

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

FY2018

Tobacco Prevention and Control Regional Profile:
Northern 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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TABLE OF CONTENTS

1. Preface
2. Overview
3. Tobacco Use
 - a. Adult smoking
 - b. Adult smokeless tobacco use
 - c. Youth smoking
 - d. Youth smokeless tobacco use
4. Secondhand Smoke
 - a. Secondhand smoke indicators
 - b. Secondhand smoke policies
 - c. Tribal resolutions
 - d. Smokefree community ordinances
 - e. Multi-unit housing policies
5. Preventing Initiation
 - a. Youth prevention indicators
 - b. Tobacco taxes
 - c. School district policy reports
6. Tobacco Cessation Indicators

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. 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, 2014ⁱⁱⁱ. These evidence-based, comprehensive, sustained statewide tobacco control programs have been shown to reduce smoking rates, tobacco-related deaths, and diseases caused by smoking.

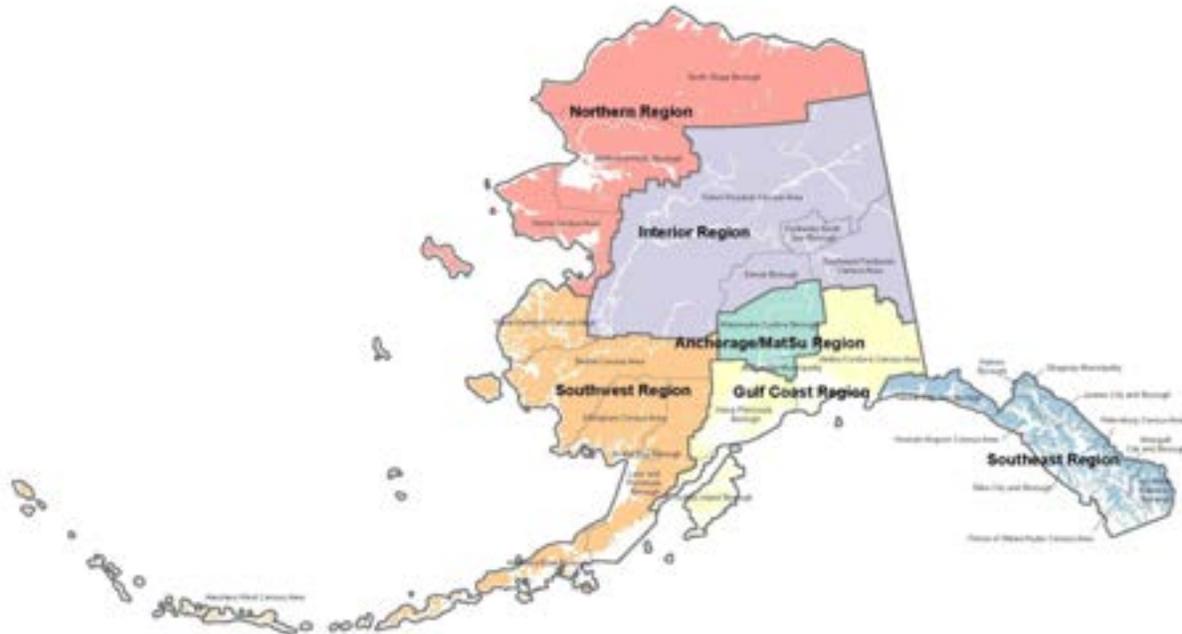
The State of Alaska Tobacco Prevention and Control (TPC) Program has achieved success by implementing an evidence-based comprehensive tobacco prevention and control program, including a tobacco quit line, counter-marketing media, and grants to promote tobacco-free policies in communities, schools and 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 Northern 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 27,705 people living in the Northern region of Alaska in 2017, accounting for 3.8% of the total population in Alaska.^{iv} Nearly half of the people in the Northern region (n=13,493) live in 1 of the 4 most populous cities; these include Barrow, Kotzebue, Nome and Prudhoe Bay.

The Northern region is made up of the North Slope and Northwest Arctic Boroughs and the Nome Census Area. The annual average unemployment rate for the Northern region was 11.6% in 2016, up from the previous year's rate of 10.6%. The most common occupation in 2016 was teacher assistants, and local government employed the most people.^v

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 Northern region contains the following three ANCSA Corporations and their related Native associations:^{vi}

- Arctic Slope Regional Corporation (Arctic Slope Native Association)
- Bering Straits Native Corporation (Bering Straits Association)

- NANA Regional Corporation (Northwest Alaska Native Association)

The Northern region contains four school districts: the Bering Strait School District, Nome Public School District, the North Slope Borough School District and the Northwest Arctic Borough School District. The Northern region accounts for 4.8% of the 129,969 K-12th grade students in Alaska, and 4.2% of the state's 38,860 high school students.

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

District Name	Total High School	Total K-12 th
Bering Strait School District	467	1,767
Nome Public School District	166	683
North Slope Borough School District	481	1,881
Northwest Arctic Borough School District	517	1,969
TOTAL	1,631	6,300

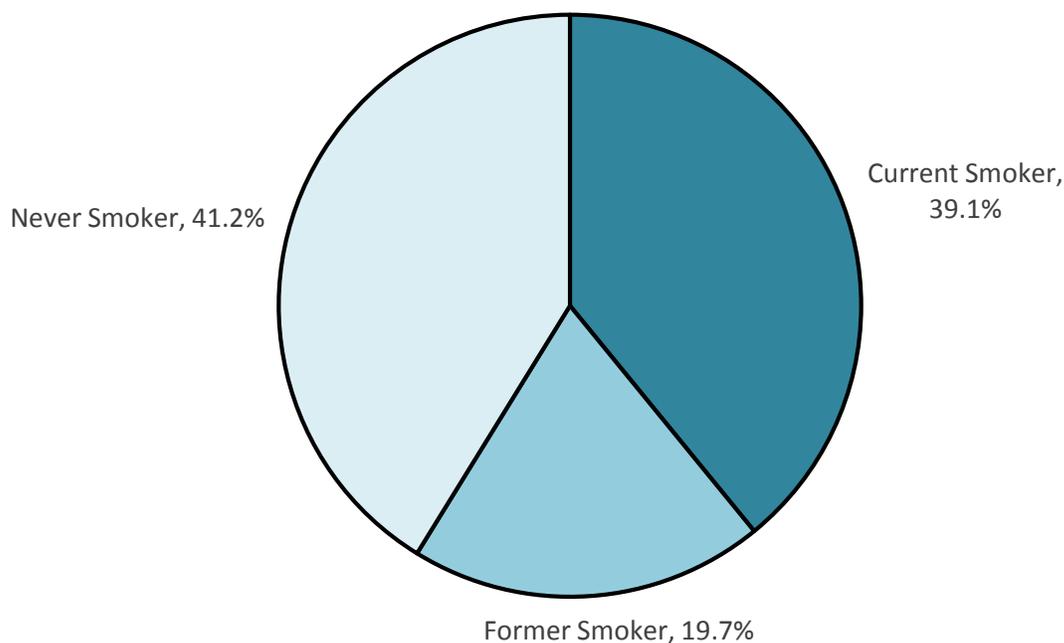
Source: Alaska Department of Education and Early Development: Assessment and Accountability, District Enrollment as of October 1, 2016 FY17. <http://education.alaska.gov/stats/>

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. An estimated 39.1% of adults in the Northern region currently smoke cigarettes, nearly double the statewide 2014-2016 estimate of 19.8%. (See Appendix A for all regional and statewide estimates.)

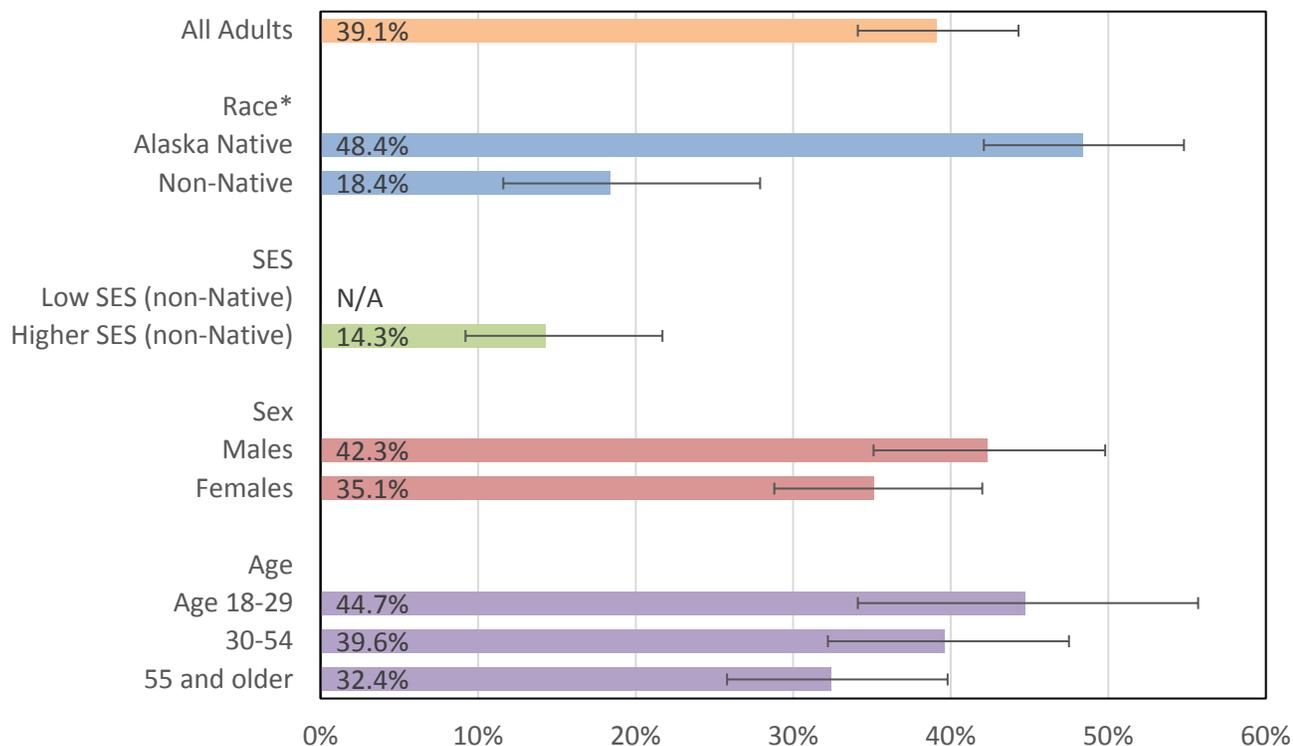
Figure 1. Adult Smoking Status, Northern Region, 2014-2016



Certain priority populations, including Alaska Native people, people with low socio-economic status (SES)^{vii}, 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 Northern region, overall adult smoking prevalence was 39.1%. Among Alaska Natives, smoking prevalence was significantly higher than prevalence among non-Natives, 48.4% compared to 18.4%.

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

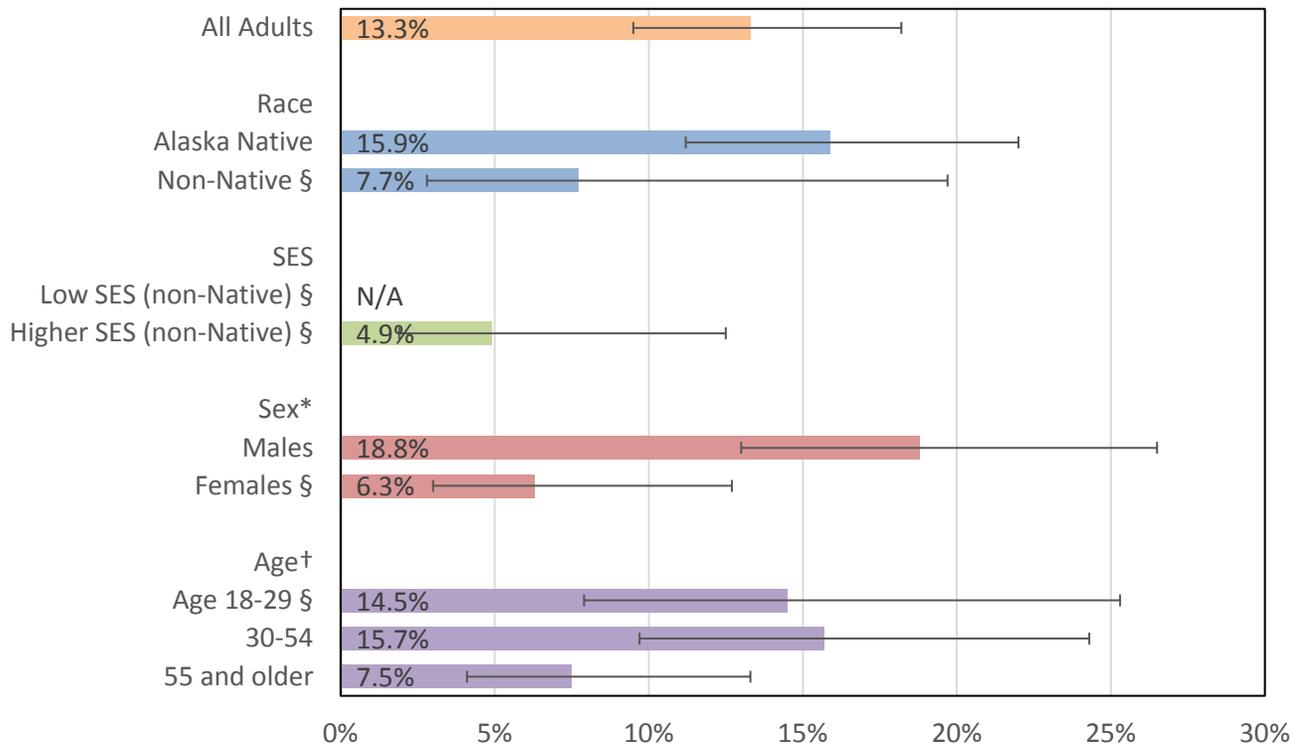


* Significant difference between or among subgroups

Adult Smokeless Tobacco Use

In the Northern region, an estimated 13.3% of adults use smokeless tobacco, higher than the statewide estimate of 5.7% for 2014 – 2016.

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



* Significant difference between or among subgroups

† Significant contrasts between 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, 2014-2016

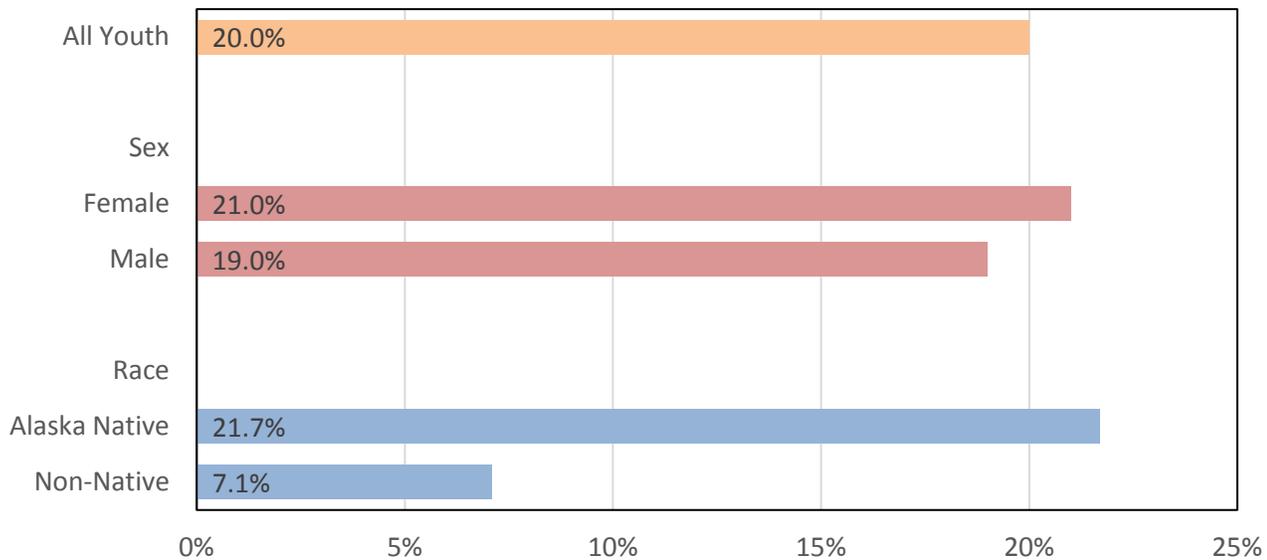
Youth Smoking

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.

An estimated 20.0% of high school students in the Northern region smoked cigarettes in the past 30 days, compared with the statewide estimate of 10.5% during 2015 and 2017. An estimated 7.4% of students smoked cigarettes on 20 or more of the past 30 days.

As seen in Figure 4, cigarette use is slightly higher among females than among males, 21.0% compared to 19.0%. Alaska Native youth in the Northern region reported smoking within the past 30 days at over triple the percentage of non-Native youth, 21.7% compared to 7.1%.

Figure 4. Youth Cigarette Use in Past 30 Days, Northern Region, 2015-2017

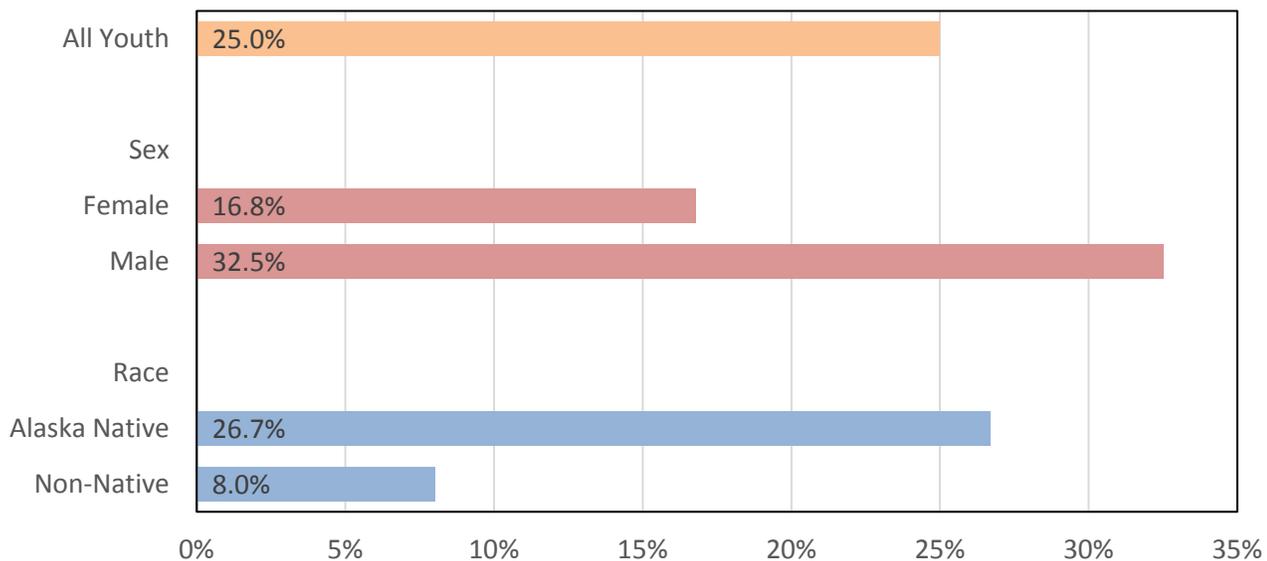


Source: Alaska Youth Risk Behavior Survey, Local File, 2015-2017

Youth Smokeless Tobacco Use

During 2015-2017, an estimated 25.0% of high school students in the Northern region used smokeless tobacco in the past 30 days, compared with the statewide estimate of 9.7%. Males in the Northern region used smokeless tobacco at approximately twice the rate of females, 32.5% compared to 16.8%. Alaska Native youth were three times more likely than non-Native youth to report smokeless tobacco use in the past 30 days, 26.7% compared to 8.0%.

Figure 5. Youth Smokeless Tobacco Use in Past 30 Days, Northern Region, 2015-2017



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 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.^{viii} In the Northern region, there is overwhelming support for both smokefree restaurants (89.3%) and workplaces (89.6%).

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

	Prevalence (95% CI)*
Has home smoking ban	91.6% (87.4%-94.5%)
No home SHS exposure	92.8% (88.7%-95.5%)
Support for smokefree workplaces	89.6% (84.7%-93.1%)
Support for smokefree restaurants	89.3% (84.9%-92.5%)
Smoking not allowed in work areas (indoor workers)	88.1% (81.1%-92.8%)
No indoor workplace SHS exposure (all workers)	91.8% (85.2%-95.6%)
No indoor workplace SHS exposure (indoor workers)	94.6%§ (87.2%-97.8%)

* 95% Confidence Interval

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

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, 35.2% of high school students surveyed in the Northern region during 2015 and 2017 were in the same room with someone who was smoking in the past seven days.^{ix}

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 Northern region, the TPC Program has 23 tobacco-free or smokefree tribal resolutions on record as of March 19, 2018, representing over half (57.5%) of the 40 tribes in the region.^x Most of the tribal resolutions are strong (18),

while two are fair and three are incomplete. The remaining 17 tribes have yet to adopt a tobacco-free or smokefree policy.

Smokefree Community Ordinances

Six communities in the Northern region have passed smokefree ordinances as of March 19, 2018. Strong ordinances have been adopted in the cities of Ambler, Koyuk, and Nome, which prohibit smoking in all indoor work and public places without exception. Incomplete ordinances have been adopted in the cities of Barrow, Buckland, and Point Hope; these ordinances do not cover all places of employment and provide exemptions for hotel rooms, tobacco retail establishments, and designated smoking areas.

Multi-Unit Housing Policies

Two multi-unit housing properties have added smokefree policies to their leases in the Northern region as of March 19, 2018. The Bering Straits Regional Housing Authority smokefree policy is rated strong and prohibits smoking by everyone in all indoor areas with smokefree signs and enforcement of the policy. The Northwest Inupiat Housing Authority smokefree policy has been rated as incomplete, lacking smokefree signage and a statement of penalties for violating the policy.

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 Northern region, one healthcare facility has adopted a comprehensive tobacco-free policy. An additional facility has adopted an incomplete tobacco-free policy which lacks key elements to be considered effective.

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

Healthcare Facility	Current Policy Status
Maniilaq Association (Maniilaq Health Center)	Comprehensive
Norton Sound Health	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 20.5% of high school students surveyed during 2015 and 2017 in the Northern region initiated smoking before the age of 13. Although the vast majority of the youth reported that their parents would consider it wrong for them to smoke cigarettes (85.5%), 37.2% thought that smoking one or more packs per day posed no or slight risk to their health. The majority (65.6%) of high school students thought their friends would consider it wrong for youth to smoke cigarettes (See Appendix Table C-1 for additional regional and state estimates.)

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 tobacco tax is \$2.00 for a pack of 20 cigarettes. Three communities in the Northern region, Barrow, Kotzebue, and the Northwest Arctic Borough have passed a 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 Barrow, Kotzebue, and the Northwest Arctic Borough 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: Northern Region

Community	Local Cigarette Tax	State Base Cigarette Tax	Total State and Local Tax per Pack	e-cigarettes	Other Tobacco Products Local Tax*
Barrow	\$1.00	\$2.00	\$3.00	N/A	12% of wholesale
Kotzebue	\$2.20	\$2.00	\$4.20	N/A	55% of wholesale
Northwest Arctic Borough	\$2.00	\$2.00	\$4.00	45% of wholesale	45% of wholesale

Source: Barrow Municipal Code, Chapter 4.22 and Kotzebue Municipal Code, Chapter 3.40 and 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 tobacco-free school policy adopted by the Northwest Arctic Borough school district is a comprehensive policy that closely resembles the model policy. The Bering Strait school district and the Nome Public Schools have both implemented strong tobacco-free school policies that contain a majority of the elements of the model policy. The North Slope Borough school district has an incomplete policy that doesn’t specifically cover all individuals nor all locations. 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 Northern Region: Current Status as of March 19, 2018

School District	Current Policy Status
Northwest Arctic Borough	Comprehensive
Bering Strait	Strong
Nome Public Schools	Strong
North Slope Borough	Incomplete

Source: State of Alaska Tobacco Prevention and Control Program

EVIDENCE-BASED TOBACCO CESSATION INTERVENTIONS

Cessation Indicators

Quitting tobacco provides health benefits at any age.^{xi-xii} Additionally, tobacco cessation programs are cost-effective and increase longevity while reducing health care costs.^{xiii} Alaska has a statewide quitline accessible

to all Alaska adults. In addition, the Northern region has local cessation resources provided by the Maniilaq Association.

In the Northern region, 37.1% 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, 56.1% have attempted to quit smoking in the past 12 months.

Table 6. Adult Cessation Indicators, Northern Region, 2014-2016

	Prevalence (95% CI)*
Quit ratio (among ever smokers age 25 and older)	37.1% (30.6%-44.0%)
Attempted to quit (among current smokers)	56.1% (47.1%-64.7%)
Quit for 3+ months (among past year smokers)	N/A‡
Aware of quit line (among current smokers)	76.3% (65.5%-84.4%)
Advised to quit by health care provider (among smokers who had a health care visit in the past year)	67.1% § (49.8%-80.7%)

* 95% Confidence Interval

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

‡ Numerator is less than 5

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							
	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
All Adults	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 [‡]	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

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
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

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
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

		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 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

Table D-1. Adult Cessation Indicators, Public Health Regions, 2014-2016

	Anchorage / Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Statewide Total
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.^{xiv} 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.

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