1, June 10, 1994.

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

19. Alaska Division of Public Health, "Alaska Behavioral Risk Factor Survey: 1992 Annual Report," Juneau, AK: Alaska Division of Public Health, October 1994, page 21.

**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.

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

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. ☺

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	31,617,000
Smoking related indirect morbidity costs**	\$15,940,000	
Total smoking related costs	\$295,630,000	194,014,000

* 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

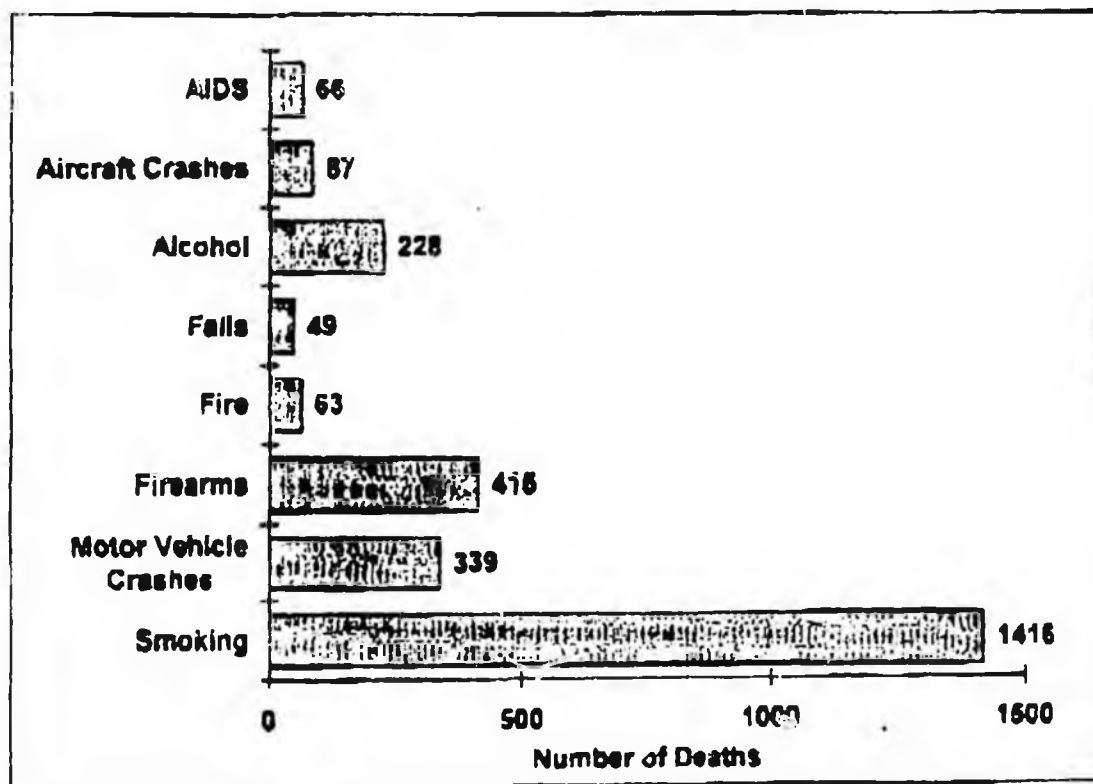


Figure 1: Alaska Resident Deaths by Selected Cause: 1992-94 Mortality Data for Alaska Residents 1992-94, provided by the Bureau of Vital Records, Alaska Division of Public Health. ICD-9 Codes: Aircraft crashes: 840-845; AIDS 42-44; Alcohol 291, 303, 305, 357.5, 535.3, 425.5, 790.3, 860, 571.0-571.3; 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 Swenor

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.

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 survey¹ 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.

¹David Swenor is Legal Counsel for the Non-Smokers' Rights Association of Canada.

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

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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 States² 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

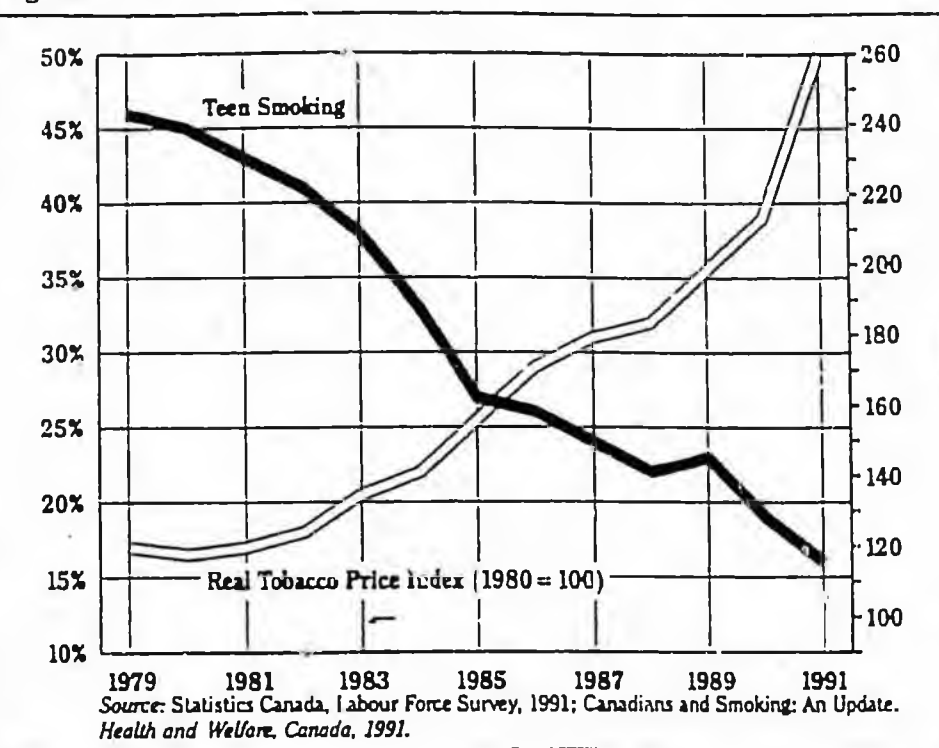


Figure 2: Tobacco taxation in the United States—average cigarette tax as a % of retail price

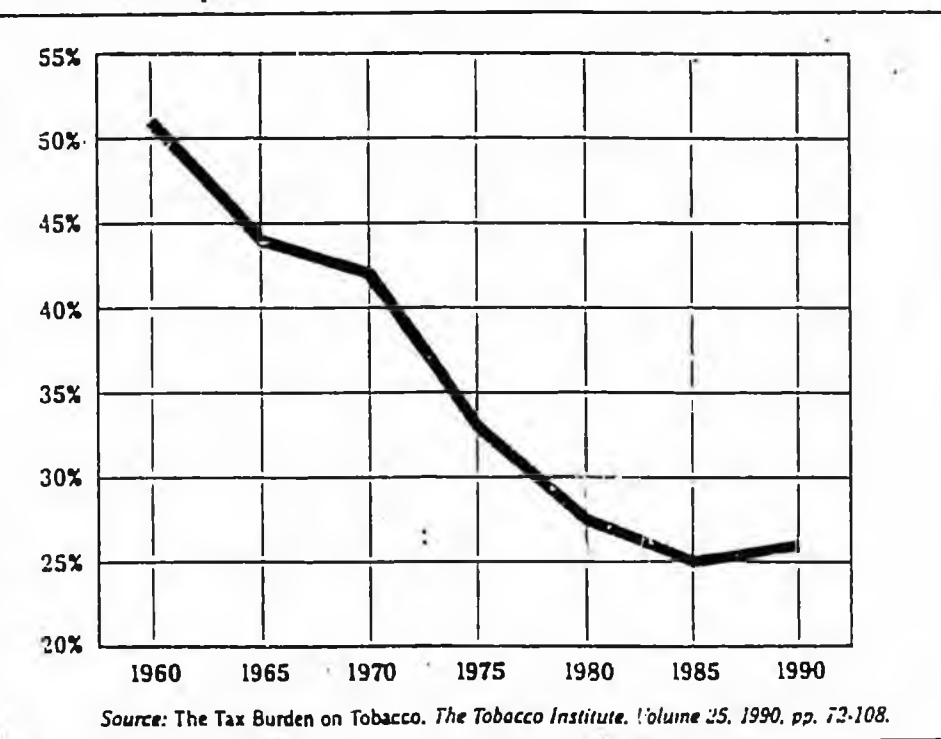
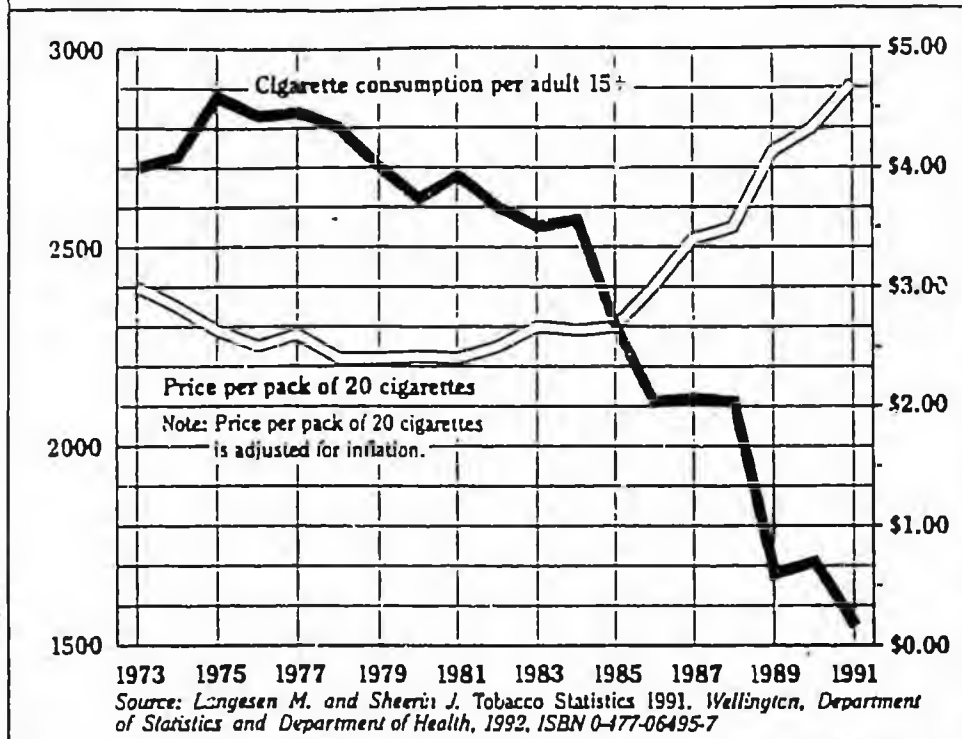


Figure 3: Cigarette consumption versus pack price—New Zealand, 1973-1991



this fall, since these are recent measures. A 1991 study³ 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

start—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

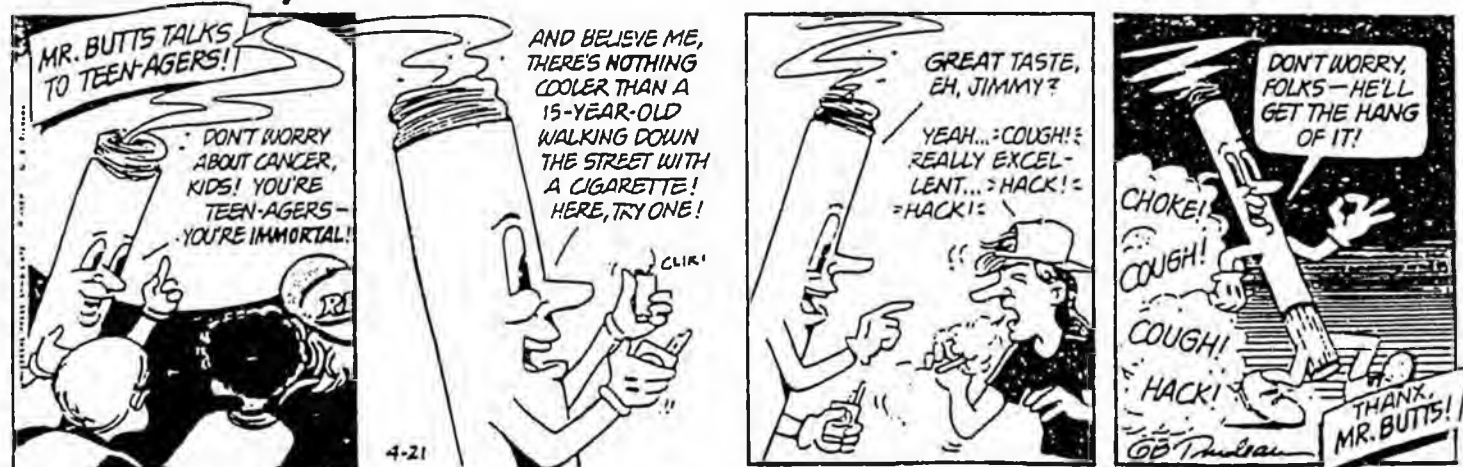
tobacco sales.

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. ☹

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Doonesbury



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.

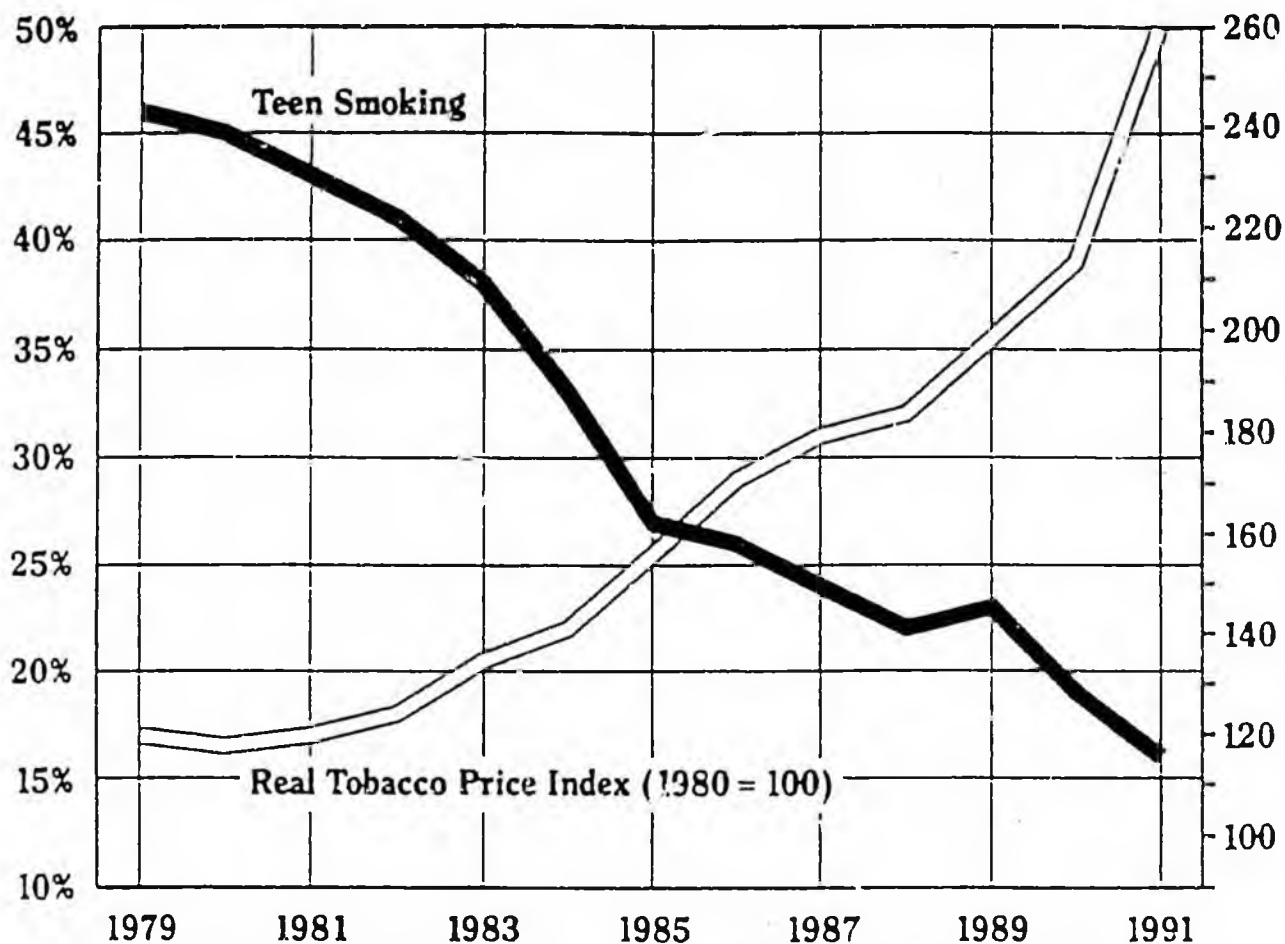
This relationship between price and consumption can be seen in more than academic studies. One of the best ways to illustrate it is to take the historical per capita consumption data presented at page 6 of The Tax Burden on Tobacco and the average price of a pack of cigarettes from 1954 to 1994 (pages 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.

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Legislative Affairs Agency
Division of Legal & Research Services



130 Seward Street, Suite 218
Juneau, Alaska 99801-2196
Phone: (907) 465-3991
Fax: (907) 463-3351

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

¹Among 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.

January 29, 1997

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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

²Studies 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.

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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

³CDC 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.

⁴Centers 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.

⁵The 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.

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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

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

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Page 5

(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.

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

Attachments

⁷Dr. 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

DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
FAX (907) 465-2029
Mail Stop 3101


130 Seward Street, Suite 409
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.

SECTIONAL ANALYSIS

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.

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
SELECT COMMITTEE ON LEGISLATIVE ETHICS



REPRESENTATIVE CON BUNDE

District 18

DURING SESSION
STATE CAPITOL, ROOM 104
JUNEAU, AK 99801-1182
(907) 465-4843 (800) 892-4843

DURING INTERIM
716 W. FOURTH AVE.
ANCHORAGE, AK 99501-2133
(907) 258-8168

E-MAIL

Representative_Con_Bunde@legis.state.ak.us

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

House Bill 1
Sponsor Statement

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.

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 F. N. Rose
Executive Director

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

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.

ASSOCIATION OF ALASKA SCHOOL BOARDS

Advocates for Alaska's Youth

SUBJECT AREA: Child and Youth Advocacy

97-6

PRESERVING THE RIGHTS OF LOCAL GOVERNMENTS TO REGULATE TOBACCO

WHEREAS, there is a movement in the United States to enact laws which preempt local governing bodies from adopting or enforcing any ordinance, rule, or regulation concerning the sale, distribution, advertising, display, or promotion of cigarette or tobacco products, and

WHEREAS, preemption would limit the authority of boroughs, cities and villages; and

WHEREAS, local ordinances are more likely to give the citizens a sense of ownership or loyalty to regulations, ultimately resulting in changed social norms related to the specific issue addressed; and

WHEREAS, former US Surgeon General C. Everett Koop has called preemption "nothing more than a devious strategy conceived by the tobacco industry to keep your communities, and therefore your people, from becoming more involved in critical tobacco prevention efforts;" and

NOW THEREFORE BE IT RESOLVED that AASB supports the right and authority of local governments to enact their own restrictions on alcohol and tobacco; and

BE IT FURTHER RESOLVED that AASB supports local governments' home rule to use their zoning, planning, and other local police powers to control alcohol and tobacco problems, including advertising and access.

Citizens To Protect Kids from Tobacco

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

January 8, 1997

The Honorable Con Bunde
Alaska House of Representatives
State Capitol
Juneau, Alaska 99801

Dear Representative Bunde:

Those of us working on the tobacco tax campaign would like to wish you a happy and productive new year and let you know that we look forward to working with you in 1997 to save thousands of lives in the years ahead.

Tobacco issues continue to make headlines in Alaska and around the country, with frequent news stories about proposed FDA regulation of tobacco and implementation of the Synar Amendment by state governments. This letter is intended to clarify that while such efforts are worthwhile, a major tobacco tax increase (\$1 per pack) is clearly the most effective tool we have to reduce tobacco use.

There is no "silver bullet" for ending the tobacco epidemic. A comprehensive approach that includes tax increases, media campaigns, innovative school programs, advertising restrictions, clean indoor air laws, and enforcement of youth access laws should be our goal.

The \$1 per pack tobacco tax increase must be the cornerstone of a comprehensive tobacco control strategy, and should be enacted first. In a report produced by a panel of experts, the National Cancer Institute concluded that "few measures exhibit the speed and magnitude of impact achieved by increasing taxation on tobacco products... Increasing tobacco excise taxes must be considered an essential and primary component of any comprehensive tobacco control program." The \$1 per pack tobacco tax increase will have immediate and dramatic impact on youth smoking and smokeless tobacco rates in every community in the state, without creating any financial drain on the state budget.

While there should be continuing efforts to enforce existing laws against selling tobacco to minors, reducing youth access to tobacco is easier said than done. The goal of the Division of Alcoholism and Drug Abuse is to increase vendor compliance to 80% (from the current rate of 64%), in keeping with the provisions of the federal "Synar" law. However, recent research conducted in Massachusetts shows that even when 80% of stores refuse to sell to minors, kids can still buy tobacco products. The researchers concluded that "compliance rates above 90% must be achieved before the youths in the community begin to have difficulty purchasing tobacco." While this is a worthwhile goal that we support, it is unlikely that we will be able to achieve it any time soon.



January 8, 1997

Page 2

Likewise, **restricting tobacco sales to liquor outlets only, as some have proposed, makes a lot of sense but will be extremely difficult to achieve.** Convenience stores typically make more than half their profits from tobacco sales. Any change in the law will be met with extreme resistance, with the tobacco industry providing financial support to the opposition. Again, the best option to reduce teen smoking is to pass the \$1 per pack tobacco tax increase.

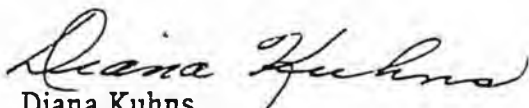
While valuable as part of a comprehensive effort, FDA regulation of tobacco products will not adequately address the tobacco epidemic in Alaska. Even if the regulations are implemented, they will not have the kind of dramatic impact on youth smoking that can be achieved through a major tobacco tax increase.

The proven effectiveness of tobacco taxation, the strong public support for the tax, and the fact that there is no cost to state government are all reasons to support the proposed \$1 per pack tax increase in Alaska. As the *Alaska Journal of Commerce* stated in an editorial last summer:

We can save thousands of lives in Alaska by protecting our kids from tobacco, and the best way to do that is to increase the state cigarette tax...It should be an easy choice and a no-lose situation. We can decrease the deaths from smoking while decreasing the dollars taken from the state savings account to support the budget, and we can reduce our future expenditures on health care.

Please feel free to contact us for more information. We look forward to talking with you soon.

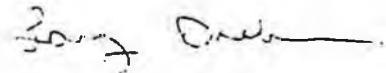
Sincerely,



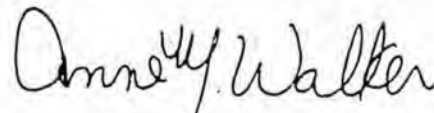
Diana Kuhns
Chief Operating Officer
American Cancer Society (Alaska)



Suzanne Meunier
Executive Director
American Heart Association (Alaska)



Larry Dickerson
Executive Director
American Lung Association (Alaska)



Anne M. Walker
Executive Director
Alaska Native Health Board

FEB-25-97 TUE 15:20

P. 01

Return to 316-6180

376-6180



Alaska State Legislature

Please enter into the record my testimony to the Finance Committee
 committee name

committee on HB 1 on Tobacco & Cigarette tax, dated _____
 bill/subject

Re: Cigarette tax:

I understand the American Cancer Society supports the cigarette tax. I support whatever the Amer. Cancer Society says on this issue. I believe way too many Alaskans smoke cigarettes. We need to try to discourage young people from starting to smoke. The tax might help in this regard.

Hopefully, the tax funds could be used to help finance health care in Alaska.

Signed: Doug Bartko Dy L Birtles
 Testifier

Representing (Optional)
490 E. Railroad Ave.
 Address
fax 373 7675
 Phone No.



Alaska State Legislature

Income & Excise Audit Div

Please enter into the record my testimony to the AK Dept of Revenue
committee name

committee on HB 1 - 1-16-97, dated 2/25/97
bill/subject

The cigarette tax is just another band-aid for a bigger problem. Many laws have already been passed that have not worked. Deny people and they will find another way to satisfy their needs. You're creating another market place that you'll have no control ~~under~~ over.

It is not the government's place to always regulate. It's people's choice. I choose to be a non-smoker. Have lived with smokers who decided to stop & they did.

If you pass another tax that is not needed then at least dedicate to someone not just the children.

Statistics show that all ages are affected by cigarettes (1st & second hand smoke); therefore,

Signed: BARBARA BROADWATER (next page)
Testifier

Representing (Optional)

Box 875082 WASILLA AK 99687

Address

NA

Phone No.

It would be hypocritical to dedicate the
tax collected just to schools ^{for} ^{the} "the children".
After all not all adults smokers have
children in school. That would be a tax
adults would not benefit from. That's
not ~~compassionate~~ compassionate or
logical if you care about ^{the} people's health
& the risk that they take from their own
decision to smoke. Taxation is not
the answer. Put it before the voters.

~~The~~ Your statistics about polls or not
correct. We ~~are~~ ^{were} never polled ~~and~~ and do
not appreciate ~~that~~ not being able to be
included in your numbers. We are registered
voters.



Alaska State Legislature

House Finance Committee

AK Dept. of Revenue

Health, Education & Social Service

Please enter into the record my testimony to the _____ committee name

committee on *Cigarette & HB 1 Tobacco Tax dated 2/14/97 & 1/16/97
bill/subject

I support a tobacco tax because:

1) The higher cost will make cigarettes less attractive to young children/teenagers; especially less attractive to those who have not yet started smoking, but tempted.

2) The higher cost of cigarettes would add one more good reason for smokers to switch to the Nicotine Patches, which are designed to help people stop smoking.

At present, smokers complain that the Nicotine Patches are more expensive than cigarettes themselves, in the short term, so they have no incentive to switch. The tax would equalize the two more.

3) The tax revenue can be used to reimburse the

Signed: [Signature]
Testifier

Representing (Optional)

P.O. Box 672029, CHUGUAK, AK 99567

Address

745-8432

Phone No.

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on
back

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State for years of health care cost related to tobacco-caused illnesses.

More importantly, the money can go towards education and intervention programs.

- * Education will alter behavior even if ~~the effect of education~~ ^{the effect of} cost doesn't; so why not add the tax for the reason of using the revenue for education? Where else should the education money come from?
- * Of course, smoking is one's free choice, but who's paying for the unreimbursed ambulance + hospital cost? Why not use the tax to pay for this?

Thank you for your attention.

~~the effect of education~~
"the effect of education"
"the effect of education"

~~the effect of education~~
"the effect of education"
"the effect of education"



Department of Health and Social Services
Karen Perdue, Commissioner
3601 C Street, Suite 576, P. O. Box 240249, Anchorage, Alaska 99524-0249 (907) 561-4406

Division of Public Health
Peter M. Nakamura, MD, MPH, Director

Section of Epidemiology
John Middaugh, MD, Editor
Bulletin No. 1 January 12, 1996

Smoking Related Mortality in Alaska: 1992-94

Cigarette Smoking in Alaska

Alaska has one of the highest smoking prevalence rates in the United States. Alaska's smoking rates are similar to those found in Nevada and in the tobacco-growing states¹. Alaska Natives have even higher smoking rates (Table 1). The highest smoking prevalence is found in the Bush region, and the lowest in the Urban region (Figure 1).

Table 1. Smoking Prevalence among Adult Alaskans by Race and Sex

	Alaska Native ⁴	All Races ¹
Men	46.5%	28.1%
Women	39.3%	25.0%

Figure 1. Smoking Prevalence in Alaska²

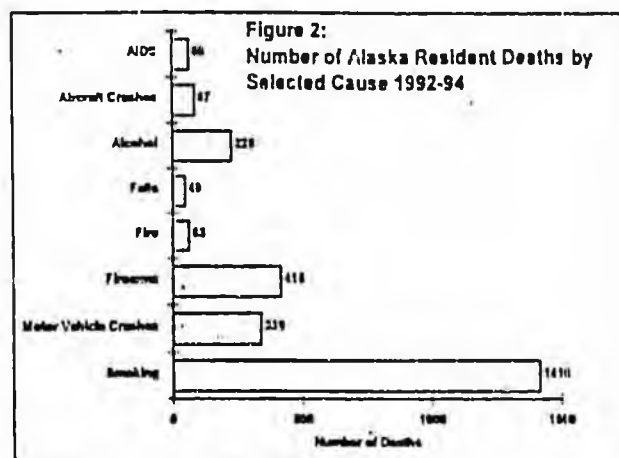


Deaths to Alaska Natives from Smoking

Alaska Natives account for 23.2% (329) of the smoking related deaths, although they account for 16.5% of the state's population.

Comparison to Other Important Causes of Death

The graph below shows how smoking compares to other preventable causes of death in Alaska⁷.



Summary

Each year, smoking kills more Alaskans than AIDS, aircraft crashes, alcohol, falls, fires, firearms and motor vehicle crashes combined. Alaska Natives are at higher risk because of their higher smoking rates.

Tobacco is considered the leading preventable cause of death in the United States⁸. The majority of smokers began smoking before 18 years of age⁹. In the U.S., by the 1980's, almost no regular smoking began after the age of 18⁹. Therefore, efforts to decrease tobacco use in the U.S. are being directed towards school-age children and adolescents, including limiting advertising and access to cigarettes¹⁰. Additional tobacco cessation efforts include developing and enacting strong policies for clean indoor air, increasing excise taxes and increasing educational efforts.

References

1. CDC. CDC Surveillance Summaries, November 18, 1994. MMWR 1994;43(No. SS-30).
2. Alaska Behavioral Risk Factor Surveillance, 1991-93 Average. AK Division of Public Health.
3. Alaska Behavioral Risk Factor Surveillance, 1993 Annual Report; AK Division of Public Health.
4. USDHHS. Preventing tobacco use among young people: A report of the surgeon general. USDHHS, PHS, CDC, 1994.
5. Schultz JM, Novotny TE, Rice DP: SAMMEC II-Computer software and documentation. Rockville, Md. U.S. Department of Health and Human Services, Public Health Service, CDC, April 1990.
6. Mortality Data for Alaska Residents, provided by the Bureau of Vital Records, Alaska Division of Public Health. Cardiovascular Disease: ICD-9 390-448; Cancer: ICD-9 140-208; Respiratory ICD-9 460-519; Perinatal ICD-9 740-779, 798.0 and age < 12 mos
7. Mortality Data for Alaska Residents, provided by the Bureau of Vital Records, AK Division of Public Health. Aircraft Crashes: ICD-9 840-845; AIDS ICD-9 42-44; Alcohol ICD-9 291,303,305,357.5,535.3, 425.5, 790.3, 860, 571.0-571.3; Falls ICD-9 880-888; Fires ICD-9 890-899; Firearms ICD-9 922,955,965,970,985; Motor Vehicle Crashes ICD-9 810-825
8. CDC. Reducing the health consequences of smoking: 25 years of progress—a report of the surgeon general. Washington, D.C. USDHHS, PHS, CDC, 1989. #89-8411.
9. Giovino GA, Henningfield JE, Tomar SL, et al: Epidemiology of tobacco use and dependence. Epidemiol Rev 1995;17:1-65.
10. Federal Register, August 11, 1995. Regulations restricting the sale and distribution of cigarettes and smokeless tobacco products to children and adolescents: proposed rule.

Deaths Caused by Smoking

The Centers for Disease Control and Prevention (CDC) has estimated that each year cigarette smoking results in approximately 419,000 deaths in the United States⁴. Deaths that are related to cigarette smoking include a portion of: cardiovascular disease; cancers of the lung, larynx, oral cavity, esophagus, pancreas, bladder, kidney and cervix; chronic bronchitis, emphysema, and other respiratory deaths⁵. Smoking also results in deaths in the perinatal period because it causes low birth weight infants and preterm delivery.

Using software provided by CDC⁵, we estimate that 1,416 deaths to Alaska residents during 1992-1994 were attributable to smoking, accounting for 19.8% of the 7,159 deaths during that time (Table 2).

Table 2. Total Number of Deaths and Estimated Smoking Related Deaths in Alaska 1992-94

Cause of Death	Total # of Deaths ⁶	Smoking Related Deaths ³	Percent Smoking Related
Cardiovascular	2,010	533	26.5%
Cancers	1,655	546	33.0%
Respiratory	503	260	51.7%
Perinatal (< 12 mos)	204	14	6.9%
Total	7,159	1,416	19.8%

Smoking Related Mortality Among Men and Women in Alaska

Of the 1,402 deaths among adults attributable to smoking, 912 were men, and 490 were women. Historically, men have been smoking longer than women and many smoking deaths are caused by long term use of cigarettes. Because smoking rates are now similar for men and women, women may have higher smoking attributable mortality in the future.



Department of Health and Social Services
Margaret R. Lowe, MEd, EdS, Commissioner

Division of Public Health
Peter M. Nakamura, MD, MPH, Director

Section of Epidemiology
John Middaugh, MD, Editor

1101 C Street, Suite 578, P.O. Box 240249, Anchorage, Alaska 99524-0249 (907) 581-4408

Bulletin No. 23 November 30, 1994

COSTS OF SMOKING IN ALASKA, 1991

It is estimated that each day 1,100 Americans will die from tobacco use; 3,000 children will smoke their first cigarette. In all, 419,000 smokers died and 1.5 million smokers quit in 1990. They are replaced by new smokers, 90% of whom start to smoke before age 18.¹

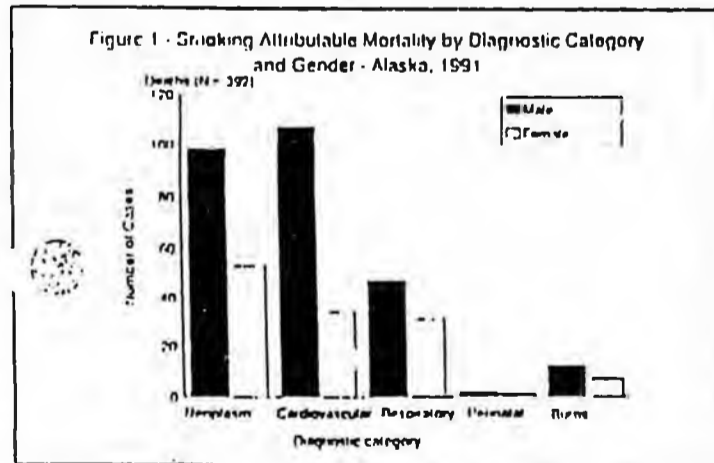
Cigarette smoking has substantial impact on mortality in Alaska. Every day an Alaskan dies due to smoking-attributable causes.

To estimate the impact of cigarette smoking in Alaska in 1991, we used the Smoking-Attributable Mortality, Morbidity, and Economic Cost (SAMMEC) software² distributed by the Centers for Disease Control and Prevention, and data from:

- the 1991 Behavioral Risk Factor Surveillance Survey
- health-care expenditure data (from the Office on Smoking and Health, CDC)
- population estimates by age and sex (Alaska Dept. of Labor) and,
- deaths by age, sex and smoking related diagnostic category (Section of Epidemiology).

RESULTS:

Smoking Attributable Mortality – 19% of the 2,076 Alaskan deaths in 1991 were smoking related. The proportion of all deaths attributable to smoking was higher for males (20%) than for females (16%). For males 40% of the smoking attributable deaths were due to cardiovascular diseases and 37% to neoplasms, whereas for females, 27% of smoking attributable deaths were due to cardiovascular diseases and 42% to neoplasms (Figure 1). Among Alaskans ≥ 35 years of age, 23% of deaths (372/1643) were attributed to cigarette smoking.



Smoking Attributable Years of Potential Life Lost (YPLL) – YPLL are the number of years that the person died prior to their 65th birthday. An average of 4.5 years of life were lost for each person 35 to 65 who died from a smoking related death in 1991.

Smoking Attributable Direct Costs – Direct health-care costs are the costs for the prevention, detection and treatment of smoking-related diseases as well as the cost for rehabilitating smokers suffering from smoking related illnesses. Costs of hospitalization, physicians' services, medications, nursing home care, and other professional services are included. The estimated total for direct costs in 1991 was \$45.6 million for persons ≥ 35 years of age. This is equivalent to \$220 per Alaskan ≥ 35 years of age or \$941 per current smoker ≥ 35 years of age.

Smoking Attributable Indirect Mortality Costs – These costs are calculated as the wages and salaries forfeited by persons who die prematurely from smoking-related causes. An estimated \$67.9 million was lost due to the indirect costs caused by smoking deaths.

Smoking Attributable Indirect Morbidity Costs – These costs include lost earnings and productivity for persons disabled by smoking-related chronic diseases. The estimated cost for indirect morbidity due to smoking was \$14.1 million.

The total estimated smoking attributable cost for Alaskans ≥ 35 years of age in 1991 was \$127.6 million.

DISCUSSION:

Smoking causes substantial mortality, morbidity and economic costs in Alaska. Total estimated smoking attributable costs have increased by 53% since 1989.³ These estimates are conservative since 1989 U.S. Labor Force and earnings data were used to calculate economic costs, which are lower than Alaska annual mean earnings. If Alaska specific health-care costs⁴ are used (instead of OSH health-care national estimates), total costs are greater - \$134 million.

SAMMEC underestimates the impact of smoking for several other reasons: 1) Estimates are based on cigarette smoking prevalence for 1991 which are lower in recent years than in the previous 30 years. The current burden of most chronic diseases linked to smoking reflects previous decades of higher smoking prevalence. 2) Estimates do not include deaths from other conditions (e.g., such as leukemia, and peptic ulcer disease) that may also be associated with smoking, nor do they include mortality caused by other forms of tobacco use (pipes, cigars, and smokeless tobacco) or exposure to environmental tobacco smoke.

To reduce the adverse health impacts of tobacco use, continued progress must be made in reducing tobacco use, especially smoking.

Vigorous efforts are needed to prevent the initiation of smoking, encourage smoking cessation at any age, and protect nonsmokers from the adverse effects of environmental tobacco smoke. Because many factors affect smoking initiation and cessation, multiple approaches are necessary including:

- increasing educational efforts
- reducing minors' access to tobacco products
- increasing tobacco excise taxes
- implementing more extensive and intensive counseling by health-care providers on smoking prevention and cessation
- developing and enacting strong policies and laws for clean indoor air
- eliminating advertising, especially advertising targeted toward persons less than 18 years of age.

References:

1. CDC. Smoking attributable mortality and years of potential life lost - United States, 1990. MMWR 1993;42:645-649.
2. Schultz JM, Novotny TE, Rice DP. SAMMEC II: computer software and documentation. Rockville, Md.: US Dept. of Health and Human Services, Public Health Service, CDC, April 1990.
3. Perham K. State of Alaska Epidemiology Bulletin, July 5, 1991.
4. State of Alaska Health Resources and Access Task Force Final Report, January 1993.

ALASKA STATE

HOSPITAL & NURSING HOME

ASSOCIATION

February 20, 1997

Representative Con Bunde
Room 106,
State Capitol
Juneau, AK 99801-1182

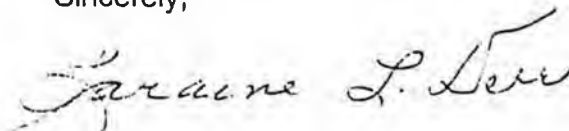
Re: Support, Cigarette Tax Legislation

Dear Representative Bunde:

The Alaska State Hospital and Nursing Home Association (ASHNHA) is dedicated to providing health services and to advocate for those programs that promote and encourage the enactment and promulgation of just and reasonable laws and regulations and improve the health status of the population we serve. In keeping with its mission, the Board of Directors voted on February 6, 1997, to support cigarette tax legislation.

Tobacco use is a major risk factor for diseases of the heart and blood vessels, chronic bronchitis and emphysema, cancers of the lung, pharynx, oral cavity, esophagus, pancreas and bladder as well as other problems such as respiratory infections and stomach ulcers. Because of the severe impacts on health services in the state, ASHNHA is a proponent of the cigarette taxes.

Sincerely,



Laraine L. Derr
President/CEO

ALASKA STATE

HOSPITAL & NURSING HOME

ASSOCIATION

Resolution

Title: Support for New State Public Health Laboratory Facility

WHEREAS, Alaska's Public Health Laboratories provide necessary services supporting disease control and prevention programs, maternal, child and family health programs and epidemiology programs; and

WHEREAS, Alaska's Public Health Laboratories support surveillance activities, outbreak investigations, and monitor the emergence of new infectious agents and the reemergence of infectious agents of public health importance; and

WHEREAS, Alaska's Public Health Laboratories also assist in assuring high quality laboratory work throughout the state by providing reference services, quality assurance materials, consultation, protocols, and training as well as providing a national surveillance link with the Centers for Disease Control; and

WHEREAS, Alaska's Public Health Laboratories generate information that serves the needs of epidemiologist, regulators, policy makers, the medical community, and the ultimate beneficiary, the public; and

WHEREAS, since 1985, thirteen studies have assessed the deficiencies and deteriorating condition of the state's Public Health Laboratories documenting significant health and safety risks caused by improper ventilation and poor layout of lab spaces; and

WHEREAS, the laboratories' current facilities are unable to meet the demands of changing analytical technologies and face serious mechanical system and structural inadequacies for conducting laboratory testing.

THEREFORE, BE IT RESOLVED, that the Alaska State Hospital & Nursing Home Association supports the concept of a new State Public Health Laboratory in Anchorage. This new laboratory will incorporate the current activities of the Juneau and Anchorage laboratories and will also house the State Medical Examiner. This new laboratory will integrate and adequately house departmental laboratory functions, allow for future growth and provide for a satisfactory level of services at a lower cost.

EASE
QUALITY
VALUE



SWISHER
SWEETS

LITTLE CIGARS



20 FILTERED
LITTLE CIGARS BY
KING EDWARD



AND, IT'S NOT A CIGARETTE.



"Fostering Native Self-Determination in Primary Care, Prevention and Health Promotion"

YUKON-KUSKOKWIM HEALTH CORPORATION

Representative Con Bunde
Room 104, State Capitol
Juneau, Alaska 99801-1182

February 8, 1997

Dear Representative Bunde:

On behalf of the Yukon-Kuskokwim Health Corporation, the largest native health corporation in the state of Alaska. I strongly urge you to vote in favor of the tax on tobacco products as put forth in House Bill No. 1.

I have here enclosed a packet of information which highlights:

- 1) the high rates of tobacco use among Alaskan youth;
- 2) the number and rate of new cases of digestive and respiratory tract cancers;
- 3) the number and rate of deaths due of digestive and respiratory tract cancers; and
- 4) the positive effect of taxation on the purchase and consumption of tobacco products.

Because many of the harmful effects of tobacco use are well documented, and because tobacco is the leading cause of preventable death and disease, and because studies have shown that one of the public health strategies that makes a difference is taxation. I strongly encourage the 20th legislature to do their part to help achieve our common mission of improving the health of the people of Alaska.

The passing of this tobacco tax will place this state in a leadership role, nationwide, by demonstrating our seriousness of effort to stem the growing population of tobacco users.

Help to protect our children's future. Please support House Bill No. 1.

Sincerely,

Gene Peltola, President / CEO
Yukon-Kuskokwim Health Corporation

In Support of
House Bill Number 1:

THE TAX ON TOBACCO

Supporting Documents

- State of Alaska Epidemiology Bulletin - Jan. 21, 1997
- Abstract - "Tobacco Use Among Alaska Youth"
- Youth Risk Behavior Survey, 1995 - Tobacco Use Data
- Abstract "The Prevalence of Tobacco Use Among Alaska Adults"
- Abstract "Smoking Attributable Mortality and Economic Costs in Alaska 1992-94"
- Cancer in Alaska Natives: A 25 Year Report
- Abstract "Prevention That Works"
- Saving Lives and Raising Revenue: The Case for Major Tobacco Tax Increases in Alaska



YUKON-KUSKOKWIM HEALTH CORPORATION

Fostering Native Self-Determination in Primary Care, Prevention and Health Promotion
P.O. Box 528 • Bethel, Alaska 99559 • 907.543.6000 • Fax 907.543.6006



Department of Health and Social Services
Karen Perdue, Commissioner
3601 C Street, Suite 540, P.O. Box 240249, Anchorage, Alaska 99524-0249 (907) 269-8000

Division of Public Health
Peter M. Nakamura, MD, MPH, Director

Section of Epidemiology
John Middaugh, MD, Editor
Bulletin No. 6 January 21, 1997

Tobacco Use Among Alaska Youth

Importance of Decreasing Youth Tobacco Use

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

Tobacco Use among Alaska High School Students³

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

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

	Alaska	Alaska Natives	U.S.
	Percent of Students		
Ever Tried Cigarettes	72.1	90.7	71.3
Current Smokers ¹	36.5	61.9	34.8
Frequent smokers ²	21.1	43.7	16.1
Smokeless Tobacco ³	15.6	22.5	11.4

¹Used at least once in past 30 days

²Used 20 or more of past 30 days

³Chewing tobacco or snuff on at least one of past 30 days

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

Tobacco Use Among Alaska Middle School Students⁴

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

Health Implications

The Centers for Disease Control and Prevention estimates that 32% of youths who become regular smokers in early adulthood will die prematurely of a smoking-related death.⁵ The estimate is based on data from studies of large populations of smokers and never-smokers.

Assuming that current smoking rates persist, 56,246 Alaska youths currently aged 0-17 will eventually become smokers.⁶ Among these smokers, 17,999 (32%) will die prematurely from a smoking-related illness.

Interventions to Prevent Tobacco Use among Youth

The 1994 Surgeon General's Report *Preventing Tobacco Use among Young People* states "Most of the American public strongly favor policies that might prevent tobacco use among young people. The policies include tobacco education in the schools, restriction on tobacco advertising and promotions, a complete ban on smoking by anyone on school grounds, prohibition of the sale of tobacco products to minors and earned tax increases on tobacco products."⁷

Effects of a Tobacco Tax

Economists use the concept of "price elasticity of demand" to describe the sensitivity of consumption to changes in price. The price elasticity of demand is defined as the percentage change in consumption that results from a 1 percent increase in price.⁸ A recent analysis based on sampling over 110,000 youths across the United States found a youth smoking price elasticity of -

0.675, meaning that for every 1% increase in the price of cigarettes, youth smoking would decrease by 0.675%, an estimate consistent with other studies.⁸ Therefore, a \$1.00 increase per pack of cigarettes would prevent 5704 of the projected 17,999 smoking-related deaths (Table 2). A larger increase would save more lives; conversely, a smaller increase would save fewer lives (Figure 1).

Table 2. Summary of projected health gains due to tobacco price increases in Alaska⁹

	No change	Price increase \$1.00 per pack	Price increase \$1.00 per pack
% ↑ in price	0	46.95%	93.90%
% ↓ in youth smoking	0	31.69%	63.38%
Projected # of smokers ¹	56,246	38,422	20,597
Projected deaths ²	17,999	12,295	6,591
Deaths prevented ³	0	5,704	11,408

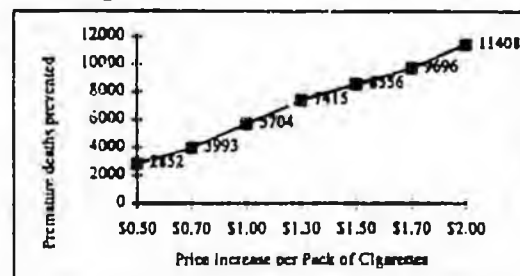
¹Assumes an average cost of \$2.13 per pack of 20 cigarettes in Alaska

²Number of youth currently aged 0-17 who would eventually become smokers

³Premature smoking-related deaths, calculated as 32% of projected smokers

⁴Premature smoking-related deaths prevented, calculated as 17999 - projected deaths

Figure 1. Number of premature smoking-related deaths prevented by price increase per pack of cigarettes⁷



Summary

The decisions that children and adolescents make about experimenting with tobacco often result in a life-long addiction. Among Alaska high school students, 21.1% are already frequent smokers. The use of tobacco begins even before high school. Alaska Native youth are disproportionately affected by tobacco. Tobacco use may be even more prevalent among youth not in school. Studies in the U.S. and Canada have clearly shown the effectiveness of increased price in reducing youth consumption.⁹ Increasing the price by at least \$1.00 per pack would prevent many premature tobacco-related deaths among Alaska youth currently aged 0-17 years, as well as the illness and suffering that would precede the deaths.

References

- 1992 Alaska Behavioral Risk Factor Surveillance System: 1992 Annual Report, Alaska Division of Public Health.
- Kessler DA, Witt AM, Barnett PS, et al. The Food and Drug Administration's regulation of tobacco products. *N Engl J Med* 1996;335:988-94.
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- US Dept of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, Georgia. USDHHS, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
- Chaloupka FJ, Grossman M. Price, tobacco control policies and youth smoking, unpublished data.
- Chaloupka FJ. Health and revenue gains from a tobacco tax increase in Alaska. Communication to American Cancer Society.

Tobacco Use Among Alaska Youth

Michele A. Hansen, MPH, CHES⁽¹⁾
Catherine Schumacher, MD, MSPH⁽¹⁾
Diane E. Ingle⁽¹⁾
John P. Middaugh, MD⁽¹⁾
Helen L. Mehrkens, BS, CHES⁽²⁾

ABSTRACT

The Youth Risk Behavior Survey (YRBS) is a national school-based survey used to monitor health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth and adults in the United States. Tobacco use is one of the behaviors monitored. Both high school and middle school surveys were administered to a representative group of Alaska high school and middle school students for the first time in 1995. Surveys were administered in a confidential and anonymous manner, taking care to assure student privacy. A total of 1,634 high school students and 1,265 middle school students completed surveys.

The survey found that Alaska high school students have smoking rates higher than the national rate and that Alaska Native youth have even higher smoking rates. Furthermore, smoking is not uncommon among Alaska middle school students.

Among high school students, 36.5% were current smokers (had smoked in the past 30 days) and 21.1% had smoked on 20 or more of the previous 30 days. Boys were more likely than girls to report having used chewing tobacco or snuff in the 30 days prior to the survey (23.5% of boys and 6.7% of girls). Smokeless tobacco use increased with grade level so that 29.1% of high school senior boys had used smokeless tobacco products within the previous 30 days. Over 60% of Alaska Native students reported smoking in the previous 30 days, 43.7% reported smoking 20 or more of the previous 30 days and 22.5% reported using chewing tobacco or snuff in the previous 30 days. Over half of middle school students reported having tried smoking at least once; about one-fourth smoked at least one day in the past 30 days and 5.6% smoked on 20 or more of the past 30 days.

- (1) Alaska Division of Public Health, Section of Epidemiology, P.O. Box 240249, Anchorage, Alaska 99524.
- (2) Alaska Department of Education, Div of Teaching and Learning Support, Juneau, Alaska 99801-1894.

INTRODUCTION

The Youth Risk Behavior Survey (YRBS) was implemented by the Alaska Division of Public Health and the Alaska Department of Education in 1995 in cooperation with the National Centers for Disease Control and Prevention (CDC) (1). The YRBS is a national survey developed by the Division of Adolescent and School Health at CDC in collaboration with 71 state and local departments of education and 19 federal agencies. The survey is a component of a larger national effort to assess priority health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth and adults in the United States. The YRBS survey examines six categories of adolescent behavior: behaviors that result in unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors; dietary behaviors, and physical activity. We report information from the Alaska YRBS about smoking and other tobacco use among Alaska youth.

METHODS

The YRBS was administered to a sample of Alaska high school (grade 9-12) and middle school (grades 7-8) students during the spring of 1995. The high school survey consisted of 84 multiple choice questions; the middle school of 54 multiple choice questions. Students filled out the surveys during regular class time.

All public schools in Alaska with students in grades 9-12 for the high school survey and students in grades 7-8 for the middle school survey were eligible to be selected in the sample. Special education and English as a second language classes were excluded at the classroom level. Group home, correspondence and correctional schools were also excluded from the sample. A sufficient number of students were selected to give a $\pm 5\%$ margin of error for each question.

A two-stage sample design was used. In the first stage sampling, schools were selected from all public schools at the high school and middle school level in proportion to their enrollment size. For the second stage

Section 2: Tobacco Use

BACKGROUND

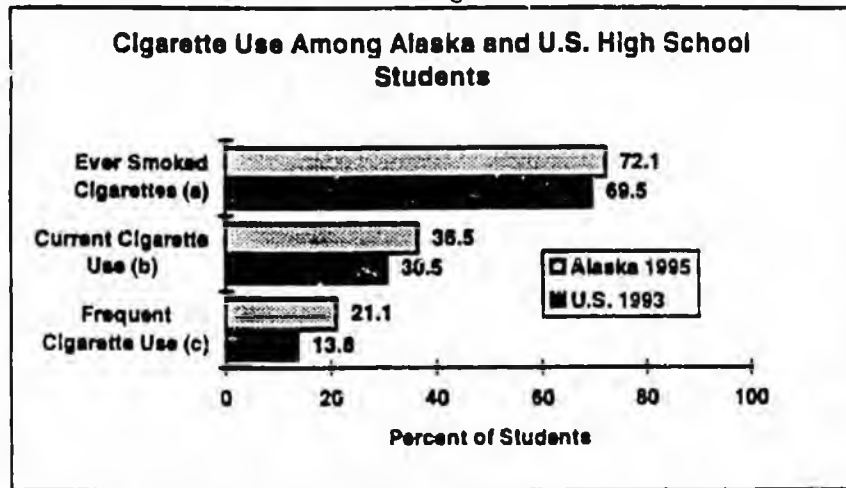
Tobacco is the leading preventable cause of premature mortality in the United States. The majority of Alaska smokers (83.7%), began smoking between the ages of 10 and 20 years². Because of the addictive properties of nicotine, smokers find it difficult to quit. Therefore, many efforts to decrease smoking in our society have been directed towards youth to decrease access to tobacco products and to discourage youth from starting to smoke³.

YRBS RESULTS

Cigarette Smoking

Alaska high school students are more likely to be current smokers and frequent smokers, than are U.S. students. Smoking rates are similar for boys and girls.

1995 Alaska & 1993 U.S. YRBS-High School Results

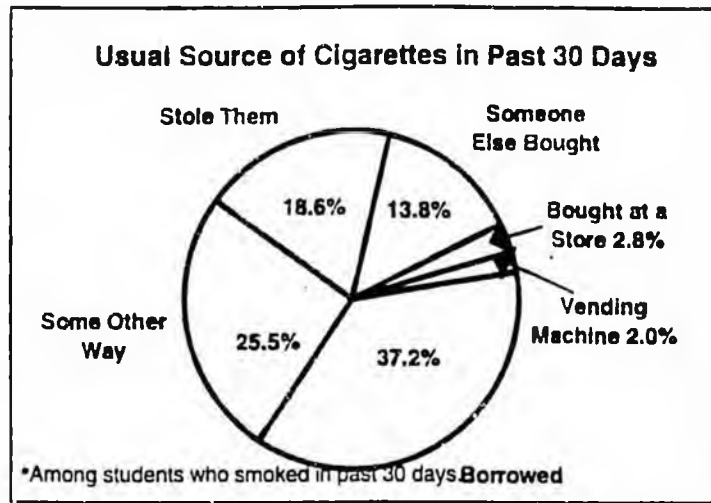


- a) Ever tried cigarette smoking.
- b) Smoked on at least one of the 30 days prior to the survey.
- c) Smoked on at least 20 of the 30 days prior to the survey.

Where are Students Getting Cigarettes?

The most common way middle school students obtain cigarettes is by borrowing them from someone else (37.2% of smokers); very few middle school smokers purchased cigarettes themselves at a store or vending machine in the 30 days prior to the survey.

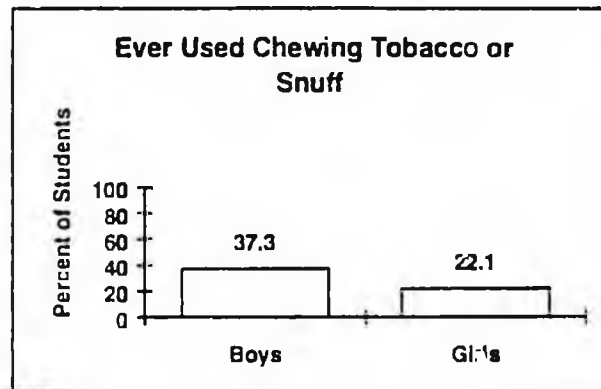
1995 Alaska YRBS-Middle School Results



Chewing Tobacco and Snuff

Boys are more likely to report ever having used chewing tobacco or snuff (37.3%) and over 20% of girls have also used smokeless tobacco products.

1995 Alaska YRBS-Middle School Results



Section 2: Tobacco Use

BACKGROUND

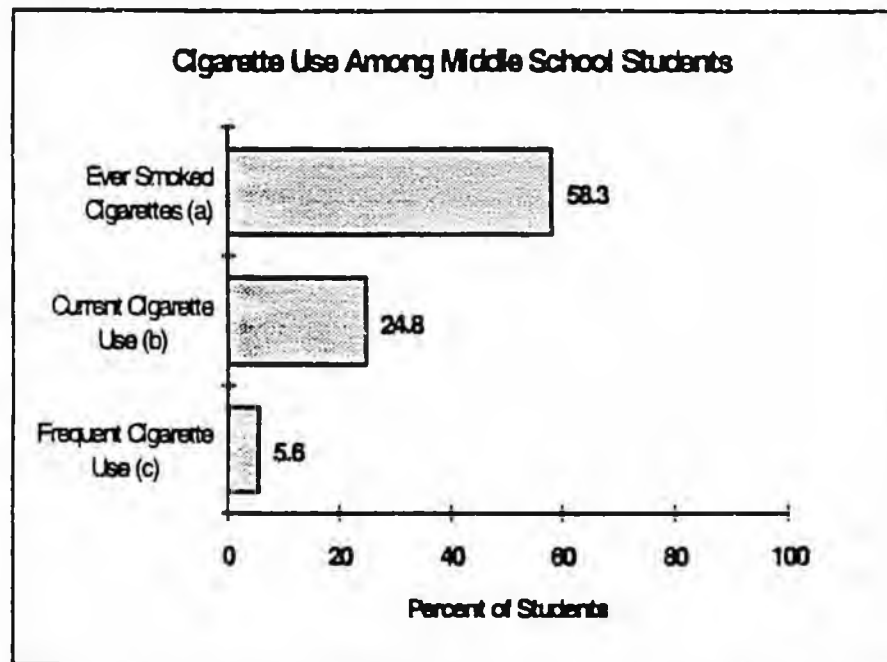
Tobacco is the leading preventable cause of premature mortality in the United States. The majority of Alaska smokers (83.7%), began smoking between the ages of 10 and 20 years². Because of the addictive properties of nicotine, smokers find it difficult to quit. Therefore, many efforts to decrease smoking in our society have been directed towards youth to decrease access to tobacco products and to discourage youth from starting to smoke³.

YRBS RESULTS

Cigarette Smoking

Over half of middle school students have tried smoking at least once; about one-fourth smoked at least one day in the past 30 days and 5.6% smoked on 20 or more of the past 30 days.

1995 Alaska YRBS-Middle School Results



- a) Ever tried cigarette smoking.
- b) Smoked on at least one of the 30 days prior to the survey.
- c) Smoked on at least 20 of the 30 days prior to the survey.

The Prevalence of Tobacco Use Among Alaska Adults

Patricia Owen⁽¹⁾

Diane E. Ingle⁽²⁾

Catherine Schumacher, MD, MSPH⁽²⁾

ABSTRACT

The Alaska Division of Public Health monitors the prevalence of smoking and other tobacco use among Alaska adults through the Alaska Behavioral Risk Factor Surveillance System, a telephone survey performed in cooperation with the U.S. Centers for Disease Control and Prevention (CDC). A total of approximately 1530 interviews are completed each year in Alaska by specially trained interviewers.

The prevalence of smoking among Alaska adults in 1994 (28.9%) was second highest in the U.S. Alaska Natives have higher smoking rates (42.9%). Overall, smoking rates have declined in the last three decades nationally. However, in recent years, little change has been found in the prevalence of smoking among adults. Alaska's rate of smokeless tobacco use has also been higher than the national rate of use. The majority of Alaska smokers (83.7%) began smoking between 10 and 20 years of age. In 1994, an estimated 121,000 Alaska adults aged 18 and older were current smokers.

INTRODUCTION

Because tobacco is one of the leading preventable causes of death and disease in the U.S. and in Alaska, the Alaska Division of Public Health monitors the prevalence of smoking and other tobacco use in Alaska through the Alaska Behavioral Risk Factor Surveillance System (BRFSS). The Alaska Division of Public Health implemented the BRFSS in 1990 with a point-in-time survey and has collected data continuously since January 1991. The survey is performed in cooperation with the U.S. Centers for Disease Control and Prevention (CDC) and gathers state based information about health related behaviors of Alaska adults through an ongoing telephone survey.

We report information from the Alaska BRFSS about smoking and other tobacco use among Alaska adults.

- (1) BRFSS Coordinator, Section of Community Health and Emergency Medical Services, AK Division of Public Health, PO Box 110616, Juneau, AK 99811-0616.
- (2) AK Division of Public Health, Section of Epidemiology, PO Box 240249, Anchorage, AK 99524.

METHODS

Alaska is one of the 50 states or territories participating in the nationwide BRFSS. Specially trained interviewers conduct 128 interviews each month using a standard BRFSS questionnaire. Interviews are conducted over the telephone using randomly selected telephone numbers. Respondents are selected from among the adult members of the household (age 18 years and older). A total of approximately 1530 interviews are completed each year in Alaska. Data are analyzed by the CDC and the Alaska Division of Public Health, and are weighted to adjust the survey sample to represent the state adult population. Alaska uses a stratified sampling design, in which the state is divided into four regions.

The BRFSS does not include persons living in institutions, such as dormitories, barracks or nursing homes. In addition, households without telephones are excluded. Telephone coverage is about 92% in Alaska although coverage varies by region (1).

Current smokers are defined as those who have ever smoked 100 cigarettes and who smoke now. In this report, we use the 1994 BRFSS data unless otherwise stated (2).

RESULTS

1994 Results

The prevalence of smoking among Alaska adults in 1994 (28.9%) was second highest in the U.S.; Nevada had the highest prevalence (29.1%). The national range was 15.0%-29.1%, with a median of 22.6% (3). Men were more likely to be smokers than were women (31.8% of men versus 25.7% of women). The age group with the highest smoking prevalence rates (37.6%) is 18-24 years.

Married persons were less likely to be smokers than persons who were divorced, widowed or never married (Table 1). Education was strongly related to smoking status (Table 2). Only 10% of college graduates reported smoking as compared to 44.5% of those with less than a high school education. Employment is also related to smoking; individuals who reported being out of work were most likely to be smokers (Table 3).

Smoking Attributable Mortality and Economic Costs in Alaska 1992-94

Catherine Schumacher, MD, MSPH⁽¹⁾

ABSTRACT

Tobacco is one of the leading preventable cause of death in the United States and Alaska. Alaska has one of the highest smoking prevalences. The Smoking-Attributable Mortality, Morbidity and Economic Cost software developed by the Centers for Disease Control and Prevention was used to estimate the deaths and economic impact due to smoking in Alaska.

In Alaska during the three year period 1992-94, 1416 deaths were estimated to be attributable to smoking, accounting for 19.8% of the 7159 deaths during that time. Direct medical care costs in 1993 due to smoking related illnesses were estimated at \$96.5 million. Additional smoking related costs include indirect mortality costs of \$183.2 million and indirect morbidity costs of \$15.9 million. The total economic cost attributable to smoking related illness for 1993 is estimated to be \$295.6 million. In summary, for the time period 1992-94, smoking was estimated to result in 470 deaths per year and in economic costs of almost \$300 million per year.

INTRODUCTION

Tobacco is one of the leading preventable cause of death in the United States (1). The U.S. Centers for Disease Control and Prevention (CDC) estimate that smoking kills approximately 419,000 people in the U.S. each year (2). Deaths that are related to cigarette smoking include a portion of: cardiovascular disease; cancers of the lung, larynx, oral cavity, esophagus, pancreas, bladder, kidney and cervix; chronic bronchitis, emphysema, and other respiratory deaths (2,3). Smoking also results in deaths in the perinatal period because maternal smoking causes a portion of low birth weight infants and preterm deliveries, and has been associated with AIDS.

Alaska has one of the highest smoking prevalence rates in the United States. Alaska's smoking rates (28.1% among men and 25.0% among women) are similar to those found in Nevada and in the tobacco-growing states (4,5). Alaska Natives (46.5% among men and 39.3% among women) have even higher smoking rates (6).

(1) Alaska Division of Public Health, Section of Epidemiology, PO Box 240249, Anchorage, Alaska 99524.

To estimate the deaths and economic impact of smoking in Alaska, we used the Smoking-Attributable Mortality, Morbidity and Economic Cost (SAMMEC) software developed by CDC (3). SAMMEC uses attributable risk formulas to estimate the deaths from neoplastic, cardiovascular, respiratory, and pediatric deaths associated with cigarette smoking. SAMMEC software uses relative risks for current and former smokers for each of the causes of death shown in Table 1.

METHODS

Mortality

SAMMEC was used to estimate the deaths attributable to smoking for Alaska adults (age \geq 35 years) and infants (age $<$ 1 year) using the 1992-94 mortality data for Alaska. Age-specific smoking prevalences for all races were obtained from the 1994 Behavioral Risk Factor Surveillance Survey (7). Alaska Native prevalence rates were obtained from the 1991-93 combined data from the Alaska Behavioral Risk Factor Surveillance Survey (6) (Table 2).

Economic Costs

Direct health care costs are the costs for prevention and treatment of smoking related diseases. CDC has been using a new method to calculate direct medical care costs which has not yet been included in the SAMMEC software (8). CDC used the method to estimate that in 1990, \$76 million was spent in Alaska on smoking related illnesses, which represented 6.13% of Alaska's total health care costs for that year (9,10). In order to estimate the 1993 direct health care costs for Alaska, that percentage was applied to the total medical care costs estimated for 1993. Nationally, about 7.1% of health care costs are attributable to smoking (11).

The SAMMEC program was used to calculate the indirect mortality costs, which are the foregone wages and salaries for persons who die prematurely from smoking related causes for 1993. The national 1990 expected lifetime earnings and housekeeping services by age and sex were used. Indirect morbidity costs were also estimated using SAMMEC, which are the lost earnings and productivity for persons disabled by smoking related illnesses.

**CANCER IN ALASKA NATIVES
A TWENTY-FIVE YEAR REPORT
1969-1993**

INCIDENCE AND MORTALITY

Anne P. Lanier, MD, MPH
Janet Kelly, MS, MPH
Bonnie Smith, RN, CTR
Claudette Amadon, RN
Annette Harpster, RN
Helen Peters, RN
Harvey Tanttala

Alaska Area Native Health Service
Indian Health Service
Public Health Service
Department of Health and Human Services
Anchorage, Alaska

Charles Key, MD
Anna Marie Davidson, CT, CTR

New Mexico Tumor Registry
The University of New Mexico Medical Center
Albuquerque, New Mexico

AUGUST, 1996

PROJECT SUMMARY

INDEXES

FIGURES

ABBREVIATIONS

ICD O CODES

Average Annual Age-Adjusted^a Cancer Incidence Rates per 100,000Ratio of Alaska Native 1989-93 Incidence Rates to U.S. 1989-1992^a

Site	Males			Females		
	Alaska Rate	U.S. Rate (White)	Rate Ratio	Alaska Rate	U.S. Rate (White)	Rate Ratio
All Sites	422.2	491.6	0.9	350.9	352.0	1.0
Oral Cavity & Pharynx	26.4	15.6	1.7	9.9	6.1	1.6
Salivary Gland	#	1.2		#	0.8	
Nasopharynx	15.9	0.6	27.8 **	#	0.2	
Gum & Other Oral Cavity	#	2.6		#	1.4	
Digestive	144.1	92.5	1.6 **	104.1	59.6	1.7 **
Esophagus	9.2	5.8	1.6	#	1.6	
Stomach	28.9	9.8	3.0 **	8.9	4.1	2.2
Colon & Rectum	81.0	57.8	1.4	70.1	39.4	1.8 *
Colon	68.3	39.8	1.7 *	54.0	29.3	1.8 *
Rectosigmoid Junction	#	6.2		4.2	3.7	1.1
Rectum	9.1	11.7	0.8	11.9	6.4	1.9
Liver	7.2	3.9	1.9	#	1.6	
Gallbladder	#	0.6		3.7	1.3	2.8
Other Biliary	5.1	1.4	3.8	#	1.0	
Pancreas	6.4	10.1	0.6	12.9	7.7	1.7
Respiratory	103.5	90.2	1.1	49.5	45.2	1.1
Lung & Bronchus	97.4	79.8	1.2	48.7	42.7	1.1
Larynx	5.4	7.7	0.7	#	1.6	
Bones & Joints	#	1.0		#	0.8	
Soft Tissue	#	2.6		#	1.8	
Melanoma of Skin	#	15.9	♦	#	11.4	
Breast	#	0.9		86.5	113.0	0.8
Female Genital				45.5	49.6	0.9
Cervix uteri				14.5	8.0	1.8
Corpus uteri/Uterus, nos				10.2	22.5	0.5
Ovary				16.0	15.9	1.0
Male Genital	76.8	153.7	0.5 **			
Prostate	69.8	147.4	0.5 **			
Testis	4.2	5.3	0.8			
Urinary	26.6	45.7	0.6	15.3	14.9	1.0
Bladder	4.5	31.9	0.1 **	#	8.1	
Kidney & Renal Pelvis	20.1	12.7	1.6	13.7	6.3	2.2
Eye & Orbit	#	0.9		#	0.6	
Brain & Nervous System	#	8.2		#	5.6	
Endocrine	#	3.3		6.9	7.4	0.9
Thyroid	#	2.8		6.9	6.9	1.0
Lymphomas	7.2	22.7	0.3 *	8.6	15.2	0.6
Hodgkin's	#	3.5		#	2.7	
Non-Hodgkin's	6.4	19.3	0.3	7.8	12.4	0.6
Multiple Myeloma	4.2	5.2	0.8	#	3.3	
Leukemia	5.0	13.7	0.4	4.7	8.0	0.6
Ill Defined & Unspecified	18.3	11.7	1.6	11.2	8.9	1.3

^a Rates are age-adjusted to the 1970 U.S. standard population.

* U.S. data from SEER program, National Cancer Institute, 1974-1992

Rates not shown for less than five cases

* Statistically significant at the 95% C.I.; ** statistically significant at the 99% C.I.

♦ Alaska Native rate significantly lower than US

Average Annual Age-Adjusted^a Incidence Rates per 100,000
 Ratio of Alaska Native 1989-93 Incidence Rates to U.S. 1989-92^b
 By Ethnicity and Sex
Males

	Aleut			Eskimo			Indian		
	No.	Alaska Rate	AK : US Rate Ratio	No.	Alaska Rate	AK : US Rate Ratio	No.	Alaska Rate	AK : US Rate Ratio
All Sites	64	456.7	0.9	231	394.2	0.8	187	444.1	0.9
Nasopharynx	1	#		15	25.1	41.8 **	4	#	
Stomach	4	#		25	39.4	4.0 **	7	17.1	1.7
Colon/Rectum	10	76.7	1.3	48	88.7	1.5	29	71.1	1.2
Liver	0	#		7	9.0	2.3	3	#	
Lung/Bronchus	15	112.0	1.4	56	105.4	1.3	31	76.7	1.0
Prostate	7	59.4	0.4	15	28.1	0.2 **	51	130.5	0.9
Leukemia	5	16.3	1.2	3	#		3	#	

Females

	Aleut			Eskimo			Indian		
	No.	Alaska Rate	AK : US Rate Ratio	No.	Alaska Rate	AK : US Rate Ratio	No.	Alaska Rate	AK : US Rate Ratio
All Sites	67	382.2	1.1	219	321.0	0.9	210	376.3	1.1
Colon/Rectum	10	66.2	1.7	53	85.0	2.2 **	24	52.5	1.3
Lung/Bronchus	14	82.9	1.9	25	41.3	1.0	21	44.2	1.0
Breast	17	104.3	0.9	43	59.3	0.5 *	70	114.7	1.0
Cervix	3	#		11	12.6	1.6	14	18.9	2.4
Lymphoma	3	#		4	#		6	11.2	0.7

^a Rates are age-adjusted to the 1970 U.S. standard population.

^b U.S. data from SEER program, National Cancer Institute, 1974-1992

Rates not shown for less than five cases

* Statistically significant at the 95% C.I.; ** statistically significant at the 99% C.I.

Average Annual Age-Adjusted* Cancer Mortality Rates per 100,000
Ratio of Alaska Native Cancer Mortality Rates 1989-93 to US 1988-1992

Males

<u>Site</u>	<u>No. Deaths</u>	<u>Alaska Native Mortality Rate</u>	<u>US Mortality Rate[†]</u>	<u>Alaska:US Rate Ratio</u>
All Sites	247	210.8	212.8	1.0
Oral Cavity/Pharynx	21	17.4	4.1	4.2 **
Nasopharynx	20	16.4	0.3	54.7 **
Digestive	81	68.3	49.8	1.4
Esophagus	9	7.9	5.3	1.5
Stomach	25	20.6	6.1	3.4 *
Colon & Rectum	29	24.9	22.9	1.1
Liver	9	6.1	3.8	1.6
Gallbladder	4	3.8	0.5	7.6
Pancreas	5	5.0	9.7	0.5
Lung & Bronchus	72	65.8	72.5	0.9
Male Genital	10	8.9	24.4	0.4
Prostate	8	7.2	24.0	0.3 *
Urinary	18	16.3	11.0	1.5
Bladder	3	2.8	5.8	0.5
Kidney & Renal Pelvis	15	13.5	5.0	2.7
Lymphomas	5	3.9	8.8	0.4
Leukemia	7	3.3	8.5	0.4
Ill Defined & Unspecified	24	19.5	14.3	1.4

Females

<u>Site</u>	<u>No. Deaths</u>	<u>Alaska Native Mortality Rate</u>	<u>US Mortality Rate[†]</u>	<u>Alaska:US Rate Ratio</u>
All Sites	236	177.2	140.0	1.3
Oral Cavity/Pharynx	9	7.4	1.6	4.6
Nasopharynx	5	4.1	0.1	41.0 **
Digestive	58	51.9	30.0	1.7 *
Esophagus	3	2.3	1.2	1.9
Stomach	8	5.1	2.7	1.9
Colon & Rectum	30	24.0	15.3	1.6
Liver	5	3.5	1.8	1.9
Gallbladder	5	3.8	0.8	4.8
Pancreas	15	11.6	6.9	1.7
Lung & Bronchus	55	43.0	31.8	1.4
Breast	29	20.7	27.0	0.8
Female Genital	21	12.9	14.5	0.9
Cervix uteri	11	5.8	2.5	2.3
Ovary	9	6.3	8.0	0.8
Urinary	17	13.7	4.1	3.3 *
Bladder	3	2.5	1.7	1.5
Kidney & Renal Pelvis	14	11.2	2.3	4.9 *
Lymphomas	7	5.5	5.8	0.9
Leukemia	2	1.6	5.0	0.3
Ill Defined & Unspecified	19	14.6	9.5	1.5

* Rates are age-adjusted to the 1970 U.S. standard population.

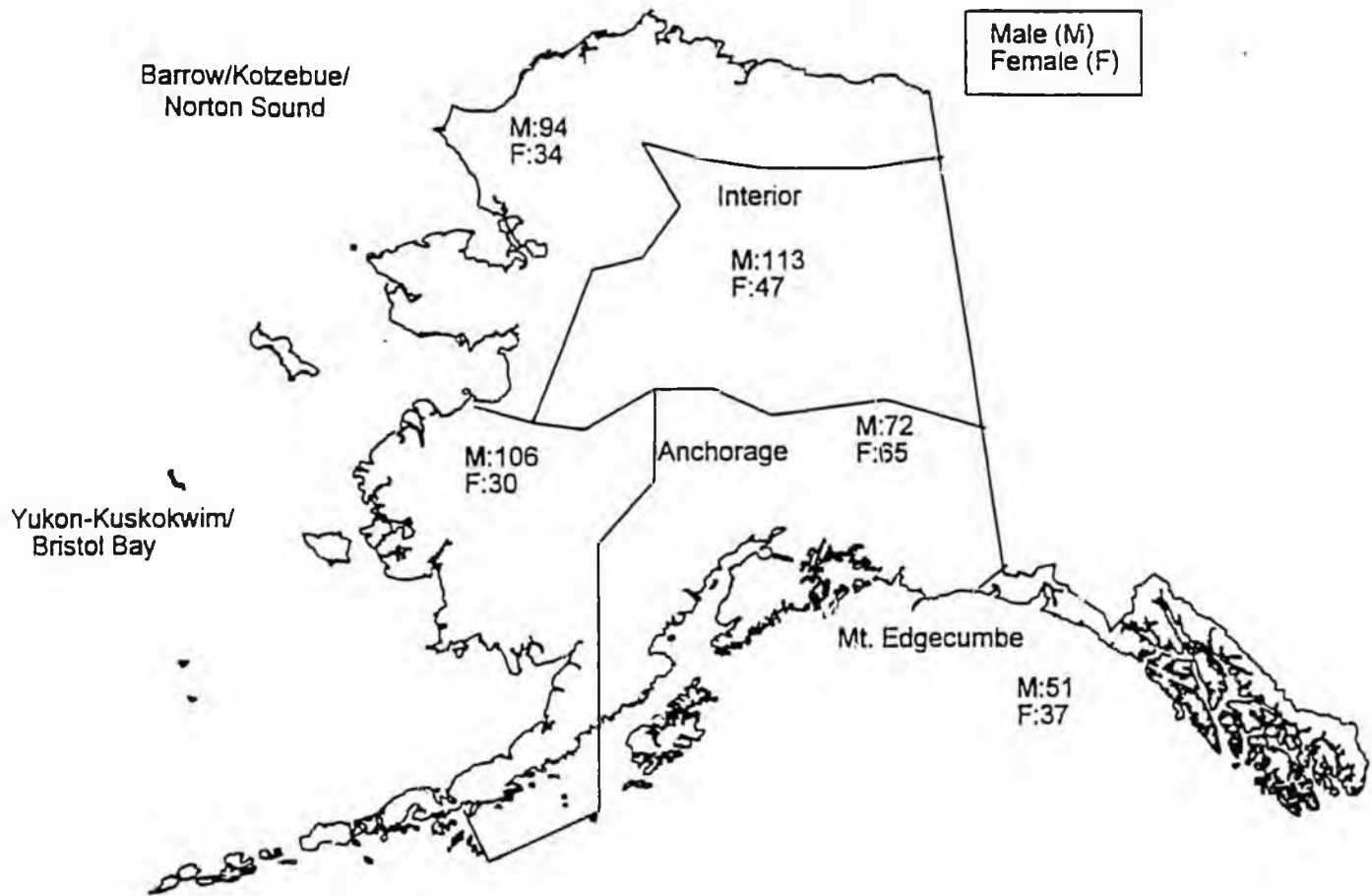
† Rates are for U.S. White population

* Statistically significant at the 95% C.I.; ** statistically significant at the 99% C.I.

Average Annual Age-Adjusted Cancer Incidence Rates

Alaska Natives 1969-1993

Lung and Bronchus



Service Unit	Male		Female	
	Cases	Rate	Cases	Rate
Anchorage	84	72	79	65
Barrow/Kotzebue/Norton Sound	77	94	26	34
Yukon-Kuskokwim/Bristol Bay	116	106	35	30
Interior	47	113	23	47
Mt. Edgecumbe	32	51	23	37

Prevention That Works

Peter Nakamura, MD⁽¹⁾

ABSTRACT

The solution to the problem of tobacco use is complicated when adolescents are faced with numerous risk factors. Alaska has a partnership between federal, state, and private interest groups and individuals who are committed to addressing the problem. This partnership is being expanded through the creation of additional local alliances. Each of the partners has influenced state policies on the control of the use of tobacco products. Because of the difficulty in changing adolescent behavior through education and information there is a need to decrease access to the offending products. A proven way to decrease access and adolescent use of tobacco products is raising the cost of the products through higher excise taxes.

THE PROBLEM

Simply stated, the problem is the increased economic burden to the state and to individuals, decreased quality of life, increased morbidity and early demise associated with tobacco use. It is difficult to imagine anyone who is not at least aware of the basic problem.

Unfortunately, we have a major hiatus between knowledge and practice. I recently had the good fortune to hear Judge Dennis A. Challeen (1) lecture on how people of good sense end up in court. The good judge starts with the explanation that you and most readers of this article are NORPs. A NORP is a normal ordinary responsible person. We take information and process it in a way that leads to the correct choice. Unfortunately, most NORPs undergo NORP WARPS. These are best described as out of character behavior followed by self-correction and return to responsibility. It is during these WARPS that NORPs commit acts that can get them in trouble with the law or other standards set by society. Think of the loyal and faithful husband who was caught in a compromising position the one time he wandered beyond the bounds of holy matrimony. He can be paying for that action for the rest of his life.

This gets us to the underlying cause of THE PROBLEM. Teens are JUNIOR NORPs experiencing a MEGA NORP WARP. This is the time in which they are most

vulnerable to high risk experimentation. Nearly 84% of Alaskan adults who smoke started smoking between the ages of 10 and 20. In Alaska, 27% of 12th grade girls and 18% of 12th grade boys reported daily use of cigarettes in a 1989 survey (2).

A SOLUTION

Just imagine if we had no automobiles and roads. The consequence would be that we would have no auto accidents and no traffic violations. The same can be said for tobacco and problems related to its use. However, automobiles, roads, and tobacco will be with us until we come up with a better means of daily transportation and a substance that is equally addictive and as well financed as tobacco.

Tobacco industry advertising has been extremely successful in affecting teenage use of tobacco. (3) Education efforts have not been equally efficient in reversing the trend. Limiting access to tobacco, alcohol, unhealthy practices and high risk behaviors are effective ways to assist our JUNIOR NORPs through the MEGA NORP WARP.

An analysis of countries around the world shows the powerful relationship between price and consumption. (4) The Canadian experience has demonstrated a direct negative correlation between increased tobacco tax and teenage use of cigarettes (Figure 1).

FEDERAL POLICY

The Food and Drug Administration (FDA) Commissioner David Kessler has called smoking addiction among young people "a pediatric disease" and an "epidemic." There has been no progress in reducing teenage smoking rates in the last decade despite continuing progress against adult smoking. The most recent data indicate that smoking among young people actually increased since 1991, with the largest increase among the youngest smokers. There was a 30% increase in smoking among 8th graders between 1991 and 1994. Between 1970 and 1986, the use of snuff increased 15 times and the use of chewing tobacco increased four times among male adolescents ages 17-19. (5)

On August 10, 1995, President Clinton announced proposed rules that will allow the FDA to affect the sale

(1) Director, Division of Public Health, State of Alaska, Dept. of Health & Social Services, Juneau, AK 99801.

Tobacco Tax Rates in Other States

STATE CIGARETTE EXCISE TAX RATES in cents per pack of 20, as of January 1, 1997

Washington	82.5	Pennsylvania	31.0
Massachusetts	76.0	Alaska	29.0*
Michigan	75.0	Idaho	28.0
Oregon	68.0	Utah	26.5
District of Columbia	65.0	New Hampshire	25.0
Hawaii	60.0	Delaware	24.0
Arizona	58.0	Kansas	24.0
New York	56.0	Ohio	24.0
Rhode Island	56.0	Oklahoma	23.0
Connecticut	50.0	New Mexico	21.0
Minnesota	48.0	Colorado	20.0
Illinois	44.0	Louisiana	20.0
North Dakota	44.0	Mississippi	18.0
Vermont	44.0	Montana	18.0
Wisconsin	44.0	Missouri	17.0
Texas	41.0	West Virginia	17.0
New Jersey	40.0	Alabama	16.5
California	37.0	Indiana	15.5
Maine	37.0	Tennessee	13.0
Iowa	36.0	Georgia	12.0
Maryland	36.0	Wyoming	12.0
Nevada	35.0	South Carolina	7.0
Nebraska	34.0	North Carolina	5.0
Florida	33.9	Kentucky	3.0
South Dakota	33.0	Virginia	2.5
Arkansas	31.5		



*Alaska's tax last raised in 1939.

Tobacco Taxes and Kids

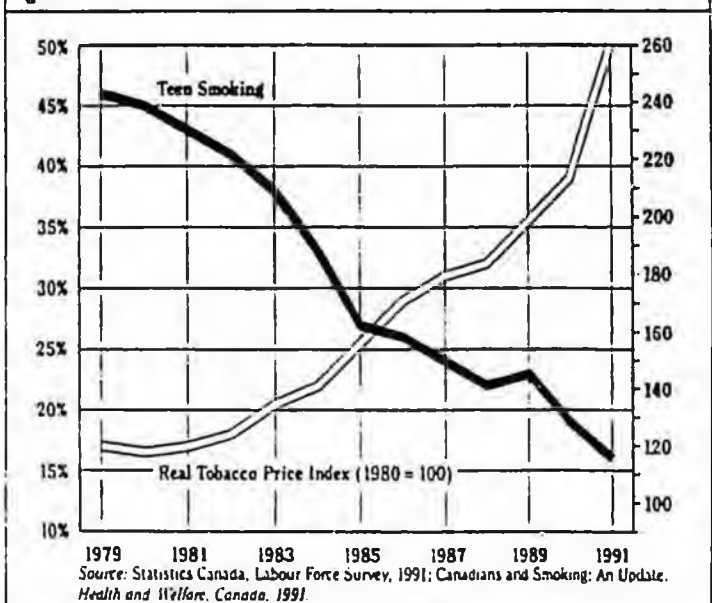
"There is widespread agreement ... that few measures exhibit the speed and magnitude of impact achieved by increasing taxation on tobacco products. [I]ncreasing tobacco excise taxes must be considered an essential and primary component of any comprehensive tobacco control program."

— *The Impact of Cigarette Excise Taxes on Smoking Among Children and Adults*
National Cancer Institute (August 1993)

EVERY DAY IN THE UNITED STATES, ABOUT 3,000 CHILDREN JOIN THE RANKS OF CIGARETTE SMOKERS. The average age is 14.5 years old. Of these 3,000 new smokers, we can expect that 30 will be murdered, 60 will die in traffic accidents, and 1,000 will be killed from smoking.¹

- **Adults don't start smoking — kids do.** Some 89% of adults who smoke began using cigarettes by or at age 18.² If children can be dissuaded from smoking they almost always lose interest by the time they reach 19, greatly reducing their chance of premature death.
- **Youth smoking and smokeless tobacco use rates in Alaska are higher than the national average.** 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.³
- **As tobacco taxes are increased, youth consumption will drop.** Research shows that a price increase of 10% in cigarettes can be expected to produce a decrease in consumption by youth of 10% or more. A substantial part of the decline is a result of children who will not initiate smoking at higher prices.⁴
- **Children are more influenced by tobacco prices than adults.**⁵ Children who smoke may not yet be addicted, and generally have less disposable income. A significant price increase in tobacco products will discourage kids from starting to smoke, while encouraging current smokers to quit or cut back.
- **Experience in Canada demonstrates that increased tobacco taxes will substantially reduce smoking among kids.** During the 1980s, Canada raised tobacco taxes from rates comparable to current U.S. rates to about \$3 (U.S.) per pack. Between 1981-1991, teen smoking declined by more than 60% in Canada while it remained relatively constant in the U.S. (See Figure 1.)⁶
- **In 1994, the Alaska Department of Health and Social Services recommended a \$2 per pack increase in state cigarette taxes as part of its Cancer Control Plan.** The research team concluded: "Preventing tobacco use by children is the key challenge in tobacco use reduction, and a substantial excise tax increase is our strongest weapon. No other measure can have as great an impact on the public's health and that of our children."⁷

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



Tobacco Taxes and the Economy

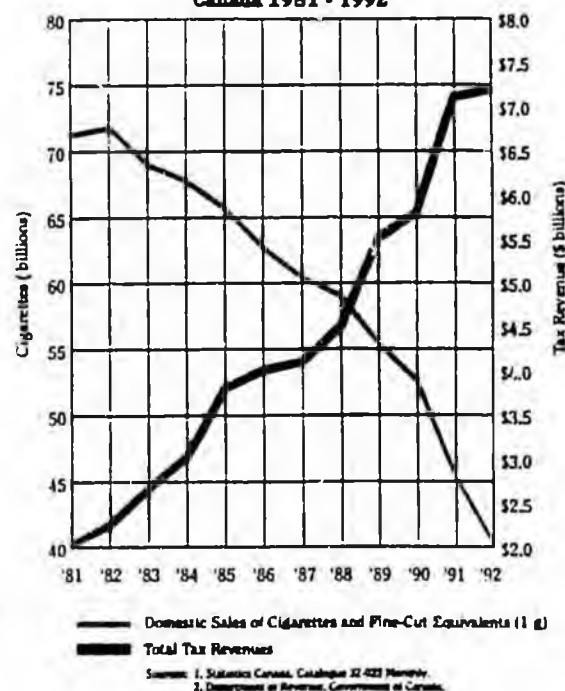
"State tobacco tax revenues are up. Monies collected from the tobacco tax are on target... . This is good news. Cigarette consumption in Michigan is down, as was expected and predicted by health and treasury officials. ... Reduced consumption is also good news. ... [M]illions of dollars in health care costs for smoking related disease will be saved as a result of reduced consumption."

— Douglas B. Roberts, Michigan State Treasurer (July 1995)
Statement regarding Michigan tobacco tax increase to 75 cents per pack

SMOKING CAUSES MORE THAN \$50 BILLION IN DIRECT HEALTH CARE COSTS EACH YEAR, according to the U.S. Centers for Disease Control and Prevention. Economic productivity losses add another \$50 billion, bringing the total cost of smoking to \$100 billion per year.¹

- In Alaska, smoking is responsible for one out of every five deaths, and costs the economy almost \$300 million a year in direct health care costs and lost productivity, according to the Alaska Dept. of Health and Social Services. This means that for every dollar that's collected in tobacco taxes, the Alaskan economy loses over \$18 from the impacts of smoking.²
- Smokers use 50% more sick leave and use the health care system 50% more than non-smokers.³
- Current and former smokers generate an estimated \$501 billion in excess health care costs over the course of their lives,⁴ even though smokers die an average of eight years younger than non-smokers.⁵
- Non-smokers pay for 75% of all government expenditures on smoking-related health care through taxes. Of the \$50 billion in U.S. health care expenditures caused directly by smoking in 1993, \$22 billion was paid for by government funds.⁶
- The Alaska Long Range Financial Planning Commission has estimated that a tobacco tax increase of \$1 per pack on cigarettes and a comparable increase in taxes on other tobacco products would raise approximately \$43 million annually. The Commission concluded: "This tax increase will dramatically lower teenage smoking and reduce tobacco use by adults, both of which will reduce the State's future expenditures on health care costs."⁷
- Tobacco tax increases result in increased revenue and reduced consumption. (See Figure 2.) This is because for most of the population a 10% price increase will result in about a 4% sales decline (with higher declines among youth). The net effect of a tobacco tax increase is that more money gets spent on fewer cigarettes, resulting in major health and revenue gains.⁸
- Increased tobacco taxes offer a win-win-win opportunity, simultaneously preventing tobacco addiction and death, reducing health care costs, and raising revenue.

Figure 2. Cigarette Sales Versus Tobacco Tax Revenue Canada 1981 - 1992



ALASKA



NFIB
National Federation of
Independent Business

HB 1

February 12, 1997

Representative Con Bunde
State Capitol
Juneau, AK 99801-1182

Subject: Support for HB 1 - Tobacco Tax

Dear Representative Bunde,

The Alaska Chapter of the National Federation of Independent Business has 4,400 members, making it the largest small-business advocacy group in the state. The typical NFIB/Alaska member employs five workers and rings up gross sales of about \$181,000 per year. In total, the organizations members employ more than 43,000 workers.

Each year the NFIB polls its diverse membership on a variety of issues. The federation uses the poll results to form its legislative agenda. The 1997 survey included a question regarding an increase in tobacco taxes. The members responded 2 to 1 in favor of increasing the tax. Following are the exact results:

Would you support an increase in the tobacco tax?

62.7% YES 35.8% NO 1.5% Undecided

Attached to this letter is a copy of the full survey results. You will notice that the organization is strongly opposed to imposition of income taxes. Historically, the organization has been opposed to increased taxes of all kinds. The case for an increased tobacco tax is clearly an exception

Please include NFIB/Alaska on your list of supporters of House Bill 1.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thyes Shaub'.

Thyes Shaub
NFIB/Alaska Lobbyist