



**TOBACCO PREVENTION AND CONTROL REGIONAL
PROFILE: INTERIOR**

FY2019

Tobacco Prevention and Control Regional Profile:

Interior Region

August 2019

Produced by the Section of Chronic Disease Prevention and Health Promotion, Tobacco Prevention and Control Program through a contract with Program Design and Evaluation Services, Multnomah County Health Department and Oregon Public Health Division.

Major contributors include:

Chris Bushore, Program Design and Evaluation Services
Erik Everson, MPH, Program Design and Evaluation Services
Andrea Fenaughty, PhD, Deputy Section Chief

ACKNOWLEDGEMENTS

We would like to thank the following for their contribution to this report –

Alaska Department of Health and Social Services, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion

Kira Anderson, Tobacco Prevention & Control Program Evaluator
David Howell, Public Health Data Analyst
Sam Hyde-Rolland, BRFSS Coordinator
Tazlina Mannix, YRBS Data Manager

Suggested Citation: Alaska Department of Health and Social Services, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. *Tobacco Prevention and Control Regional Profile: Interior Region, FY2019 update*. Anchorage, AK: Alaska Department of Health and Social Services; 2019.

Copyright Information: All material in this document is in the public domain and may be reproduced or copied without permission; however, citation as to source is appreciated.

Table of Contents

PREFACE	3
OVERVIEW.....	4
TOBACCO USE	5
Adult Smoking.....	5
Adult Smokeless Tobacco Use	7
Youth Smoking	7
Youth Smokeless Tobacco Use.....	8
ELIMINATING EXPOSURE TO SECONDHAND SMOKE.....	9
Secondhand Smoke (SHS) Indicators	9
Secondhand Smoke Policies.....	9
Tribal Resolutions.....	9
Smokefree Community Ordinances.....	10
Multi-Unit Housing Policies.....	10
Healthcare Policies.....	10
PREVENTING THE INITIATION OF TOBACCO USE.....	10
Youth Prevention Indicators	10
Tobacco Taxes.....	10
School District Policy Reports	11
Post-Secondary Institutions	12
EVIDENCE-BASED TOBACCO CESSATION INTERVENTIONS.....	12
Cessation Indicators.....	12
APPENDICES	13
Appendix A: Adult Tobacco Use.....	13
Appendix B: Eliminating Exposure to Secondhand Smoke.....	15
Appendix C: Preventing the Initiation of Tobacco Use.....	16
Appendix D: Evidence-Based Tobacco Cessation Interventions.....	17
Appendix E: Data Sources	18
References	21

PREFACE

Tobacco use remains Alaska’s leading preventable cause of disease and death. More Alaskans die from the direct effects of tobacco use than from suicide, motor vehicle crashes, chronic liver disease and cirrhosis, homicide, and HIV/AIDS combined.ⁱ 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 all tobacco products.

The Centers for Disease Control and Prevention (CDC) has identified tobacco use as one of the most important “winnable battles” in public health – priorities with large-scale impact on health and known, effective strategies to address them.ⁱⁱ The CDC offers guidance to the 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, 2014.ⁱⁱⁱ These evidence-based, comprehensive, sustained statewide tobacco control programs have been shown to reduce smoking rates, tobacco-related deaths, and diseases caused by smoking.

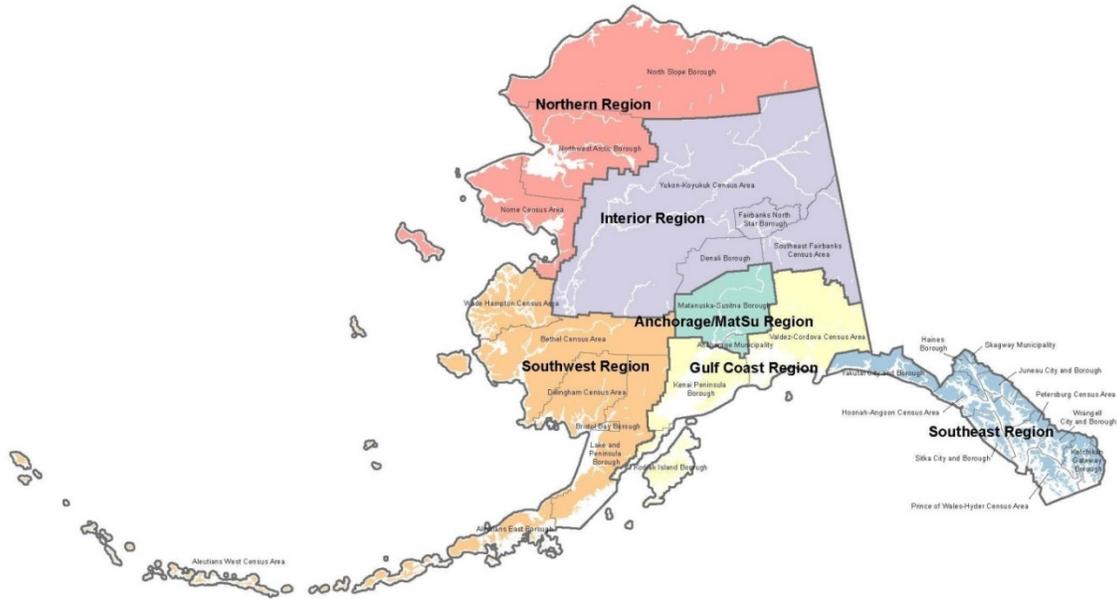
The State of Alaska Tobacco Prevention and Control (TPC) Program has achieved success by implementing an evidence-based comprehensive tobacco prevention and control program, including a tobacco quit line, counter-marketing media, and grants to promote tobacco-free policies in communities, schools and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

The TPC Program had previously supported grant programs to independently fund work in these four goal areas, including community organizations, health care systems, and schools across the state. In 2013, the TPC Program streamlined this approach by offering a comprehensive, regional funding scenario in which partners can approach tobacco prevention and control at the community 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 rate of smoking and four times the rate 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 Interior region, data for the other regions and statewide are included in Appendix A, and regional reports are available for each of the six Public Health/Labor Market regions in Alaska (see map on page 4, and details on included census areas/boroughs in Appendix E).

The Six Public Health/Labor Market Regions in Alaska



OVERVIEW

The Alaska Department of Labor and Workforce Development estimates 111,214 people living in the Interior region of Alaska in 2018, accounting for 15.1% of the total population in Alaska.^{iv} The vast majority of people (n=97,121) live in the Fairbanks North Star Borough. The city of Fairbanks (n=31,668) accounts for 28.5% of the total population in the Interior Region.

The Interior region consists of the Denali and Fairbanks North Star Boroughs, and the Southeast Fairbanks and Yukon-Koyukuk Census Areas. The 2017 annual average unemployment rate for the Interior region was 7.1%, up slightly from the previous year's rate of 6.8%.^v The most common occupation in 2016 was retail sales, and the trade, transportation and utilities sector employed the most people.^{vi}

Alaska Native Regional Corporations were established when the US Congress passed the Alaska Native Claims Settlement Act (ANCSA) in 1971. ANCSA settled land and financial claims made by the Alaska Native people and provided for the establishment of 13 regional corporations in the state to administer those claims. The Interior region contains the following two ANCSA Corporations and their related Native associations:^{vii}

- Ahtna, Incorporated (Copper River Native Association). Information on Ahtna Incorporated is also listed in the Gulf Coast Regional Profile.
- Doyon, Limited (Tanana Chiefs' Conference).

The Interior region contains ten school districts (see Table 1). The Interior region accounts for 18.5% of the 128,800 K-12th grade students in Alaska, and 19.3% of the state's 38,092 high school students.

Table 1. School District Enrollment in the Interior Region as of October 1, 2018

District Name	Total High School	Total K-12 th
Alaska Gateway School District	97	382
Delta-Greely School District	228	819
Denali Borough School District	287	938
Fairbanks North Star Borough School District	3,659	13,138
Galena City School District	1,676	4,847
Iditarod Area School District	69	322
Nenana City School District	564	1,264
Tanana School District	17	51
Yukon Flats School District	53	211
Yukon-Koyukuk School District	708	1,910
TOTAL	7,358	23,882

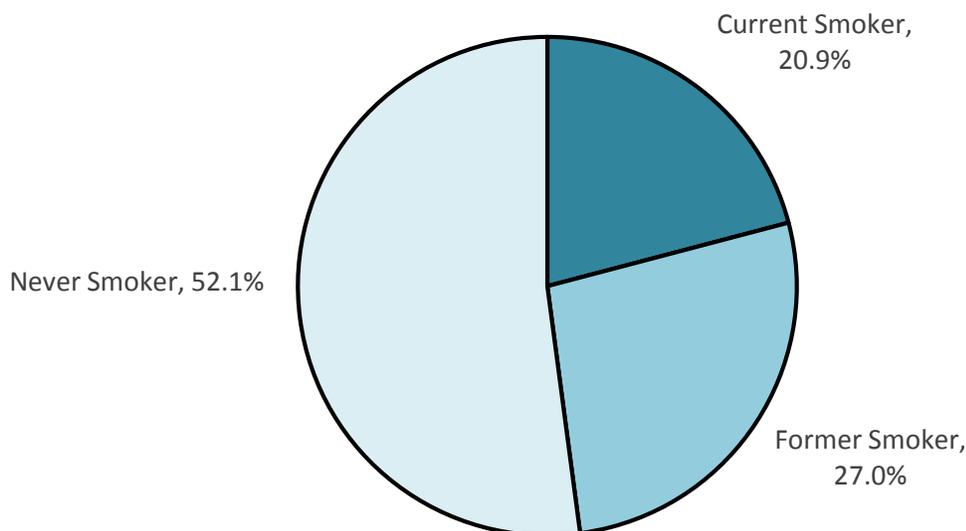
Source: Alaska Department of Education and Early Development: Assessment and Accountability, District Enrollment as of October 1, 2018 FY19. <http://education.alaska.gov/stats/>

TOBACCO USE

Adult Smoking

Adult tobacco use data are gathered using both the standard and supplemental surveys of the Alaska Behavioral Risk Factor Surveillance System (BRFSS; see Appendix E for details on both surveys). For this report, it was necessary to combine 2015-2017 data to calculate regional estimates. A total of 20.9% of adults in the Interior region are estimated to currently smoke cigarettes, slightly higher than the statewide estimate of 19.7% (see Appendix A for all regional and statewide estimates).

Figure 1. Adult Smoking Status, Interior Region, 2015-2017

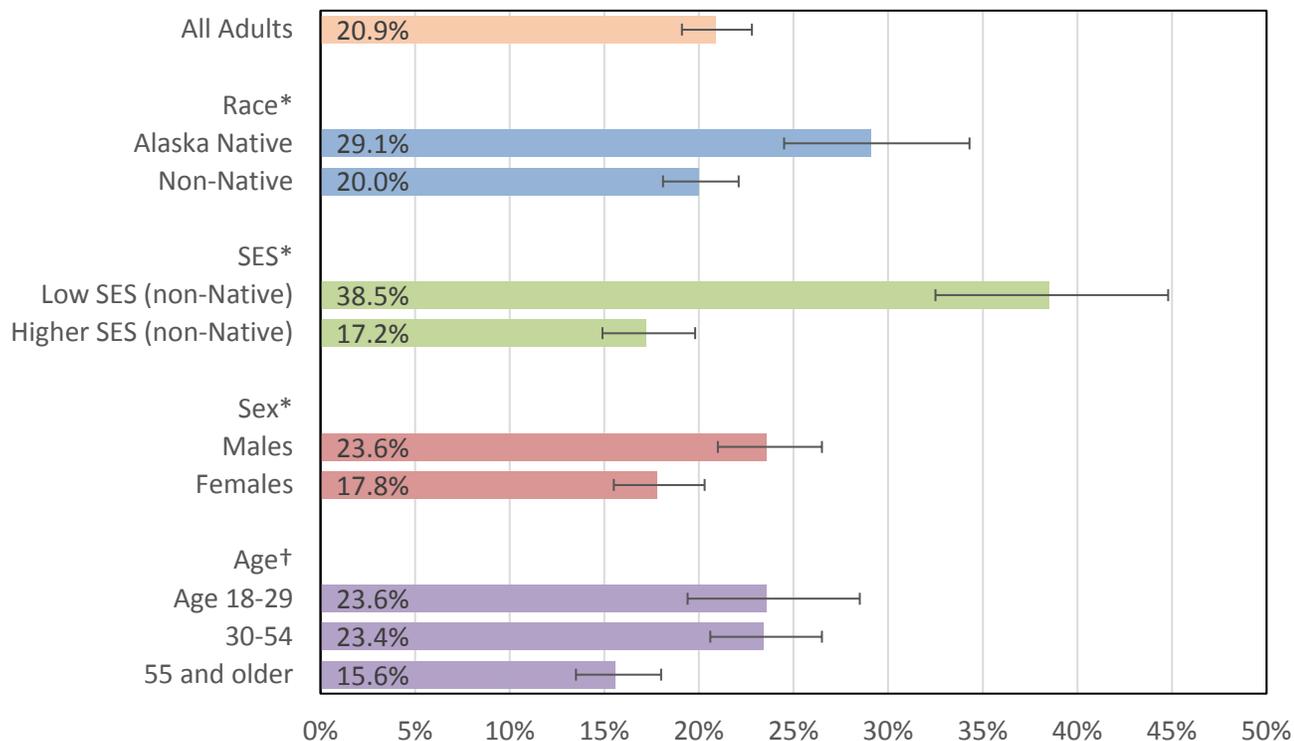


Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2015-2017

Certain priority populations, including Alaska Native people, people with low socio-economic status (SES)^{viii}, and young adults, may experience higher rates of tobacco use than others. The figure below summarizes data for specific population groups. These data are useful to monitor tobacco use in these populations and to help identify where to focus programmatic efforts for the Alaska Tobacco Prevention and Control (TPC) Program and its partners.

Among Alaska Native people in the Interior region, the prevalence of smoking was significantly higher than among non-Natives, 29.1% compared to 20.0%. Likewise, smoking prevalence was higher among people of low SES (38.5%) compared to those of higher SES (17.2%), and among men (23.6%) compared to women (17.8%). Smoking prevalence was also significantly higher among ages 18-29 (23.6%) and 30-54 (23.4%) compared to those age 55 and older (15.6%)

Figure 2. Percent of Alaska Adults Who Currently Smoke, Interior Region, 2015-2017



* Significant difference between or among subgroups

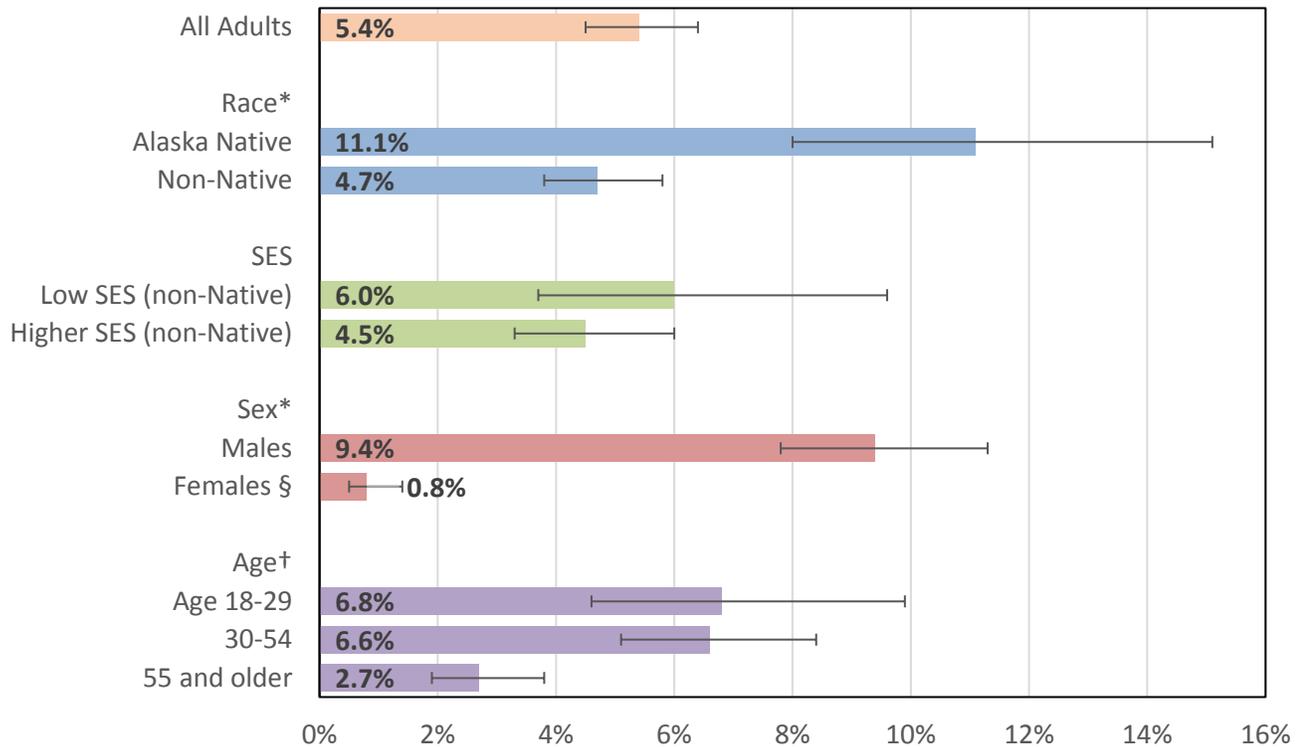
† Significant differences between ages 18-29 and 55 and older, ages 30-54 and 55 and older

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2015-2017

Adult Smokeless Tobacco Use

In the Interior region, an estimated 5.4% of adults used smokeless tobacco, slightly lower than the statewide estimate of 5.7% for 2015-2017. Smokeless tobacco usage was significantly higher among Alaska Native people (11.1%) than among non-Native people (4.7%), and higher among males (9.4%) than females (0.8%) in the Interior region. Adults ages 55 and older (2.7%) were significantly less likely to use smokeless tobacco than young adults (6.8%) and middle-aged Alaskans (6.6%).

Figure 3. Percent of Alaska Adults Who Use Smokeless Tobacco, Interior Region, 2015-2017



* Significant difference between or among subgroups

† Significant differences between ages 18-29 and 55 and older, ages 30-54 and 55 and older

§ Interpret data with caution (for more information, see Appendix Table A-2)

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2015-2017

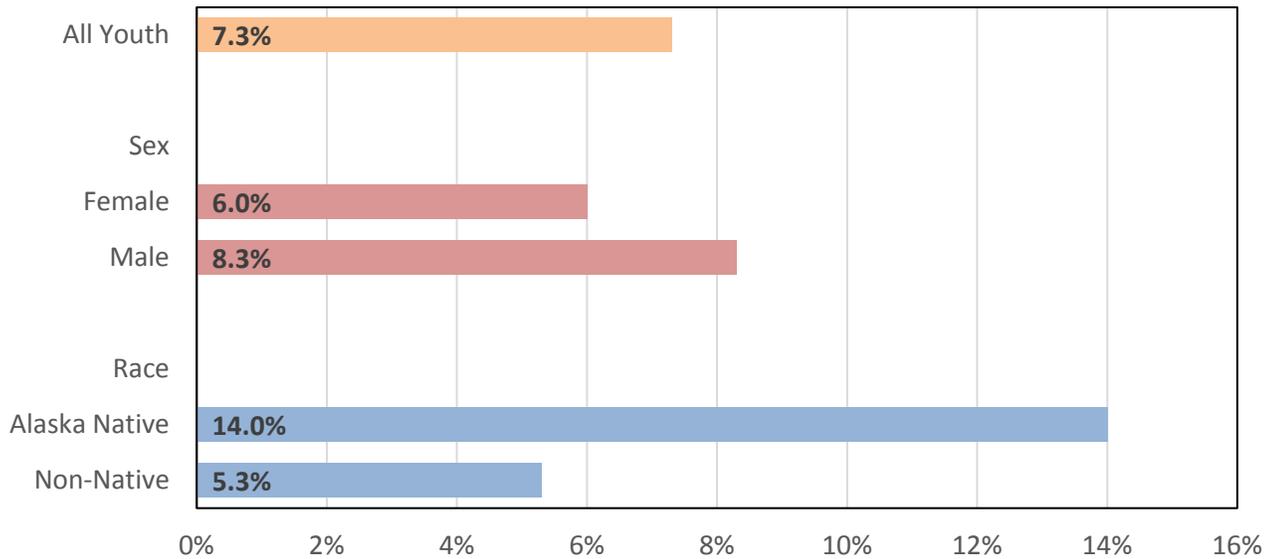
Youth Smoking

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 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 E for additional detail). Because of the mixed sample, regional estimates are presented without confidence intervals. Estimates for this report are based on the two most recent years of YRBS data combined (2015 and 2017).

An estimated 7.3% of high school students in the Interior region smoked cigarettes in the past 30 days, compared with the statewide estimate of 10.5% for 2015 and 2017 combined. An estimated 2.0% of students smoked cigarettes on 20 or more of the past 30 days, slightly lower than the statewide estimate of 3.3%.

As seen in Figure 4, youth cigarette use in the Interior region is slightly higher among males than among females, 8.3% compared to 6.0%. Over twice as many Alaska Native youth reported smoking within the past 30 days as compared to non-Native youth, 14.0% and 5.3% respectively.

Figure 4. Youth Cigarette Use in Past 30 Days, Interior Region, 2015 and 2017

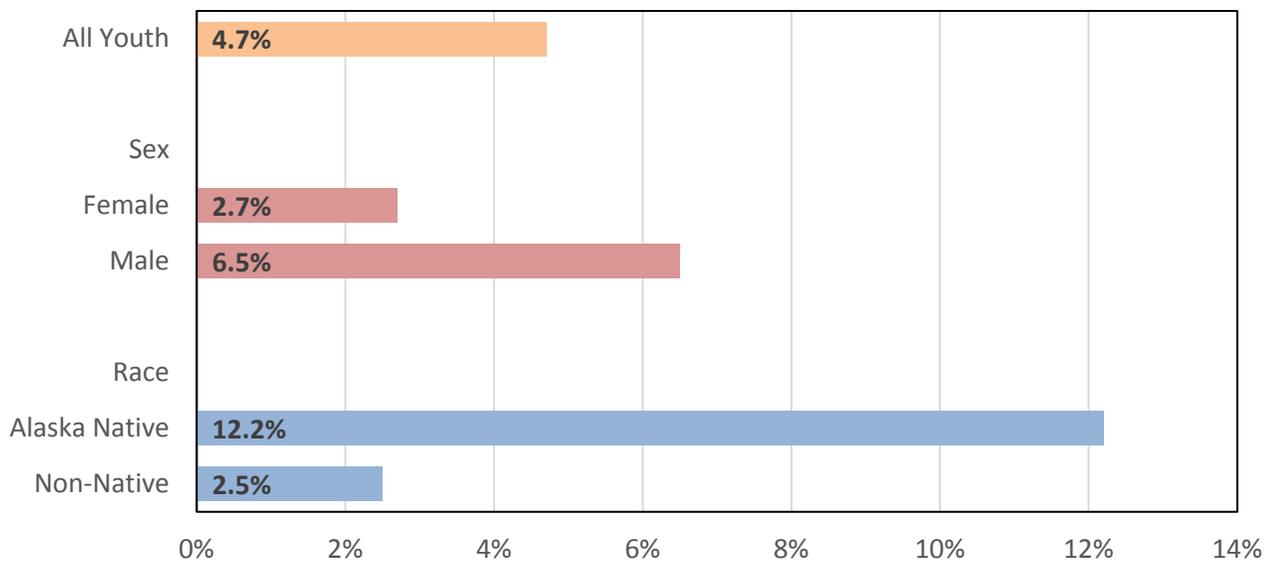


Source: Alaska Youth Risk Behavior Survey, Local File, 2015 and 2017

Youth Smokeless Tobacco Use

For 2015 and 2017 combined, an estimated 4.7% of high school students in the Interior region used smokeless tobacco in the past 30 days, compared with the statewide estimate of 9.7%. High school student smokeless tobacco use in the past 30 days was nearly five times as high among Alaska Native youth as compared to non-Native youth, and twice as high among males as compared to females.

Figure 5. Youth Smokeless Tobacco Use in Past 30 Days, Interior Region, 2015 and 2017



Source: Alaska Youth Risk Behavior Survey, Local File, 2015-2017

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.^{ix} In the Interior region, there is very strong support for both smokefree restaurants (76.9%) and workplaces (87.9%).

Table 2. Adult Secondhand Smoke (SHS) Indicators, Interior Region, 2015-2017

	Prevalence (95% Confidence Interval)
Has home smoking ban	90.1% (87.9%-91.9%)
No home SHS exposure	92.5% (90.9%-93.9%)
Support for smokefree workplaces	87.9% (85.9%-89.6%)
Support for smokefree restaurants	76.9% (74.3%-79.3%)
Smoking not allowed in work areas (indoor workers)	85.3% (82.3%-87.9%)
No indoor workplace SHS exposure (all workers)	91.8% (89.6%-93.5%)
No indoor workplace SHS exposure (indoor workers)	93.7% (91.5%-95.3%)

Source: Alaska Behavioral Risk Factor Surveillance System, Modified File, 2015-2017

Although the vast majority of adults did not report secondhand smoke exposure in homes and workplaces, 30.4% of high school students surveyed in the Interior region during 2015 and 2017 were in the same room with someone who was smoking in the past seven days.^x

Secondhand Smoke Policies

The Alaska TPC Program collects information on smokefree tribal resolutions, community ordinances, multi-unit housing policies and healthcare policies. These policies are evaluated in comparison to a model policy. Policies are grouped into four distinct categories based on the percentage of the model policy elements each contains: comprehensive, strong, fair, and incomplete. A comprehensive policy contains at least 90% of the model policy elements and a strong policy has at least 80%, while a fair policy has at minimum 70% of the model policy elements. Anything under 70% of the model policy elements is classified as an incomplete policy. Using these classification categories allows the TPC Program to rate the quality of tobacco control policies among different organizations as well as throughout the state.

Tribal Resolutions

Many tribes across Alaska have adopted smokefree or tobacco-free resolutions. In the Interior region, the TPC Program has 11 tobacco-free or smokefree tribal resolutions on record as of February 21, 2019, representing just over a quarter of the 39 tribes in the region.^{xi} Most of the tribal resolutions are strong policies (8), however

one is fair and the remaining two are incomplete. The Interior region has the lowest percentage of tribal resolutions.

Smokefree Community Ordinances

Only one community in the Interior region has passed a smokefree ordinance as of February 21, 2019. The City of Fairbanks has passed an ordinance that prohibits smoking in all indoor workplaces and public places. This policy is incomplete as exemptions are made for bars, restaurants, tobacco retail establishments, a percentage of hotel rooms, and designated smoking buildings.

Multi-Unit Housing Policies

One smokefree multi-unit housing policy has been adopted in the Interior region as of February 21, 2019. The Moore Street Apartments policy prevents all current and new residents from smoking in all indoor areas as well as within a reasonable distance from entrances and exits. However, it is an incomplete policy, lacking the requirement for smokefree signs as well as enforcement of the smokefree policy.

Healthcare Policies

Healthcare facilities exist to promote the health and wellbeing of the communities they serve. As such, healthy behaviors should be encouraged while activities known to cause harm should be prevented. In the Interior region, one healthcare facility has adopted a comprehensive tobacco-free policy. An additional facility has adopted a strong tobacco-free policy.

Table 3. Healthcare Policy Report for the Interior Region: Current Status as of February 21, 2019

Healthcare Facility	Current Policy Status
Railbelt Mental Health and Addictions	Comprehensive
Tanana Chiefs Conference	Strong

Source: State of Alaska Tobacco Prevention and Control Program

PREVENTING 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 social norms around tobacco use. An estimated 6.7% of high school students surveyed during 2015 and 2017 in the Interior region started smoking before the age of 13. Although nearly all of the youth reported that their parents would consider it wrong for them to smoke cigarettes (92.8%), 15.8% thought that smoking one or more packs per day posed no risk or slight risk to their health. The majority (63.4%) of high school students thought their friends would consider it wrong for them to smoke cigarettes (see Appendix C for all youth prevention indicators).

Tobacco Taxes

Numerous economic studies have documented that tobacco tax or price increases reduce both adult and underage smoking. States, municipalities and boroughs are allowed to levy a local tax on cigarettes and other tobacco products, including cigars and chewing tobacco.

Alaska's statewide cigarette tax is \$2.00 for a pack of 20 cigarettes. Three communities in the Interior region, Fairbanks City, Fairbanks North Star Borough, and North Pole, have passed an additional local cigarette tax.

Alaska’s statewide tax on other tobacco products (cigars and chewing tobacco) is 75% of the wholesale price. The communities of Fairbanks City, Fairbanks North Star Borough, and the City of North Pole have also placed a local tax on cigarettes and other tobacco products. See Table 4 for the cigarette and other tobacco product taxes in these communities.

Table 4. Tax Rates for Cigarettes and Other Tobacco Products as of February 21, 2019: Interior Region

Community	Local Cigarette Tax	State Base Cigarette Tax	E-cigarettes	Other Tobacco Products Local Tax*
Fairbanks City	8% of wholesale	\$2.00	N/A	8% of wholesale
Fairbanks North Star Borough	8% of wholesale	\$2.00	N/A	8% of wholesale
North Pole	10% of wholesale	\$2.00	N/A	10% of wholesale

Source: Fairbanks, Alaska, Code of Ordinances, Chapter 74, Article V, Alaska Department of Commerce, Community and Economic Development, and the State of Alaska Tobacco Prevention and Control Program.

School District Policy Reports

In an effort to promote tobacco-free schools, the TPC Program recently revised the evaluation of tobacco-free school policies into four distinct categories: comprehensive, strong, fair, and incomplete. Each tobacco-free school policy is compared to a model policy which is the ideal policy for tobacco-free schools. A comprehensive tobacco-free school policy has all or nearly all of the elements of a model policy, while strong and fair policies have progressively fewer elements of the model policy, respectively. An incomplete policy is lacking too many components for the policy to be considered an effective tobacco-free school policy.

The tobacco-free school policies adopted by the school districts in the Interior region are nearly all comprehensive policies, closely resembling the model school policy. However, the school policy in the Galena City School District is currently incomplete, lacking specificity about where the policy is applicable and who is covered by the policy.

School policies are subject to change, and the TPC Program reviews and updates school district tobacco policies quarterly. The policy summaries here are current as of February 21, 2019.

Table 5. School Policy Report for the Interior Region: Current Status as of February 21, 2019

School District	Current Policy Status
Alaska Gateway	Comprehensive
Delta-Greely	Comprehensive
Denali Borough	Comprehensive
Fairbanks North Star Borough	Comprehensive
Iditarod Area	Comprehensive
Nenana City	Comprehensive
Tanana City	Comprehensive
Yukon Flats	Comprehensive
Yukon-Koyukuk	Comprehensive
Galena City	Incomplete

Source: State of Alaska Tobacco Prevention and Control Program

Post-Secondary Institutions

Similar to school district policies, post-secondary policies are evaluated based on a model policy, which contains all of the elements needed for an effective tobacco control policy. In the Interior region, the University of Alaska Fairbanks has adopted a strong tobacco-free policy that contains the majority of the components from the model policy.

Table 6. Post-Secondary Policy Report for the Interior Region: Current Status as of February 21, 2019

Institution	Current Policy Status
University of Alaska Fairbanks	Strong

Source: State of Alaska Tobacco Prevention and Control Program

EVIDENCE-BASED TOBACCO CESSATION INTERVENTIONS

Cessation Indicators

Quitting tobacco provides health benefits at any age.^{xii-xiii} Tobacco cessation programs are cost-effective and increase longevity while reducing health care costs.^{xiv} Alaska has a statewide quitline accessible to all Alaska adults. In addition, the Interior region has a local cessation resource provided through Tanana Chiefs Conference.

In the Interior region, 58.3% of adults ages 25 or older who have ever smoked regularly have quit (i.e., quit ratio, as shown in Table 7). Among adults who currently smoke, 52.8% have attempted to quit smoking in the past 12 months and 5.6% of past year smokers achieved a long-term quit of three or more months.

Table 7. Adult Cessation Indicators, Interior Region, 2015-2017

	Prevalence (95% Confidence Interval)
Quit ratio (among ever smokers age 25 and older)	58.3% (55.1%-61.5%)
Attempted to quit (among current smokers)	52.8% (47.7%-57.9%)
Quit for 3+ months (among past year smokers)	5.6% (3.5%-8.8%)
Aware of quit line (among current smokers)	84.5% (78.9%-88.9%)
Advised to quit by health care provider (among smokers who had a health care visit in the past year)	61.8% (52.9%-69.9%)

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File (first two metrics) & Modified File (last three metrics), 2015-2017

APPENDICES

Appendix A: Adult Tobacco Use

Table A-1. Percent of Alaska Adults Who Currently Smoke, by Public Health Region, 2015-2017

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
All Adults	16.8% (15.4%-18.2%)	21.2% (18.9%-23.7%)	20.9% (19.1%-22.8%)	40.7% (35.3%-46.4%)	21.2% (19.1%-23.4%)	28.0% (24.0%-32.3%)	19.7% (18.8%-20.7%)
Alaska	34.5% (28.3%-41.2%)	41.2% (30.3%-53.1%)	29.1% (24.5%-34.3%)	49.5% (42.7%-56.4%)	35.6% (29.4%-42.3%)	38.9% (33.3%-44.8%)	38.1% (35.2%-41.1%)
Native	15.1% (13.8%-16.7%)	18.5% (16.4%-20.7%)	20.0% (18.1%-22.1%)	21.2% (12.9%-32.7%)	18.4% (16.3%-20.7%)	12.9% (8.9%-18.2%)	16.7% (15.7%-17.7%)
Non-Native	33.1% (28.6%-38.1%)	34.5% (28.6%-40.8%)	38.5% (32.5%-44.8%)	‡	38.2% (31.2%-45.7%)	28.8%*†	34.7% (31.6%-37.9%)
Low SES (non-Native)	11.8% (10.2%-13.6%)	13.9% (11.5%-16.8%)	17.2% (14.9%-19.8%)	14.2% (8.6%-22.6%)	15.6% (13.0%-18.5%)	8.4% (4.8%-14.1%)	13.3% (12.1%-14.5%)
Higher SES (non-Native)	18.0% (16.1%-20.2%)	24.9% (21.4%-28.7%)	23.6% (21.0%-26.5%)	44.9% (37.1%-53.0%)	23.4% (20.4%-26.8%)	33.4% (27.6%-39.8%)	22.1% (20.8%-23.5%)
Males	15.4% (13.5%-17.6%)	17.1% (14.3%-20.3%)	17.8% (15.5%-20.3%)	34.7% (28.0%-42.0%)	18.8% (16.2%-21.7%)	21.0% (16.5%-26.2%)	17.1% (15.9%-18.5%)
Females	17.1% (14.1%-20.6%)	23.5% (17.6%-30.8%)	23.6% (19.4%-28.5%)	45.1% (33.8%-56.9%)	25.0% (19.2%-31.8%)	42.2% (30.8%-54.6%)	21.8% (19.6%-24.2%)
Age 18-29	19.3% (17.1%-21.8%)	24.5% (20.7%-28.7%)	23.4% (20.6%-26.5%)	42.7% (34.8%-51.0%)	24.4% (21.1%-27.9%)	27.8% (22.7%-33.5%)	22.4% (20.9%-23.9%)
30-54	13.0% (11.2%-15.1%)	16.9% (13.9%-20.5%)	15.6% (13.5%-18.0%)	28.0% (21.0%-36.3%)	16.0% (13.5%-18.9%)	18.3% (14.1%-23.4%)	14.9% (13.7%-16.2%)
55 and older							

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2015-2017

* Inadequate sample size for uncommon or very common events. For means and proportions < 25% or >75%, an estimate is flagged if it is based on a denominator which is less than 8 times a broadly calculated design effect, over the prevalence estimate.

† Large coefficient of variation

‡ Denominator is less than 50 or numerator is less than 5

Table A-2. Percent of Alaska Adults Who Currently Use Smokeless Tobacco, by Public Health Region, 2015-2017

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
All Adults	4.6% (3.9%-5.4%)	5.4% (4.3%-6.6%)	5.4% (4.5%-6.4%)	15.2% (11.0%-20.7%)	3.5% (2.6%-4.5%)	20.2% (16.8%-24.1%)	5.7% (5.2%-6.3%)
Alaska	7.5% (4.7%-11.7%)	8.1%* (4.6%-13.8%)	11.1% (8.0%-15.1%)	18.9% (13.5%-25.9%)	1.9%*† (0.8%-4.6%)	32.4% (27.1%-38.2%)	13.9% (12.0%-16.1%)
Native	4.3% (3.6%-5.2%)	5.0% (3.9%-6.3%)	4.7% (3.8%-5.8%)	7.6%† (2.7%-19.9%)	3.8% (2.9%-5.0%)	4.1% (2.4%-6.8%)	4.4% (3.9%-5.0%)
Non-Native	4.1% (2.6%-6.6%)	7.8% (4.9%-12.0%)	6.0% (3.7%-9.6%)	‡	4.8%*† (2.6%-8.9%)	‡	5.3% (4.0%-6.9%)
Low SES (non-Native)	5.0% (4.0%-6.3%)	5.5% (3.9%-7.5%)	4.5% (3.3%-6.0%)	4.5%*† (1.6%-11.7%)	4.3% (3.0%-6.2%)	5.2%† (2.8%-9.7%)	4.9% (4.2%-5.7%)
Higher SES (non-Native)	8.1% (6.8%-9.7%)	9.8% (7.8%-12.1%)	9.4% (7.8%-11.3%)	20.4% (14.2%-28.5%)	6.7% (5.1%-8.7%)	21.9% (17.1%-27.6%)	9.5% (8.6%-10.5%)
Males	1.0% (0.6%-1.8%)	0.4%*† (0.2%-0.8%)	0.8%* (0.5%-1.4%)	7.7%† (3.8%-15.2%)	N/A‡	18.0% (13.7%-23.4%)	1.7% (1.3%-2.2%)
Females	6.7% (4.9%-9.0%)	4.5%*† (2.4%-8.2%)	6.8% (4.6%-9.9%)	19.1% (11.0%-31.1%)	4.1%* (2.2%-7.3%)	28.8% (19.0%-41.1%)	7.8% (6.5%-9.5%)
Age 18-29	5.0% (4.0%-6.3%)	7.5% (5.6%-9.9%)	6.6% (5.1%-8.4%)	15.8% (9.6%-24.9%)	5.0% (3.4%-7.1%)	21.5% (17.0%-26.8%)	6.7% (5.9%-7.6%)
30-54	2.1% (1.4%-3.1%)	3.6% (2.4%-5.4%)	2.7% (1.9%-3.8%)	9.7% (5.6%-16.1%)	1.6% (1.0%-2.5%)	12.7% (9.5%-17.0%)	3.0% (2.5%-3.5%)
55 and older							

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2015-2017

* Inadequate sample size for uncommon or very common events. For means and proportions < 25% or >75%, an estimate is flagged if it is based on a denominator which is less than 8 times a broadly calculated design effect, over the prevalence estimate.

† Large coefficient of variation

‡ Denominator is less than 50 or numerator is less than 5

Appendix B: Eliminating Exposure to Secondhand Smoke

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
Has home smoking ban	92.1% (90.3%-93.6%)	91.2% (88.1%-93.5%)	90.1% (87.9%-91.9%)	91.2% (85.9%-94.6%)	91.4% (88.8%-93.5%)	95.2% (92.7%-96.9%)	91.7% (90.6%-92.7%)
No home SHS exposure	94.3% (93.1%-95.3%)	91.2% (88.5%-93.3%)	92.5% (90.9%-93.9%)	95.3%* (91.9%-97.3%)	93.4% (91.3%-94.9%)	94.3% (90.6%-96.6%)	93.6% (92.8%-94.3%)
Support for smokefree workplace policies	88.8% (87.2%-90.3%)	82.8% (79.3%-85.9%)	87.9% (85.9%-89.6%)	90.4% (85.4%-93.9%)	89.1% (87.0%-91.0%)	88.2% (83.9%-91.5%)	88.0% (86.9%-89.0%)
Support for smokefree restaurant policies	85.5% (83.7%-87.2%)	83.0% (80.2%-85.4%)	76.9% (74.3%-79.3%)	89.7% (84.3%-93.4%)	84.4% (82.0%-86.6%)	88.2% (83.7%-91.6%)	84.0% (82.8%-85.1%)
Smoking not allowed in work areas (indoor workers)	85.3% (82.4%-87.8%)	84.7% (79.3%-88.8%)	85.3% (82.3%-87.9%)	92.1%* (86.2%-95.6%)	88.2% (84.6%-91.1%)	78.7% (70.4%-85.1%)	85.5% (83.7%-87.1%)
No indoor workplace SHS exposure (all workers)	94.8% (93.2%-96.0%)	88.5% (84.0%-91.9%)	91.8% (89.6%-93.5%)	91.8% (85.3%-95.6%)	94.1% (91.9%-95.8%)	90.2% (83.3%-94.5%)	93.2% (92.1%-94.1%)
No indoor workplace SHS exposure (indoor workers)	95.7% (94.0%-96.9%)	89.2% (83.9%-92.9%)	93.7% (91.5%-95.3%)	94.2%* (87.0%-97.6%)	94.3% (91.4%-96.2%)	93.4% (85.6%-97.1%)	94.4% (93.2%-95.3%)

* Inadequate sample size for uncommon or very common events. For means and proportions < 25% or >75%, an estimate is flagged if it is based on a denominator which is less than 8 times a broadly calculated design effect, over the prevalence estimate.

Source: Alaska Behavioral Risk Factor Surveillance System, Modified File, 2015-2017

National Center for Health Statistics Data Quality Measures

Appendix C: Preventing the Initiation of Tobacco Use

Table C-1. Youth Tobacco Prevention Indicators, by Public Health Region, 2015-2017

		Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest
Initiated smoking prior to age 13	%	7.1%	8.4%	6.7%	20.5%	8.1%	18.9%
	N	4,410	3,328	1,261	1,376	2,412	1,147
Perceives no risk or only slight risk from smoking*	%	17.3%	15.8%	12.6%	37.2%	13.9%	45.6%
	N	4,454	3,335	1,282	1,405	2,414	1,121
Thinks parents consider it wrong for them to smoke**	%	91.1%	90.3%	92.8%	85.5%	92.1%	80.5%
	N	4,395	3,320	1,278	1,374	2,398	1,153
Thinks friends consider it wrong for them to smoke (2017)†	%	66.2%	68.1%	63.4%	65.6%	64.3%	60.0%
	N	2,158	1,983	690	658	1,058	848

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

**Students who think parents feel it would be wrong or very wrong for them to smoke cigarettes

† Students who think friends feel it would be wrong or very wrong for them to smoke cigarettes, 2017 data only

Source: Alaska Youth Risk Behavior Survey, Local File, 2015-2017

Appendix D: Evidence-Based Tobacco Cessation Interventions

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
Quit ratio (among ever smokers age 25 and older)	62.6% (59.7%-65.4%)	60.1% (56.0%-64.0%)	58.3% (55.1%-61.5%)	37.4% (30.5%-44.9%)	58.4% (54.7%-62.0%)	50.4% (44.9%-56.0%)	59.5% (57.8%-61.2%)
Attempted to quit (among current smokers)	56.3% (51.6%-61.0%)	53.6% (47.0%-60.1%)	52.8% (47.7%-57.9%)	52.3% (42.6%-61.8%)	62.0% (56.3%-67.3%)	59.6% (51.1%-67.6%)	55.9% (53.2%-58.6%)
Quit for 3+ months (among past year smokers)	5.8% (3.9%-8.7%)	3.7%*† (2.0%-7.0%)	5.6% (3.5%-8.8%)	3.0%*† (1.0%-8.1%)	7.4% (4.2%-12.7%)	9.1%*† (4.4%-18.0%)	5.7% (4.5%-7.3%)
Aware of quit line (among current smokers)	86.5% (81.2%-90.4%)	85.2% (75.5%-91.5%)	84.5% (78.9%-88.9%)	84.3%* (73.7%-91.2%)	87.4% (81.6%-91.6%)	81.1% (69.4%-89.0%)	85.6% (82.7%-88.1%)
Advised to quit by health care provider (among smokers who had a health care visit in the past year)	70.8% (62.5%-77.8%)	65.7% (53.6%-76.1%)	61.8% (52.9%-69.9%)	61.2%* (42.2%-77.3%)	59.4% (49.6%-68.5%)	63.8% (47.3%-77.5%)	66.5% (61.8%-70.9%)

* Inadequate sample size for uncommon or very common events. For means and proportions < 25% or >75%, an estimate is flagged if it is based on a denominator which is less than 8 times a broadly calculated design effect, over the prevalence estimate.

† Large coefficient of variation

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File (first two metrics) & Modified File (last three metrics), 2015-2017

National Center for Health Statistics Data Quality Measures

Appendix E: Data Sources

Youth Risk Behavior Survey (YRBS)

The YRBS is a systematic biennial 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 sponsor national and state surveys every two years, most recently in 2017.

The statewide Alaska traditional high school YRBS is conducted using a two-stage sampling design. The sampling frame is traditional 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 2001 through 2017, 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 1,200 to 1,400 students are surveyed from about 40 to 45 high schools that are scientifically selected to represent all public traditional high schools (excluding boarding schools, alternative schools, correspondence and home study schools, and correctional schools) in Alaska. Data are weighted to reflect the true distribution of Alaska traditional high school students by gender, race/ethnicity, and grade level, but not by region of the state. These results are considered to be representative of Alaska's more than 30,000 high school students in grades 9-12 in traditional public high schools.

The traditional school-based YRBS does not estimate risk behaviors associated with youth who drop out of school or do not attend school. Beginning in 2009, about 1,600 students from 13 alternative high schools in Alaska have been surveyed in each survey cycle to evaluate and address the health risks of this unique population. Further information about the YRBS, including survey results for the statewide traditional high school sample, the alternative high school sample, and the correctional high school sample is available at <http://www.hss.state.ak.us/dph/chronic/school/YRBSresults.htm>.

Reporting by Region

Although not all schools are selected for the state sample, schools can participate on a volunteer basis to receive aggregated data on their students. For regional reporting, the sample includes all traditional 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 in the local school district sample. Schools were not systematically and randomly selected, and the regional group of participants may not be representative of all schools within that region. However, in each region, students from at least two school districts participated in the survey.

Data were weighted by school enrollment (or by district enrollment if there were 20 or fewer students in the school) by gender and grade only if 50% or more of the school's sampled students participated in the survey. 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 calculated for these regional data.

To protect the anonymity of school districts and students, the data may be publicly distributed if specific criteria are met. First, regional YRBS data are based upon aggregated school districts and do not report information about any single school district. Second, prevalence estimates are reported when a minimum of 100 student responses were received; otherwise, the results are suppressed as Data Statistically Unreliable (DSU).

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 Alaska Native. We combine all other race groups to report a category called "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 excluding Alaska Native. Those who did not report a race group or ethnicity are not included in the 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 and Prevention (CDC). It aims to estimate in the general adult population, the prevalence of health-related risk behaviors, chronic health conditions, and use of preventive services that are known to be associated with the leading causes of morbidity and mortality. The BRFSS has operated continuously in Alaska since it began in 1991.

The BRFSS uses a probability (or randomized) 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 six geographic regions. In addition, the sampling frame was expanded to include a random sample of cell phone owners 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.^{xv} Since 2011, Alaska's cell phone sample has been 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, 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. The Supplemental Survey contains mostly 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 2017, approximately 265 Alaska adults were interviewed each month for the Standard BRFSS, to reach an annual sample size of 3,200 (530 per region); an additional 319 Alaska adults were interviewed each month for the Supplemental BRFSS in 2017, reaching an annual sample size of 3,833. Because sample size is lower per region and for some subpopulation reporting groups, data from 2015 to 2017 have been combined to report some key indicators.

BRFSS data are weighted to adjust the distribution of the sample data so that they reflect 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 uses 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 help ensure that the BRFSS can continue to be a valuable source of information for health planning and improvement.

The Standard and Supplemental BRFSS are each weighted separately for analysis of questions that are unique to that 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 5,000 or more 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 Wales-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 Kusilvak Census Area (formerly 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 reported “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 were included in the “non-Native” group.

Reporting by Socio-Economic Status (SES)

In Tobacco Facts, the low SES priority population is defined as 'non-Native adults (age 25-64) of low socio-economic status.' Reporting by SES is restricted to non-Native because reporting for Alaska Native as a priority population is already done separately. Reporting by 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 age 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.

Poverty level (as calculated by income and household size) and education level were identified as key indicators of SES that are available using BRFSS. The State of Alaska guideline for Medicaid eligibility – household incomes at or below the 185% poverty guideline - was adopted as the poverty measure. Therefore, “low SES” was calculated as those persons with less than a High School education or less than 185% of the Alaska Poverty Level Guideline.

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 50, or if the numerator (n) is less than 5.

References

- i Alaska Tobacco Facts, 2018 Update. Retrieved from http://dhss.alaska.gov/dph/Chronic/Documents/Tobacco/PDF/2018_AKTobaccoFacts.pdf
- ii See <http://www.cdc.gov/winnablebattles/>
- iii See https://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm
- iv Alaska Department of Labor and Workforce Development, Research and Analysis Section. (2019). Retrieved from <http://live.laborstats.alaska.gov/pop/index.cfm>
- v Alaska Department of Labor and Workforce Development, Research and Analysis Section. (2019). Retrieved from <http://live.laborstats.alaska.gov/labforce/>
- vi Alaska Department of Labor and Workforce Development, Research and Analysis Section. (2016). Alaska Local and Regional Information. Retrieved from <http://live.laborstats.alaska.gov/alari/>
- vii Alaska Department of Commerce, Community and Economic Development, Division of Community and Regional Affairs. (n.d.) Community Information. Retrieved from <http://commerce.alaska.gov/dca/apps/DCRAExternal/community>
- viii The low SES definition is non-Native adults age 25-64 who have less than a High School education or less than 185% of the Alaska Poverty Level Guideline. Alaska Natives are excluded because they are a separate priority population.
- ix U.S. Department of Health and Human Services. (2006). *The Health Consequences of Involuntary Exposure to Tobacco Smoke: 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.
- x Alaska Youth Risk Behavior Survey, 2015 and 2017.
- xi State of Alaska Tobacco Prevention and Control Program.
- xii U.S. Department of Health and Human Services. (1990). *The Health Benefits of Smoking Cessation*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- xiii Doll R, Peto R, Boreham J, Sutherland I. (2004). Mortality in relation to smoking: 50 years' observations on male British doctors. *British Medical Journal*; 328(7455):1519–1527.
- xiv Leif Associates. (2012). The Business Case for Coverage of Tobacco Cessation, 2012 Update. Retrieved from <http://www.ctri.wisc.edu/Employers/Actuarial.Analysis.pdf>
- xv Blumberg SJ, Luke JV, Ganesh N, et al. (2011). Wireless substitution: State-level estimates from the National Health Interview Survey, January 2007–June 2010. *National Health Statistics Reports*; no 39. Hyattsville, MD: National Center for Health Statistics.