TOBACCO PREVENTION AND CONTROL REGIONAL PROFILE: SOUTHWEST

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TOBACCO-FREE ALASKA

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PREFACE

Tobacco use remains Alaska's leading preventable cause of disease and death. More Alaskans die as a result of tobacco use than from infectious diseases, alcohol, car accidents, illegal drugs, murders and suicides combined. Tobacco use exacts an enormous burden on the State of Alaska and its residents, causing premature death and millions of dollars of avoidable medical care expenditures.[i] The single best thing that Alaskans who use tobacco can do to improve their health and the health of those around them is to quit using any tobacco products.

The Centers for Disease Control and Prevention (CDC) has identified tobacco use as 1 of the most important "winnable battles" in public health – priorities with large-scale impact on health and known, effective strategies to address them. The CDC offers guidance to states about how to reduce the burden of tobacco use through comprehensive tobacco prevention and control programs described in *Best Practices for Comprehensive Tobacco Control Programs*-2007. These evidence-based, comprehensive, sustained statewide tobacco control programs have been shown to reduce smoking rates, tobacco-related deaths and diseases caused by smoking.

Tobacco use remains a critical health issue in Alaska and disproportionately affects Alaska Native adults and youth, individuals of low socioeconomic status (SES) and young adults, leading to health inequities or disparities for these groups. However, Alaska has made considerable progress in reducing the burden of tobacco use by implementing a comprehensive tobacco prevention and control program consistent with CDC guidelines. Since the inception of the program in 1996, adult smoking rates have declined significantly to 23% in 2011, and youth smoking rates have been more than cut in half, to 14% in 2011.[i]

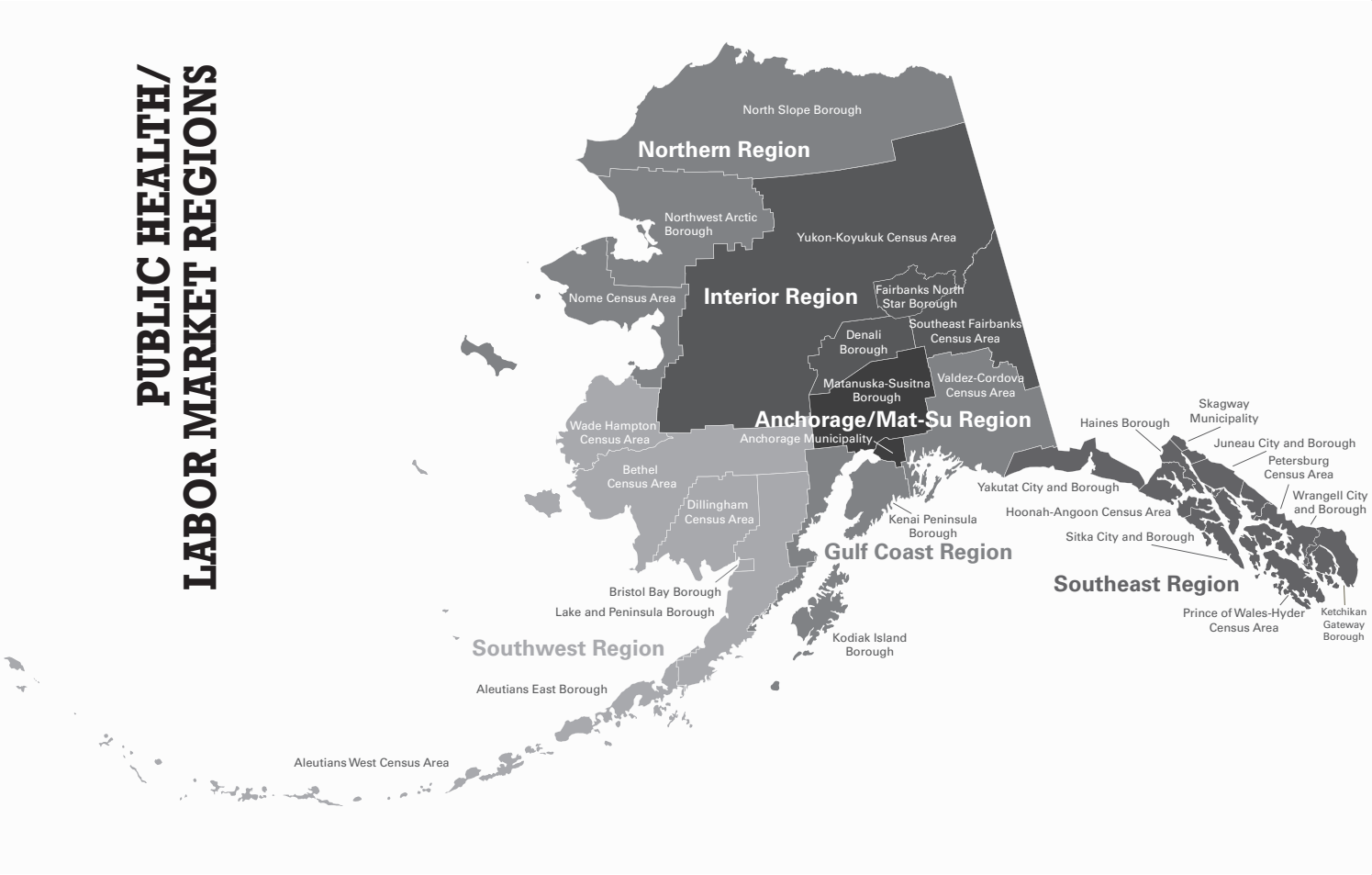
The State of Alaska Tobacco Prevention and Control (TPC) Program has achieved success by implementing an evidence-based comprehensive tobacco prevention and control program, including a tobacco quit line, counter-marketing media and grants to promote tobacco-free policies in community programs, schools and healthcare organizations. These program elements combine to address the 4 goals of the TPC Program:

1. prevent the initiation of tobacco use among youth;
2. promote cessation for tobacco users;
3. eliminate exposure to secondhand smoke (SHS); and
4. identify and eliminate tobacco use disparities.

Until now, the TPC Program has offered 3 separate grant programs to fund work by community organizations, healthcare systems and K-12 schools toward these 4 goal areas. Beginning in FY14, the TPC Program provides a comprehensive, regional funding scenario to encourage all types of organizations to approach and coordinate tobacco control and prevention at the community level. Grantees will be working collaboratively on evidenced based strategies that change the community context around tobacco use within their Public Health Region and at a statewide level.

Regional profiles have been compiled to support this innovative streamlined approach to comprehensive tobacco prevention and control in Alaska. Tobacco use varies considerably by region, with twice the rates of smoking and 4 times the rates of smokeless tobacco use in some regions when compared with the statewide estimates. These regional profiles summarize key demographic data, tobacco indicators, tobacco-related policies in the region and potential

partner organizations and infrastructure that could support regional tobacco prevention and control efforts. While this report is specific to the Southwest region, data for the other regions and statewide are included in Appendix B, and regional reports are available for each of the 6 Public Health/Labor Market regions in Alaska (see map below).



OVERVIEW

The 2010 US Census lists 40,649 people living in the Southwest region of Alaska, accounting for 6% of the total population in Alaska. Over 40% of the people in this region (n=17,013) live in the Bethel Census Area. See Table A-1 in Appendix A for a list of specific communities in the Southwest region.

The economy in the Southwest region is based on natural resources, subsistence and government spending,[ii] with both commercial and recreational fishing acting as the mainstay of the economy. The Southwest region consists of the Aleutians East, Bristol Bay and Lake and Peninsula Boroughs, as well as the Aleutians West, Bethel, Dillingham and Wade Hampton Census Areas. The annual average unemployment rate for the Southwest region was 12.6% in 2011. The industries employing over two-thirds of the workers in the Southwest region in 2011 were local government, trade, transportation and utilities, and educational and health services.[iii]

There are 13 Alaska Native Regional Corporations (or ANCSA Corporations) in the state of Alaska. ANCSA Corporations were established when the US Congress passed the Alaska Native Claims Settlement Act (ANCSA), which settled land and financial claims made by Alaska Native people and provided for the establishment of 13 regional corporations to administer those claims. The Southwest region contains the following 3 ANCSA Corporations and their related Native associations:[iv]

- Bristol Bay Native Corporation (Bristol Bay Native Association)
- Calista Corporation (Association of Village Council Presidents)
- The Aleut Corporation (Aleut League)

The Southwest region contains 14 school districts (see Table 1). Out of the 128,926 K-12th grade students in the state of Alaska, the Southwest region accounts for approximately 7% of K-12th grade students in Alaska. Similarly, out of the 39,352 high school students in the state, the region also accounts for nearly 7% of high school students.

Table 1. School District Enrollment in the Southwest Region as of October 1, 2011

District Name	Total High School	Total K-12th
Aleutian Region Schools	6	31
Aleutians East Borough Schools	62	225
Bristol Bay Borough Schools	54	149
Dillingham City Schools	153	482
Kashunamiut Schools	91	312
Kuspuk Schools	104	345
Lake and Peninsula Borough Schools	109	330
Lower Kuskokwim Schools	1,009	4,041
LowerYukon Schools	493	2,002
Pribilof Schools	23	81
Saint Mary's Schools	47	182
Southwest Region Schools	193	623
Unalaska City Schools	142	412
Yupiit Schools	108	446
TOTAL	**2,594**	**9,661**

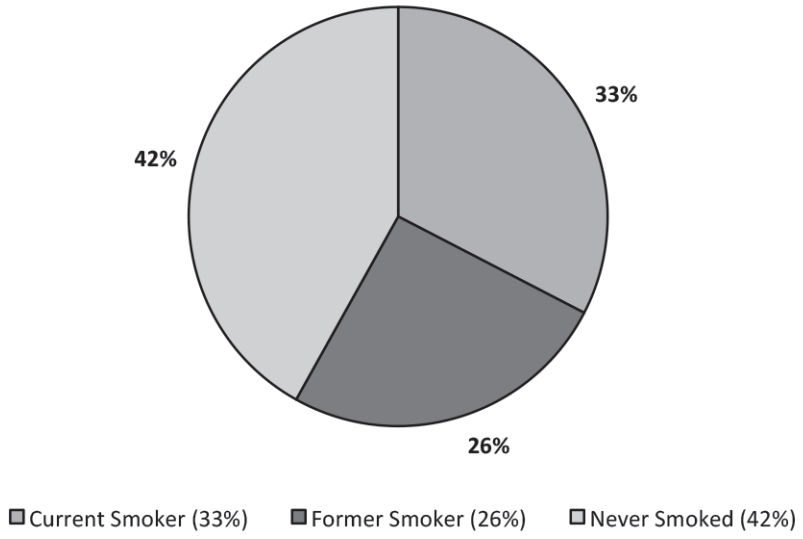
Source: Alaska Department of Education and Early Development: Assessment and Accountability, District Enrollment as of October 1, 2011 FY12. http://education.alaska.gov/stats/

TOBACCO USE

Adult Smoking

Adult tobacco use data are gathered using the Alaska Behavioral Risk Factor Surveillance System (BRFSS), pooling 2009 – 2011 data to calculate regional estimates. Nearly 1 in 3 adults (33% ± 4%) are estimated to currently smoke cigarettes in the Southwest region, well above the statewide estimate of 22% (± 1%) for 2009 – 2011 pooled data. (See Appendix B for all regional and statewide estimates.)

Figure 1. Adult Smoking Status, Southwest Region, 2009-2011

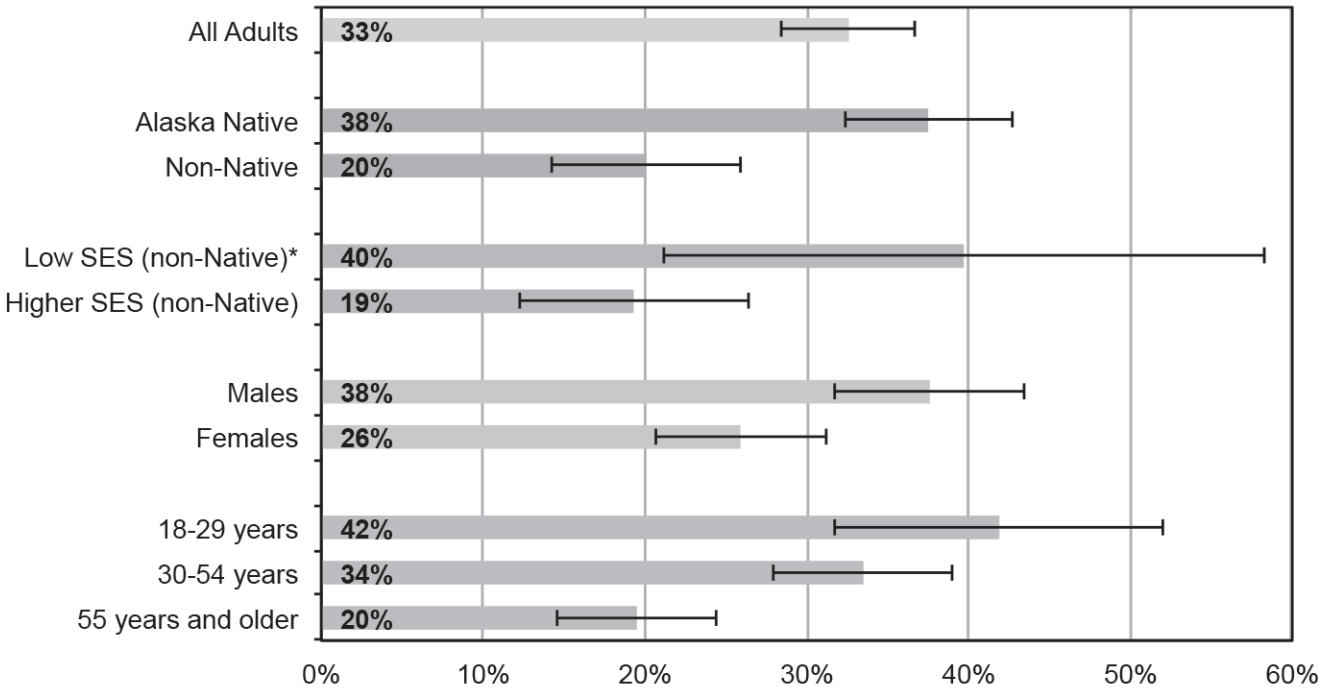


Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Certain priority populations, including Alaska Natives, people with low socioeconomic status (SES), and young adults, may experience higher rates of tobacco use than others. Figure 2 summarizes data for specific population groups to monitor tobacco use in these populations and to help identify where to focus programmatic efforts for the Alaska TPC Program and its partners.

In the Southwest region, adult smoking prevalence was 33% (±4%) overall. Although the smoking prevalence among Alaska Natives (38% ±5%) was not significantly higher than the regional estimate (33% ±4%), it was significantly higher than the prevalence of non-Natives (20% ±6%). The smoking prevalence for men was significantly higher than for women in the region, 38% (±6%) compared to 26% (±5%).

Figure 2. Percent of Alaska Adults Who Currently Smoke, Southwest Region, 2009-2011

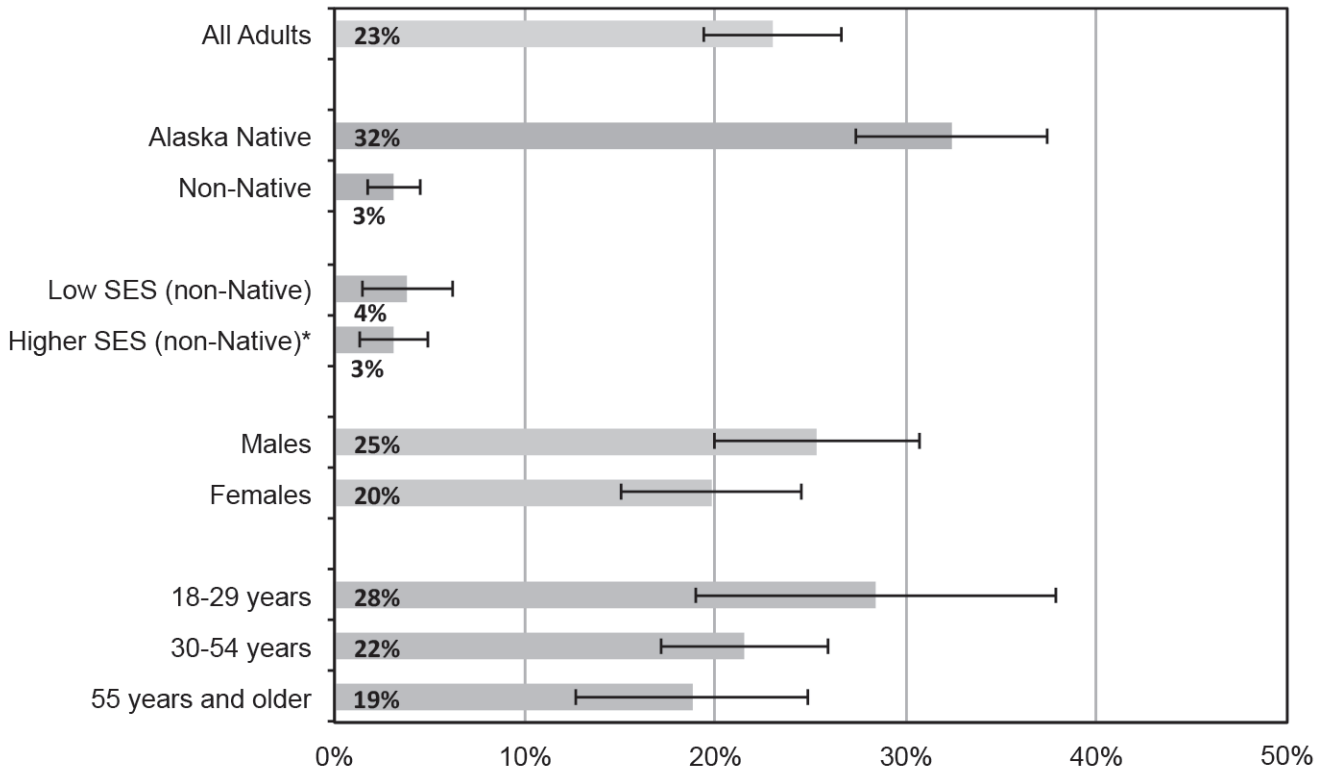


Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Adult Smokeless Tobacco Use

In the Southwest region, an estimated 23% (±4%) of adults use smokeless tobacco, the highest prevalence of the 6 regions and approximately 4 times higher than the statewide estimate of 5% (±1%) for 2009 – 2011 data. As shown in Figure 3, there was no difference between males and females who used smokeless tobacco, 25% (±5%) compared to 20% (±5%). Prevalence of smokeless tobacco use was significantly higher among Alaska Natives (32% ±5%) than the regional estimate (23% ±4%), as well as non-Native prevalence (3% ±1%).

Figure 3. Percent of Alaska Adults Who Use Smokeless Tobacco, Southwest Region, 2009-2011



*Interpret data with caution (For more information, see Table B-2 in Appendix B.)
Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Youth Smoking

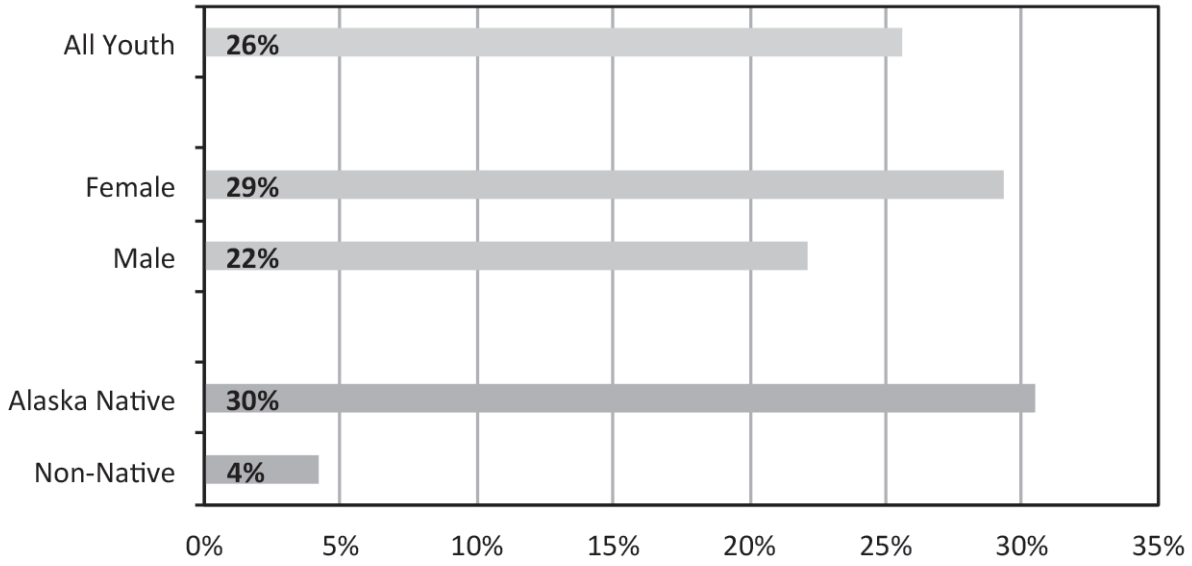
Information about youth tobacco use and other related indicators comes from the Youth Risk Behavior Survey (YRBS), conducted in a sample of high schools every other year. Although the official state estimates are based on a scientifically selected statewide sample of schools and students, the regional data include a combination of the scientific statewide sample and schools that volunteered or chose to participate as part of a local sample. (In Alaska, individual school districts can also conduct a local YRBS.) For this reason, regional estimates may not be generalizable to all students in the region (see Appendix F for additional detail). Because of the mixed sample, regional estimates are presented without confidence intervals (for example, "6%", rather than "6% ±2%" of students).

For district-specific information, contact your local school district for results. The data presented here only reflect statewide and regional YRBS data.

An estimated 26% of high school students surveyed in the Southwest region smoked cigarettes in the past 30 days, compared with the statewide weighted estimate of 14% in 2011. An estimated 8% of students surveyed smoked cigarettes on 20 or more of the past 30 days.

As demonstrated in Figure 4, estimates for cigarette use are somewhat higher for girls than for boys surveyed in this region, 29% compared to 22%. Estimates for smoking in the past 30 days are over 7 times higher for Alaska Native youth than non-Native youth surveyed in the Southwest region, 31% compared to 4%.

Figure 4. Youth Cigarette Use in Past 30 Days, Southwest Region, 2011

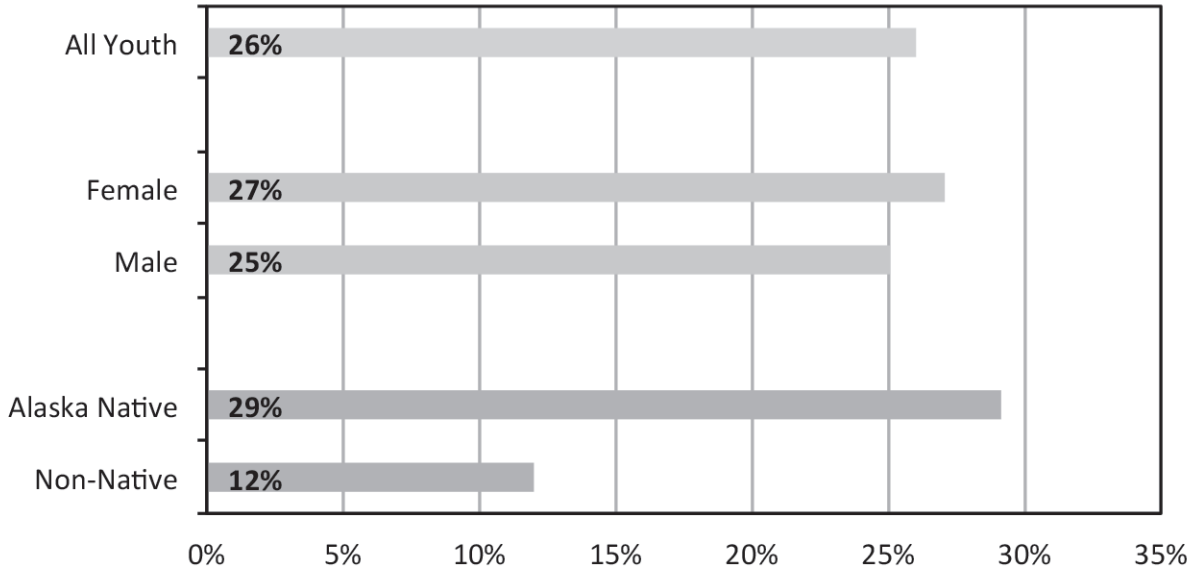


Source: Alaska Youth Risk Behavior Survey, 2011

Youth Smokeless Tobacco Use

In 2011, an estimated 26% of high school students surveyed in the Southwest region reported smokeless tobacco use in the past 30 days, compared with the statewide weighted estimate of 8% in 2011. Similar to cigarette use, Alaska Native youth surveyed were more likely than non-Native youth to report smokeless tobacco use in the past 30 days, 29% compared to 12%. However, no gender differences were evident in the Southwest region.

Figure 5. Youth Smokeless Tobacco Use in Past 30 Days, Southwest Region, 2011



Source: Alaska Youth Risk Behavior Survey, 2011

ELIMINATING EXPOSURE TO SECONDHAND SMOKE

Secondhand Smoke (SHS) Indicators

There is no safe level of exposure to secondhand smoke. Creating completely smokefree indoor areas is the only way to protect nonsmokers from secondhand smoke. Policies establishing smokefree environments are the most effective way to eliminate secondhand smoke.[v] In the Southwest region, there is overwhelming support for both smokefree restaurants and workplaces.

Table 2. Adult Secondhand Smoke (SHS) Indicators, Southwest Region, 2009-2011

	Prevalence (95% CI)*
Has home smoking ban	92.7% (±2.8%)
No home SHS exposure	92.8% (±3.5%)
Support for smokefree workplaces	86.2% (±4.7%)
Support for smokefree restaurants	88.6% (±3.9%)
Smoking not allowed in work areas (indoor workers)	82.3% (±7.6%)
No indoor workplace SHS exposure (all workers)**	95.2% (±2.8%)
No indoor workplace SHS exposure (indoor workers)	96.5% (±2.4%)

*95% Confidence Interval
**Estimate from 2010-2011; not available from earlier years.
Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Although the vast majority of adults did not report secondhand smoke exposure in homes and workplaces, an estimated 38% of high school students surveyed in the Southwest region in 2011 reported being in the same room with someone who was smoking in the past 7 days.[vi]

Tribal Resolutions

Several tribes across Alaska have adopted 100% comprehensive model smokefree or tobacco-free resolutions. In the Southwest region through January 2013, the TPC Program has tobacco-free tribal resolutions on record for Clarks Point Traditional Council, Curyung Tribal Council (Dillingham), Igiugig Village Council, Iliamna Village Council, Manokotak Village Council, Native Village of Atka, Native Village of Port Heiden and St. George Traditional Council. Newtok Traditional Council, Nunakauyak Traditional Council (Toksook Bay), Tuntutuliak Traditional Council and Village of Kotlik have all adopted smokefree tribal resolutions.[vii]

Smokefree Workplace Laws

Three communities have adopted smokefree workplace laws in the Southwest region through December 31, 2012, including Bethel, Dillingham and Unalaska. The City of Bethel has exemptions for restaurants and bars. The City of Dillingham has exemptions for "non-public" workplaces with 2 or fewer employees and does not cover restaurants and bars. The City of Unalaska allows exemptions for private clubs and allows for smoking shacks so does not cover 100% of the population.

Table 3. Smokefree Workplace Laws through December 31, 2012 in the Southwest Region

		Law covers the following:		
Jurisdiction	**Date**	**Workplaces**	**Restaurants**	**Bars**
Bethel	1998	Yes	Yes	No
Dillingham	2003	No	No	No
Unalaska	2009	Yes	Yes	Yes

Source: State of Alaska Tobacco Prevention and Control Program

Regional Housing Authorities

Public housing residents often have limited housing choices and without smokefree policies in place, their housing options may include secondhand smoke exposure. In July 2009, the US Department of Housing and Urban Development (USD-HUD) published a notice strongly encouraging implementation of smokefree policies in public housing to advance tobacco prevention and control efforts among low income and vulnerable populations.[viii] There are 26 regional housing authorities in the Southwest region (see Table 4). According to TPC Program records, as of December 31, 2012, the Aleutian Housing Authority is the only regional housing authority in the Southwest region with a comprehensive smokefree policy that includes all residents, visitors and staff within all housing authority property.

Table 4. Regional Housing Authorities in the Southwest Region

Regional Housing Authority	Smokefree Policy?
Akiachak Native Community	No
Aleutian Housing Authority	Yes
Asa'carsarmiut Tribe	No
Association of Village Council Presidents (AVCP) Regional Housing Authority	No
Bristol Bay Housing Authority	No
Chevak Native Village	No
Egegik Village	No
Emmonak Village	No
Iqurmiut Traditional Council	No
Kwethluk Tribal Resident Council, Incorporated	No
Lime Village	No
Manokotak Village	No

Table 4. (continued) Regional Housing Authorities in the Southwest Region

Native Village of Goodnews Bay	No
Native Village of Kwinhagak	No
Native Village of Pilot Point	No
Newhalen Village	No
Nondalton Village	No
Orutsararmuit Native Village	No
Pedro Bay Village	No
Pilot Station Traditional Village	No
Saint Paul Island	No
Tuluksak Native Community	No
Village of Aniak	No
Village of Atmautluak	No
Village of Iliamna	No
Village of Sleetmute	No

Source: Alaska Community Database (Department of Commerce, Community, and Economic Development) and State of Alaska Tobacco Prevention and Control Program

PREVENT THE INITIATION OF TOBACCO USE

Youth Prevention Indicators

The YRBS data offer key indicators for tracking youth initiation of tobacco use and youth perceptions of the social norms around tobacco use. An estimated 20% of high school students surveyed in the Southwest region used some type of tobacco (either cigarettes or smokeless tobacco) on school property within the past 30 days in 2011. Although nearly all of the youth reported that their parents would consider it wrong for them to smoke cigarettes, nearly 1 in 4 students surveyed thought that smoking one or more packs per day posed no or slight risk to their health.

Table 5. Youth Tobacco Prevention Indicators, Southwest Region, 2011

	Percent (%) (Total Respondents)
Used tobacco on school property*	19.7% (378)
Initiated smoking prior to age 13	22.1% (359)
Perceives no or only slight risk from smoking**	23.5% (380)
Thinks parents consider it wrong for child to smoke	96.9% (375)

*Smoking or using smokeless tobacco within the past 30 days.
**Students who think smoking one or more packs of cigarettes per day is no or slight risk.
Source: Alaska Youth Risk Behavior Survey, 2011

Tobacco Taxes

Numerous economic studies have documented that tobacco tax or price increases reduce both adult and underage smoking. Alaska's statewide cigarette tax is $2.00 for a pack of 20 cigarettes and 75% of wholesale price of other tobacco products, including cigars and chewing tobacco. Municipalities and boroughs are allowed to also levy a tax on other tobacco products, including cigars and chewing tobacco. As of December 31, 2012, Bethel is the only community in the Southwest region to have passed a local tobacco tax, effective February 2013. In addition to a cigarette tax, Bethel also levies a 45% tax on the wholesale price of other tobacco products.

Table 6. Tobacco Tax Rates Through December 31, 2012 in the Southwest Region

Community	Local Tax	State Base Tax	Total Tax per Pack	Other Tobacco Product Tax
Bethel	$2.21	$2.00	$4.21	45% of wholesale

Source: Bethel Municipal Code, Chapter 4.17

School District Policy Reports

In an effort to promote tobacco-free schools, the TPC Program developed a gold standard tobacco-free schools policy and conducted an analysis of existing school district tobacco policies. In the southwest region, Aleutians East Borough School District, and Southwest Region School District have both adopted Gold Standard tobacco-free school district policies. (See Table D-2 in Appendix D for more information about the 8 required standard policy elements.)

School policies are subject to change. The policy summaries presented here are current as of November 7, 2012. Table 7 summarizes the number and percent of school districts in the Southwest region that meet the 8 minimum elements of a tobacco-free school policy. Table 8 summarizes the number and percent of school districts in the Southwest region that meet the gold, silver or bronze tobacco-free campus standard. The TPC Program reviews and updates school district tobacco policies quarterly. For the most current regional school district policy report visit http://www.redegroup.co/alaska-school-district-reports.

Table 7. School Policy Report for the Southwest Region: Minimum Standard Data Elements Met as of November 7, 2012

Number of School Districts	Percent (%) of School Districts	Minimum Data Element
2	14%	Tobacco-free school district – Minimum standard elements (8 total)
11	79%	Incomplete – Policy lacks 1 or more key elements to meet the tobacco-free school standard
1	7%	Missing – Policy has not been submitted

Source: State of Alaska Tobacco Prevention and Control Program

See Table D-3 in Appendix D for more information about the additional policy elements.

Table 8. School Policy Report for the Southwest Region: Gold, Silver or Bronze as of November 7, 2012

Number of School Districts	Percent (%) of School Districts	Minimum Data Element
2	14%	Gold star – Minimum standard plus at least 10 additional elements
0	0%	Silver star – Minimum standard plus 5 - 9 additional elements
0	0%	Bronze star – Minimum standard plus 1 - 4 additional elements

Source: State of Alaska Tobacco Prevention and Control Program

Table 9 displays the current status of each school district in the Southwest region as of November 7, 2012.

Table 9. School Policy Report for the Southwest Region: Current Status as of November 7, 2012

School District	Current Status
Aleutians East Borough Schools	Gold Star
Aleutian Region Schools	Incomplete
Bristol Bay Borough Schools	Incomplete
Dillingham City Schools	Incomplete
Kashunamiut Schools	Incomplete
Kuspuk Schools	Incomplete
Lake and Peninsula Borough Schools	Incomplete
Lower Kuskokwim Schools	Incomplete
Lower Yukon Schools	Incomplete
Pribilof Schools	Incomplete
Saint Mary's Schools	Missing
Southwest Region Schools	Gold Star
Unalaska City Schools	Incomplete
Yupiit Schools	Incomplete

Source: State of Alaska Tobacco Prevention and Control Program

EVIDENCE-BASED TOBACCO CESSATION INTERVENTIONS

Cessation Indicators

Quitting tobacco provides health benefits at any age.[ix-x] Additionally, tobacco cessation programs are cost-effective and increase longevity while reducing healthcare costs.[xi] In the Southwest region, nearly 50% of adults aged 25 or more who have ever smoked regularly have quit (i.e., quit ratio, as shown in Table 10). Among adults who currently smoke, approximately 56% have attempted to quit smoking in the past 12 months.

Table 10. Adult Cessation Indicators, Southwest Region, 2009-2011

	Prevalence (95% CI)*
Quit ratio (among ever smokers age 25 and older)	47.8% (±5.5%)
Attempted to quit (among current smokers)	56.3% (±8.0%)
Quit for 3+ months (among past year smokers)	7.6%† (±5.0%)
Aware of quit line (among current smokers)	71.6% (±11.9%)
Advised to quit by healthcare provider (among smokers who had a healthcare visit in the past year)	56.8% (±15.8%)

*95% Confidence interval (CI)
†Interpret data with caution. (For more information, see Table E-1 in Appendix E)
Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Alaska's Tobacco Quit Line

Alaska's Tobacco Quit Line provides free, phone based counseling and nicotine replacement therapy to all Alaskans. In 2012, 3,215 Alaska residents called the quit line, with just 3% of the callers (94 callers) from the Southwest region. Nearly all calls (96%; 90 callers) from the Southwest region were tobacco users who requested a cessation intervention.

Table 11. Alaska's Tobacco Quit Line: Summary of Services, Southwest Region, 2012

	Number of Callers (%)
Live Transfers*	‡
General Questions	‡
Intervention Requested	90 (96%)
Materials Only	‡
TOTAL	**94 (100%)**

*A live transfer to Alere Wellbeing's Commercial Line, which is part of a defined employee benefit package (e.g., ConocoPhillips Alaska, Inc.).
‡ Data suppressed because there were less than 5 callers.
Source: Alaska's Tobacco Quit Line, 2012

The majority of tobacco users in the Southwest region who called the quit line to request an intervention were Alaska Native callers; there was no gender difference in callers (see Table 12 and 13).

Table 12. Alaska's Tobacco Quit Line: Total Number of Tobacco Users Who Requested an Intervention by Sex, Southwest Region, 2012

	Number of Callers (%)
Female	42 (47%)
Male	48 (53%)
TOTAL	**90 (100%)**

Source: Alaska's Tobacco Quit Line, 2012

Table 13. Alaska's Tobacco Quit Line: Total Number of Tobacco Users Who Requested an Intervention by Alaska Native vs. Non-Native, Southwest Region, 2012

	Number of Callers (%)
Alaska Native	59 (67%)
Non-Native	29 (33%)
TOTAL	**88 (100%)**

Source: Alaska's Tobacco Quit Line, 2012

Of the estimated total number of all tobacco users in the Southwest region, approximately 1% called the quit line and requested an intervention in 2012; the comparable national estimate is 2%.[xii]

Resources and Systems for Tobacco Cessation Interventions

The TPC Program works to engage all healthcare systems to implement tobacco control policies consistent with the U.S. Public Health Services Clinical Practice Guidelines Treating Tobacco Use and Dependence, including working with all health systems to ask, advise, refer and document tobacco use and follow-up while minimizing barriers to treatment. According to the Alaska Department of Commerce, Community and Economic Development, 5 Regional Native Health Corporations operate in the Southwest region: Aleutian Pribilof Islands Association, Incorporated; Bristol Bay Area Health Corporation; Eastern Aleutian Tribes, Incorporated; Southcentral Foundation; and Yukon-Kuskokwim Health Corporation. In addition, there are numerous hospitals, clinics, tribal health organizations and community health centers in the Southwest region. There are also a variety of mental health and substance abuse facilities in the region. Appendix E (Table E-2 and E-3) summarizes these healthcare facilities, offering partnership opportunities for tobacco cessation intervention services in the Southwest region.

APPENDICES

Appendix A: Overview

Table A-1. Community Population in the Southwest Region, 2010

Community	Borough/Census Area	2010 Census Population
Akutan	Aleutians East Borough	1,027
Cold Bay	Aleutians East Borough	108
False Pass	Aleutians East Borough	35
King Cove	Aleutians East Borough	938
Nelson Lagoon	Aleutians East Borough	52
Sand Point	Aleutians East Borough	976
Balance**	Aleutians East Borough	5
Borough Subtotal		3,141
Adak	Aleutians West Census Area	326
Atka	Aleutians West Census Area	61
Attu Station	Aleutians West Census Area	21
Nikolski	Aleutians West Census Area	18
Saint George	Aleutians West Census Area	102
Saint Paul	Aleutians West Census Area	479
Unalaska	Aleutians West Census Area	4,376
Balance**	Aleutians West Census Area	178
Census Area Subtotal		5,561
Akiachak	Bethel Census Area	627
Akiak	Bethel Census Area	346
Aniak	Bethel Census Area	501
Atmautluak	Bethel Census Area	277
Bethel	Bethel Census Area	6,080
Chefornak	Bethel Census Area	418

Table A-1 (continued). Community Population in the Southwest Region, 2010

Chuathbaluk	Bethel Census Area	118
Crooked Creek	Bethel Census Area	105
Eek	Bethel Census Area	296
Goodnews Bay	Bethel Census Area	243
Kasigluk	Bethel Census Area	569
Kipnuk	Bethel Census Area	639
Kongiganak	Bethel Census Area	439
Kwethluk	Bethel Census Area	721
Kwigillingok	Bethel Census Area	321
Lime Village	Bethel Census Area	29
Lower Kalskag	Bethel Census Area	282
Mekoryuk	Bethel Census Area	191
Napakiak	Bethel Census Area	354
Napaskiak	Bethel Census Area	405
Newtok	Bethel Census Area	354
Nightmute	Bethel Census Area	280
Nunapitchuk	Bethel Census Area	496
Oscarville	Bethel Census Area	70
Platinum	Bethel Census Area	61
Quinhagak	Bethel Census Area	669
Red Devil	Bethel Census Area	23
Sleetmute	Bethel Census Area	86
Stony River	Bethel Census Area	54
Toksook Bay	Bethel Census Area	590
Tuluksak	Bethel Census Area	373
Tuntutuliak	Bethel Census Area	408

Table A-1 (continued). Community Population in the Southwest Region, 2010

Tununak	Bethel Census Area	327
Upper Kalskag	Bethel Census Area	210
Balance**	Bethel Census Area	51
Census Area Subtotal		17,013
King Salmon	Bristol Bay Borough	374
Naknek	Bristol Bay Borough	544
South Naknek	Bristol Bay Borough	79
Balance**	Bristol Bay Borough	0
Borough Subtotal		997
Aleknagik	Dillingham Census Area	219
Clark's Point	Dillingham Census Area	62
Dillingham	Dillingham Census Area	2,329
Ekwok	Dillingham Census Area	115
Koliganek	Dillingham Census Area	209
Manokotak	Dillingham Census Area	442
New Stuyahok	Dillingham Census Area	510
Portage Creek	Dillingham Census Area	2
Togiak	Dillingham Census Area	817
Twin Hills	Dillingham Census Area	74
Balance**	Dillingham Census Area	68
Census Area Subtotal		4,847
Chignik	Lake and Peninsula Borough	91
Chignik Lagoon	Lake and Peninsula Borough	78
Chignik Lake	Lake and Peninsula Borough	73
Egegik	Lake and Peninsula Borough	109
Igiugig	Lake and Peninsula Borough	50

Table A-1 (continued). Community Population in the Southwest Region, 2010

Iliamna	Lake and Peninsula Borough	109
Ivanof Bay	Lake and Peninsula Borough	7
Kokhanok	Lake and Peninsula Borough	170
Levelock	Lake and Peninsula Borough	69
Newhalen	Lake and Peninsula Borough	190
Nondalton	Lake and Peninsula Borough	164
Pedro Bay	Lake and Peninsula Borough	42
Perryville	Lake and Peninsula Borough	113
Pilot Point	Lake and Peninsula Borough	68
Pope-Vannoy Landing	Lake and Peninsula Borough	6
Port Alsworth	Lake and Peninsula Borough	159
Port Heiden	Lake and Peninsula Borough	102
Ugashik	Lake and Peninsula Borough	12
Balance**	Lake and Peninsula Borough	19
Borough Subtotal		1,631
Alakanuk	Wade Hampton Census Area	677
Chevak	Wade Hampton Census Area	938
Emmonak	Wade Hampton Census Area	762
Hooper Bay	Wade Hampton Census Area	1,093
Kotlik	Wade Hampton Census Area	577
Marshall	Wade Hampton Census Area	414
Mountain Village	Wade Hampton Census Area	813
Nunam Iqua	Wade Hampton Census Area	187
Pilot Station	Wade Hampton Census Area	568
Pitkas Point	Wade Hampton Census Area	109
Russian Mission	Wade Hampton Census Area	312

Table A-1 (continued). Community Population in the Southwest Region, 2010

Saint Mary's	Wade Hampton Census Area	507
Scammon Bay	Wade Hampton Census Area	474
Balance*	Wade Hampton Census Area	28
Census Area Subtotal		7,459
REGION TOTAL		**40,649**

*Census designated place (CDP) is the the statistical counterpart of incorporated places and are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state. CDPs are delineated cooperatively by state and local officials and the Census Bureau, following Census Bureau guidelines.

**Balance refers to a population that lives in an unincorporated remote or rural area (sometimes referred to as "off the grid").

Source: Alaska Community Database (Department of Commerce, Community, and Economic Development) and US Census

Appendix B: Adult Tobacco Use

Table B-1. Prevalence (and 95% Confidence Interval) of Smoking Among Alaska Adults, Public Health Regions, 2009-2011

	Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
All Adults	19.3%	22.0%	22.8%	45.9%	23.1%	32.6%	22.1%
	± 2.0%	2.3%	2.2%	5.3%	2.6%	4.1%	1.2%
Alaska Native	32.3%	34.5%	45.5%	53.8%	36.7%	37.5%	39.1%
	± 9.1%	7.8%	7.1%	6.0%	7.7%	5.2%	3.4%
Non-Native	18.1%	20.7%	20.1%	22.9%	20.8%	20.1%	19.1%
	± 2.0%	2.5%	2.3%	9.9%	2.7%	5.8%	1.3%
Low SES (non-Native)	32.7%	31.1%	34.6%	25.5%*	41.2%	39.7%**	33.7%
	± 5.5%	5.7%	6.2%	17.5%	7.2%	18.6%	3.4%
Higher SES (non-Native)	15.2%	18.8%	16.5%	24.3%	15.5%	19.3%	16.0%
	± 2.4%	3.0%	2.5%	12.2%	2.9%	7.1%	1.5%
Males	20.6%	21.1%	22.2%	51.7%	25.0%	37.6%	23.4%
	± 3.2%	3.4%	3.1%	7.4%	3.9%	5.9%	1.9%
Females	17.9%	22.9%	23.5%	37.8%	21.2%	25.9%	20.6%
	± 2.5%	3.1%	3.1%	6.4%	3.4%	5.3%	1.6%
Age 18-29	26.9%	20.6%	29.8%	43.8%	28.2%	41.9%	28.6%
	± 5.9%	6.8%	5.6%	11.4%	8.4%	10.1%	3.5%
30-54	19.2%	25.2%	22.2%	49.7%	26.8%	33.5%	22.7%
	± 2.6%	3.3%	3.1%	6.9%	3.5%	5.5%	1.6%
55 and older	12.7%	18.2%	16.1%	40.5%	14.9%	19.5%	15.3%
	± 2.3%	3.1%	2.6%	9.9%	3.0%	4.9%	1.4%

*Inadequate sample size for normal approximation. For means and proportions based on commonly occurring events (where 0.25 < P < 0.75), an estimate is flagged if it is based on a cell size of less than 30 times a "broadly calculated average design effect."

**Inadequate sample size for uncommon or very common events. For proportions below 0.25 or above 0.75, the criteria for statistical reliability is that the cell size be sufficiently large that the minimum of nP and n(1-P) be greater than or equal to eight times a broadly calculated average design effect, where n is the cell size and P is the estimated proportion. (I.e., an estimate is flagged when n<8 * (avg. design effect)/min(P,1-P)). The coefficient of variation is not used in these cases.

Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Table B-2. Prevalence (and 95% Confidence Interval) of Smokeless Tobacco Use Among Alaska Adults, Public Health Regions, 2009-2011

	Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
All Adults	3.1%	6.9%	6.5%	7.8%	3.8%	23.0%	5.3%
	± 0.8%	1.7%	1.4%	3.1%	1.0%	3.6%	0.6%
Alaska Native	5.1%*	11.7%	10.5%	9.9%	3.9%	32.4%	13.3%
	± 3.4%	6.3%	4.4%	4.2%	2.1%	5.0%	2.0%
Non-Native	2.9%	6.5%	6.0%	2.7%*	3.8%	3.1%	4.0%
	± 0.9%	1.8%	1.5%	2.3%	1.2%	1.4%	0.6%
Low SES (non-Native)	4.1%*	5.0%	3.9%	DNC	4.2%*	3.8%	4.1%
	± 2.4%	2.5%	2.2%	DNC	2.7%	2.4%	1.5%
Higher SES (non-Native)	3.0%	6.6%	6.0%	3.6%*	4.7%	3.1%*	4.1%
	± 1.0%	2.4%	1.7%	3.0%	1.8%	1.8%	0.7%
Males	5.6%	12.3%	11.1%	12.1%	7.0%	25.3%	8.8%
	± 1.6%	3.1%	2.5%	5.1%	2.0%	5.4%	1.1%
Females	0.5%*	0.9%**	1.0%*	2.0%*	0.3%	19.8%	1.5%
	± 0.4%	0.7%	0.8%	1.7%	0.1%	4.7%	0.4%
Age 18-29	2.7%*	9.3%*	9.7%	14.0%*	3.0%*	28.4%	6.7%
	± 2.1%	5.6%	4.0%	8.9%	2.4%	9.5%	1.7%
30-54	4.2%	8.7%	6.2%	6.7%	5.6%	21.5%	6.1%
	± 1.3%	2.7%	1.7%	3.1%	1.8%	4.4%	0.9%
55 and older	1.4%**	3.2%	3.4%	2.6%*	1.6%**	18.8%	2.8%
	± 0.8%	1.4%	1.2%	2.7%	1.0%	6.1%	0.6%

DNC: Data Not Collected

*Inadequate sample size for normal approximation. For means and proportions based on commonly occurring events (where 0.25 < P < 0.75), an estimate is flagged if it is based on a cell size of less than 30 times a "broadly calculated average design effect."

**Large coefficient of variation. Estimates are flagged if the coefficient of variation (ratio of the standard error to the mean expressed as a percent) is greater than 30.

Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Appendix C: Eliminating Exposure to Secondhand Smoke

Table C-1. Prevalence (and 95% Confidence Interval) of Secondhand Smoking (SHS) Indicators Among Alaska Adults, Public Health Regions, 2009-2011

	Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Total
Has home smoking ban	91.2% ± 2.0%	86.3% 3.2%	87.1% 2.5%	89.4% 4.6%	87.3% 3.1%	92.7% 2.8%	89.6% 1.3%
No home SHS exposure	91.1% ± 2.3%	87.2% 3.3%	89.4% 2.3%	89.4% 4.8%	88.3% 3.4%	92.8% 3.5%	90.1% 1.4%
Support for smokefree workplaces	82.1% ± 3.1%	81.7% 3.2%	80.6% 3.0%	85.1% 5.3%	78.2% 3.9%	86.2% 4.7%	81.7% 1.8%
Support for smokefree restaurants	82.1% ± 3.0%	81.1% 3.3%	72.3% 3.7%	84.8% 5.8%	74.6% 4.0%	88.6% 3.9%	80.0% 1.8%
Smoking not allowed in work areas (indoor workers)	87.0% ± 4.3%	82.7% 4.5%	81.7% 4.5%	81.2% 8.1%	84.6% 5.0%	82.3% 7.6%	85.1% 2.7%
No indoor workplace SHS exposure (all workers)†	93.1% ± 2.8%	90.8% 3.8%	90.6% 3.2%	91.8% 5.4%	91.5% 4.5%	95.2% 2.8%	92.3% 1.7%
No indoor workplace SHS exposure (indoor workers)	95.2% ± 2.1%	90.6% 3.0%	92.0% 2.7%	89.5% 6.0%	94.5% 2.7%	96.5% 2.4%	94.0% 1.3%

†Estimate from 2010-2011; not available from earlier years.

Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Appendix D: Prevent the Initiation of Tobacco Use

Table D-1. Youth Tobacco Prevention Indicators, Public Health Regions, 2011

		Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest
Used tobacco on school property*	Percent	6.0%	6.4%	4.5%	20.6%	4.2%	19.7%
	Total Respondents	1,650	1,829	448	737	1,184	378
Initiation of smoking prior to age 13	Percent	9.3%	10.3%	9.4%	23.3%	8.5%	22.1%
	Total Respondents	1,564	1,740	428	685	1,115	359
Perceives no or only slight risk from smoking**	Percent	14.1%	10.6%	9.2%	30.0%	11.7%	23.5%
	Total Respondents	1,660	1,828	457	745	1,187	380
Thinks parents consider it wrong for child to smoke	Percent	98.3%	97.7%	98.5%	95.9%	97.4%	96.9%
	Total Respondents	1,636	1,807	447	705	1,166	375

*Smoking or using smokeless tobacco within the past 30 days.

**Students who think smoking one or more packs of cigarettes per day is no or slight risk.

Source: Alaska Youth Risk Behavior Survey, 2011

Table D-2. School Policy Report for the Southwest Region: Minimum Standard Elements of a Tobacco-Free Policy as of November 7, 201212

Number of School Districts	Percent (%) of School Districts	Policy Elements
3	21%	Prohibits use of tobacco products on all school property (including grounds, buildings, parking areas and residencies where applicable)
8	57%	Prohibits use of tobacco products in school vehicles
2	14%	Prohibits use of tobacco products at any school-sponsored event (on- or off-campus)
2	14%	Defines tobacco to mean all forms of tobacco and tobacco use (all smoking products, smokeless tobacco products and non treatment related nicotine delivery devices)
3	21%	Applies to all students, staff and visitors
10	71%	Requires the posting of signs informing students, staff and visitors that school grounds are tobacco-free
4	29%	Identifies specific enforcement procedures and consequences for violating school policies
3	21%	Remains in force 24 hours a day, 7 days a week, 365 days a year

Source: State of Alaska Tobacco Prevention and Control Program

Table D-3. School Policy Report for the Southwest Region: Additional Policy Elements of a Tobacco-Free Policy as of November 7, 2012

Number of School Districts	Percent (%) of School Districts	Policy Element
13	93%	Includes a rationale for being tobacco-free
13	93%	States that tobacco possession by a person under age 19 is against the law
4	29%	Includes language restricting items from school property that might contribute to tobacco use and acceptability (such as lighters, clothing with logos)
0	0%	Includes a requirement for evidence-based tobacco prevention education for all students
2	14%	Includes provisions against accepting tobacco industry funds or free giveaways
7	50%	Includes language prohibiting tobacco advertising in school buildings and school functions
3	21%	Includes progressive consequences for violating school tobacco policy (such as an education program or in school suspension versus suspension for student's first offense)
2	14%	Includes provisions to refer students and staff to local or statewide programs to help them quit using tobacco
6	43%	Includes language prohibiting distribution of tobacco products
2	14%	Includes language specifically prohibiting tobacco use by contractors
2	14%	Includes procedures for communicating the policy to students
2	14%	Includes procedures for communicating the policy to staff
2	14%	Includes procedures for communicating the policy to visitors

Source: State of Alaska Tobacco Prevention and Control ProgramSource: State of Alaska Tobacco Prevention and Control Program

Appendix E: Evidence-Based Tobacco Cessation Interventions

Table E-1. Prevalence (and 95% Confidence Interval) of Cessation Indicators Among Alaska Adults, Public Health Regions, 2009-2011

	Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Total
Quit ratio (among ever smokers age 25 and older)	60.7% ± 3.5%	57.3% 3.6%	58.2% 3.4%	30.8% 5.5%	59.3% 3.7%	47.8% 5.5%	57.8% 2.0%
Attempted to quit (among current smokers)	58.2% ± 6.0%	57.7% 5.8%	57.1% 5.6%	53.1% 8.2%	58.8% 6.7%	56.3% 8.0%	57.5% 3.2%
Quit for 3+ months (among past year smokers)	11.0%* ± 5.3%	9.2% 5.1%	7.6%† 4.6%	1.9%*† 2.2%	6.7%† 5.1%	7.6%† 5.0%	8.9% 2.8%
Awareness of quit line (among current smokers)	69.8% ± 9.0%	80.7% 6.7%	66.6% 8.9%	53.6% 13.6%	78.5% 7.0%	71.6% 11.9%	70.4% 4.8%
Advised to quit by healthcare provider (among smokers who had a healthcare visit in the past year)	69.7%* ± 11.6%	64.9% 10.3%	61.6% 10.9%	67.7% 19.2%	79.2% 7.9%	56.8% 15.8%	67.9% 6.2%

* Inadequate sample size for normal approximation. For means and proportions based on commonly occurring events (where 0.25 < P < 0.75), an estimate is flagged if it is based on a cell size of less than 30 times a "broadly calculated average design effect."

† Large coefficient of variation. Estimates are flagged if the coefficient of variation (ratio of the standard error to the mean expressed as a percent) is greater than 30.

Source: Alaska Behavioral Risk Factor Surveillance System, 2009 – 2011

Table E-2. State of Alaska (Funded by the Division of Behavioral Health) Mental Health and Substance Abuse Facilities in the Southwest Region, FY13

		Provider Type		
Agency	**Service Area**	**Community Behavioral Health Center**	**Mental Health**	**Substance Abuse**
Aleutian Pribilof Islands Association	Western Aleutian/ Pribilof Islands	•	•	•
Bristol Bay Area Health Corporation	Dillingham	•	•	•
City of Bethel	Bethel			
Eastern Aleutian Tribes	East Aleutian Islands	•	•	•
Residential Youth Care	East Aleutian Islands		•	
Yukon-Kuskokwim Health Corporation	Bethel	•	•	•
Alaska Youth and Family Network	Statewide		•	

Source: State of Alaska Department of Behavioral Health

Table E-3. Healthcare Systems in the Southwest Region; Department of Commerce, Community, and Economic Development Listing*

Healthcare Organization	Borough/Census Area
Adak Medical Clinic	Aleutians West Census Area
Agnes Boliver Health Clinic	Wade Hampton Census Area
Akiachak Native Community Clinic	Bethel Census Area
Alakanuk Clinic	Wade Hampton Census Area
Aleknagik North Shore Health Clinic	Dillingham Census Area
Aleknagik South Shore Health Clinic	Dillingham Census Area
Anesia Kudrin Memorial Clinic	Aleutians East Borough
Anna Livingston Memorial Clinic	Aleutians East Borough
Atka Village Clinic	Aleutians West Census Area
Atmautluak Health Clinic	Bethel Census Area
Bethel Family Clinic	Bethel Census Area
Betty Guy Memorial Clinic	Bethel Census Area
Camai Community Health Center	Bristol Bay Borough
Catherine Alexie Health Clinic	Bethel Census Area
Chefornak Clinic	Bethel Census Area
Chevak Clinic	Wade Hampton Census Area
Chignik Bay Sub Regional Health Clinic	Lake and Peninsula Borough
Chignik Lagoon Clinic	Lake and Peninsula Borough
Chignik Lake Clinic	Lake and Peninsula Borough
Clara Morgan Sub-Regional Clinic	Bethel Census Area
Clark's Point Clinic	Dillingham Census Area
Crimet Phillips Sr. Clinic	Bethel Census Area
Crooked Creek Health Clinic	Bethel Census Area
Edith Kawagley Memorial Clinic	Bethel Census Area
Eek Health Clinic	Bethel Census Area

Table E-3 (continued). Healthcare Systems in the Southwest Region; Department of Commerce, Community, and Economic Development Listing*

Egegik Village Clinic	Lake and Peninsula Borough
Ekwok Clinic	Dillingham Census Area
Elena Alexie Memorial Clinic	Bethel Census Area
Eliza Maxie Hertz Memorial Clinic	Bethel Census Area
Emillin Health Clinic	Lake and Peninsula Borough
George Waskey Memorial Clinic (Mountain Village)	Wade Hampton Census Area
Goodnews Bay Clinic	Bethel Census Area
Hooper Bay Sub Regional Clinic	Wade Hampton Census Area
Igiugig Village Health Clinic	Lake and Peninsula Borough
Iliamna Clinic Nilavena Subregional Clinic	Lake and Peninsula Borough
Ivanof Bay Clinic	Lake and Peninsula Borough
John Afcan Memorial Clinic	Wade Hampton Census Area
Julius Pleasant Health Center	Dillingham Census Area
Kanakanak Hospital Public Health Services	Dillingham Census Area
Kasiguk Health Clinic	Bethel Census Area
Kathleen Daniel Memorial Clinic	Bethel Census Area
King Cove Medical Clinic	Aleutians East Borough
King Salmon Health Clinic	Bristol Bay Borough
Kipnuk Clinic	Bethel Census Area
Kokhanok Clinic	Lake and Peninsula Borough
Koliganek Clinic	Dillingham Census Area
Kotlik Clinic	Wade Hampton Census Area
Kwigillingok Health Clinic	Bethel Census Area
Levelock Clinic	Lake and Peninsula Borough
Lillian E. Jimmy Memorial Health Clinic	Bethel Census Area
Lime Village Clinic	Bethel Census Area

Table E-3 (continued). Healthcare Systems in the Southwest Region; Department of Commerce, Community, and Economic Development Listing*

Manguan Health Clinic	Bethel Census Area
Manokotak Village Clinic	Dillingham Census Area
Marie Kameroff Health Clinic	Bethel Census Area
Mekoryuk Health Clinic	Bethel Census Area
Napakiak Health Clinic	Bethel Census Area
Nelson Lagoon Clinic	Aleutians East Borough
New Stuyahok Clinic	Dillingham Census Area
Newhalen Clinic	Lake and Peninsula Borough
Nightmute Health Clinic	Bethel Census Area
Nikolski Health Clinic	Aleutians West Census Area
Nondalton Clinic	Lake and Peninsula Borough
Nunam Iqua Clinic	Wade Hampton Census Area
Oonalaska Wellness Center Aleutians	West Census Area
Oscarville Health Clinic	Bethel Census Area
Pearl E. Johnson Sub-Regional Clinic	Wade Hampton Census Area
Pedro Bay Clinic	Lake and Peninsula Borough
Pilot Point Clinic	Lake and Peninsula Borough
Pilot Station Clinic	Wade Hampton Census Area
Pitka's Point Clinic	Wade Hampton Census Area
Platinum Village Clinic	Bethel Census Area
Port Heiden Clinic	Lake and Peninsula Borough
Quinhagak (Kwinhagak) Clinic	Bethel Census Area
Red Devil Clinic	Bethel Census Area
Russian Mission Clinic	Wade Hampton Census Area
Sand Point Community Health Clinic	Aleutians East Borough
Scammon Bay Clinic	Wade Hampton Census Area

Table E-3 (continued). Healthcare Systems in the Southwest Region; Department of Commerce, Community, and Economic Development Listing*

Sleetmute Clinic	Bethel Census Area
South Naknek Health Clinic	Bristol Bay Borough
St. George Clinic	Aleutians West Census Area
St. Paul Health Center	Aleutians West Census Area
Stony River Clinic	Bethel Census Area
Togiak Sub-Regional Health Clinic	Dillingham Census Area
Toksook Bay Subregional Clinic	Bethel Census Area
Tuluksak Clinic	Bethel Census Area
Tununak Clinic	Bethel Census Area
Yukon-Kuskokwim Delta Regional Hospital	Bethel Census Area

Source: Alaska Community Database (Department of Commerce, Community, and Economic Development)

*NOTE: The healthcare system data presented in Table E-3 were compiled by the Department of Commerce, Community, and Economic Development. The list may not be comprehensive and additional healthcare clinics and hospitals may exist in the region beyond those included in this table.

Appendix F: Data Sources

Alaska's Tobacco Quit Line

The State of Alaska contracts with Alere Wellbeing to provide quit line services to the state. Each month, Alere Wellbeing provides monthly, quarterly and annual reports on general utilization. The state also receives monthly utilization datasets. Quit line utilization data is then analyzed to produce detailed unique reports quarterly and annually.

To calculate the quit line reach ratio, we used the total number of quit line callers who were a tobacco user and requested an intervention as the numerator. To obtain the denominator, we used SPSS Complex Samples to obtain raked weighted estimates of the tobacco use population in each public health region from the Alaska Behavioral Risk Factor Surveillance System (2011).

Youth Behavioral Risk Factor Surveillance System (YRBS)

The YRBS is a systematic survey of high school students that assesses prevalence of 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 2 years, most recently in 2011.

The statewide Alaska YRBS is conducted using a two-stage sampling design. The sampling frame is regular public schools containing grades 9, 10, 11, or 12. 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.

The traditional school-based YRBS does 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 YRBS, including survey results for the statewide traditional sample, the alternative schools sample and the correctional schools sample is available at http://www.hss.state.ak.us/dph/chronic/school/YRBSresults.htm.

Reporting by Region

With the 2011 YRBS data, regional information is available for public health program planning for the first time. For regional reporting, the sampling frame is considered to be 'ad hoc', because it includes all regular public schools containing grades 9, 10, 11, or 12 who participated in the

survey, whether they were part of the statewide official sample, or chose to participate for other reasons. Schools were not systematically and randomly selected and the regional group of participants may not be very representative of schools within their region. However, in each region, students from 2 or more of school districts participated in the survey.

Data were weighted by school enrollment by gender and grade only if the participation rate for the school achieved the 60% response rate established by the CDC for samples or the 50% response rate when all eligible students are surveyed. Not all of the participating schools met these requirements. Therefore, the regional estimates are based on a combination of weighted and unweighted responses. Due to the sampling limitations, confidence intervals are not assessed for these regional data.

The regional YRBS data are based upon aggregated school districts and do not reveal information on a single school district. Prevalence rates are based upon a minimum of 100 responses or the results are suppressed as Data Statistically Unreliable (DSU). Based upon these measures to protect the anonymity of school districts and students, the data may be publicly distributed.

Reporting by Race Group Within Region

In this profile, we report race/ethnicity by whether the survey participant reported being Alaska Native or not. All YRBS survey participants who report being Alaska Native, either alone or in combination with other race groups or Hispanic ethnicity, are categorized in this report as being Alaska Native. We combine all other race groups to report a category "non-Native". This category includes students who report being White, 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 are not included in the race group reporting.

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 Centers for Disease Control (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 with landline telephones have a known, nonzero chance of selection. The sample is stratified into 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. Historically, those living in institutions (i.e., nursing homes, dormitories) are not surveyed. In 2011, the sample was stratified into 6 geographic regions. In addition, the sampling frame was expanded to include cell phones as well as landline or household phones. This step was important because the proportion of households served only by cellular telephones has increased rapidly. By June 2010, about 20% of Alaska households were cell-only.[xiii] In 2011, Alaska's cell phone sample was large enough to include it in weighting and reporting of data.

Interviews 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, healthcare 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 2 BRFSS surveys: the standard BRFSS and a supplemental BRFSS. The supplemental survey contains most of the additional tobacco-related questions, some of which have been adapted from the CDC's Adult Tobacco Survey. Both surveys are conducted throughout the year, using separate samples drawn using the same methodology. In 2011, approximately 210 Alaska adults were interviewed each month for the standard BRFSS, to reach an annual sample size of 2,500 (500 per region); the same number were interviewed for the supplemental BRFSS. Because sample size is lower per region and some subpopulation reporting groups, data from 2009 to 2011 have been combined to report some key indicators.

BRFSS data are weighted to adjust the distribution of the sample data so that it reflects the total population of the sampled area, and to compensate for the over-representation or under-representation of persons in various subgroups. Beginning with the 2011 BRFSS, the CDC is using a new weighting method known as iterative proportional fitting, or raking. Raking allows for the inclusion of several key demographic factors in adjusting survey data to the adult population totals. The changes that have been made will help ensure that the BRFSS can continue to be a valuable source of information for health planning and improvement.

Although point estimates produced when cell phones are included in the sample and weighting is done by raking differ somewhat from those previously reported using old methods, the differences are often minimal. To provide additional context for interpretation about changes in prevalence estimates over time, raking was applied to data from 2007 and 2010, and data including both landline and cell phone respondents will be available from 2011 on.

Both the standard and supplemental BRFSS are weighted (separately) for analysis of items that occur only in 1 version. In addition, a combined dataset (standard plus supplemental) is created and weighted for analysis of questions that occur in both versions, so that some data can be reported for a total of about 5,000 survey respondents each year since 2004. The larger sample sizes allow for more precision in the estimates. For tobacco-related items, this includes smoking and SLT use prevalence.

Regional Reporting

Alaska Public Health 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.

Regional groups for this report are as follows:

1) Anchorage/Mat-Su – Municipality of Anchorage and Matanuska-Susitna Borough
2) Gulf Coast – Kenai Peninsula Borough, Kodiak Island Borough and Valdez-Cordova Census Area
3) Interior – Denali Borough, Fairbanks North Star Borough, Southeast Fairbanks Census Area and Yukon-Koyukuk Census Area
4) Northern – Nome Census Area, North Slope Borough, and Northwest Arctic Borough

5) Southeast – Haines Borough, Hoonah-Angoon Census Area, Juneau City and Borough, Ketchikan Gateway Borough, Petersburg Census Area, Prince of Wale-Hyder Census Area, Sitka City and Borough, Skagway Municipality, Wrangell City and Borough, and Yakutat City and Borough
6) Southwest – Aleutians East Borough, Aleutians West Census Area, Bethel Census Area, Bristol Bay Borough, Dillingham Census Area, Lake and Peninsula Borough and Wade Hampton Census Area

Reporting by Race Group

Information by race group is reported by Alaska Native and non-Native status. For this report, Alaska Native includes all survey respondents who report "Alaska Native/American Indian" as their primary or only race group. Those who report being Hispanic or reported their race as something other than Alaska Native or American Indian are included in the "non-Native" group.

Data Suppression Guidelines

In this report BRFSS information is suppressed or flagged based on statistical guidelines developed by Alaska's Division of Public Health in the Department of Health and Human Services, which are based upon the national Joint Policy of Variance Estimation and Statistical Reporting Standards for the National Health and Nutrition Examination Survey (NHANES-III) and the Continuing Survey of Food Intake by Individuals (CSFII) Reports. An asterisk is used to indicate that the estimate may lack statistical precision. Estimates are flagged if the coefficient of variation (ratio of the standard error to the mean expressed as a percent) is greater than 30. In some cases, the flag also denotes that estimates are based on an inadequate sample size, as determined by whether the event, or risk factor, is very common, common or very uncommon. Finally, information is suppressed if the unweighted sample size for the denominator (N) is less than 30, or if the numerator (n) is less than 5.

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