

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

**FY2018**

**Tobacco Prevention and Control Regional Profile:**  
**Southeast Region**  
***Version 2: 6/11/2018***

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.

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**ACKNOWLEDGEMENTS**

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

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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: Southeast Region, FY2018 update*. Anchorage, AK: Alaska Department of Health and Social Services; 2018.

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## **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.<sup>i</sup> 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. 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.<sup>ii</sup> 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<sup>iii</sup>. These evidence-based, comprehensive, sustained statewide tobacco control programs have been shown to reduce smoking rates, tobacco-related deaths, and diseases caused by smoking.

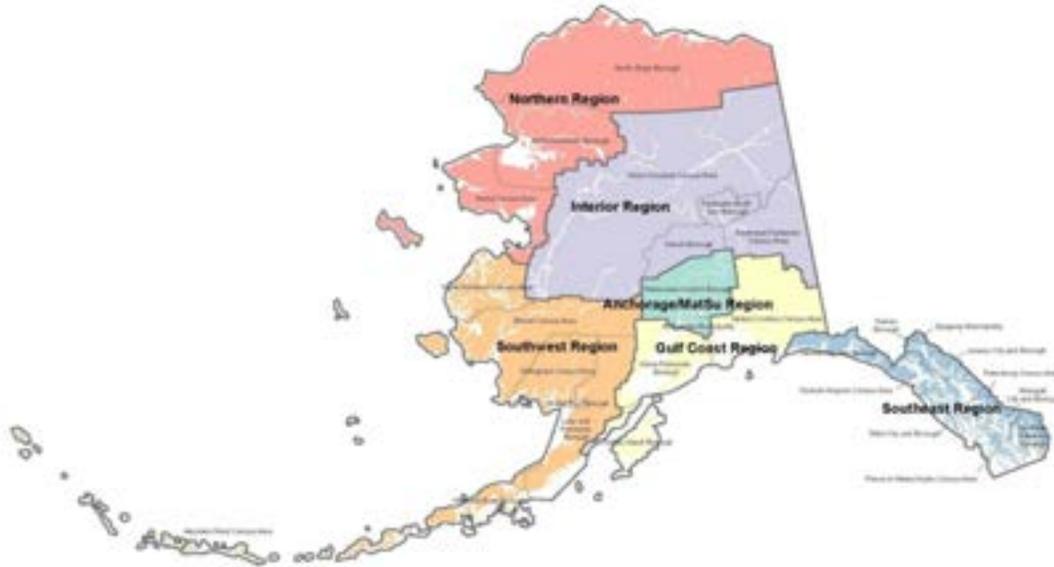
The State of Alaska Tobacco Prevention and Control (TPC) Program has achieved success by implementing an evidence-based comprehensive tobacco prevention and control program, including a tobacco quit line, counter-marketing media, and grants to promote tobacco-free policies in communities, schools and 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 rates of smoking and four 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 Southeast 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 3, 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 72,915 people living in the Southeast region of Alaska in 2017, accounting for 9.9% of the total population in Alaska.<sup>iv</sup> The region's largest population resides in the City of Juneau (n=32,269); other populous places include Sitka (n=8,748) and Ketchikan (n=8,125).

The Southeast region is comprised of the cities and boroughs of Juneau, Sitka, Wrangell and Yakutat, the boroughs of Haines and Ketchikan Gateway, the municipality of Skagway, and the Prince of Wales-Hyder, Hoonah-Angoon and Petersburg census areas. The annual average unemployment rate for the Southeast region in 2016 was 6.3%, down from the previous year's rate of 6.6%. The most common occupations in 2016 were retail sales and cashiers, while the trade, transportation and utilities sector and the government sector (state and local) were the industries that employed the most people.<sup>v</sup>

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 the Alaska Natives and provided for the establishment of 13 regional corporations to administer those claims. The ANCSA Corporation and related Native association in the Southeast region is the Sealaska Corporation (Central Council Tlingit and Haida Indian Tribes of Alaska).<sup>vi</sup>

The Southeast region contains 18 school districts detailed in Table 1. The Southeast region accounts for 8.9% of the 129,969 K-12<sup>th</sup> grade students in the state of Alaska, and 10.0% of the state's 38,860 high school students.

**Table 1. School District Enrollment in the Southeast Region as of October 1, 2016**

<b>District Name</b>	<b>Total High School</b>	<b>Total K-12<sup>th</sup></b>
Annette Island School District	90	301
Chatham School District	43	166
Craig City School District	137	537
Haines Borough School District	83	265
Hoonah City School District	29	109
Hydaburg City School District	21	70
Juneau Borough School District	1,496	4,716
Kake City School District	27	93
Ketchikan Gateway Borough School District	731	2,287
Klawock City School District	38	127
Mount Edgecumbe High School	432	432
Pelican City School District	2	10
Petersburg City School District	158	473
Sitka Borough School District	418	1,316
Skagway School District	29	118
Southeast Island School District	48	184
Wrangell City School District	92	274
Yakutat City School District	26	93
<b>TOTAL</b>	<b>3,900</b>	<b>11,571</b>

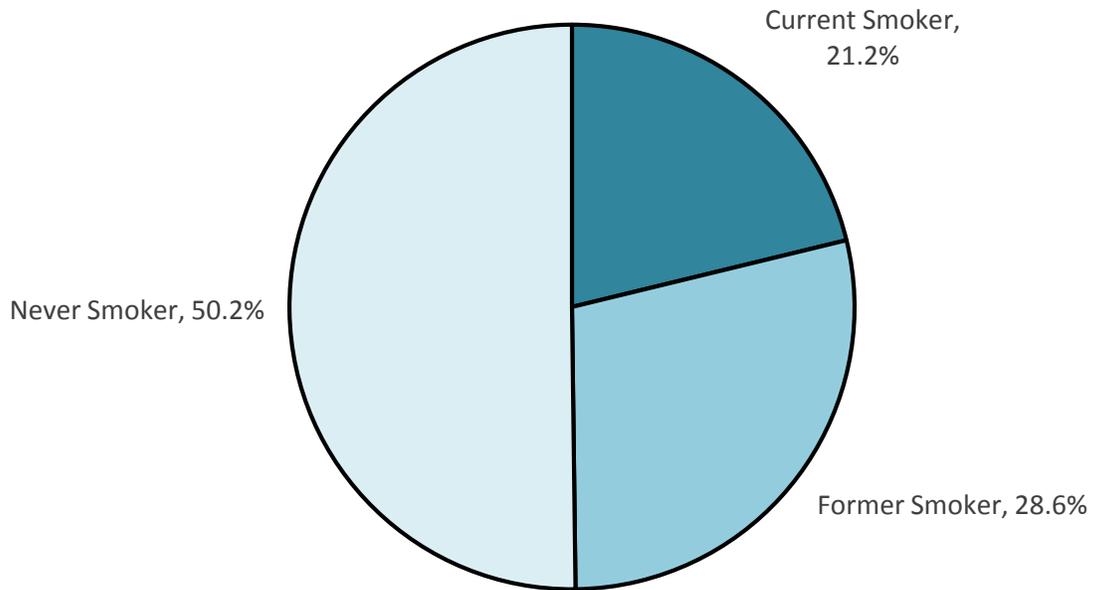
Source: Alaska Department of Education and Early Development: Assessment and Accountability, District Enrollment as of October 1, 2016 FY17. <http://education.alaska.gov/stats/>

## **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 2014-2016 data to calculate regional estimates. A total of 21.2% of adults are estimated to currently smoke cigarettes in the Southeast region, similar to the statewide estimate of 19.8% for 2014-2016 pooled data. (See Appendix A for all regional and statewide estimates.)

**Figure 1.** Adult Smoking Status, Southeast Region, 2014-2016

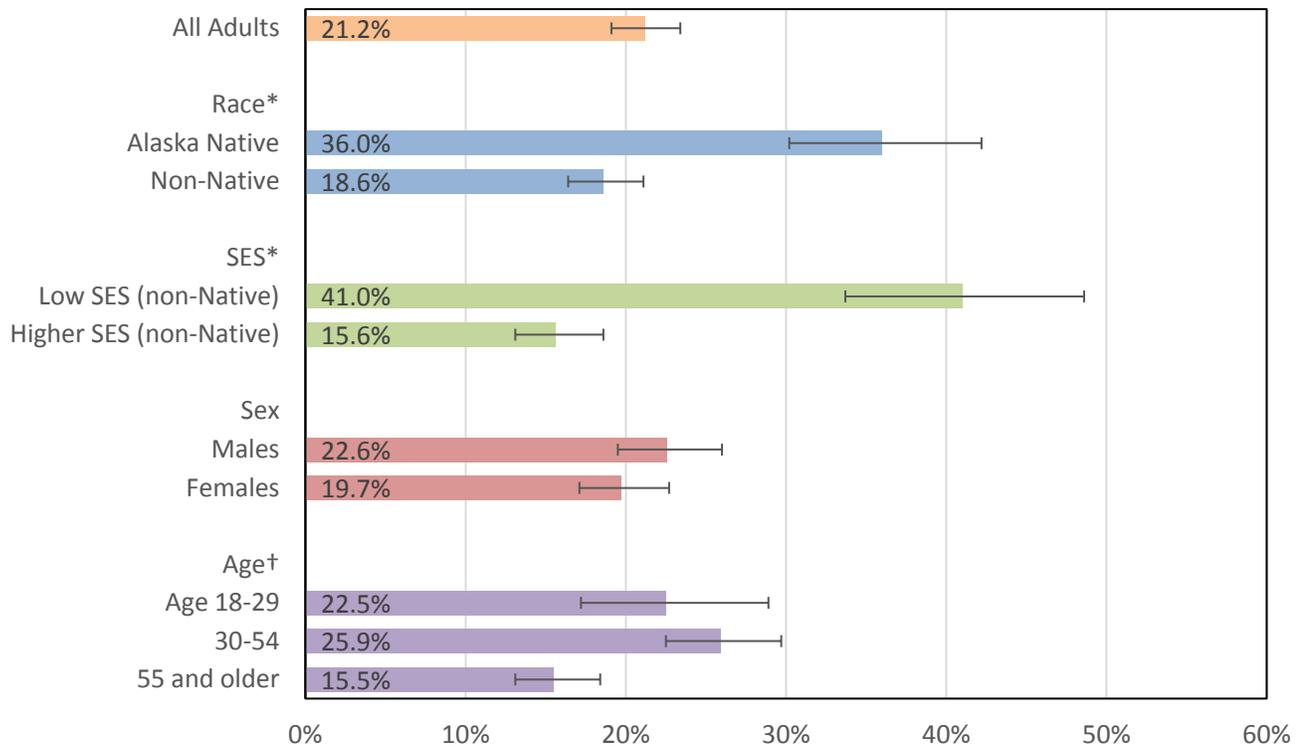


Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2014-2016

Certain priority populations, including Alaska Native people, people with low socio-economic status (SES)<sup>vii</sup>, 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.

In the Southeast region, adult smoking prevalence was 21.2% overall. Among Alaska Native people, the smoking prevalence was significantly higher than among non-Natives, 36.0% compared to 18.6%. Likewise, the smoking prevalence was significantly higher among people of low SES than among people of higher SES, 41.0% compared to 15.6%. Smoking prevalence was also significantly higher among young adults (22.5%) and middle-aged adults (25.9%) as compared to adults age 55 and older (15.5%).

**Figure 2. Percent of Alaska Adults Who Currently Smoke, Southeast Region, 2014-2016**



\* Significant difference between or among subgroups

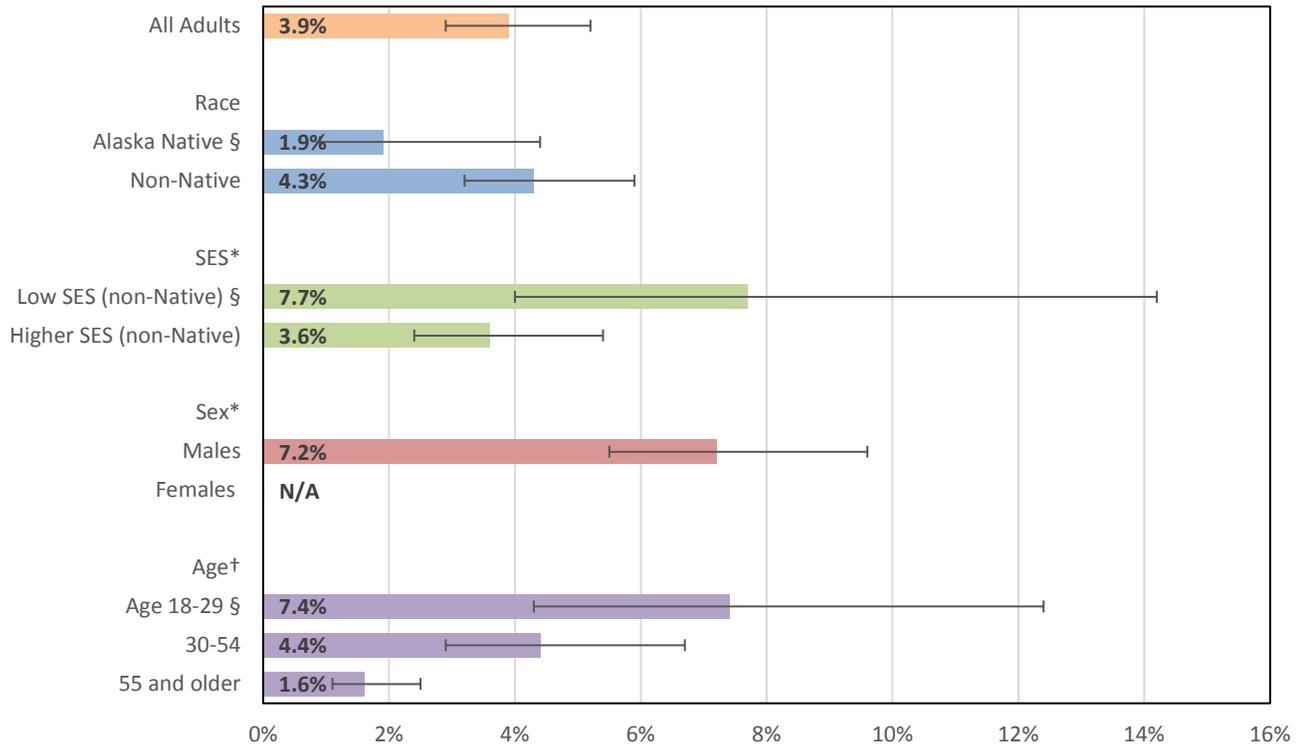
† Significant contrasts between ages 18-29 and 55 and older, ages 30-54 and 55 and older

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2014-2016

## Adult Smokeless Tobacco Use

In the Southeast region, an estimated 3.9% of adults used smokeless tobacco, lower than the statewide estimate of 5.7% for 2014-2016 data. Males were significantly more likely to use smokeless tobacco than females in the Southeast region. Young adults age 18 to 29 were significantly more likely to use smokeless tobacco than those aged 55 and greater. Likewise, adults age 30 to 54 were significantly more likely to use smokeless tobacco than those aged 55 and greater.

**Figure 3.** Percent of Alaska Adults Who Use Smokeless Tobacco, Southeast Region, 2014-2016



\* Significant difference between or among subgroups

† Significant contrasts 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)

N/A Denominator is less than 50 or numerator is less than 5

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2014-2016

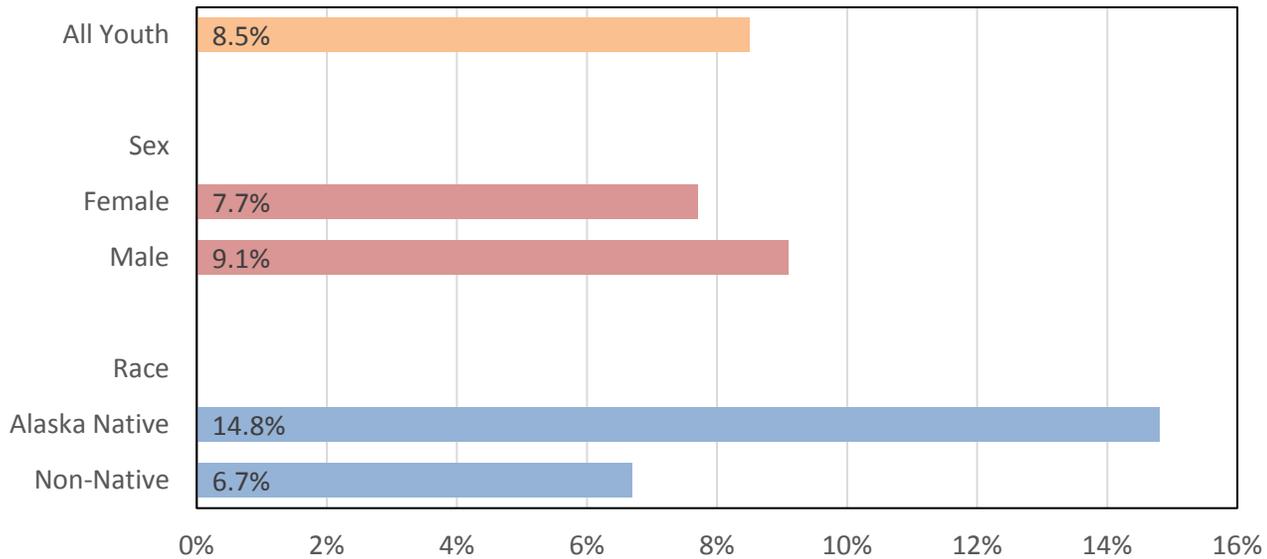
## Youth Smoking

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 8.5% of high school students in the Southeast region smoked cigarettes in the past 30 days, similar to the statewide estimate of 10.5% for 2015 and 2017. An estimated 2.9% 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, estimated male cigarette use was marginally higher than female use, 9.1% compared to 7.7% respectively. Twice as many Alaska Native youth reported smoking within the past 30 days in the Southeast region as compared to non-Native youth, 14.8% compared to 6.7%.

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

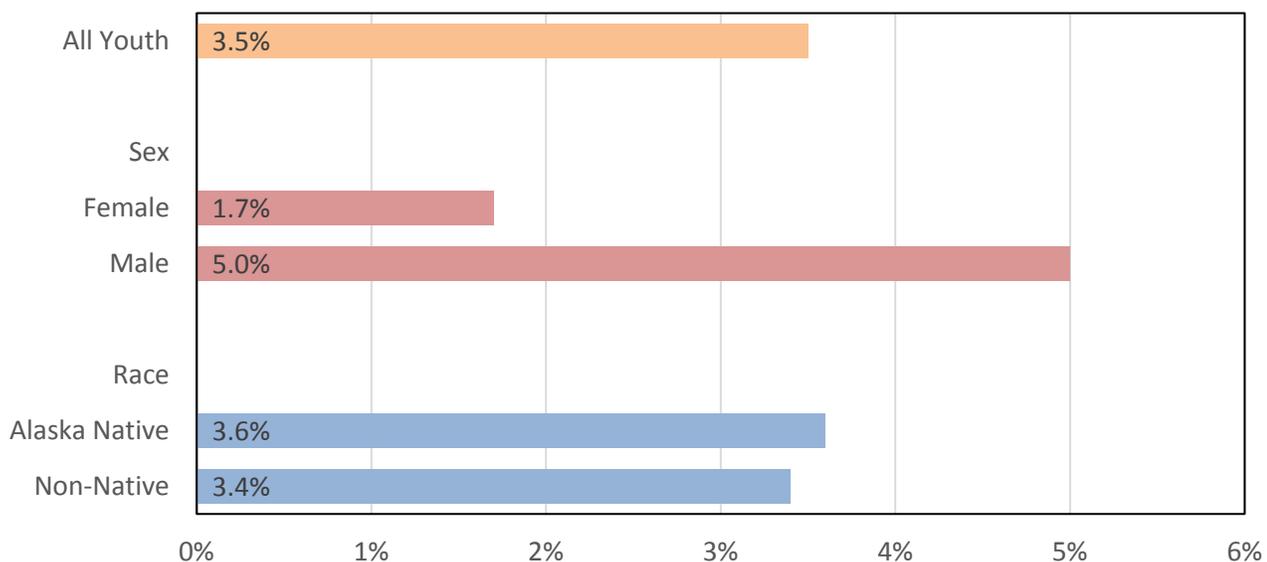


Source: Alaska Youth Risk Behavior Survey, Local File, 2015 and 2017

### Youth Smokeless Tobacco Use

During the combined time period of 2015 and 2017, an estimated 3.5% of high school students in the Southeast region used smokeless tobacco in the past 30 days, less than half of the statewide estimate of 9.7% for the same time period. Males in the Southeast region were over twice as likely as females to have used smokeless tobacco in the past 30 days, 5.0% compared to 1.7%. There was no difference in smokeless tobacco use among Alaska Native youth and non-Native youth during 2015 and 2017, 3.6% and 3.4% respectively.

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



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

## **ELIMINATING EXPOSURE TO SECONDHAND SMOKE**

### **Secondhand Smoke (SHS) Indicators**

There is no safe level of exposure to secondhand smoke. Creating completely smoke-free 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.<sup>viii</sup> In the Southeast region, there is overwhelming support for both smokefree restaurants (83.5%) and workplaces (90.4%).

**Table 2.** Adult Secondhand Smoke (SHS) Indicators, Southeast Region, 2014-2016

	<b>Prevalence (95% CI)*</b>
Has home smoking ban	90.9% (88.7%-92.7%)
No home SHS exposure	92.5% (90.1%-94.3%)
Support for smokefree workplaces	90.4% (88.3%-92.1%)
Support for smokefree restaurants	83.5% (80.8%-85.9%)
Smoking not allowed in work areas (indoor workers)	87.8% (84.0%-90.7%)
No indoor workplace SHS exposure (all workers)	93.2% (90.4%-95.2%)
No indoor workplace SHS exposure (indoor workers)	93.8% (90.8%-95.9%)

\* 95% Confidence Interval

Source: Alaska Behavioral Risk Factor Surveillance System, Modified File, 2014-2016

Although the vast majority of adults did not report secondhand smoke exposure in homes and workplaces, 27.5% of high school students surveyed in the Southeast region during 2015 and 2017 were in the same room with someone who was smoking in the past seven days.<sup>ix</sup>

### **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, 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 Southeast region, the TPC Program has 15 tobacco-free or smokefree tribal resolutions on record as of March 19, 2018,

representing over three-fourths (78.9%) of the 19 tribes in the region.<sup>x</sup> This is the highest percentage of tribal resolutions for any region in Alaska. Two of these resolutions are comprehensive, six are strong, five are fair and two are incomplete. The remaining four tribes have yet to adopt a smokefree or tobacco-free policy.

**Smokefree Community Ordinances**

Eight communities in the Southeast region have passed smokefree ordinances as of March 19, 2018. The City of Haines has passed a strong ordinance that prohibits smoking in all indoor work places and public places, with the only exemption being a percentage of hotel rooms. The City and Borough of Juneau, the City of Klawock and the City of Skagway have all passed fair ordinances that prohibit smoking in all indoor work places and public places but allow for exceptions in hotel rooms, private clubs, stage theater, and places of employment with four or less employees. The Borough and City of Sitka, the City of Hoonah, the City of Metlakatla, and the City of Petersburg have all passed incomplete smokefree ordinances that provide exclusions for bars, restaurants, employee break rooms, hotel rooms and private clubs.

**Multi-Unit Housing Policies**

Three multi-unit housing properties have added smokefree policies to their leases in the Southeast region as of March 19, 2018. The Tlingit Haida Regional Housing Authority has a strong smokefree policy, complete with signage and a statement of penalties for violating the policy. The Mountain View Manor has a fair policy with signage and penalties, but provides a designated smoking area on the property. The Baranof Island Housing Authority has an incomplete policy which prohibits smoking in all indoor areas, but doesn't include signage and the policy allows residents to smoke on the property provided they are 20 feet from the entrances and exits.

**Healthcare Policies**

Healthcare facilities exist to promote the health and wellbeing of the communities that they serve. As such, healthy behaviors should be encouraged while activities that are known to cause harm should be prevented. For these reasons, certain healthcare facilities have adopted tobacco-free policies. In the Southeast region, two healthcare facilities have adopted strong tobacco-free policies. An additional three facilities have adopted incomplete tobacco-free policies, which lack key elements to be considered effective.

**Table 3.** Healthcare Policy Report for the Southeast Region: Current Status as of March 19, 2018

<b>Healthcare Facility</b>	<b>Current Policy Status</b>
SEARHC	Strong
Wrangell Medical Center	Strong
Alaska Island Community Services	Incomplete
Ketchikan Indian Community Tribal Health Clinic	Incomplete
Peacehealth Southeast Alaska Region	Incomplete

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 the social norms around tobacco use. An estimated 8.1% of high school students surveyed during 2015 and 2017 in the Southeast region initiated smoking prior to age 13. Although nearly all youth reported that their parents would consider it wrong for them to smoke cigarettes (92.1%), 13.9% thought that smoking one or more packs per day posed no or slight risk to their health. The majority of high school students (64.3%) thought their friends would consider it wrong for youth to smoke in 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 Southeast region, the City and Borough of Juneau, Petersburg Borough, and Sitka have passed a local cigarette tax in addition to the statewide tax.

Alaska's statewide tax on other tobacco products (cigars and chewing tobacco) is 75% of the wholesale price. The communities of Haines Borough, the City of Hoonah, the City and Borough of Juneau, the City of Kake, Petersburg Borough, and the City and Borough of Sitka have also placed an additional local tax beyond the statewide tax on 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 March 19, 2018: Southeast Region**

Community	Local Cigarette Tax	State Base Cigarette Tax	Total State and Local Tax per Pack	e-cigarettes	Other Tobacco Products Local Tax*
Haines Borough	\$2.00	\$2.00	\$4.00	45% of wholesale	45% of wholesale
Hoonah	15% retail	\$2.00	\$2.00 + 15%	15% retail	15% retail
City and Borough of Juneau	\$3.00	\$2.00	\$5.00	45% of wholesale	45% of wholesale
Kake	8% retail	\$2.00	\$2.00 + 8%	N/A	N/A
Petersburg Borough	\$2.00	\$2.00	\$4.00	45% of wholesale	45% of wholesale
City and Borough of Sitka	\$2.46	\$2.00	\$4.46	90% of wholesale	90% of wholesale

Sources: Sitka General Code, Chapter 4.26, City and Borough of Juneau, Alaska, Code of Ordinances, Chapter 69.08, Petersburg Borough Finance Department and the State of Alaska Tobacco Prevention and Control Program.

\*Methods for computing the after-tax price vary.

## 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 majority of schools in the Southeast region have adopted comprehensive tobacco-free school policies that closely resemble the model school policy. Additionally, the Yakutat school district has implemented a strong tobacco-free policy. The Chatham, Craig City, Haines Borough, and Skagway school districts currently have incomplete policies which will require additional elements from the model policy to be considered effective tobacco-free policies. School policies are subject to change. The policy summaries presented here are current as of March 19, 2018. The TPC Program reviews and updates school district tobacco policies quarterly.

**Table 5.** School Policy Report for the Southeast Region: Current Status as of March 19, 2018

School District	Current Policy Status
Annette Island	Comprehensive
Hoonah City	Comprehensive
Hydaburg City	Comprehensive
Juneau Borough	Comprehensive
Kake City	Comprehensive
Ketchikan Gateway Borough	Comprehensive
Klawock City	Comprehensive
Mount Edgecumbe	Comprehensive
Pelican	Comprehensive
Petersburg City	Comprehensive
Sitka	Comprehensive
Southeast Island	Comprehensive
Wrangell	Comprehensive
Yakutat	Strong
Chatham	Incomplete
Craig City	Incomplete
Haines Borough	Incomplete
Skagway	Incomplete

Source: State of Alaska Tobacco Prevention and Control Program

### Post-Secondary Institutions

Similar to the 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 Southeast region, the University of Alaska Southeast 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 Southeast Region: Current Status as of March 19, 2018

Institution	Current Policy Status
University of Alaska Southeast	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.<sup>xi-xii</sup> Additionally, tobacco cessation programs are cost-effective and increase longevity while reducing health care costs.<sup>xiii</sup> Alaska has a statewide quitline accessible to all Alaska adults. In addition, the Southeast region has local cessation resources such as the Bartlett Regional Hospital Tobacco Cessation Program and a program at Ketchikan Indian Community Tribal Health.

In the Southeast region, 58.6% of adults ages 25 and older who have ever smoked regularly have quit (i.e., quit ratio, as shown in Table 7). Among adults who currently smoke, 62.9% have attempted to quit smoking in

the past 12 months and an estimated 6.1% of past year smokers achieved a long-term quit of three months or more.

**Table 7.** Adult Cessation Indicators, Southeast Region, 2014-2016

	<b>Prevalence (95% CI)*</b>
Quit ratio (among ever smokers age 25 and older)	58.6% (54.9%-62.2%)
Attempted to quit (among current smokers)	62.9% (57.3%-68.2%)
Quit for 3+ months (among past year smokers)	6.1% § (3.2%-11.1%)
Aware of quit line (among current smokers)	87.4% (81.4%-91.7%)
Advised to quit by health care provider (among smokers who had a health care visit in the past year)	63.4% (52.9%-72.9%)

\* 95% Confidence Interval

§ Interpret data with caution (for more information, see Appendix Table D-1)

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File (first two metrics) & Modified File (last three metrics), 2014-2016

**APPENDICES**

**Appendix A: Tobacco Use**

**Table A-1. Percent of Alaska Adults Who Currently Smoke, Public Health Regions, 2014-2016**

	<b>Anchorage / Mat-Su</b>	<b>Gulf Coast</b>	<b>Interior</b>	<b>Northern</b>	<b>Southeast</b>	<b>Southwest</b>	<b>Statewide Total</b>
<b>All Adults</b>	17.0% (15.8%-18.4%)	20.1% (18.2%-22.2%)	20.4% (18.6%-22.3%)	39.1% (34.1%-44.3%)	21.2% (19.1%-23.4%)	30.2% (26.7%-34.0%)	19.8% (18.9%-20.7%)
Alaska	38.1% (32.4%-44.2%)	33.4% (26.4%-41.3%)	33.2% (28.2%-38.7%)	48.4% (42.1%-54.8%)	36.0% (30.2%-42.2%)	41.3% (36.6%-46.1%)	39.6% (37.1%-42.2%)
Native	15.5% (14.2%-16.9%)	19.3% (17.3%-21.5%)	19.0% (17.1%-21.0%)	18.4% (11.6%-27.9%)	18.6% (16.4%-21.1%)	13.6% (9.8%-18.4%)	16.8% (15.9%-17.8%)
Non-Native	32.9% (28.6%-37.4%)	35.6% (30.0%-41.6%)	35.7% (29.9%-42.0%)	N/A <sup>‡</sup>	41.0% (33.7%-48.6%)	25.2% (13.7%-41.7%)	34.3% (31.5%-37.3%)
Low SES (non-Native)	12.6% (11.1%-14.4%)	14.9% (12.5%-17.6%)	15.9% (13.8%-18.3%)	14.3% (9.2%-21.7%)	15.6% (13.1%-18.6%)	11.2% (7.1%-17.2%)	13.7% (12.6%-14.9%)
Higher SES (non-Native)	18.1% (16.3%-20.1%)	22.0% (19.2%-25.1%)	22.7% (20.1%-25.6%)	42.3% (35.1%-49.8%)	22.6% (19.5%-26.0%)	31.5% (26.7%-36.7%)	21.4% (20.2%-22.7%)
Males	15.9% (14.1%-17.9%)	18.0% (15.5%-20.8%)	17.7% (15.5%-20.2%)	35.1% (28.8%-42.0%)	19.7% (17.1%-22.7%)	28.4% (23.4%-34.0%)	18.0% (16.8%-19.2%)
Females	17.2% (14.3%-20.5%)	23.3% (17.8%-29.9%)	23.9% (19.4%-29.0%)	44.7% (34.1%-55.7%)	22.5% (17.2%-28.9%)	40.1% (30.7%-50.4%)	21.6% (19.5%-23.9%)
Age 18-29	20.5% (18.4%-22.8%)	24.2% (21.0%-27.7%)	21.6% (19.0%-24.5%)	39.6% (32.2%-47.5%)	25.9% (22.5%-29.7%)	31.2% (26.5%-36.4%)	22.9% (21.5%-24.3%)
30-54	12.4% (10.8%-14.2%)	14.8% (12.6%-17.4%)	16.1% (13.9%-18.5%)	32.4% (25.8%-39.8%)	15.5% (13.1%-18.4%)	19.4% (15.8%-23.7%)	14.5% (13.5%-15.6%)
55 and older							

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2014-2016

‡ Denominator is less than 50

**Table A-2.** Percent of Alaska Adults Who Currently Use Smokeless Tobacco, Public Health Regions, 2014-2016

	<b>Anchorage / Mat-Su</b>	<b>Gulf Coast</b>	<b>Interior</b>	<b>Northern</b>	<b>Southeast</b>	<b>Southwest</b>	<b>Statewide Total</b>
All Adults	4.6% (3.9%-5.4%)	5.1% (4.1%-6.2%)	5.2% (4.3%-6.2%)	13.3% (9.5%-18.2%)	3.9% (2.9%-5.2%)	20.5% (17.7%-23.7%)	5.7% (5.2%-6.2%)
Alaska Native	8.5% (5.8%-12.4%)	8.7% (5.3%-13.8%)	10.9% (7.7%-15.4%)	15.9% (11.2%-22.0%)	1.9%*† (0.9%-4.4%)	32.0% (27.7%-36.6%)	14.5% (12.8%-16.4%)
Non-Native	4.2% (3.5%-5.1%)	4.7% (3.7%-5.9%)	4.5% (3.6%-5.6%)	7.7%† (2.8%-19.7%)	4.3% (3.2%-5.9%)	3.2% (1.9%-5.4%)	4.4% (3.9%-4.9%)
Low SES (non-Native)	4.3% (2.8%-6.7%)	5.9% (3.5%-9.6%)	4.8% (2.9%-7.8%)	N/A‡	7.7%* (4.0%-14.2%)	4.3%† (1.4%-12.3%)	5.2% (4.0%-6.8%)
Higher SES (non-Native)	4.5% (3.6%-5.7%)	4.9% (3.5%-6.7%)	4.7% (3.6%-6.3%)	4.9%† (1.9%-12.5%)	3.6% (2.4%-5.4%)	3.1%† (1.5%-6.4%)	4.5% (3.9%-5.2%)
Males	7.9% (6.7%-9.4%)	9.1% (7.3%-11.2%)	9.1% (7.5%-10.9%)	18.8% (13.0%-26.5%)	7.2% (5.5%-9.6%)	23.0% (19.0%-27.6%)	9.4% (8.5%-10.3%)
Females	1.2% (0.7%-2.0%)	0.6%*† (0.3%-1.3%)	0.7%* (0.3%-1.4%)	6.3%† (3.0%-12.7%)	N/A‡	17.0% (13.3%-21.6%)	1.8% (1.4%-2.2%)
Age 18-29	6.8% (5.1%-9.1%)	5.8%* (3.4%-10.0%)	6.4% (4.3%-9.4%)	14.5%* (7.9%-25.3%)	7.4%* (4.3%-12.4%)	25.2% (18.0%-34.2%)	8.0% (6.7%-9.5%)
30-54	4.8% (3.8%-5.9%)	7.1% (5.3%-9.3%)	6.2% (4.9%-7.9%)	15.7% (9.7%-24.3%)	4.4% (2.9%-6.7%)	20.2% (16.5%-24.5%)	6.4% (5.6%-7.2%)
55 and older	2.3% (1.6%-3.3%)	2.7% (1.9%-3.9%)	2.6% (1.8%-3.7%)	7.5% (4.1%-13.3%)	1.6% (1.1%-2.5%)	16.1% (12.3%-20.9%)	3.0% (2.5%-3.6%)

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File, 2014-2016

\* 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**

**Table B-1. Adult Secondhand Smoke (SHS) Indicators, Public Health Regions, 2014-2016**

	<b>Anchorage / Mat-Su</b>	<b>Gulf Coast</b>	<b>Interior</b>	<b>Northern</b>	<b>Southeast</b>	<b>Southwest</b>	<b>Statewide Total</b>
Has home smoking ban	91.5% (90.0%-92.7%)	90.3% (87.7%-92.4%)	90.0% (88.2%-91.6%)	91.6% (87.4%-94.5%)	90.9% (88.7%-92.7%)	94.7% (92.7%-96.1%)	91.2% (90.3%-92.0%)
No home SHS exposure	93.5% (92.2%-94.5%)	91.8% (89.4%-93.7%)	92.5% (90.9%-93.9%)	92.8% (88.7%-95.5%)	92.5% (90.1%-94.3%)	94.9% (92.7%-96.5%)	93.1% (92.3%-93.8%)
Support for smokefree workplaces	88.9% (87.3%-90.3%)	84.6% (81.7%-87.1%)	87.7% (85.6%-89.6%)	89.6% (84.7%-93.1%)	90.4% (88.3%-92.1%)	88.8% (85.2%-91.6%)	88.4% (87.4%-89.3%)
Support for smokefree restaurants	84.4% (82.5%-86.1%)	81.0% (78.0%-83.7%)	74.5% (71.6%-77.3%)	89.3% (84.9%-92.5%)	83.5% (80.8%-85.9%)	88.3% (85.2%-90.8%)	82.7% (81.5%-83.8%)
Smoking not allowed in work areas (indoor workers)	84.4% (81.6%-86.8%)	83.5% (78.1%-87.8%)	87.0% (83.8%-89.7%)	88.1% (81.1%-92.8%)	87.8% (84.0%-90.7%)	85.6% (80.5%-89.5%)	85.3% (83.5%-86.8%)
No indoor workplace SHS exposure (all workers)	93.4% (91.7%-94.8%)	89.9% (86.4%-92.5%)	91.4% (89.1%-93.3%)	91.8% (85.2%-95.6%)	93.2% (90.4%-95.2%)	91.1% (86.0%-94.4%)	92.5% (91.4%-93.5%)
No indoor workplace SHS exposure (indoor workers)	94.5% (92.7%-95.8%)	90.0% (85.7%-93.2%)	93.3% (90.9%-95.1%)	94.6%* (87.2%-97.8%)	93.8% (90.8%-95.9%)	93.2% (88.4%-96.0%)	93.7% (92.6%-94.7%)

\* 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, 2014-2016

National Center for Health Statistics Data Quality Measures

**Appendix C: Preventing the Initiation of Tobacco Use**

**Table C-1.** Youth Tobacco Prevention Indicators, Public Health Regions, 2015-2017

		<b>Anchorage / Mat-Su</b>	<b>Gulf Coast</b>	<b>Interior</b>	<b>Northern</b>	<b>Southeast</b>	<b>Southwest</b>
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 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 child 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 youth 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**

<b>Table D-1. Adult Cessation Indicators, Public Health Regions, 2014-2016</b>							
	<b>Anchorage / Mat-Su</b>	<b>Gulf Coast</b>	<b>Interior</b>	<b>Northern</b>	<b>Southeast</b>	<b>Southwest</b>	<b>Statewide Total</b>
Quit ratio (among ever smokers age 25 and older)	61.9% (59.2%-64.5%)	61.3% (57.8%-64.6%)	59.3% (56.1%-62.5%)	37.1% (30.6%-44.0%)	58.6% (54.9%-62.2%)	45.8% (41.2%-50.5%)	59.2% (57.6%-60.8%)
Attempted to quit (among current smokers)	59.4% (55.2%-63.6%)	53.5% (47.9%-59.1%)	55.2% (50.0%-60.2%)	56.1% (47.1%-64.7%)	62.9% (57.3%-68.2%)	61.1% (54.4%-67.4%)	58.3% (55.8%-60.7%)
Quit for 3+ months (among past year smokers)	9.0% (6.4%-12.5%)	4.4%*† (2.0%-9.3%)	7.4% (4.8%-11.4%)	N/A‡	6.1%*† (3.2%-11.1%)	3.8%*† (1.9%-7.6%)	7.1% (5.7%-9.0%)
Aware of quit line (among current smokers)	86.3% (81.0%-90.3%)	85.2% (78.0%-90.4%)	85.5% (79.7%-89.9%)	76.3% (65.5%-84.4%)	87.4% (81.4%-91.7%)	77.4% (68.6%-84.3%)	85.0% (82.2%-87.4%)
Advised to quit by health care provider (among smokers who had a health care visit in the past year)	70.5% (62.5%-77.5%)	65.3% (53.6%-75.4%)	63.6% (53.9%-72.3%)	67.1%* (49.8%-80.7%)	63.4% (52.9%-72.9%)	68.2% (56.4%-78.0%)	67.6% (62.9%-71.9%)

\* 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

‡ Numerator is less than 5

Source: Alaska Behavioral Risk Factor Surveillance System, Combined File (first two metrics) & Modified File (last three metrics), 2014-2016

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 1,250 to 1,350 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. 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. 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.

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 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**

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 very representative of schools within their region. However, in each region, students from two or more of the 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 the participation rate for the school achieved a 50% response rate. 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.

The regional YRBS data are based upon aggregated school districts and do not reveal information on a single school district. Prevalence estimates 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 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 (except for 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 the prevalence of health-related risk behaviors, chronic health conditions, and use of preventive services in the general adult population 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 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 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.<sup>xiv</sup> 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 2016, approximately 240 Alaska adults were interviewed each month for the Standard BRFSS, to reach an annual sample size of 2,914 (485 per region); an additional 370 Alaska adults were interviewed each month for the Supplemental BRFSS in 2016, reaching an annual sample size of 4467. Because sample size is lower per region and some subpopulation reporting groups, data from 2014 to 2016 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.

Both the Standard and Supplemental BRFSS are weighted (separately) for analysis of items that occur only in one 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.

#### 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

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- <sup>ii</sup> See <http://www.cdc.gov/winnablebattles/>
- <sup>iii</sup> See [https://www.cdc.gov/tobacco/stateandcommunity/best\\_practices/index.htm](https://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm)
- <sup>iv</sup> Alaska Department of Labor and Workforce Development, Research and Analysis Section. (2018). Retrieved from <http://live.laborstats.alaska.gov/pop/index.cfm>
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- <sup>vi</sup> Alaska Department of Commerce, Community and Economic Development, Division of Corporations, ANCSA Information. Retrieved from <https://www.commerce.alaska.gov/web/cbpl/corporations/ancsainformation.aspx>
- <sup>vii</sup> 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.
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