

# *Alaska* Tobacco Facts

The impact of tobacco on the lives  
of Alaska's people.



# Alaska Tobacco Facts

2012 Update

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## Acknowledgements

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# **Table of Contents**

Table of Contents .....	1
1. Introduction .....	2
2. Cigarette Consumption.....	3
3. Tobacco-Related Deaths and Economic Costs .....	4
4. Adult Smoking .....	5
5. Adult Smokeless Tobacco Use .....	16
6. Youth Cigarette Smoking .....	20
7. Youth Cigar Use .....	25
8. Youth Smokeless Tobacco Use .....	27
9. Youth Access to Tobacco.....	29
10. Tobacco Use During Pregnancy .....	31
11. Secondhand Smoke .....	34
12. Alaska Tobacco Prevention and Control Program.....	39
13. Trend Tables .....	44
14. Data Sources .....	50

# 1. Introduction

*Alaska Tobacco Facts* is designed to be a brief, annual update of key indicators from state data sources. This report can be used to educate Alaskans about the toll that tobacco continues to take on the health and well-being of our citizens.

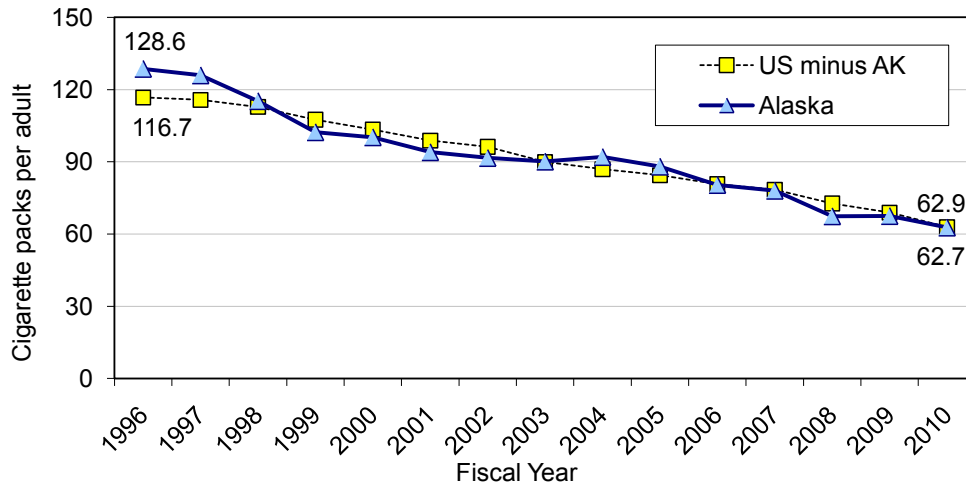
Trends in tobacco use are measured from the baseline year of 1996, prior to two early events in tobacco prevention and control in Alaska: the tobacco tax increase in 1997 and Alaska's decision to join in the national multi-state Tobacco Master Settlement Agreement in 1998. Differences are noted where there is statistical significance ( $p < .05$ ).

The following are highlights from *Alaska Tobacco Facts, 2012 Update*:

- Per adult cigarette consumption declined 51% from State Fiscal Year (SFY) 1996 to SFY 2010; **436 million fewer cigarettes** were sold in 2010 compared to 1996.
- In 2010, tobacco use cost Alaska \$348 million in direct medical expenditures and an additional \$231 million in lost productivity due to tobacco-related deaths.
- **The percentage of adult smokers in Alaska has declined** by one-fourth since 1996 to 20.6 percent in 2010, a statistically significant decrease.
- Alaska Native adults are still twice as likely to smoke as non-Native adults.
- Alaska adults with less education, with lower incomes, and who live in rural areas of the state also smoke more than their peers.
- The majority of Alaska adults who currently smoke want to quit; about three out of five tried to quit in the last 12 months.
- **Smoking among high school students has declined** more than 60%, from 37% in 1995 to 14% in 2011.
- Alaska Native high school students—both boys and girls—are significantly more likely to smoke than students from other race groups, although the gap has decreased considerably since 2003.
- Secondhand smoke exposure has decreased significantly among children at home, and among high school students at home and other indoor spaces, but one out of three high school students are still regularly exposed to secondhand smoke.
- Among those who work primarily indoors, younger adults (age 18 to 29) are significantly less likely to be protected by a clean indoor air policy.
- Nine out of ten adults believe people should be protected from smoke from other people's cigarettes and a similar proportion say they would visit bars and other establishments as often or more often if smoking were not allowed there.

## 2. Cigarette Consumption

### Annual Per Adult Sales of Cigarette Packs, By Fiscal Year, Alaska and US (minus Alaska), 1996-2010

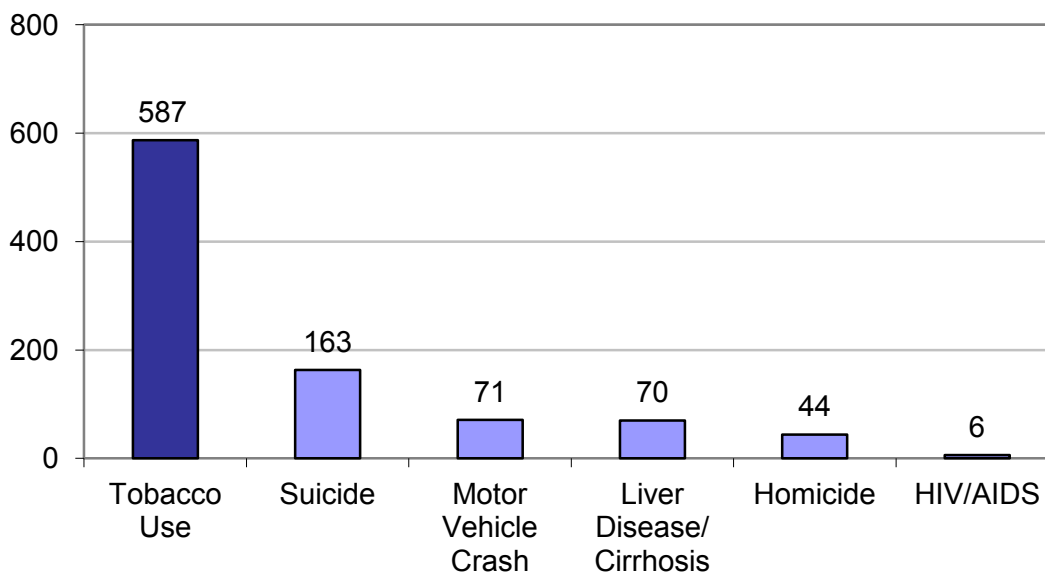


Sources: Alaska Department of Revenue, Tax Division FY10 Reports;  
Orzechowski & Walker, *The Tax Burden on Tobacco*, 2011 (vol 45).

- Between State Fiscal Years (SFY) 1996 and 2010, the per-adult number of cigarette packs sold in Alaska dropped 51%, from 128.6 packs to 62.7 packs per adult.
- This drop in cigarette sales translates to 436 million fewer cigarettes sold in Alaska in 2010 compared to 1996.

### 3. Tobacco-Related Deaths and Economic Costs

**Number of Deaths Due to Selected Causes,  
Alaska, 2009**



Sources: Alaska Bureau of Vital Statistics (2009 deaths); Alaska Behavioral Risk Factor Surveillance System (smoking prevalence); CDC, Smoking Attributable Morbidity, Mortality, and Economic Costs.\*

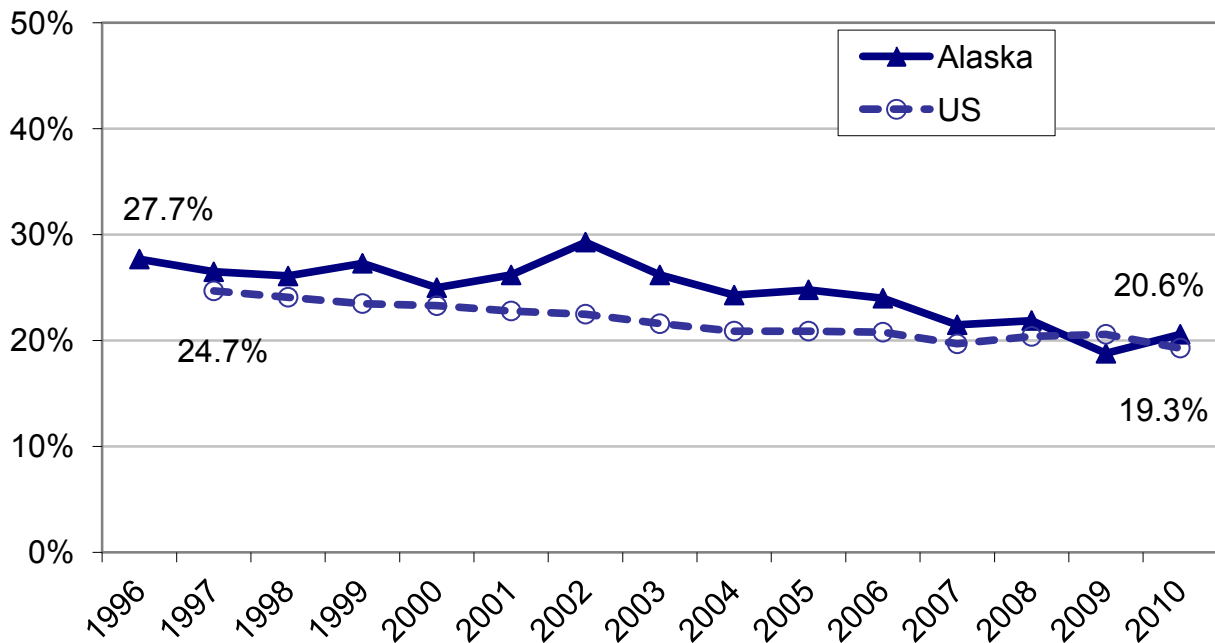
- More Alaskans die annually from the direct effects of tobacco use than from suicide, motor vehicle crashes, chronic liver disease and cirrhosis, homicide, and HIV/AIDS combined.
- Nationally, exposure to secondhand smoke kills more than 49,000 adult non-smokers from coronary heart disease and lung cancer each year.<sup>†</sup>
- In 2010, tobacco use cost Alaska an estimated \$348 million in direct medical expenditures and an additional \$231 million in lost productivity due to tobacco-related deaths.\*
- This sums to an astounding \$579 million, yet it underestimates total costs; lost productivity from tobacco-related illness and costs due to secondhand smoke exposure-related illness or death are not included.

\* See Section 14: Data Sources, pp 50-51 for information on how smoking-attributable deaths and costs were estimated.

<sup>†</sup> National estimates from the U.S. Department of Health and Human Services 2006 report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General."

## 4. Adult Smoking

Percent of Adults Who Smoke, by Year  
Alaska and US, 1996-2010



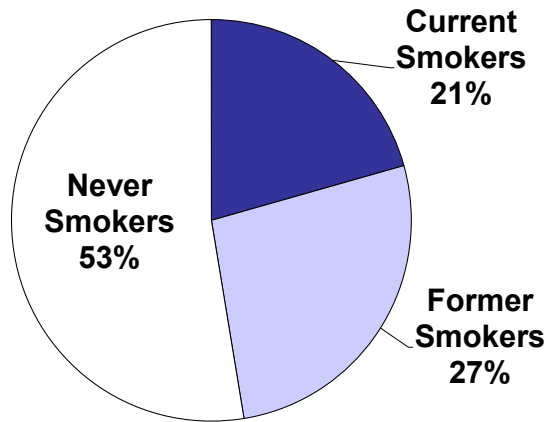
Sources: Alaska Behavioral Risk Factor Surveillance System; National Health Interview Survey

For Alaska:

- Smoking prevalence has declined significantly from 27.7% in 1996 to 20.6% in 2010. Using the 2000 population information for Alaska, this represents about 31,000 fewer adult smokers in 2010 than in 1996.
- Among women, the proportion of smokers has decreased significantly from 24.2% in 1996 to 18.8% in 2010.
- Among men, the decline in smoking is also significant, falling from 30.8% in 1996 to 22.2% in 2010.



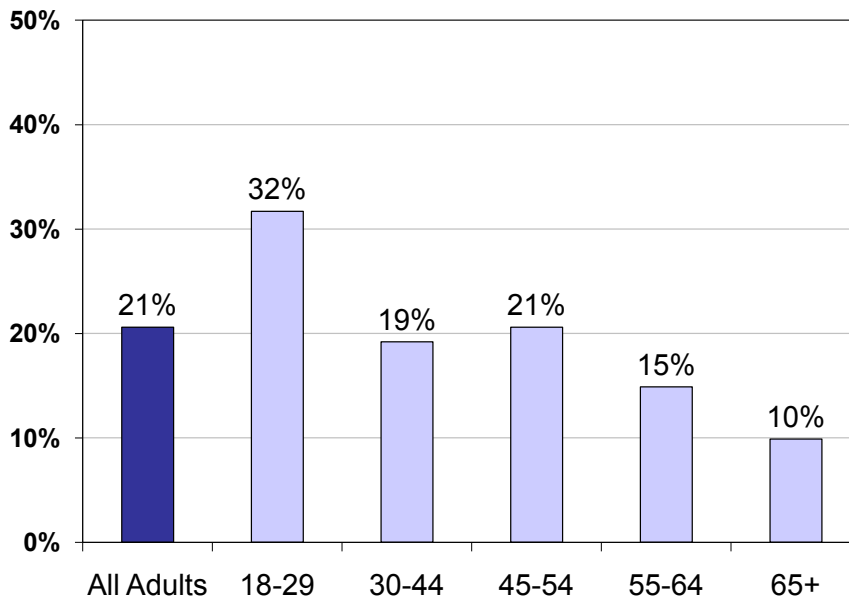
## Smoking Status of Adults, Alaska, 2010



Source: Alaska Behavioral Risk Factor Surveillance System

- As the proportion of smokers decreases, the proportion of Alaskans who have never been smokers has increased from 46.3% in 1996 to 52.6% in 2010.
- Although the proportion of former smokers among all Alaska adults has remained at about a quarter of the population, among Alaskans who have ever been smokers, the proportion of former smokers increased from 48.4% in 1996 to 56.5% in 2010.
- Less than 4 in 10 Alaska adults in North/NW/Interior and Southwest Alaska (37.6%) have never been smokers, compared to more than half of adults in other regions of Alaska (54.2%).

## Percentage of Adults Who Smoke, by Age Group, Alaska, 2010



Source: Alaska Behavioral Risk Factor Surveillance System

- Among adults aged 30-54, smoking decreased from 29.6% in 1996 to 19.7% in 2010. Among those aged 55 and older, prevalence also decreased significantly, from 21.4% in 1996 to 12.9% in 2010.
- Younger adults remain a priority group for tobacco prevention efforts. In 2010, almost 1 in 3 (31.7%) young adults aged 18 to 29 reported being a smoker. This proportion has remained about the same since 1996.
- More than half of all current smokers (57%) were smoking by the time they were 17 years old.

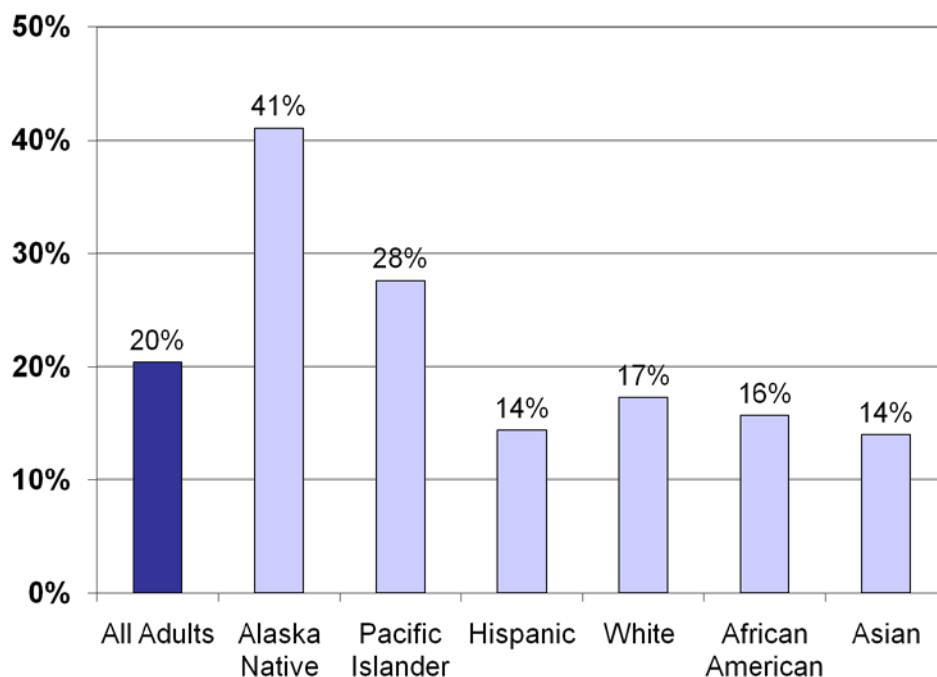
## Percentage of Adults Who Smoke, by Region, Alaska, 2010

Region	Percentage
North/NW/Interior	39%
Southwest	31%
Mat-Su Borough	26%
Southeast	22%
Fairbanks (North Star)	18%
Gulf Coast	16%
Municipality of Anchorage	17%
All Adults	21%

Source: Alaska Behavioral Risk Factor Surveillance System

- Residents of more rural regions in Alaska – Southwest and North/NW/Interior Regions – are more likely to smoke than residents of other regions excepting Mat-Su.
- Between 1998 and 2010, adult smoking prevalence decreased in four regions of Alaska: Anchorage, Gulf Coast, Southeast, and Fairbanks North Star.
- Regional groupings include:
  - North/NW/Interior – Nome, Northwest Arctic, North Slope, Southeast Fairbanks, Denali and most of Yukon-Koyukuk
  - Southwest – Bristol Bay, East Aleutians, West Aleutians, Dillingham, Lake & Peninsula, Bethel, and Wade Hampton (plus a small part of Yukon-Koyukuk)
  - Mat-Su Borough
  - Southeast – Yakutat, Skagway, Juneau, Sitka, Haines, Wrangell-Petersburg, Ketchikan, and Ketchikan Gateway
  - Fairbanks (North Star) – Fairbanks North Star Borough
  - Gulf Coast – Kenai, Kodiak, and Valdez Cordova Boroughs and Census Areas
  - Municipality of Anchorage

## Percentage of Adults Who Smoke, by Race/Ethnicity, Alaska, 2008-2010

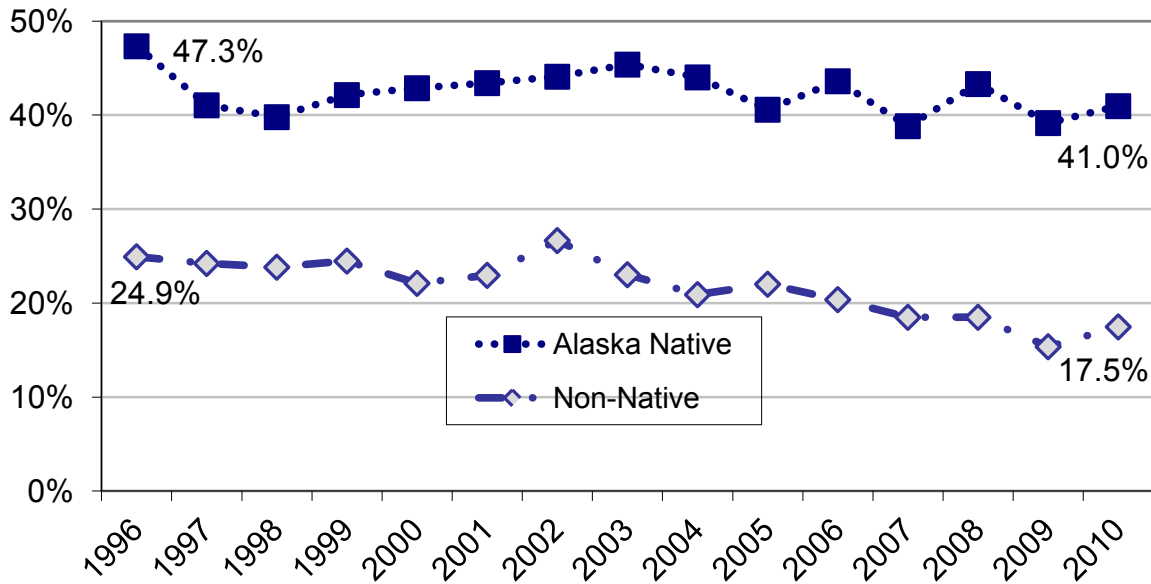


*Note: The race categories of Alaska Native, African American, Asian, Pacific Islander, and White do not include respondents of Hispanic ethnicity.  
Note also: Percents for 2008-2010 may differ from those reported elsewhere for 2010 only.*

Source: Alaska Behavioral Risk Factor Surveillance System

- Alaska Native adults are more likely to be smokers than Hispanic, White, African American, or Asian adults.
- There is no significant difference in smoking prevalence between White, African American, Asian, Pacific Islander, and Hispanic adults.

## Percentage of Adults Who Smoke, by Year Alaska Natives and Non-Natives, 1996-2010



Source: Alaska Behavioral Risk Factor Surveillance System

- Smoking prevalence has remained high for Alaska Native adults, and has not changed significantly since 1996. Roughly 2 in 5 Alaska Native adults smoked in 2010.
- Among non-Native adults, smoking has decreased significantly since 1996.
- Alaska Native adults are currently more than twice as likely to smoke as non-Native Alaska adults.

**Percentage of Adults Age 25 to 64 Who Smoke,  
by Socioeconomic Status (SES) and Race, Alaska, 2008-2010**

<b>SES Status (age 25-64)*</b>	<b>Alaska Natives</b>	<b>Non-Natives</b>
Lower SES	50%	31%
Higher SES	33%	15%
All Adults (age 25-64)	42%	18%

Source: Alaska Behavioral Risk Factor Surveillance System

\*Lower SES is calculated as those persons with less than a high school education or less than 185% of the Alaska Poverty Level Guideline. Measurement of SES is also restricted to age 25 to 64 because younger adults (age 18-24) may not have had a chance to complete their education and begin to earn an income. Older adults aged 65 and over are similarly excluded because income and education might be inadequate SES markers for those who are potentially retired and eligible for Medicare.

- In addition to Alaska Natives, non-Native adults age 25-64 of lower SES are disproportionately likely to smoke, compared to their higher SES non-Native counterparts (31% versus 15%).
- Regardless of race group, more than 2 in 5 adult smokers (42%) live in households earning less than 185% of the Alaska Poverty Level Guideline, compared to 27% of the overall adult population.

Source: Alaska Behavioral Risk Factor Surveillance System

- Employment status is another factor related to both SES and smoking. Although unemployed adults and those who are unable to work comprise about 11% of the overall adult population, they are disproportionately likely to smoke; 45% of unemployed adults and 41% of those who are unable to work are smokers, compared to 19% of employed adults who smoke.

Source: Alaska Behavioral Risk Factor Surveillance System

**Percentage of Adults Who Smoke, by Education and Race,  
Alaska, 2008-2010**

<b>Education Level</b>	<b>Alaska Natives</b>	<b>Alaska Non-Natives</b>	<b>Total</b>
Less than high school graduate	52%	43%	46%
High school graduate or GED	46%	24%	29%
Some college	33%	18%	20%
College graduate	14%	7%	8%
All Adults	41%	17%	20%

Source: Alaska Behavioral Risk Factor Surveillance System

**Percentage of Adults Who Smoke, by Income and Race,  
Alaska, 2008-2010**

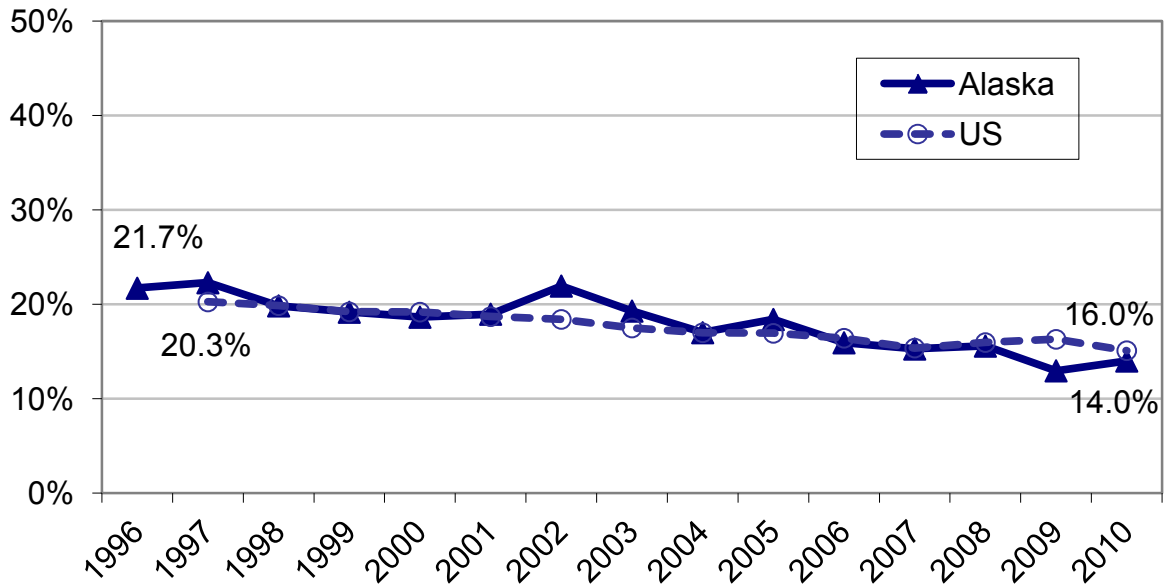
<b>Household Income Level</b>	<b>Alaska Natives</b>	<b>Alaska Non-Natives</b>	<b>Total</b>
Less than \$15,000	50%	35%	41%
\$15,000 - \$24,999	49%	27%	33%
\$25,000 - \$49,999	38%	21%	24%
\$50,000 - \$74,999	33%	16%	18%
\$75,000 or more	30%	12%	13%
All Adults	41%	17%	20%

Source: Alaska Behavioral Risk Factor Surveillance System

- Alaskans with fewer years of education and/or lower household income are more likely to be smokers; this pattern is true for both Alaska Native and non-Native adults.

Source: Alaska Behavioral Risk Factor Surveillance System

## Percentage of Adults Who Smoke Every Day, by Year Alaska and United States, 1996-2010

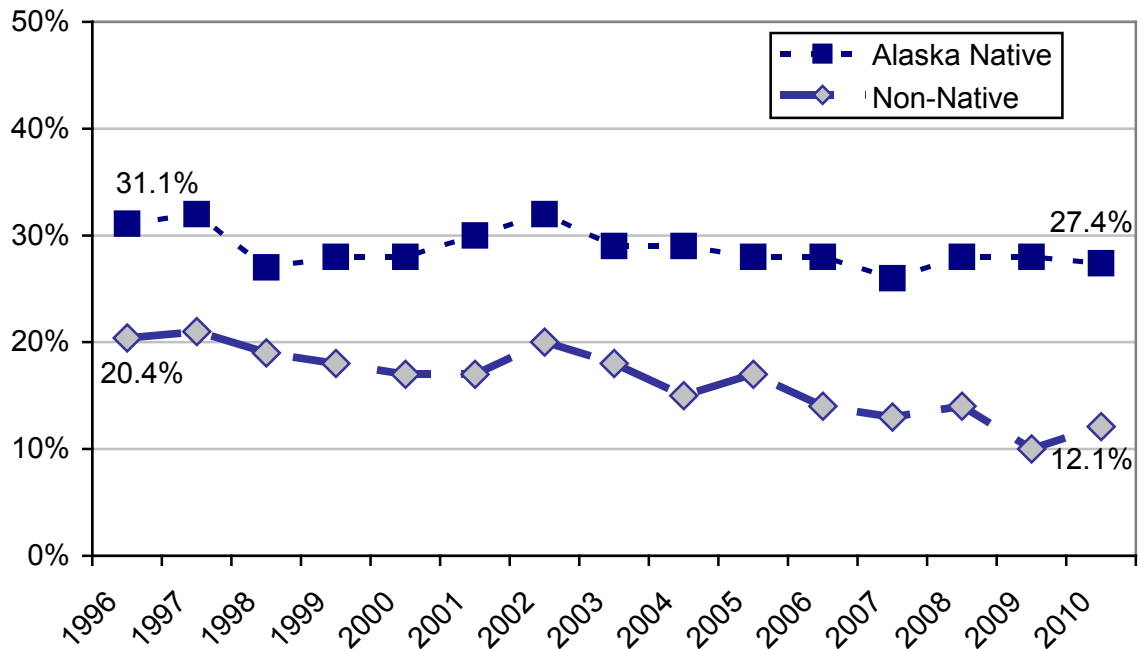


Sources: Alaska Behavioral Risk Factor Surveillance System; National Health Interview Survey

- Almost 7 out of 10 Alaska adult smokers are smoking every day.
- Even though the proportion of smokers who smoke daily has not significantly changed, the percentage of Alaska adults overall who smoke daily has decreased significantly.



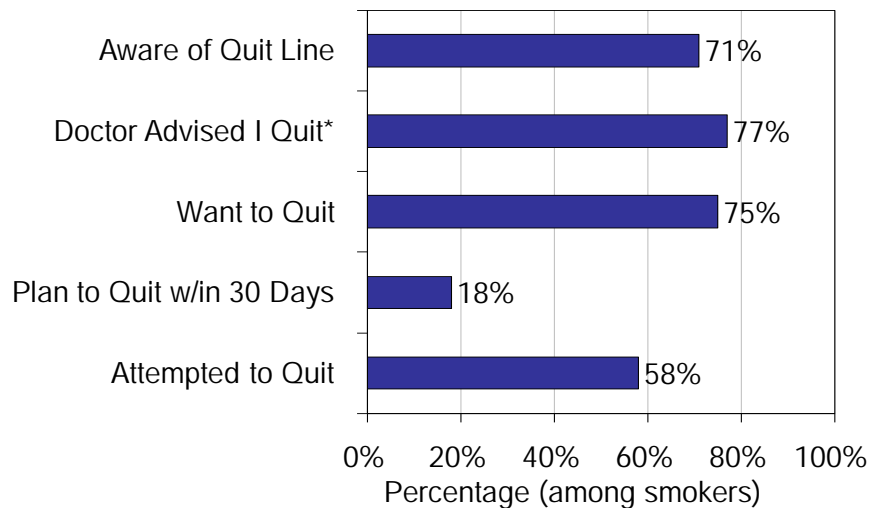
## Percentage of Adults Who Smoke Every Day, by Year, Alaska Natives and Non-Natives, 1996-2010



Source: Alaska Behavioral Risk Factor Surveillance System

- Since 1996, the percentage of Alaska Native adults who smoke every day has remained about the same, while the percentage of non-Native adult daily smokers has decreased.
- Among both groups, almost 7 out of 10 smokers are smoking every day.

## Percentage of Adult Smokers Endorsing Key Cessation Variables Alaska, 2010



Sources: Alaska Behavioral Risk Factor Surveillance System

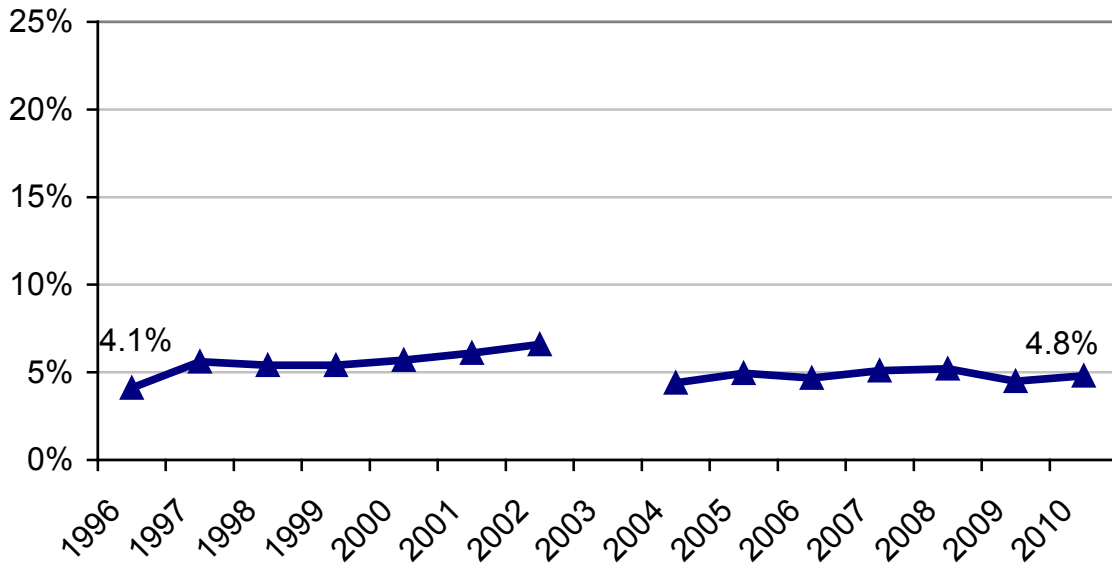
\*Among current smokers who had a health care visit in the past 12 months.

- Seven in 10 Alaskans who currently smoke (71%) want to quit.
- Nearly three out of five current smokers (58%) have attempted to quit in the past 12 months; quit attempts were made by over half of those who smoke every day (55%) and nearly two-thirds of those who smoke some days (64%).
- Quit attempts among Alaska Native people who currently smoke have increased from 59% in 2001 to 65% in 2010.
- The proportion of Alaska smokers who had a health care visit in the past 12 months and received advice from their health care provider to quit has increased from 73% in 2001 to 77% in 2010.
- Being able to stay quit for 3 or more months greatly increases the chances of quitting tobacco for life. About 9% of Alaska adults who smoked in the past year have been successfully quit for 3 or more months. Longer-term quits are higher for non-Native than Alaska Native past year adult smokers (10% versus 4%).

Source: Alaska Behavioral Risk Factor Surveillance System, 2008-2010

## 5. Adult Smokeless Tobacco Use

Percentage of Adults Who Use Smokeless Tobacco, by Year  
Alaska, 1996-2010



Note: Question was not asked in 2003.

Source: Alaska Behavioral Risk Factor Surveillance System

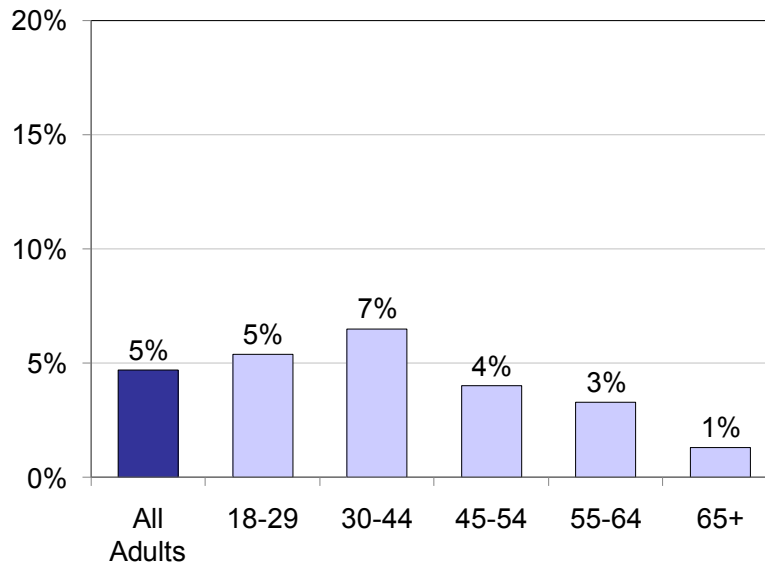
- Use of smokeless tobacco in Alaska has remained stable over the past 14 years.
- Nationally, an estimated 3.6% of adults used smokeless tobacco within the past month; with use much higher among men (7.1%) than women (0.4%).

Source: Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Detailed Tables. Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality; 2011.

- Smokeless tobacco use is a known cause of cancer of the mouth and gum, and is linked to oral health problems like periodontitis and tooth loss.

Source: International Agency for Research on Cancer (IARC). Summaries and Evaluations Tobacco Products, Smokeless (Group 1); February 1998.

## Percentage of Adults Who Use Smokeless Tobacco, by Age Group Alaska, 2009-2010



Source: Alaska Behavioral Risk Factor Surveillance System

- Younger Alaskans ages 18-44 are significantly more likely to use smokeless tobacco than those who are aged 45 and older (6.0% versus 3.1%).

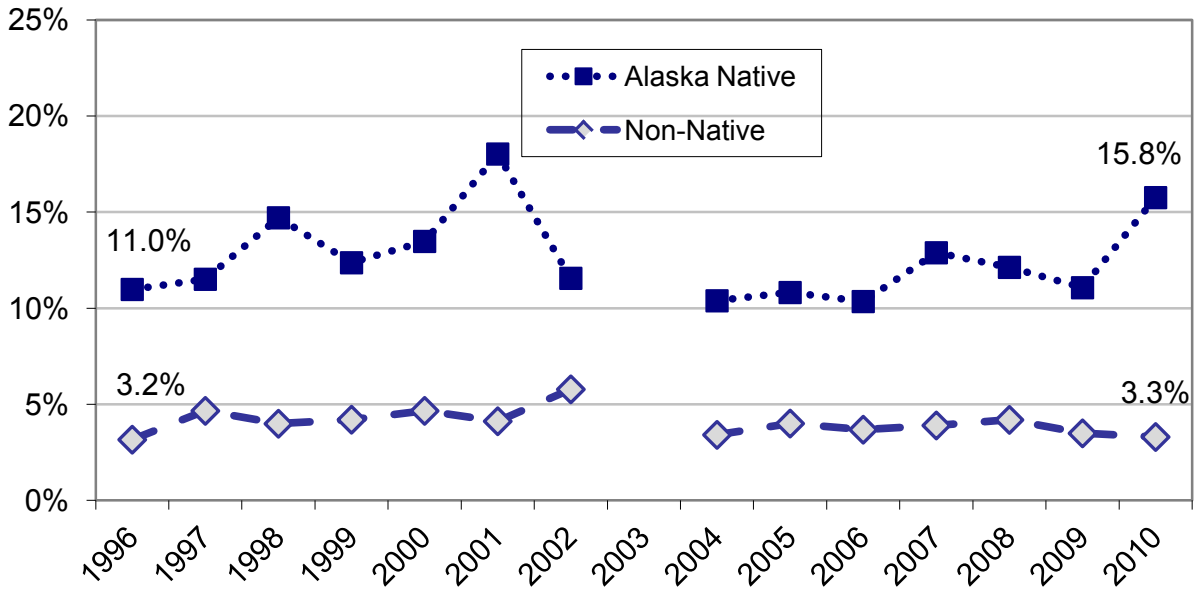
## Percentage of Adults Who Use Smokeless Tobacco, by Region Alaska, 2009-2010

Region	Percentage
Southwest	21.7%
North//NW//Interior	8.1%
Mat-Su Borough	4.3%
Gulf Coast	5.1%
Southeast	3.5%
Fairbanks (North Star)	5.5%
Municipality of Anchorage	2.0%
All Adults	4.7%

Source: Alaska Behavioral Risk Factor Surveillance System

- Alaskans in the Southwest Region are significantly more likely to use smokeless tobacco than those in any other region.

## Percentage of Adults Who Use Smokeless Tobacco, by Year Alaska Natives and Non-Natives, 1996-2010



Source: Alaska Behavioral Risk Factor Surveillance System

Note: Question was not asked in 2003.

- Among adults in Alaska, Alaska Native adults are more likely to use smokeless tobacco than non-Native adults.

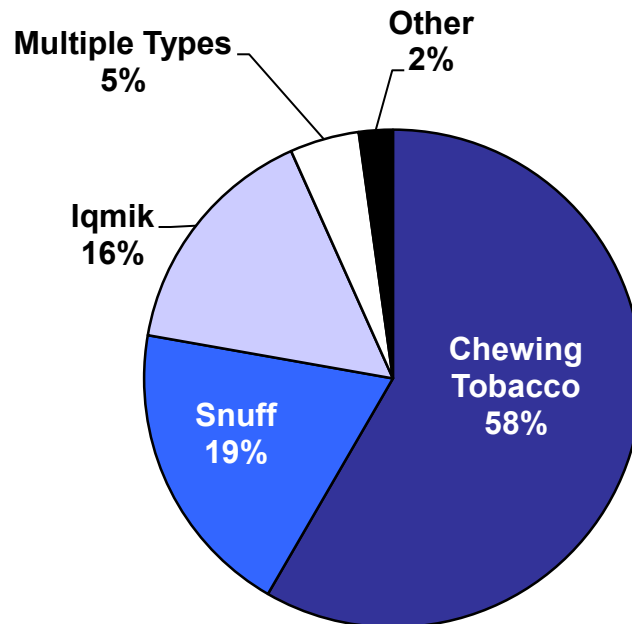
## Percentage of Adults Who Use Smokeless Tobacco, by Sex Alaska Natives and Non-Natives, 2009-2010

	Alaska Native	Non-Native	Total
<b>Men</b>	17.0%	6.4%	7.9%
<b>Women</b>	9.1%	0.1%	1.4%
<b>Total</b>	13.2%	3.4%	4.7%

Source: Alaska Behavioral Risk Factor Surveillance System

- Men use smokeless tobacco more than women, but Alaska Native women are as likely to use smokeless tobacco as non-Native men.

## Type of Smokeless Tobacco Used by Adults, Alaska, 2009-2010

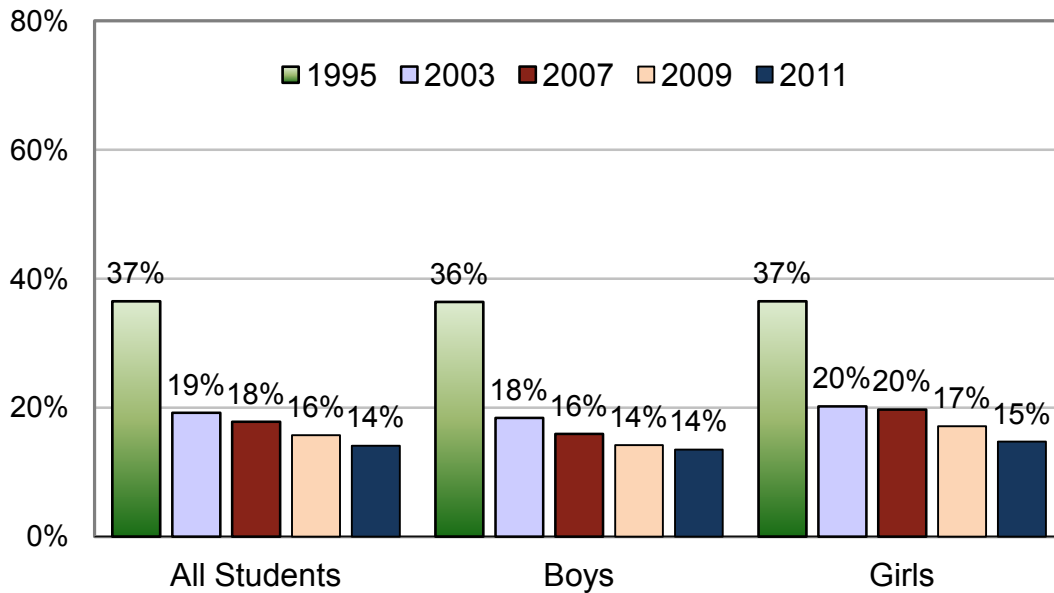


Source: Alaska Behavioral Risk Factor Surveillance System

- Over half of adult Alaskans who are using smokeless tobacco (SLT) report using chewing tobacco alone; chewing tobacco accounts for 27% of Alaska Native and 73% of non-Native smokeless tobacco use.
- Sixteen percent of adults who use smokeless tobacco — 47% of Alaska Native users—are using tobacco in the form of Iqmik or Blackbull, an Alaska-specific SLT variant. Iqmik is prepared by mixing chewing tobacco with the ash of a punk fungus.

## 6. Youth Cigarette Smoking

### Percentage of High School Students Who Smoke, by Sex and Year Alaska, 1995 to 2011

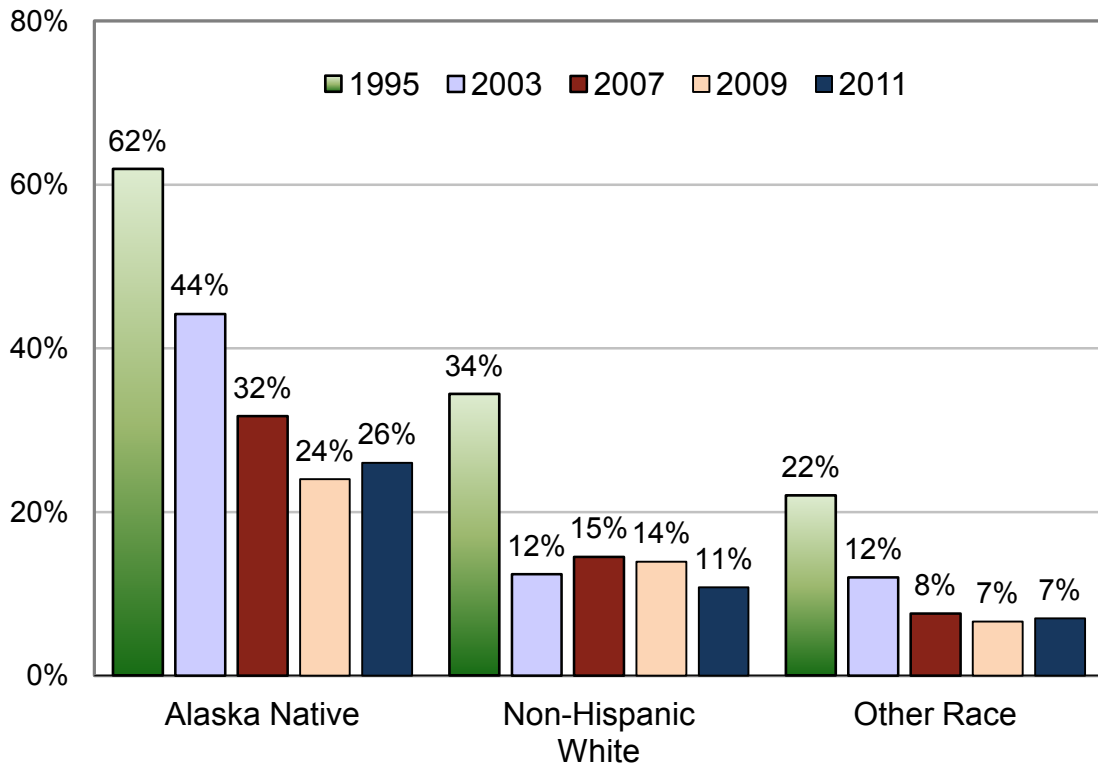


Source: Alaska Youth Risk Behavior Survey

- Smoking among high school students dropped from 37% in 1995 to 14% in 2011.
- This decrease means that there are almost 9,800 fewer youth smokers in 2011 than there were in 1995.

Note: Population numbers used to calculate the number fewer smokers are from 2000 Census, ages 14 to 17.

## Percentage of High School Students Who Smoke, by Race and Year Alaska, 1995 to 2011



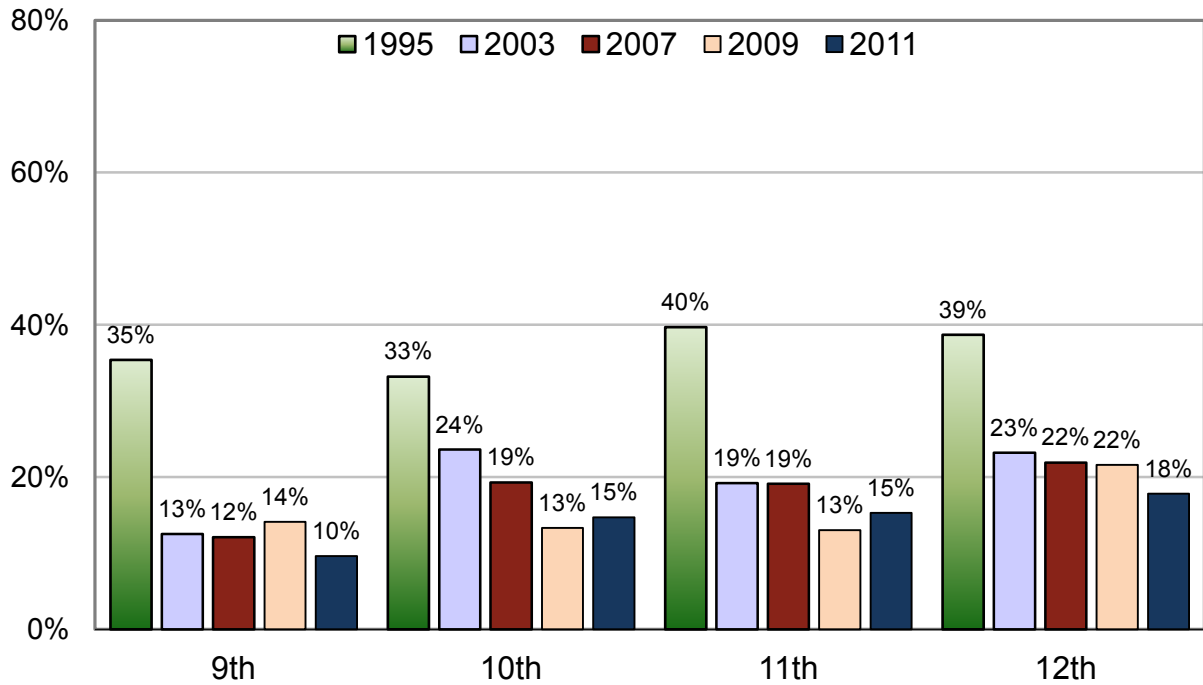
Source: Alaska Youth Risk Behavior Survey

Note: The Alaska Native group includes all students who report being Alaska Native; the White group includes those who reported White as their only race group and who did not report being Hispanic. The "Other Race" category includes students who reported being African American, Asian, Hawaiian or other Pacific Islander, Hispanic, or multiple race groups not including Alaska Native.

- Between 2003 and 2011, the decline in youth smoking was significant for Alaska Native students, but youth smoking prevalence has not changed significantly during this time period among White (non-Hispanic) or Other Race students.
- Alaska Native high school students are still more than twice as likely to smoke as students of other racial/ethnic backgrounds, although the gap has decreased considerably since 2003.



## Percentage of High School Students Who Smoke, by Grade and Year Alaska, 1995 to 2011



Source: Alaska Youth Risk Behavior Survey

- Between 1995 and 2011, declines in youth smoking occurred in each high school grade level.

## Percentage of Youth Who Smoke, by Race Group and Gender, Alaska, 2009 and 2011 combined

Gender	Alaska Native Youth	Non-Hispanic White Youth	Youth of Other Races	Total
Girls	29.0%	12.5%	6.8%	15.9%
Boys	21.5%	12.3%	6.5%	13.9%
<b>All Youth</b>	25.2%	12.4%	6.6%	14.9%

Source: Alaska Youth Risk Behavior Survey 2009 and 2011

- Alaska Native girls are significantly more likely to smoke than boys or girls from any other group, including Alaska Native boys. Non-Hispanic White girls are also more likely to smoke than girls of Other Races (including Asian, African American, Hawaiian/Pacific Islander, and multiple race youth).
- Alaska Native boys are more likely to smoke than non-Hispanic White boys. Boys from the Other Races group are less likely to smoke than either Alaska Native or non-Hispanic White boys.

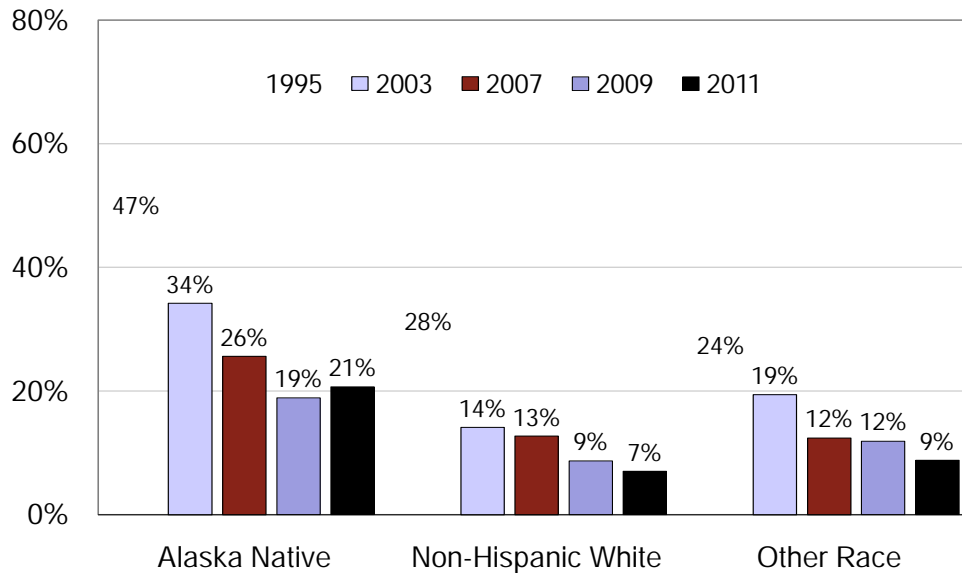
## Percentage of Youth Who Smoke, by Race Group and Grade, Alaska, 2009 and 2011 combined

Grade	Alaska Native Youth	Non-Hispanic White Youth	Youth of Other Races	Total
9 <sup>th</sup> Grade	21.1%	9.4%	6.3%	11.9%
10 <sup>th</sup> Grade	20.8%	13.4%	4.5%	14.0%
11 <sup>th</sup> Grade	22.2%	13.5%	7.3%	14.1%
12 <sup>th</sup> Grade	[N too small]	13.1%	[N too small]	19.8%
<b>All Youth</b>	24.3%	12.0%	8.4%	14.9%

Source: Alaska Youth Risk Behavior Survey, combined years 2009 and 2011.

- In 9<sup>th</sup> grade, Alaska Native high school youth are more likely to smoke than either non-Hispanic White or Other Race youth.
- In 10<sup>th</sup> and 11<sup>th</sup> grade, there is no significant difference in smoking prevalence between Alaska Native and non-Hispanic White students, but both are significantly more likely to smoke than students of Other Races.

## Percentage of High School Students Who Started Smoking Before Age 13, by Race and Year, Alaska, 1995 to 2011



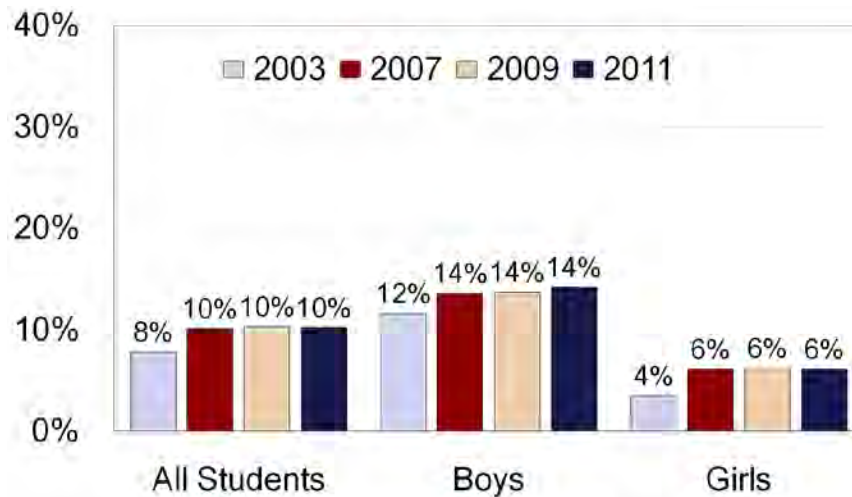
Source: Alaska Youth Risk Behavior Survey

Note: The Alaska Native group includes all students who report being Alaska Native; the White group includes those who reported White as their only race group and who did not report being Hispanic. The “Other Race” category includes students who reported being African American, Asian, Hawaiian or other Pacific Islander, Hispanic, or multiple race groups not including Alaska Native.

- Overall, the proportion of high school students who started smoking before age 13 dropped from 30.7% in 1995 to 11.1% in 2011.
- Among currently smoking high school students, the proportion of those who started before age 13 has steadily decreased, dropping from 53.1% in 1995 to 31.2% in 2011.
- One in five Alaska Native high school students (21%) started smoking before age 13 in 2011.

## 7. Youth Cigar Use

### Percentage of High School Students Who Smoke Cigars or Cigarillos, by Sex and Year, Alaska, 2003 to 2011

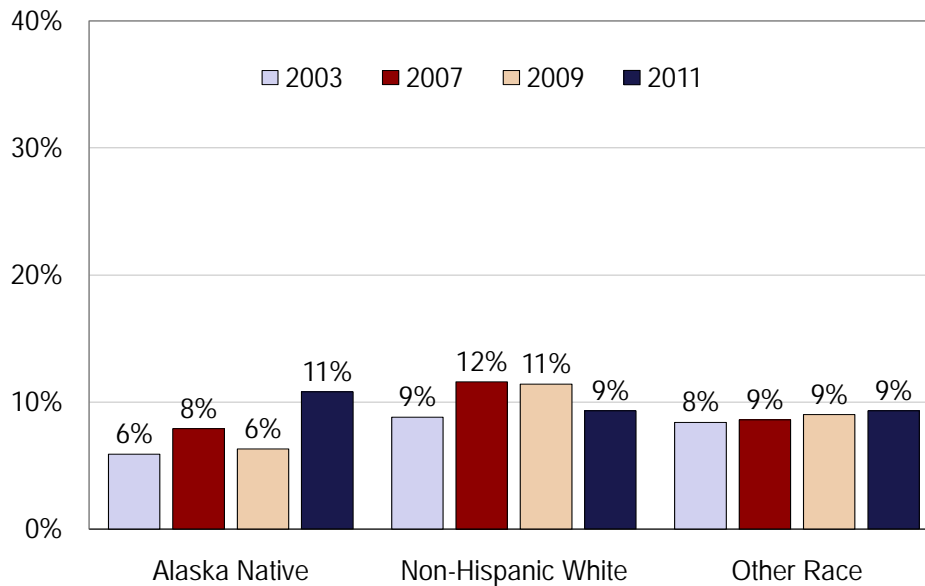


Source: Alaska Youth Risk Behavior Survey; question first added in 2003

- Although boys are more likely to smoke cigars, the proportion of girls smoking cigars increased significantly between 2003 and 2011.
- Youth who smoke cigarettes are more likely than non-smokers to have smoked one or more cigars in the past 30 days. Among students who smoke cigarettes, 32.4% also reported cigar use, whereas only 4.9% of students who do not smoke cigarettes reported smoking cigars. There were differences by gender; nearly half (47.4%) of the boys who smoke cigarettes also smoked one or more cigars in the past 30 days, compared to 18.2% of girls who smoke cigarettes.

Source: Alaska Youth Risk Behavior Survey 2011

## Percentage of High School Students Who Smoke Cigars or Cigarillos, by Race and Year, Alaska, 2003 to 2011



Source: Alaska Youth Risk Behavior Survey

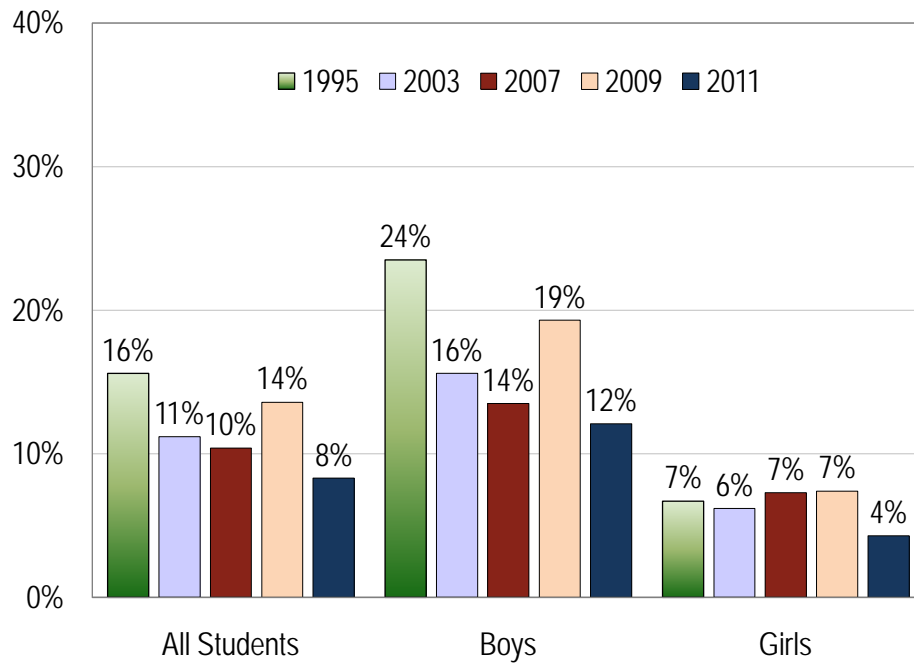
Note: The Alaska Native group includes all students who report being Alaska Native; the White group includes those who reported White as their only race group and who did not report being Hispanic. The “Other Race” category includes students who reported being African American, Asian, Hawaiian or other Pacific Islander, Hispanic, or multiple race groups not including Alaska Native.

- Cigar use has not changed significantly among non-Hispanic White youth and among youth from the combined Other Race group, between 2003 and 2011.
- Among Alaska Native high school students, cigar use in 2011 is significantly higher than it was in 2003, although it is not significantly different from use in 2007 or 2009.
- As noted on the previous page, nearly one in three students (32.4%) who smoked cigarettes also reported smoking one or more cigars in the past 30 days. There were differences by race group. About one in five (19.5%) Alaska Native cigarette smokers also smoked cigars, compared to two in five (42.6%) White and combined Other Race group youth smokers.

Source: Alaska Youth Risk Behavior Survey, combined years 2009 and 2011.

## 8. Youth Smokeless Tobacco Use

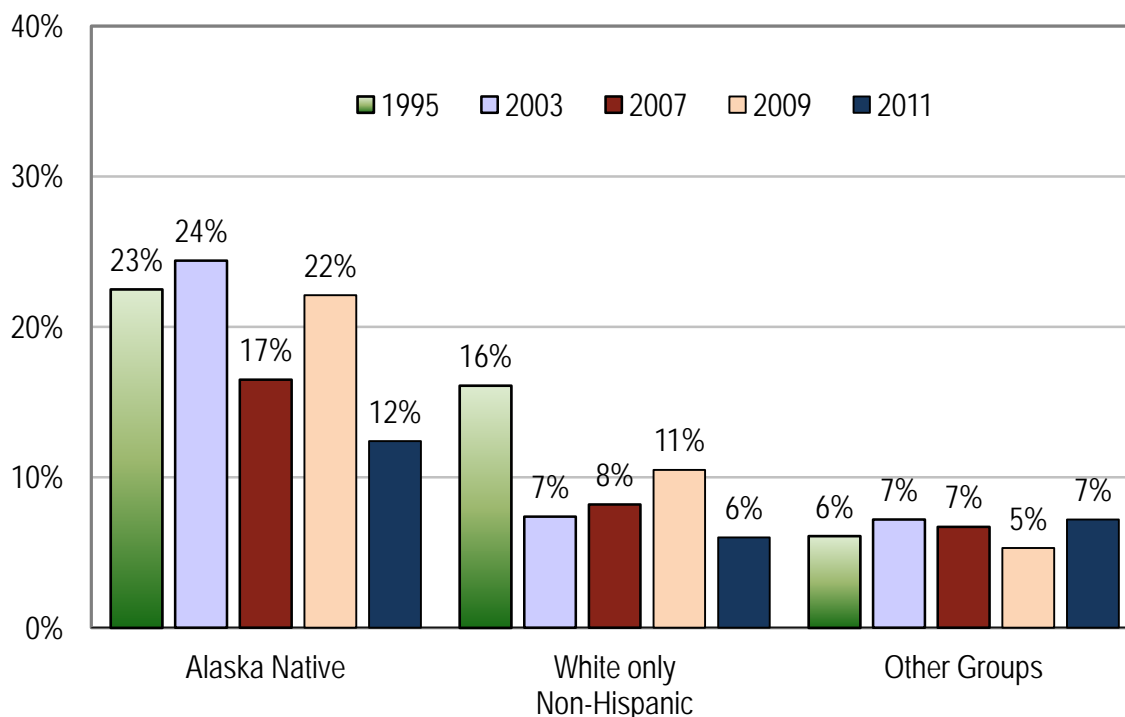
### Percentage of High School Students Who Use Smokeless Tobacco, by Sex and Year, Alaska, 1995 to 2011



Source: Alaska Youth Risk Behavior Survey

- Overall, use of smokeless tobacco (SLT) among high school students dropped from 15.6% in 1995 to 8.3% in 2011.
- Among boys, SLT use has decreased since 1995.

## Percentage of High School Students Who Use Smokeless Tobacco, by Race and Year, Alaska, 1995 to 2011



Source: Alaska Youth Risk Behavior Survey

Note: The Alaska Native group includes all students who report being Alaska Native; the White group includes those who reported White as their only race group and who did not report being Hispanic. The "Other Race" category includes students who reported being African American, Asian, Hawaiian or other Pacific Islander, Hispanic, or multiple race groups not including Alaska Native.

- Smokeless tobacco (SLT) use among Alaska Native students is significantly lower in 2011 than in 2009, but is not significantly lower than the estimate reported in 2007.
- SLT use decreased among non-Hispanic White students between 1995 and 2003, but has not changed significantly since 2003.
- SLT use disparities by race group occur among both girls and boys. Alaska Native girls have a higher prevalence of SLT use (13.1%) than White (2.4%) or Other Race girls (2.7%). Alaska Native boys have a higher prevalence of SLT use (21.5%) than White (12.3%) or Other Race boys (6.5%).

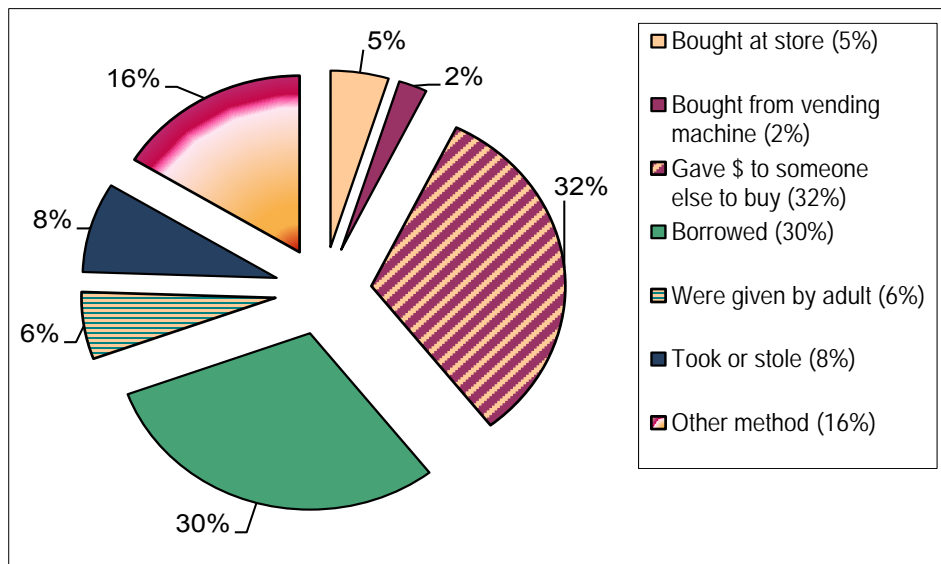
Source: Alaska Youth Risk Behavior Survey, combined years 2009 and 2011.

## 9. Youth Access to Tobacco

### Percentage of High School Student Smokers Who Bought their Cigarettes in the Past 30 Days, Alaska 1995 to 2011

- The proportion of high school smokers who reported that their usual way of getting cigarettes was to buy them in a store decreased from 27.1% in 1995 to 4.8% in 2011.

### Usual Methods of Getting Cigarettes in the Past 30 Days, Among High School Student Smokers, Alaska 2011



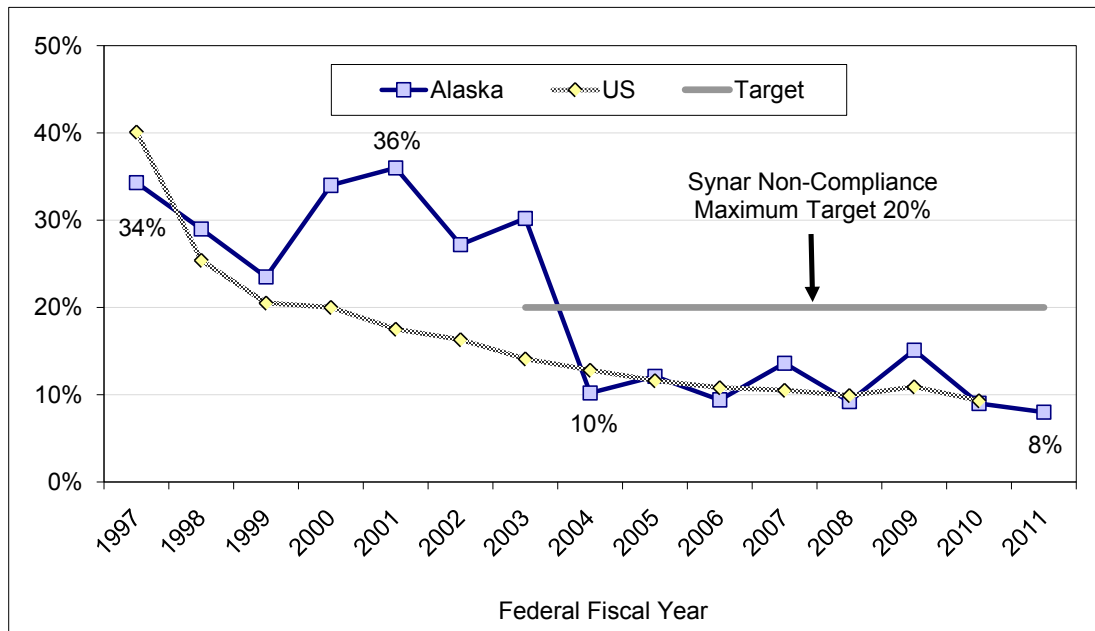
Source: Alaska Youth Risk Behavior Survey

- In 2011, two out of three high school smokers (68%) reported that they usually got their cigarettes with assistance from other people around them; 32% gave money to someone else to buy them, 30% borrowed them from someone else, and 6% were given cigarettes by someone who was age 18 or older.

Source: Alaska Youth Risk Behavior Survey



## Percentage of Vendors Found Selling Tobacco to Minors, Alaska and US (Median) by Fiscal Year, 1997-2011

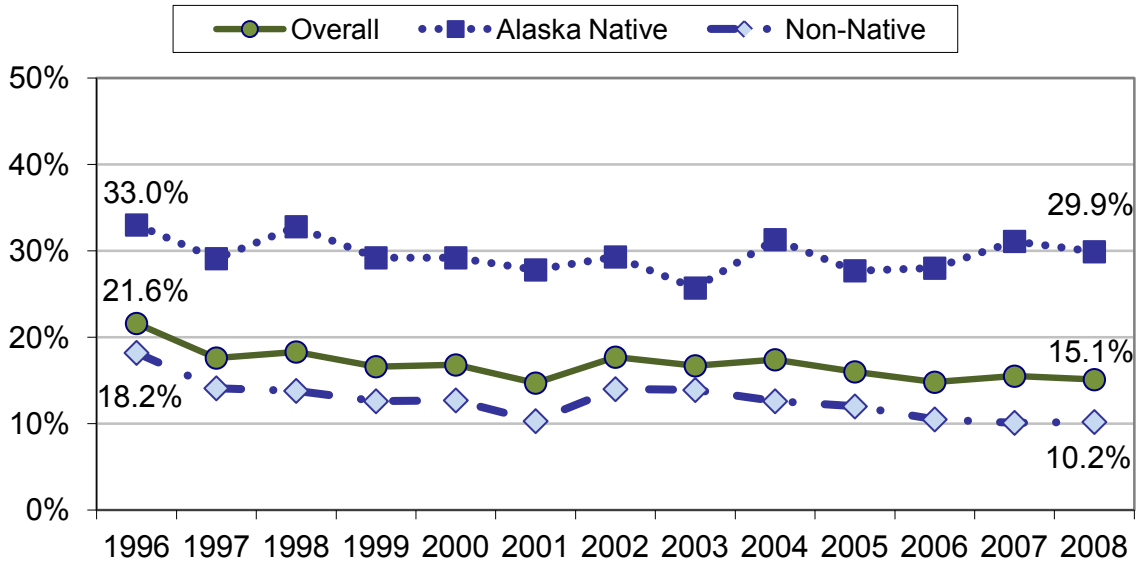


Source: Alaska Synar Compliance Database.

- Since 2003, Alaska has maintained the “20% or below” compliance rate established by the federal Synar amendment. This means fewer tobacco vendors statewide are selling tobacco products to minors compared to previous years.
- Both the Synar compliance data and youth self-report indicate that Alaska has made great progress in the last decade in reducing sales of tobacco directly to underage youth.

## 10. Tobacco Use During Pregnancy

### Prenatal Cigarette Smoking (last 3 months), by Year Alaska, 1996-2008



Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

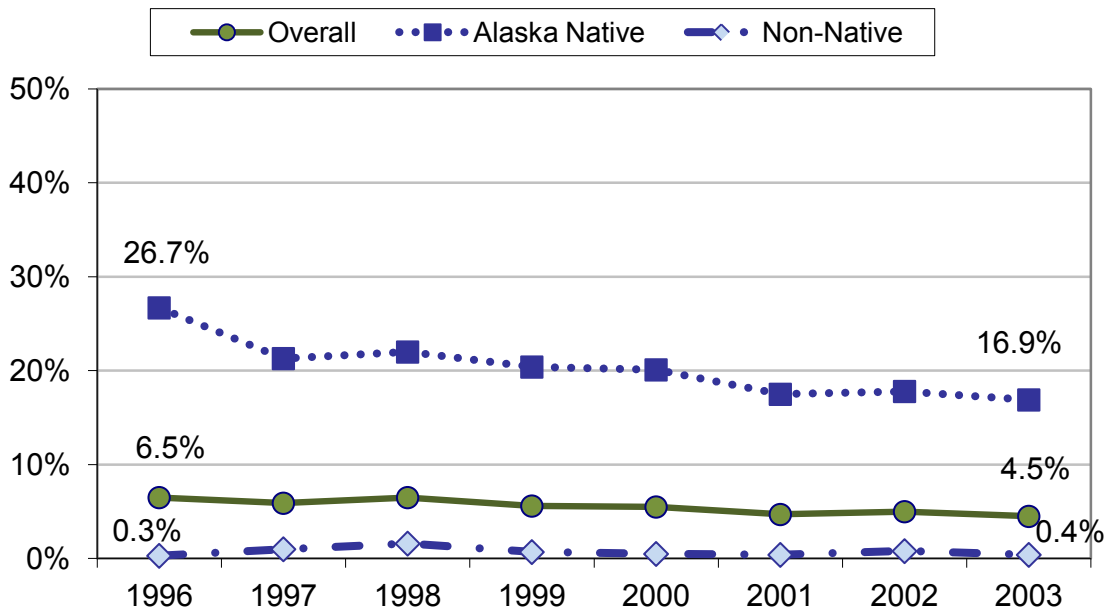
- Prenatal tobacco use accounts for 20-30% of all low-birth-weight births in the United States. According to the 2004 Surgeon General’s report, eliminating maternal smoking may lead to a 10% reduction in all sudden infant deaths and a 12% reduction in deaths from perinatal conditions.

Source: The Health Consequences of Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.

- Overall, prenatal cigarette use in Alaska has decreased significantly from 21.6% in 1996 to 15.1% in 2008, as well as among non-Native women. However, most of the decrease occurred between 1996 and 1997.
- Prenatal smoking prevalence has not changed significantly among Alaska Native women. Among Alaska Native women, for the period 2004 to 2008, prenatal smoking prevalence was significantly higher in four tribal health regions: Arctic Slope, Bristol Bay, Northwest Arctic, and Norton Sound.

Source: Young MB, Perham-Hester KA, Kemberling MM. Alaska Maternal and Child Health Data Book 2011: Alaska Native Edition. Anchorage, AK: A collaboration of the Alaska Department of Health and Social Services, Division of Public Health, and the Alaska Native Tribal Health Consortium, Alaska Native Epidemiology Center. October 2011.

## Prenatal Smokeless Tobacco Use, by Year Alaska, 1996-2003

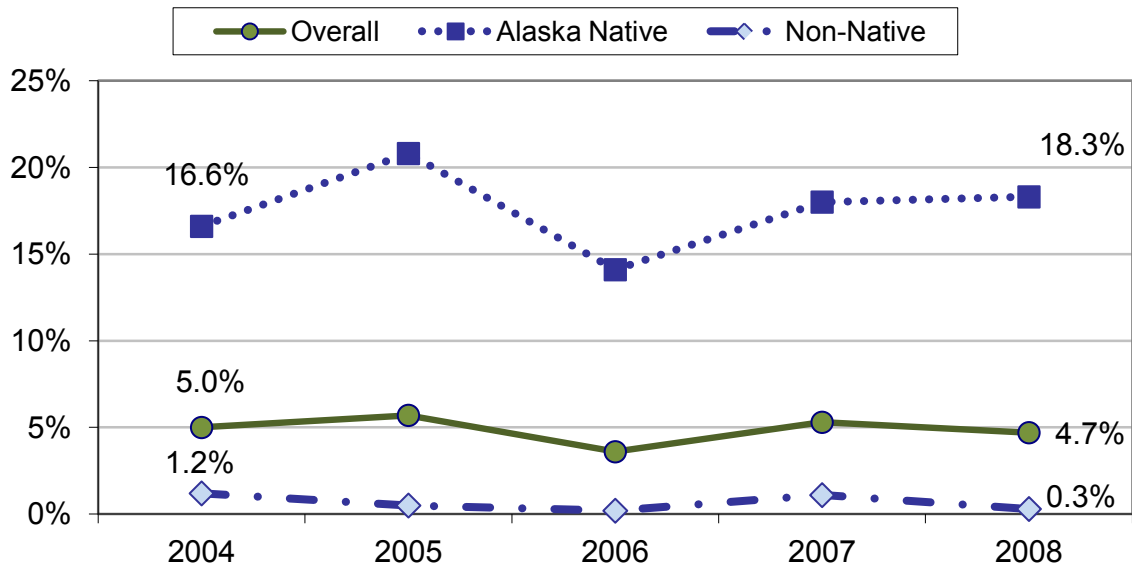


Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

- Between 1996 and 2003 there was a statistically significant decline in prenatal smokeless tobacco use among Alaska Native women, from 26.7% to 16.9%.

Source: Schoellhorn KJ, Perham-Hester KA, Goldsmith YW. Alaska Maternal and Child Health Data Book 2008: Health Status Edition. Anchorage, AK. Maternal and Child Health Epidemiology Unit, Section of Women's, Children's, and Family Health, Division of Public Health, Alaska Department of Health and Social Services. December 2008.

## Prenatal Iqmik or Spit Tobacco Use, by Year Alaska, 2004-2008



Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

Note: Although data about smokeless tobacco use have been collected since 1996, the questions used since 2004 are substantively different than those used prior. For this reason, data since 2004 are presented separately.

- In 2004, questions on the PRAMS survey about smokeless tobacco (SLT) use changed to include either spit tobacco or Iqmik. SLT use among Alaska women is higher than in many other states, in large part because of Alaska Native SLT use, including Iqmik, an Alaska-specific SLT variant. Iqmik is prepared by mixing chewing tobacco with the ash of a punk fungus.
- During 2004-2008, the prevalence of reported prenatal SLT (spit tobacco or Iqmik) use among Alaska Native women ranged from 14.1% in 2006 to 20.8% in 2005, but there was no significant trend during the five-year period.
- Iqmik is primarily used among Alaska Natives in Southwest Alaska. For the period 2004 to 2008, 57.7% of Alaska Native mothers residing in the Yukon-Kuskokwim tribal health region reported prenatal SLT use. However 15.3% of Alaska Native mothers in Bristol Bay, 13.1% in Norton Sound and 10.3% in Southcentral tribal health regions also reported prenatal SLT use.

Source: Young MB, Perham-Hester KA, Kemberling MM. Alaska Maternal and Child Health Data Book 2011: Alaska Native Edition. Anchorage, AK: A collaboration of the Alaska Department of Health and Social Services, Division of Public Health, and the Alaska Native Tribal Health Consortium, Alaska Native Epidemiology Center. October 2011.

## 11. Secondhand Smoke

According to a recent report from the Surgeon General:

- There is no risk-free level of secondhand smoke exposure. Even brief exposure can be dangerous.
- Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25-30% and their lung cancer risk by 20-30%.
- Almost 60% of U.S. children aged 3-11 years — or almost 22 million children — are exposed to secondhand smoke.
- Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from secondhand smoke exposure. Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate secondhand smoke exposure.

Source: U.S. Department of Health and Human Services. [The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General](#). Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006 [cited 2006 Sep 27]. Available from: <http://www.surgeongeneral.gov/library/secondhandsmoke/report/>.

- Roughly 9,560 Alaska children are exposed to secondhand smoke in their homes.

Source: Alaska Behavioral Risk Factor Surveillance System; Alaska Department of Labor and Workforce Development Census Data, 2010.

- Risk of exposure to secondhand smoke for children living with smokers decreased from 29.1% in 2004-2005 to 12.2% in 2008-2010.
- About 1 in 7 Alaska smokers with children in the home (14.3%) reported that someone was smoking in the home in the past 30 days.
- Risk of exposure to secondhand smoke for children living with smokers is higher for those aged 13 to 17 (18.8%) than for children under age 5 (7.8%).
- Having a home rule against smoking inside significantly lowers the risk of secondhand smoke exposure for children.

Source: Alaska Behavioral Risk Factor Surveillance System

- The proportion of Alaska high school students who report being in the same room with someone who was smoking in the past 7 days has decreased from 49.1% in 2003 to 35.6% in 2011.

Source: Alaska Youth Risk Behavior Survey

## Indicators of Home Secondhand Smoke Exposure and Policy by Select Demographics, Alaska, 2010

	Percentage with:	
	No Exposure at Home <sup>a</sup>	Smoking Ban in Home <sup>b</sup>
<b>Smoking status</b>		
Non-smokers	97%	95%
Smokers	79%	79%
<b>Race</b>		
Alaska Native	94%	95%
Non-Native	93%	91%
<b>Age</b>		
18-29	93%	93%
30-54	94%	93%
55 and older	93%	88%
<b>Education level</b>		
Did not graduate H.S.	82%	82%
High school graduate	92%	91%
Some college	92%	90%
College graduate	98%	96%
<b>Poverty level</b>		
Less than 185%	94%	91%
More than 185%	95%	93%
<b>All Adults</b>	<b>94%</b>	<b>92%</b>

<sup>a</sup> No one (including respondent) smoked anywhere inside respondent's home in the past 30 days;

<sup>b</sup> Rules about smoking inside respondent's home best described as: "Smoking is not allowed anywhere inside your home".

Source: Alaska Behavioral Risk Factor Surveillance System

- About nine in ten Alaska adults report having smoking bans and no secondhand smoke exposure in their homes; almost eight in ten Alaska smokers also report home bans and no exposure at home.
- Risk of exposure to secondhand smoke in the home differs by smoking status and education, as does having a home smoking ban. Non-smokers and adults with higher education are less likely to be exposed to secondhand smoke and more likely to have home smoking bans.

## Indicators of Work Secondhand Smoke Exposure and Policy by Select Demographics, Alaska, 2008-2010

	Percentage with:	
	No Indoor Smoke Exposure <sup>a</sup>	Smoking Ban at Work <sup>b</sup>
<b>Sex</b>		
Men	92%	85%
Women	96%	90%
<b>Race</b>		
Alaska Native	93%	81%
Non-Native	95%	88%
<b>Age</b>		
18-29	95%	76%
30-54	94%	90%
55 and older	96%	92%
<b>Education level</b>		
High school or less	88%	78%
Some college	94%	87%
College grad or more	98%	94%
<b>Poverty level</b>		
Less than 185%	90%	83%
More than 185%	95%	89%
<b>All Adults</b>	94%	87%

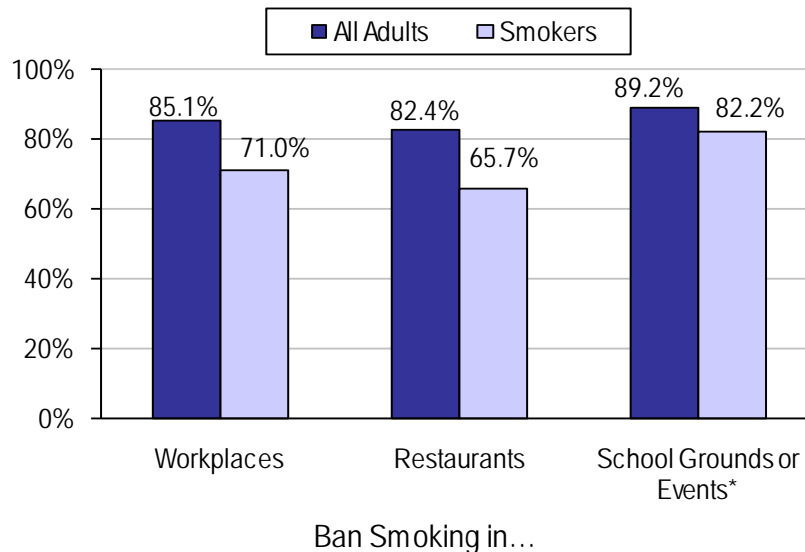
<sup>a</sup> Among those who work primarily indoors: 2010 question: In the past 30 days, has anyone smoked cigarettes, cigars, or pipes anywhere indoors at respondent's workplace. Questions for 2008-2009 first ask about smoking anywhere at workplace; then about smoking occurring in indoor work areas and indoor public spaces.

<sup>b</sup> Rules about smoking inside respondent's workplace best described as: Smoking is not allowed in any work areas".

Source: Alaska Behavioral Risk Factor Surveillance System

- Among those who work primarily indoors, reported indoor smoke exposure at work differs significantly by gender, education, and income/poverty status.
- Although about one in sixteen Alaska indoor workers (6%) report indoor smoke exposure at work, almost one in three (31%) report exposure to secondhand smoke just outside their indoor workspaces, near the entry areas.
- Among those who work primarily indoors, there are significant differences in having a workplace smoking ban. Men, Alaska Natives, younger adults (age 18-29), and those with less education are less likely to work in a place with a policy to protect against secondhand smoke.

## Percentage of Adults Who Support Full Smoking Bans in Selected Locations, by Smoking Status, Alaska, 2010



Source: Alaska Behavioral Risk Factor Surveillance System, 2010

\* Source: Alaska Behavioral Risk Factor Surveillance System, 2006

- There is widespread support for clean indoor air policies such as smoking bans in work places, including establishments like restaurants.
- Studies across the country show that comprehensive clean indoor air policies do not have an adverse impact on the hospitality industry.

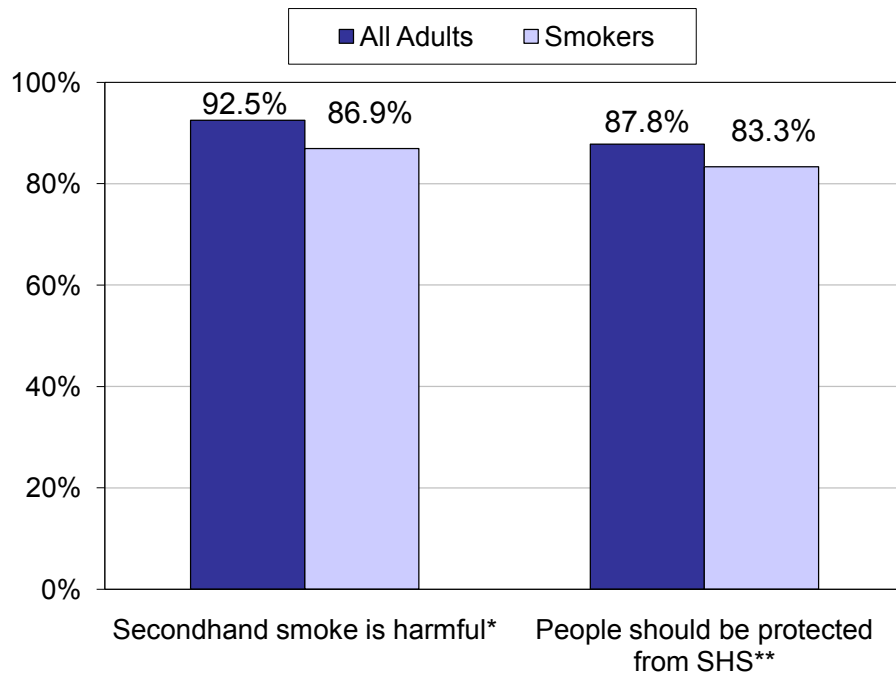
Source: The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. (2006).

- Recently enacted clean indoor air policies in Anchorage and Juneau protect more workers in these jurisdictions.
- In Anchorage and Juneau, 94% of all adults and 79% of smokers reported visiting bars and lounges as often or more often now that smoking is not allowed. One in five adults in Anchorage and Juneau (21%) reported going more often to these establishments now that they are smokefree.
- Outside of Anchorage and Juneau, in places where smoking is still allowed in bars and some other establishments, 92% of all adults and 74% of smokers say they would still go to these places as often or more often, if smoking were not allowed.

Source: Alaska Behavioral Risk Factor Surveillance System, 2008-2010.



## Adult Opinions on Harm from Secondhand Smoke, by Smoking Status, Alaska, 2010



\* Percentage who say that secondhand smoke is somewhat harmful or very harmful.

\*\* Percentage who agree or strongly agree that people should be protected from secondhand smoke.

Source: Alaska Behavioral Risk Factor Surveillance System

- Most Alaskans — whether smokers or non-smokers — see secondhand smoke as a source of harm from which people should be protected.

## **12. Alaska Tobacco Prevention and Control Program**

The State of Alaska Tobacco Prevention and Control Program (TPCP) is located within the Department of Health and Social Services, Division of Public Health, in the Section of Chronic Disease Prevention and Health Promotion (CDPHP). The work of the TPCP is complemented by initiatives undertaken by many other organizations, including non-profits, tribal health organizations, state and local governments, schools, community groups, and the Alaska Tobacco Control Alliance (ATCA), the statewide tobacco prevention and control coalition.

The Alaska TPCP follows the model outlined in *Best Practices for Comprehensive Tobacco Prevention and Control Programs*, a CDC document that describes strategies shown to reduce tobacco use when employed in a sustained and comprehensive manner.<sup>3</sup> The model, drawing on the tobacco prevention and control literature and outcomes in states across the country, has four primary goals, which are:

1. Prevent the initiation of tobacco use by young people
2. Promote tobacco cessation among adults and young people
3. Eliminate exposure to secondhand smoke
4. Identify and eliminate tobacco-related disparities in specific populations.

Work to achieve the four goals is accomplished through work in five overarching categories, including: 1) State and Community Interventions, 2) Health Communications, 3) Cessation Interventions, 4) Surveillance and Evaluation, and 5) Administration and Management. A description of each category and TPCP activities in each is given below.

### **1) State and Community Interventions**

The overarching State and Community Interventions component has five subcategories, including: Statewide Programs, Community Programs, Tobacco-Related Disparities, Youth Programs, and Chronic Disease Programs.

#### **Statewide Programs**

Statewide programs are designed to provide resources and information that support coordinated and effective tobacco control activities in a state. The Alaska TPCP currently has the following statewide programs:

- Technical assistance to community programs (TPCP grantees) on action planning, coalition development, local policy change, and media advocacy
- Support, training, and development for the statewide tobacco coalition (ATCA)
- Implementation of a statewide strategic plan in conjunction with ATCA.

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<sup>3</sup> Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs-2007*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; October 2007.

## Community Programs

Community programs are designed to reduce secondhand smoke (SHS) exposure and promote individual behavior change by altering the way tobacco is promoted, sold, and used. Community programs also work to change social norms around tobacco use by influencing tobacco-related knowledge, attitudes, and practices.

The Alaska TPCP provides grants to local organizations for staff, operating expenses, resource materials, education, training, and local media. The TPCP currently funds 21 organizations in the state to provide education around the effects of tobacco use and SHS exposure and to promote evidence-based strategies that discourage youth initiation, provide support for tobacco users to quit, and protect residents from SHS exposure. Grantees also act as a resource to community leaders and organizations interested in reducing the impact of tobacco use within their communities.

Many communities in Alaska have developed and implemented strong policies that protect residents from exposure to secondhand smoke and discourage tobacco use. In July 2007, the Municipality of Anchorage passed a comprehensive clean indoor air ordinance that prohibits smoking in workplaces, including bars. In January 2008, Juneau strengthened its existing workplace ordinance to include prohibitions against smoking in bars and clubs. The comprehensive policies in these two communities protect nearly half the state's workers from secondhand smoke exposure. In addition to these comprehensive policies, many other Alaska communities have passed ordinances or resolutions that restrict smoking in workplaces and public spaces.

## Tobacco-Related Disparities

Tobacco-related disparities have been defined as “differences in patterns, prevention, and treatment in tobacco use, differences in the risk, incidence, morbidity, mortality, and burden of tobacco-related illness that exist among specific population groups in the United States, and related differences in capacity and infrastructure, access to resources, and environmental tobacco smoke exposure.”<sup>4</sup> The CDC recommends that state program plans include strategies to identify and eliminate tobacco-related disparities.

Alaska TPCP efforts to reduce and eliminate tobacco-related disparities were formalized in 2006 when Alaska was chosen as one of 11 states funded by the CDC to participate in a strategic planning process around disparities. The TPCP convened a planning team, the Leadership for Eliminating Alaskan Disparities (LEAD) workgroup, which published a strategic plan to eliminate disparities in tobacco use due to race, region of residence, or socioeconomic status. The TPCP created a position to oversee the disparities component of the program in 2008 and hired a contractor to revise and update the disparities plan in March 2010. An updated plan was published in 2011 that included detailed strategies and action steps for each of the program goals among priority populations. The priority populations include those with elevated tobacco use rates, including Alaska Native adults, adults of low socioeconomic status, and young adults aged 18-29. In addition, the LEAD workgroup continues tobacco prevention and control efforts with behavioral health clients, other ethnic minorities, and the Lesbian/Gay/Bisexual/Transgender population.

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<sup>4</sup> Fagan P, King G, Lawrence D, Petrucci SA, Robinson RG, Banks D, et al. Eliminating tobacco-related health disparities: directions for future research. *American Journal of Public Health* 2004; 94:211-217.

## Youth Prevention

Because most tobacco use begins before age 18, programs that prevent the uptake of smoking among young people are a recommended component of a comprehensive tobacco control effort. Local and state level policies that increase the unit price of tobacco products, create smoke-free environments, and restrict minors' access to tobacco products have been shown to contribute to the non-use of tobacco among youth.

Community and state-level organizations in Alaska have taken important steps to prevent youth from using tobacco. In 1997 the state tax on cigarettes was raised to \$1.00 per pack, and the tax rate on other tobacco products was raised from 25% to 75% of the wholesale price. In 2005 the Alaska State Legislature passed a second \$1.00 per pack cigarette tax increase that was implemented incrementally between January 2005 and July 2007. Many local government agencies also levy an additional tax on cigarettes and other tobacco products. State and local policies increasing the unit price of tobacco products have been accompanied by statewide counter-marketing efforts.

In 2007 the Alaska TPCP initiated a school-based tobacco prevention grant program. Currently the grant program funds 7 school districts to develop comprehensive school tobacco prevention programs that include a tobacco-free campus environment, prevention curricula, and outreach to communities. To promote synergy between school-based and community efforts, all funded school programs are located in regions also served by the community grant program.

Additionally, in 2011 the TPCP worked with the Association of Alaska School Boards to develop a model tobacco-free campus policy. Through a contractor, the TPCP is working to assess current tobacco policies in each district and to encourage adoption of the model policy.

School and community programs to reduce youth tobacco use are supported and reinforced by statewide efforts to reduce youth access to tobacco. Through the Division of Behavioral Health, the State of Alaska conducts a statewide program to comply with the Federal Synar Amendment, which requires states to have laws in place prohibiting the sale and distribution of tobacco products to persons under age 18. Alaska is one of several states that have expanded this prohibition to persons under age 19. The Synar Amendment also requires states to collect data on vendor compliance with underage sales laws and report annually to the Secretary of Health and Human Services. States face penalties if the sales rates to minors exceed 20 percent. Since 2003 Alaska has successfully met federal requirements that illegal vendor sales not exceed 20 percent.

## Chronic Disease Programs

Tobacco use is a risk factor for many chronic diseases, including numerous types of cancers, heart disease, stroke, and respiratory illness. Programs designed to reduce or prevent chronic disease should include tobacco prevention and control activities and may also focus on other risk factors that contribute to those illnesses.

The TPCP is located within the Section of Chronic Disease Prevention and Health Promotion (CDPHP) within the Alaska Division of Public Health. TPCP staff members are involved in CDPHP strategic planning efforts and also link cessation resources available through the Alaska Tobacco Quit Line with information on other chronic conditions. Quit line staff distribute information on chronic conditions to health care providers and quit line callers.

## **2) Health Communications Interventions**

Health communication interventions are an important component of efforts to change the social norms around tobacco use. Effective media messages can build public support for tobacco prevention and control policies, increase knowledge of the harms of tobacco use and the dangers of exposure to secondhand smoke, and contribute to decreases in youth and adult tobacco use rates.

TPCP health communications interventions include a wide range of activities, including paid television, radio, and print media. The TPCP currently has a contract for the development, acquisition, and placement of paid media. The television, radio, and print materials developed through this contract are designed to motivate tobacco users to quit and educate Alaskans about the health risks associated with exposure to secondhand smoke. TPCP grantees also receive technical assistance around the development, production, and placement of media that supports their local tobacco prevention and cessation efforts.

## **3) Cessation Interventions**

Programs that assist tobacco users in quitting can produce significant health and economic benefits. Evidence-based clinical practice guidelines outline effective cessation strategies, including brief advice by medical providers to quit using tobacco, FDA-approved pharmacotherapy (e.g., nicotine replacement therapy, NRT), and population-based helplines or quit lines. System changes are critical to the broad based success of cessation interventions.

The TPCP currently funds a statewide, toll-free tobacco quit line that includes the provision of NRT. The TPCP also funds 10 health care centers across Alaska to build comprehensive, sustainable health care systems that identify and treat tobacco users. A key component of this program is training staff in Alaska's hospitals and clinics to screen patients for tobacco use and exposure to secondhand smoke, and to refer tobacco users to cessation services. In 2011 the TPCP launched *Mission 100*, a program designed to expand the number of health care organizations and providers that routinely screen patients for tobacco use and refer them to appropriate treatment. *Mission 100* provides outreach and technical assistance on implementing the U.S. Public Health Service *Clinical Guidelines for Treating Tobacco Use and Dependence* to health care organizations statewide.

## **4) Surveillance and Evaluation**

Surveillance and evaluation systems are used to monitor progress in reducing tobacco use and to document program accountability. Surveillance efforts focus on regular monitoring of tobacco-related knowledge, attitudes, and behaviors, while evaluation uses data to assess program implementation and effectiveness.

The Alaska TPCP collects tobacco-related data annually through a variety of methods which are described in detail in Appendix C. Key tobacco indicators are published annually in Alaska Tobacco Facts, an online report. In addition, the TPCP routinely conducts specialized data analysis projects, including reports on tobacco use among Alaska Native adults, adults of lower socioeconomic status, smokeless tobacco, and tobacco cessation.

Routine program evaluation efforts include monitoring of grantee progress as well as assessments of specific TPCP program components, including surveys of quit rates and satisfaction among Alaska Tobacco Quit Line clients as well as media recall and recognition surveys.

## **5) Administration and Management**

An effective tobacco control program requires a strong management structure that can oversee the implementation of program components and coordinate efforts with partner agencies. The TPCP administers numerous grants and contracts to implement the activities of the comprehensive program. The TPCP also partners with other state agencies, ATCA, non-profit organizations, the CDC, tribal health organizations, local governments, schools, and community groups. The TPCP is overseen by a full-time Program Manager and supported by a Deputy Manager. Several administrative staff positions in the CDPHP Section also include TPCP administrative functions.

Funding for the TPCP Program is provided primarily through the Tobacco Use Education and Cessation Fund (TUECF), which was established in 2001 by the Alaska State Legislature under AS 37.05.580 to provide a source to finance a comprehensive tobacco use prevention, education, and cessation program authorized by AS 44.29.020(A)(15). In 1998 the State of Alaska joined 45 other states in the national multi-state Master Settlement Agreement (MSA) with the tobacco industry. The settlement funds to states are intended to offset the costs of tobacco-related illness by supporting tobacco prevention and cessation programs. Each year, 20 percent of the MSA revenue and a portion of the state cigarette tax revenue are to be placed in the TUECF fund and are available for appropriation to tobacco prevention and control efforts.

The Centers for Disease Control and Prevention (CDC) has issued recommendations on the financial resources needed in each state to counter the aggressive marketing of tobacco products. Since 2000 Alaska's funding appropriations have grown to levels at or near the CDC recommendations, with funds administered by the Alaska TPCP.

## 13. Trend Tables

### Section 2. Cigarette Consumption

#### Annual Per Adult Sales of Cigarettes, By Fiscal Year

Fiscal Year	Alaska	US minus AK
1996	128.6	116.7
1997	125.9	115.7
1998	115.2	112.8
1999	102.3	107.5
2000	100.2	103.4
2001	94.0	98.8
2002	91.6	96.2
2003	90.1	89.9
2004	92.0	86.9
2005	88.0	84.4
2006	80.4	80.7
2007	78.0	78.4
2008	67.4	72.7
2009	67.5	68.9
2010	62.7	62.9

Sources: Alaska Department of Revenue, Tax Division FY10 Reports; Orzechowski & Walker, *The Tax Burden on Tobacco*, 2011.

## Section 4. Adult Smoking

Trends in Cigarette Smoking in Alaska Overall, and by Gender, 1996 - 2010

Year	All Adults	±	N	Male	±	N	Female	±	N
1996	27.7%	3.4%	1530	30.8%	5.2%	712	24.2%	4.2%	818
1997	26.5%	3.3%	1543	27.2%	4.9%	716	25.8%	4.3%	827
1998	26.1%	2.6%	1986	28.3%	3.8%	922	23.7%	3.4%	1064
1999	27.3%	3.0%	2045	25.3%	3.5%	999	29.5%	4.9%	1046
2000	25.0%	2.7%	2072	26.8%	4.1%	984	23.1%	3.6%	1088
2001	26.2%	2.4%	2866	26.4%	3.6%	1356	25.9%	3.2%	1510
2002	29.4%	2.7%	2690	32.0%	4.1%	1185	26.5%	3.6%	1505
2003	26.2%	2.4%	2657	30.2%	3.6%	1228	21.9%	3.0%	1429
2004	24.3%	1.7%	5094	26.9%	2.6%	2317	21.4%	2.1%	2777
2005	24.8%	1.7%	5722	28.6%	2.6%	2665	20.8%	2.0%	3057
2006	24.0%	1.9%	4219	25.4%	2.9%	1882	22.5%	2.5%	2337
2007	21.5%	1.8%	5068	24.0%	2.9%	2305	18.9%	2.2%	2763
2008	21.9%	1.9%	4915	24.1%	2.9%	2272	19.5%	2.3%	2643
2009	18.8%	1.7%	4722	19.4%	2.5%	2130	18.1%	2.2%	2592
2010	20.6%	2.4%	3209	22.2%	3.8%	1447	18.8%	2.9%	1762
p-value	<0.001 decrease			<0.001 decrease			<0.001 decrease		

Trends in Cigarette Smoking in Alaska by Race Group, 1996 - 2010

Year	Alaska Native	±	N	Non-Native	±	N
1996	47.3%	8.5%	317	24.9%	3.6%	1203
1997	41.1%	7.7%	317	24.2%	3.6%	1207
1998	39.8%	6.3%	361	23.8%	2.8%	1604
1999	42.1%	7.1%	417	24.5%	3.3%	1599
2000	42.9%	7.4%	389	22.1%	2.9%	1628
2001	43.4%	6.1%	572	23.0%	2.6%	2213
2002	44.1%	6.9%	544	26.7%	3.0%	2119
2003	45.4%	6.3%	516	23.0%	2.5%	2127
2004	44.0%	4.6%	1004	20.9%	1.8%	4046
2005	40.6%	4.1%	1094	22.0%	1.8%	4565
2006	43.6%	5.3%	788	20.4%	2.0%	3376
2007	38.8%	5.4%	985	18.5%	1.9%	4030
2008	43.3%	4.8%	938	18.5%	2.0%	3919
2009	39.2%	5.1%	842	15.4%	1.7%	3814
2010	41.0%	7.2%	533	17.5%	2.5%	2597
p-value	0.33 no trend direction			<0.001 decrease		

Source: Alaska Behavioral Risk Factor Surveillance System



## Section 4. Adult Smoking (continued)

Trends in Daily Cigarette Smoking in Alaska Overall, and by Gender, 1996 - 2010

Year	All Adults	±	N	Male	±	N	Female	±	N
1996	21.7%	3.1%	1530	22.6%	4.6%	712	20.8%	4.0%	818
1997	22.3%	3.1%	1543	22.3%	4.5%	716	22.3%	4.1%	827
1998	19.8%	2.3%	1986	20.7%	3.5%	922	18.9%	3.1%	1064
1999	19.2%	2.4%	2045	18.1%	3.0%	999	20.3%	3.8%	1046
2000	18.6%	2.5%	2072	19.5%	3.7%	984	17.8%	3.3%	1088
2001	19.0%	2.1%	2866	18.4%	2.9%	1356	19.5%	2.9%	1510
2002	21.9%	2.5%	2690	23.1%	3.8%	1185	20.7%	3.4%	1505
2003	19.3%	2.2%	2657	23.1%	3.3%	1228	15.1%	2.7%	1429
2004	17.0%	1.5%	5094	19.3%	2.3%	2317	14.5%	1.7%	2777
2005	18.4%	1.5%	5722	21.8%	2.5%	2665	14.8%	1.8%	3057
2006	15.9%	1.6%	4219	16.7%	2.4%	1882	15.2%	2.1%	2337
2007	15.3%	1.6%	5068	16.7%	2.6%	2305	13.8%	2.0%	2763
2008	15.6%	1.7%	4915	17.6%	2.6%	2272	13.5%	2.0%	2643
2009	13.0%	1.4%	4722	14.1%	2.2%	2130	11.8%	1.7%	2592
2010	14.0%	2.1%	3209	14.8%	3.2%	1447	13.2%	2.6%	1762
p-value	<0.001 decrease			<0.001 decrease			<0.001 decrease		

Trends in Daily Cigarette Smoking in Alaska by Race Group, 1996 - 2010

Year	Alaska Native	±	N	Non-Native	±	N
1996	31.1%	7.2%	317	20.4%	3.4%	1203
1997	32.2%	7.6%	317	20.7%	3.4%	1207
1998	27.4%	5.4%	361	18.6%	2.6%	1604
1999	27.6%	6.9%	417	17.6%	2.6%	1599
2000	28.2%	7.0%	389	16.9%	2.7%	1628
2001	30.5%	5.9%	572	17.0%	2.2%	2213
2002	31.7%	6.5%	544	20.2%	2.8%	2119
2003	29.0%	5.5%	516	17.7%	2.4%	2127
2004	29.1%	4.3%	1004	15.0%	1.5%	4046
2005	27.7%	3.8%	1094	16.8%	1.7%	4565
2006	28.4%	5.0%	788	13.7%	1.6%	3376
2007	25.8%	5.4%	985	13.5%	1.7%	4030
2008	27.9%	4.1%	938	13.6%	1.8%	3919
2009	28.1%	4.9%	842	10.5%	1.4%	3814
2010	27.4%	7.2%	533	12.1%	2.2%	2597
p-value	0.24 no trend direction			<0.001 decrease		

Source: Alaska Behavioral Risk Factor Surveillance System

## Section 5. Adult Smokeless Tobacco (SLT) Use

Trends in SLT Use in Alaska Overall, and by Gender, 1996 - 2010

Year	All Adults	±	N	Male	±	N	Female	±	N
1996	4.1%	1.3%	1506	6.8%	2.4%	699	1.1%	0.5%	807
1997	5.6%	1.7%	1543	9.2%	3.1%	715	1.6%	1.0%	828
1998	5.4%	1.4%	1989	8.6%	2.5%	924	1.9%	0.9%	1065
1999	5.4%	1.3%	2050	8.7%	2.3%	1001	1.7%	0.9%	1049
2000	5.7%	1.6%	2079	9.5%	2.9%	985	1.7%	0.6%	1094
2001	6.1%	1.3%	2873	10.2%	2.5%	1357	1.8%	0.7%	1516
2002	6.6%	1.4%	2692	11.2%	2.6%	1186	1.8%	0.6%	1506
2003	NA			NA			NA		
2004	4.4%	1.2%	2462	7.5%	2.2%	1103	1.0%	0.7%	1359
2005	5.0%	0.9%	5343	8.6%	1.6%	2489	1.0%	0.3%	2854
2006	4.7%	0.9%	4124	7.8%	1.7%	1835	1.4%	0.5%	2289
2007	5.2%	0.9%	4939	8.8%	1.7%	2244	1.2%	0.4%	2695
2008	5.2%	0.9%	4732	8.7%	1.7%	2155	1.5%	0.5%	2577
2009	4.5%	0.8%	4560	7.9%	1.6%	2037	1.0%	0.4%	2523
2010	4.8%	1.1%	2901	7.6%	2.1%	1295	1.8%	0.7%	1606
p-value	0.32 no trend direction			0.54 no trend direction			0.32 no trend direction		

Trends in SLT Use in Alaska by Race Group, 1996 - 2010

Year	Alaska Native	±	N	Non-Native	±	N
1996	11.0%	4.2%	307	3.2%	1.3%	1189
1997	11.5%	4.7%	318	4.7%	1.9%	1206
1998	14.7%	5.3%	363	4.0%	1.4%	1605
1999	12.4%	4.1%	420	4.2%	1.3%	1600
2000	13.5%	3.8%	393	4.7%	1.8%	1631
2001	18.0%	5.5%	576	4.1%	1.2%	2215
2002	11.6%	3.2%	547	5.8%	1.6%	2118
2003	NA			NA		
2004	10.4%	5.4%	461	3.4%	1.0%	1976
2005	10.8%	2.5%	1025	4.0%	0.9%	4257
2006	10.4%	2.5%	758	3.7%	1.0%	3313
2007	12.9%	3.1%	931	3.9%	1.0%	3955
2008	12.1%	2.4%	887	4.2%	1.0%	3832
2009	11.1%	2.8%	799	3.5%	0.9%	3699
2010	15.8%	4.3%	458	3.3%	1.2%	2368
p-value	0.80 no trend direction			0.30 no trend direction		

Source: Alaska Behavioral Risk Factor Surveillance System

## Section 10. Tobacco Use During Pregnancy

Trends in Maternal Cigarette Smoking during Last 3 Months of Pregnancy in Alaska Overall, and by Race Group, 1996 - 2008

Year	All Mothers	±	N	Alaska Native	±	N	Non-Native	±	N
1996	21.6%	2.5%	1264	33%	3.8%	512	18%	3.1%	752
1997	17.6%	2.2%	1331	29%	3.6%	542	14%	2.7%	789
1998	18.3%	2.2%	1348	33%	3.4%	588	14%	2.7%	760
1999	16.7%	2.1%	1400	29%	3.3%	618	13%	2.5%	782
2000	16.8%	2.1%	1371	29%	3.3%	618	13%	2.5%	753
2001	14.7%	1.9%	1417	28%	3.1%	640	10%	2.3%	777
2002	17.7%	2.1%	1488	29%	3.1%	658	14%	2.5%	830
2003	16.8%	2.1%	1506	26%	2.9%	677	14%	2.6%	829
2004	17.3%	2.4%	1241	31%	3.9%	514	13%	3.0%	727
2005	16.1%	2.3%	1251	28%	3.7%	523	12%	2.8%	728
2006	14.8%	2.2%	1221	28%	3.9%	476	11%	2.6%	745
2007	15.4%	2.2%	1331	31%	3.8%	517	10%	2.6%	814
2008	15.1%	2.3%	1206	30%	3.9%	501	10%	2.8%	705
p-value	<0.001 decrease			0.29 no trend direction			<0.001 decrease		

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

## Section 10. Tobacco Use During Pregnancy (continued)

Trends in Maternal Spit Tobacco or Iqmik Use During Pregnancy in Alaska Overall,  
and by Race Group, 1996 - 2003

Year	All Mothers	±	N	Alaska Native	±	N	Non-Native	±	N
1996	6.5%	1.1%	1039	26.7%	4.1%	410	0.3%	0.5%	625
1997	5.9%	0.9%	1364	21.3%	3.1%	566	1.0%	0.7%	793
1998	6.5%	1.1%	1361	22.0%	3.0%	596	1.6%	1.0%	758
1999	5.6%	0.9%	1444	20.4%	2.9%	630	0.7%	0.6%	783
2000	5.5%	0.8%	1460	20.1%	2.8%	643	0.5%	0.5%	752
2001	4.7%	0.7%	1523	17.5%	2.6%	654	0.4%	0.4%	786
2002	5.0%	0.8%	1605	17.8%	2.5%	672	0.8%	0.6%	831
2003	4.5%	0.7%	1617	16.9%	2.4%	693	0.4%	0.4%	827
p-value	<0.001 decrease			<0.001 decrease			0.19 no trend direction		

Trends in Maternal Spit Tobacco Use During Pregnancy in Alaska Overall,  
and by Race Group, 2004 - 2008

Year	All Mothers	±	N	Alaska Native	±	N	Non-Native	±	N
2004	5.0%	1.1%	1312	16.6%	3.1%	508	1.2%	1.0%	726
2005	5.7%	0.9%	1337	20.8%	3.3%	518	0.5%	0.6%	715
2006	3.6%	0.8%	1386	14.1%	2.9%	485	0.2%	0.4%	738
2007	5.3%	1.0%	1476	18.0%	3.1%	526	1.1%	0.9%	807
2008	4.7%	0.9%	1273	18.3%	3.3%	498	0.3%	0.4%	698
p-value	0.55 no trend direction			0.90 no trend direction			0.33 no trend direction		

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

## **14. Data Sources**

### **Tobacco Tax Data**

Data on cigarette sales in Alaska were obtained from the Alaska Department of Revenue, Tax Division. In Alaska, a tobacco tax is levied on cigarettes and other tobacco products that are sold, imported, or transferred into the state. This tax, which currently amounts to \$2.00 for a pack of 20 cigarettes and 75 percent of wholesale price for cigars and chewing tobacco, is collected primarily from licensed wholesalers and distributors. Tobacco tax returns are filed monthly by the last day of the month following the month in which the sales were made. Alaska tax data may fail to account for tobacco products that are consumed here but are purchased out of state or through other means not captured by tax records (e.g., bought over the Internet). Because data files are updated monthly, variations can occur depending on when a report is accessed. Tobacco sales estimates for years prior to FY 2008 are those calculated for and included in prior reports, and are not updated to reflect any further changes. Estimates used for 2010 come from the “FY10 Cigarette and Other Tobacco Products Summary” dated 8/27/2010.

### **Population Estimates**

Alaska and U.S. population estimates by age, used in calculating U.S. tobacco consumption (packs per adult), come from the U.S. Census Bureau Population Division website Table 2: Annual Estimates of the Population by Sex and Selected Age Groups for the United States: April 1, 2000 to July 1, 2010 (NC-EST2007-02). Data for 2010 come from the census release at <http://2010.census.gov/2010census/>.

Alaska population estimates by age, sex and race/ethnicity, used in calculating the number of tobacco users and Alaska consumption (packs per adult), come from the Alaska Department of Labor and Workforce Development population estimate web pages at, <http://laborstats.alaska.gov/?PAGEID=67&SUBID=171>. Data for 2010 were also from the census release at <http://2010.census.gov/2010census/>.

### **Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC)**

Estimates of Alaska’s mortality and economic costs associated with tobacco use were calculated using an online application developed at CDC known as Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC). The SAMMEC formula applies age- and sex-specific smoking-attributable fractions to mortality data for each smoking-related disease in the population under study, also taking into consideration the smoking prevalence for each population. The overall smoking-attributable mortality is the sum of the smoking-attributable deaths across age groups and causes of death for both sexes combined for a given year.

SAMMEC also provides estimates of smoking-attributed medical expenditures and for productivity losses due to smoking-related mortality. This application does not currently allow estimates of morbidity-related productivity costs. The estimates of adult medical expenditures attributable to smoking and the loss of productivity due to smoking-related mortality were calculated using such measures as the state's 2009 age-and-sex-specific mortality rates for specified conditions, the 2008 BRFSS estimate of adult smoking prevalence, the 2004 present value for future earnings, and the 2004 U.S. life expectancy. The estimate for productivity losses was adjusted using the 2010 employment cost index information from the U.S. Department of Labor, Bureau of Labor and Statistics (<http://www.bls.gov/ncs/ect/>). The 2004 estimate of total medical spending in Alaska, obtained from the Centers for Medicare and Medicaid Services, was used in estimating smoking-related medical expenditures. This estimate was then adjusted to 2010 using medical consumer price index information from the U.S. Department of Labor, Bureau of Labor and Statistics (<http://www.bls.gov/cpi/>).

Data on specific causes of deaths from smoking-related diseases in Alaska were abstracted from death certificates, provided by the Alaska Bureau of Vital Statistics. The cause of death used in our analysis was the underlying cause, based on the Tenth Revision of the International Classification of Diseases (ICD-10). Deaths of Alaska residents who died out of state were not included in the figures used to produce the SAMMEC estimates of tobacco-related deaths and the associated economic costs. The estimates of current smoking prevalence used for the SAMMEC calculations were obtained from the Alaska BRFSS.

Estimated deaths due to secondhand smoke are national estimates from the U.S. Department of Health and Human Services 2006 report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General." Available from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health: <http://www.surgeongeneral.gov/library/secondhandsmoke/report/>.

## **Behavioral Risk Factor Surveillance System (BRFSS)**

The BRFSS is an anonymous telephone survey conducted by the Alaska Division of Public Health in cooperation with the CDC. It aims to estimate the prevalence of behavioral risk factors in the general population that are known to be associated with the leading causes of morbidity and mortality in adults. The BRFSS has operated continuously in Alaska since it began in 1991.

The BRFSS uses a probability (or random) sample in which all Alaska households have a known, nonzero chance of selection. The sample is stratified into five regions, with roughly equal numbers of interviews conducted in each region. This method deliberately over-samples rural areas of the state. Respondents are randomly selected from among the adult members of each household reached through a series of random telephone calls. Those living in institutions (i.e., nursing homes, dormitories) are not surveyed.

Surveys are conducted by trained interviewers, during weekdays, evenings, and weekends throughout the year. In addition to tobacco use, the BRFSS questionnaire covers such topics as general health status, health care access, nutrition, physical activity, diabetes, alcohol use, women's health, injury prevention, and HIV/AIDS awareness. There are also questions on the demographic characteristics of respondents.

Alaska presently conducts two BRFSS surveys: the standard BRFSS and a supplemental BRFSS, which contains many tobacco questions adopted from the CDC's Adult Tobacco Survey. Both surveys are conducted throughout the year, using separate samples drawn using the same methodology. In recent years, approximately 210 Alaska adults are interviewed each month for the standard BRFSS, to reach an annual sample size of 2,500 (500 per region); the same number are interviewed for the supplemental BRFSS, for a total of roughly 5,000 survey respondents. Sample size for 2010 was lower, and so for this issue of Tobacco Facts, data from 2009 and 2010 have been combined in some cases, for example in reporting smokeless tobacco (SLT) use by age group or region.

Both the standard and supplemental BRFSS are weighted (separately) to compensate for the over-representation or under-representation of persons in various subgroups. The data are further weighted to adjust the distribution of the sample data so that it reflects the total population of the sampled area. In addition, a combined dataset (standard plus supplemental) is created of union of questions appearing on both surveys. This combined dataset is weighted separately.

Where possible, the combined dataset was used to provide the estimates contained in this report. In cases where questions appeared on only one or another of the BRFSS surveys, that particular dataset was used. In this report, we used chi-square tests in our comparisons between groups of Alaskans. Chi-square tests are simple tests of association between group and outcome variables (for example, smoking [yes, no] and gender [male, female]). For trend analyses, we use logistic regression. Logistic regression analysis assumes a linear change over time using logistic models, and provides an appropriate test for determining if a statistically significant change has occurred over time. Linear trends indicate a statistically significant increase or decrease during the entire time period for which estimates are examined. P-values less than 0.05 indicate that both percentages are statistically significant at the 95% confidence level.

### Regional Reporting

Regions were defined using borough designation. Although the BRFSS survey data do not provide enough representation for reporting by most of the individual boroughs, combining boroughs provides a useful geographic factor for analyses. Region was also modified by tribal health organization region designation. While the individual tribal health organizations are generally too small to represent with survey data from the BRFSS, these aggregated units help meet the need of providing information at a useful level of geography. In this report, most boroughs fall entirely within the boundary of one region; the exception is Yukon-Koyukuk Borough. Tribal health care is provided for part of these boroughs by organizations in another borough, and the regions used in this report reflect that difference between tribal health provision and borough. For this reason, about 14% of

respondents from the Yukon-Koyukuk Borough are categorized with the Southwest region for the purposes of this report.

Regional groups for this report are as follows:

- 1) Municipality of Anchorage
- 2) Mat-Su Borough
- 3) Gulf Coast – Kenai, Kodiak, and Valdez Cordova
- 4) Southeast – Yakutat, Skagway, Juneau, Sitka, Haines, Wrangell-Petersburg, Ketchikan, and Ketchikan Gateway
- 5) Fairbanks North Star Borough
- 6) North/Northwest/Interior – Nome, Northwest Arctic, North Slope, most of Yukon-Koyukuk, Southeast Fairbanks, and Denali
- 7) Southwest -- Bristol Bay, East Aleutians, West Aleutians, Dillingham, Lake & Peninsula, Bethel, and Wade Hampton (plus part of Yukon-Koyukuk)

### Reporting by Race Group

Because there are small numbers of BRFSS respondents who report their primary race group as something other than White or Alaska Native each year, the most recent three years of data are combined to report information by race group. Trend information by race group is reported by Alaska Native and non-Native status.

The term Alaska Native is used to refer to the original inhabitants of the land that is now the state of Alaska. For this study, Alaska Native includes all survey respondents who report “Alaska Native/American Indian” as their primary or only race group. Although some Alaska Natives such as the Tlingit and Haida share cultural background with Pacific Coast Native Americans, many Alaska Natives are culturally much closer to other sub-arctic region peoples such as Canadian First Nations. Alaska Natives are also different than “lower 48” Native Americans in regards to tobacco. Tobacco was not historically or traditionally used by Alaska Native people, but was widely adopted after introduction by Russian traders in the 1700s. It is possible that some respondents in this Alaska Native category are members of Native American tribes or cultures that are not based in Alaska, but the majority of survey respondents in this category are member of Alaska Native cultures.

## **Youth Risk Behavior Survey (YRBS)**

The YRBS is a systematic survey of high school students investigating behaviors related to the leading causes of mortality, morbidity and social problems among youth. The Centers for Disease Control and Prevention sponsors national and state surveys every two years, most recently in 2011.

Alaska first participated in the YRBS in 1995. Although Alaska participation rates met CDC standards in 1999, this sample did not include Anchorage schools and so the 1999 YRBS data are generally not included in multi-year analyses. The next statewide survey with a statistically valid, representative sample was in 2003. Alaska was unsuccessful in



its attempt to obtain a statewide representative sample in 2005, but achieved the participation rates required to meet the CDC representative sample standards in subsequent years. Overall participation rates were above 60% in all years for which data are presented.

The Alaska YRBS is conducted using a two-stage sampling design. Schools are selected first with a probability of inclusion proportional to the size of their enrollment. Once a school is chosen, classes are selected, with each student having an equal opportunity for inclusion. From 2003 through 2011, active parental consent was required for each student participating in the YRBS. On the appointed survey day students completed written questionnaires and returned them in class in unmarked, sealed envelopes.

In a typical YRBS administration, about 1,250 to 1,350 students are surveyed from about 40 to 45 high schools that are scientifically selected to represent all public high schools (excluding boarding schools, alternative schools, correspondence and home study schools, and correctional schools) in Alaska. These results are considered to be representative of Alaska's more than 33,000 high school students grades 9-12 in traditional public high schools. Data are weighted to reflect the true distribution of Alaska high school students by gender and grade level, but not by region of the state.

School-based surveys do not estimate risk behaviors associated with youth who drop out of school or do not attend school. However, for the first time in 2009, about 1,000 students from 15 alternative high schools in Alaska were surveyed to evaluate and address the health risks of this unique population. This process was repeated in 2011. Further information about the surveys and the data is available at <http://www.hss.state.ak.us/dph/chronic/school/YRBSresults.htm>.

#### Reporting by Race Group

All YRBS survey participants who report being Alaska Native, either alone or in combination with other race groups or Hispanic ethnicity, are grouped here as Alaska Native. Reporting of other race groups has changed somewhat since the last issue of Tobacco Facts; this change reflects national methods of reporting information by race. For reporting of trends, students who report being White only and non-Hispanic form a second group (after Alaska Native). The third group for trend reporting includes students who report being Hispanic, African American, Asian, Hawaiian or Other Pacific Islander, or who report multiple race groups (except for Alaska Native). Those who did not report a race group or did not report whether they are of Hispanic ethnicity are not included in the race group reporting. Reporting by individual race or ethnicity groups (other than Alaska Native or White only, non-Hispanic) is limited by the relatively small number of students participating.

#### Data Suppression Guidelines

Information is suppressed where the total participation (denominator) is less than 100 students by group, or where the number of students reporting a behavior (numerator) is fewer than 5.

## **Synar Compliance Data**

The Center for Substance Abuse Prevention (CSAP) oversees implementation of the Synar Amendment, which requires states to have laws in place prohibiting the sale and distribution of tobacco products to persons under age 18. (Alaska, Utah, Alabama, and New Jersey have expanded this prohibition to persons under 19.) States are required to collect data on vendor compliance with underage sales laws, and must achieve a maximum sales-to-minors rate of not greater than 20 percent to avoid penalties. The sample from which these data are collected must reflect the distribution of the underage population throughout the state and the distribution of outlets that are accessible to youth throughout the state.

Alaska data on vendor sales of tobacco products to minors are obtained through the Alaska Department of Health and Social Services, Division of Behavioral Health's Tobacco Enforcement Program. A business license database provided by the Department of Occupational Licensing is used to identify outlets that are accessible to youth. Each summer, eligible, trained, underage youth attempt to purchase tobacco products in the sampled establishments. Undercover tobacco enforcement staff monitor these transactions, noting whether sales occurred.

Synar data are reported for the federal fiscal year, October through September. The year reported in this document reflects the end date of the federal fiscal year; that is, data collected from October 2009 to September 2010 are reported as the 2010 data.

## **Pregnancy Risk Assessment Monitoring System (PRAMS)**

PRAMS data were used in this report to document prenatal tobacco use. PRAMS is a population-based survey of Alaska women who have recently delivered a live-born infant. It gathers information on the health risk behaviors and circumstances of pregnant and postpartum women. PRAMS is conducted in collaboration with the CDC in 37 states, New York City, and South Dakota (Yankton Sioux Tribe). In Alaska, the Division of Public Health has administered PRAMS since 1990.

A stratified systematic sample is drawn each month from the state's live birth records for infants between two and six months of age. Sampled mothers receive a series of mailed questionnaires to solicit a response, and since 1997, telephone follow-up has been initiated among those who do not respond to the third mailed request.

In addition to maternal tobacco use, the PRAMS questionnaire addresses such topics as access to prenatal care, maternal use of alcohol, maternal stress, breastfeeding, physical abuse, and other topics. Survey responses are weighted so that reported prevalences accurately describe Alaska women delivering a live-born infant during the year of the survey. The weighted response rate ranged from 71-77% for 2006 through 2008.

Because the questions about smokeless tobacco use changed significantly in 2004, trend data are available from 1990 to 2003. Data from 2004 to 2008 reflect combined information from questions about different types of smokeless tobacco, including Iqmik.