

# Southeast Regional Health Profile



Map Courtesy of  
SouthEast Alaska Regional Health Consortium



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- Division of Environmental Health and Engineering for providing region-specific water and sewer service rates;
- Immunization Program for providing region-specific immunization rates;
- Injury Prevention Program for providing region-specific injury rates;

### Indian Health Service

- Alaska Area Indian Health Service for providing village level Alaska Native population estimates, Indian Health Services user population estimates, and National Patient Information Reporting System data.

### State of Alaska

- Behavioral Risk Factor Surveillance System for providing data;
- Bureau of Vital Statistics for providing birth and death data;
- Youth Risk Behavior Survey for providing Alaska Native specific results;
- Alaska Trauma Registry for providing data;
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## Introduction

“Alaska Natives are the healthiest people in the world.”

Alaska Native people are continuing to make progress toward their vision. Monitoring health status helps us to know where the Alaska Native population is on the path to becoming the healthiest people and how far there is to go to reach this vision.

This report provides an overview of the health status of Southeast Alaska Native people, which includes those served by the Ketchikan Indian Corporation, Metlakatla Indian Community, Southeast Alaska Regional Health Corporation, and Yakutat Tlingit Tribe. By using data to monitor health status, significant improvements in health over time can be demonstrated. In addition, health areas which are a concern, or for which inequities exist, can be readily identified for improvement.

The report covers demographics, leading causes of mortality and morbidity, adolescent and adult lifestyle risk factors, maternal and child health issues, cancer, immunizations, diabetes, and infectious diseases, and dental health. The last section of this report displays preventive services, access to health care, and environmental health indicators.

The health status topics found in this report were selected from the national Healthy People 2010 document with guidance from staff at the Southeast Alaska Regional Health Consortium. Various data sources were accessed to compile this document. Each data source contains certain limitations, which should be considered when using this document. Appendixes A and B explain these limitations as well as providing detailed information about the data sources.

Data is only part of the decision making-process. This document serves as a useful reference tool for all those interested in Southeast Alaska Native health issues, and for those interested in contributing to achieving the vision of the Alaska Native population becoming the healthiest in the world.

## How is the regional health profile organized?

This section outlines the regional health profile, provides a map of the region, and gives a description of the appendixes. It also includes the *Regional Health Profile Overview*, which is a table that provides an overview of the data presented in this document.

Health indicators are presented in the following five sections:

1. **Demographic Information** includes data for population estimates, user population, population change, population projections, educational attainment, unemployment, poverty status, and household income.
2. **Mortality and Morbidity** includes data about deaths including: leading causes, cancer, heart disease, cerebrovascular disease, unintentional injury, leading causes of injury, and infant.
3. **Health Behavior** includes adult and adolescent data on tobacco use, alcohol consumption, physical activity, obesity, breastfeeding, violence, juvenile justice, sexual behavior, substance use, and safety of children.
4. **Health Indicators** includes leading causes of inpatient discharges, outpatient visits as well as information on injury-related hospitalizations. In addition this section covers leading cancers, diabetes, asthma, low birth weight, teen birth rate, sexually transmitted infections, and dental health.
5. **Preventive Services and Access to Health Care** includes data on cervical, breast, and colorectal cancer screening, seasonal influenza vaccination for ages 65 and older, two-year old vaccinations, prenatal care, healthcare coverage, access to care, WIC and Medicaid enrollment, and water and sewer service.

These main sections are followed by the appendixes:

- *Appendix A* describes the methods and data sources in detail including the strengths and limitations of the data;
  - *Appendix B* includes a table of the race/ethnicity classifications used by each of the data sources;
  - *Appendix C* lists the titles of all figures and tables used throughout the document and may be used to find specific data quickly; and
  - *Appendix D* lists a glossary of terms that are used throughout the regional health profile.
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Southeast Region Map



Map Courtesy of SouthEast Alaska Regional Health Consortium

## Regional Health Profile Overview

Indicator	Healthy People 2010 Objective	Southeast Alaska Natives	Alaska Natives Statewide	U.S. Whites	Time Period
<b>Mortality &amp; Morbidity</b>					
Leading causes of death	N/A	Cancer	Cancer	Heart Disease	2004-2007
Cancer deaths per 100,000	158.6	205.1	236.8	183.4	2004-2007
Coronary heart disease deaths per 100,000	162	149.5	178.9	209.5	2004-2007
Cerebrovascular deaths per 100,000	50	51.2	60.1	46.1	2004-2007
Unintentional injury deaths per 100,000	17.1	76.0	96.0	39.3	2004-2007
Leading causes of injury death	N/A	Drowning	Suicide <sup>1</sup>	Motor Vehicle Accidents <sup>2</sup>	1999-2005
Infant deaths per 1,000 live births	4.5	6.3	9.2	N/A	1999-2008
<b>Health Behavior</b>					
Percent of adults who currently smoke	12%	36.3%	40.7%	19.5%	2005-2007
Percent of smokeless tobacco use by adults	0.4%	3.4%	10.4%	4.3% <sup>3</sup>	2005-2007
Percent of adults who engage in regular, moderate and/or vigorous physical activity	50%	59%	54%	N/A	2007
Percent of obese adults	15%	32.6%	37.5% <sup>4</sup>	25.4%	2008
Percent of overweight adults	N/A	40.8%	34.3% <sup>4</sup>	36.3%	2008
Percent who initiated breastfeeding	75%	96.9%**	89.5%	68.7% <sup>5</sup>	2004-2005
Percent of abstinence from smoking among pregnant women	99%	81.9%	68.4%	87.0%	2006-2008

<sup>1</sup>Alaska Native Injury Atlas, January 2008, Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium

<sup>2</sup>The Three Leading Causes of Injury Mortality in the United States, 1999-2005, Lois A. Fingerhut, Robert N. Anderson, National Center for Health Statistics, Health & Stats, March 2008, <http://www.cdc.gov/nchs/data/hestat/injury99-05/injury99-05.pdf>.

<sup>3</sup>Substance Abuse and Mental Health Services Administration. Results from the 2007 National Survey on Drug Use and Health: Detailed Tables. Rockville (MD): Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2007

<sup>4</sup>State of Alaska, Health Risks in Alaska Among Adults, Alaska Behavioral Risk Factor Survey, 2008 Annual Report

<sup>5</sup>National Center for Health Statistics, Health, United States, 2008, With Chartbook, Hyattsville, MD: 2009

N/A Not Available

## Regional Health Profile Overview

Indicator	Healthy People 2010 Objective	Southeast Alaska Natives	Alaska Natives Statewide	U.S. Whites	Time Period
<b>Health Behavior</b>					
Percent of abstinence from alcohol use among pregnant women	95%	98.4%	95.6%	N/A	2006-2008
Percent of adult, intimate partner, lifetime violence	N/A	41.7%	32.3%	N/A	2006
Percent of adolescents who are at risk of being overweight	N/A	†	21.4%	14.3%	2007
Percent of overweight adolescents	5%	†	13.2%	10.8%	2007
Percent of adolescents who engage in recommended levels of physical activity	85%	†	32.2%	37.0%	2007
Percent of adolescents using alcohol during the past 30 days	N/A	†	40.8%	47.3%	2007
Percent of adolescents smoking during the past 30 days	16%	†	31.7%	23.2%	2007
Percent of adolescents using spit tobacco use during the past 30 days	1%	†	16.6%	10.3%	2007
Percent of adolescents using marijuana in the past 30 days	0.7%	†	31.7%	19.9%	2007
Percent of adolescents reporting cocaine use during their lifetimes	N/A	†	7.2%	7.4%	2007
Percent of adolescents who have never engaged in sexual intercourse	56%	†	50.7%	56.3%	2007
Percent of adults who witnessed intimate partner violence as a child	N/A	†	28.1	N/A	2006

N/A Not Available

† Numbers too small to present

**Regional Health Profile Overview**

Indicator	Healthy People 2010 Objective	Southeast Alaska Natives	Alaska Natives Statewide	U.S. Whites	Time Period
<b>Health Indicators</b>					
Leading injury hospitalizations	N/A	Falls	N/A	N/A	1994-2004
Fall hospitalization rates per 10,000	N/A	56.9	38.7	N/A	1991-2003
Leading Cancers	N/A	Breast	Colon Rectum	Breast <sup>1</sup>	1998-2007
Rate of clinically diagnosed diabetes per 1,000	25	55.0	40.0	N/A	2007
Percent increase in diabetes prevalence	N/A	118.0%	117.0%	N/A	1990-2007
Percent with reported asthma	N/A	12.3%	13.2% <sup>2</sup>	13.4%	2008
Percent of infants born with low birth weight	5.0%	3.8%	5.6%	7.3%	2001-2005
Rate of pregnancies among 15-19 year old females per 1,000	39.0	64.8	96.5	25.9 (2005)	2001-2005
Percent of children with caries experience	42%	95%	65%*	N/A	2004
Percent of children with untreated caries	21%	57%	28%*	N/A	2004
Percent of children with dental sealants	50%	38%	52%*	N/A	2004

<sup>1</sup>Horner MJ, Ries, LAG, Krapcho M, Neyman N, Aminou R, Howlader N, Altekruse SF, Feuer EJ, Huang L, Mariotto A, Miller BA, Lewis DR, Eisner MP, Stinchcomb DG, Edwards BD (eds). SEER Cancer Statistics Review, 1975-2006, National Cancer Institute. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2006/](http://seer.cancer.gov/csr/1975_2006/), based on November 2008 SEER data submission, posted to the SEER website, 2009.

<sup>2</sup>State of Alaska, Health Risks in Alaska Among Adults, Alaska Behavioral Risk Factor Survey, 2008 Annual Report

N/A Not Available

\*Alaska Total Population

## Regional Health Profile Overview

Indicator	Healthy People 2010 Objective	Southeast Alaska Natives	Alaska Natives Statewide	U.S. Whites	Time Period
<b>Preventive Services and Access to Health Care</b>					
Percent of women aged 18 years and older who received a Pap test within the preceding three years	90%	†	89.0%	84.9% (2006)	2004 & 2006
Percent of women aged 40 years and older who received a mammogram within the preceding two years	70%	†	74.0%	77.0% (2006)	2004 & 2006
Percent of adults aged 50 years and older who have ever received a flexible sigmoidoscopy or colonoscopy	50%	46.7%	52.8%	59.1% (2006)	2004 & 2006
Percent of adults aged 65 years and older who are vaccinated against seasonal influenza in the past 12 months	90%	48.7%	48.9%	69.0%	2010
Percent of young children aged 19 to 35 months who received the 4:3:1:3:3	80%	76.6% <sup>1</sup>	82.4% <sup>1</sup>	78.0% (2007)	2010
Percent of women who received adequate prenatal care	90%	72.7%	50.1%	N/A	2001-2005
Percent of adults who have health care coverage	100%	76.5%	82.9%*	89.5%	2008
Percent of adults who did not receive health services because of the cost	N/A	9.9%	14.0%*	N/A	2007
Percent of WIC participation	N/A	34.3%	72.5%	N/A	2004-2005
Percent enrolled in Medicaid	N/A	12.4%**	13.6%*	15.4%***	2007
Percent of communities with access to safe water and proper sewage disposal	N/A	98.2%	N/A	N/A	2008

<sup>1</sup>Alaska Native Tribal Health Consortium Immunization Registry

<sup>2</sup>Calculation based on CMS Statistics: Centers for Medicare and Medicaid Services (CMS), Office of External Affairs, released 1/31/08; and 2007 population estimates from the United States Census Bureau, available at <http://www.census.gov/popest/states/tables/NST-EST2007-01.xls>

† Numbers too small to present

N/A Not Available

\*Alaska Total Population

\*\*Southeast Total Population

\*\*\*U.S. Total Population

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# **Demographic Information**

## Population Estimates

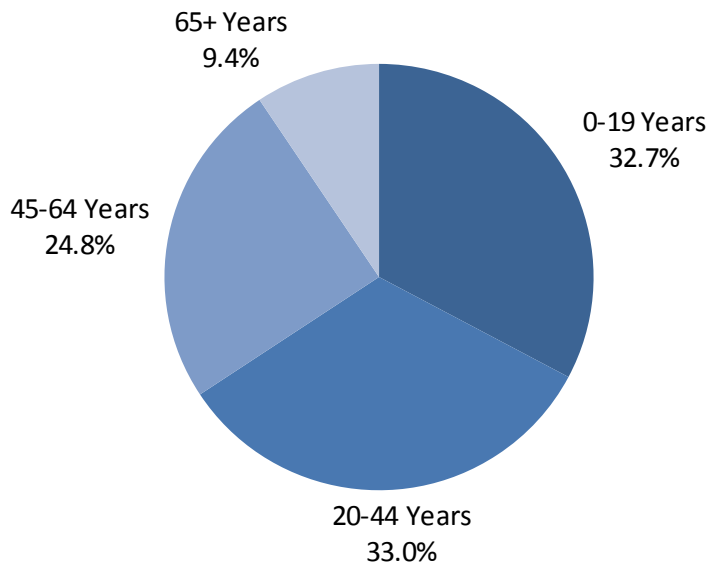
**Definition:** The State of Alaska Department of Labor uses the U.S. Census, vital records, and other data to calculate “bridged” **population estimates** between the census years. “Bridged” refers to a method that makes multiple race and single race categories comparable over time since the 2000 U.S. Census allowed respondents to check multiple race categories for the first time.

### Summary

- The Alaska Department of Labor estimates that 14,136 Alaska Native people live in Southeast Alaska. This represents 20.4% of Southeast’s total population.
- About one-third (32.7%) of Southeast Alaska Native people were under the age of 20.

**Figure 1. Population Estimates by Age Group, Alaska Natives, Southeast, 2009**

Data Source: Alaska Department of Labor and Workforce Development





## Population Estimates

**Table 1. Population Estimates by Age Group, Alaska Natives, Southeast, 2009**

Data Source: Alaska Department of Labor and Workforce Development

Age	Male		Female		Total	
	N	%	N	%	N	%
0-4	604	8.4%	614	8.8%	1,218	8.6%
5-9	589	8.2%	539	7.7%	1,128	8.0%
10-14	554	7.7%	508	7.3%	1,062	7.5%
15-19	658	9.2%	562	8.1%	1,220	8.6%
20-24	579	8.1%	485	7.0%	1,064	7.5%
25-29	529	7.4%	465	6.7%	994	7.0%
30-34	415	5.8%	414	5.9%	829	5.9%
35-39	405	5.6%	395	5.7%	800	5.7%
40-44	506	7.1%	474	6.8%	980	6.9%
45-49	507	7.1%	503	7.2%	1,010	7.1%
50-54	471	6.6%	495	7.1%	966	6.8%
55-59	399	5.6%	444	6.4%	843	6.0%
60-64	334	4.7%	354	5.1%	688	4.9%
65-69	253	3.5%	229	3.3%	482	3.4%
70-74	163	2.3%	171	2.5%	334	2.4%
75-79	103	1.4%	135	1.9%	238	1.7%
80-84	62	0.9%	90	1.3%	152	1.1%
85+	44	0.6%	84	1.2%	128	0.9%
<b>Total</b>	<b>7,175</b>	<b>100.0%</b>	<b>6,961</b>	<b>100.0%</b>	<b>14,136</b>	<b>100.0%</b>

## Population Pyramid Compared to U.S. Population

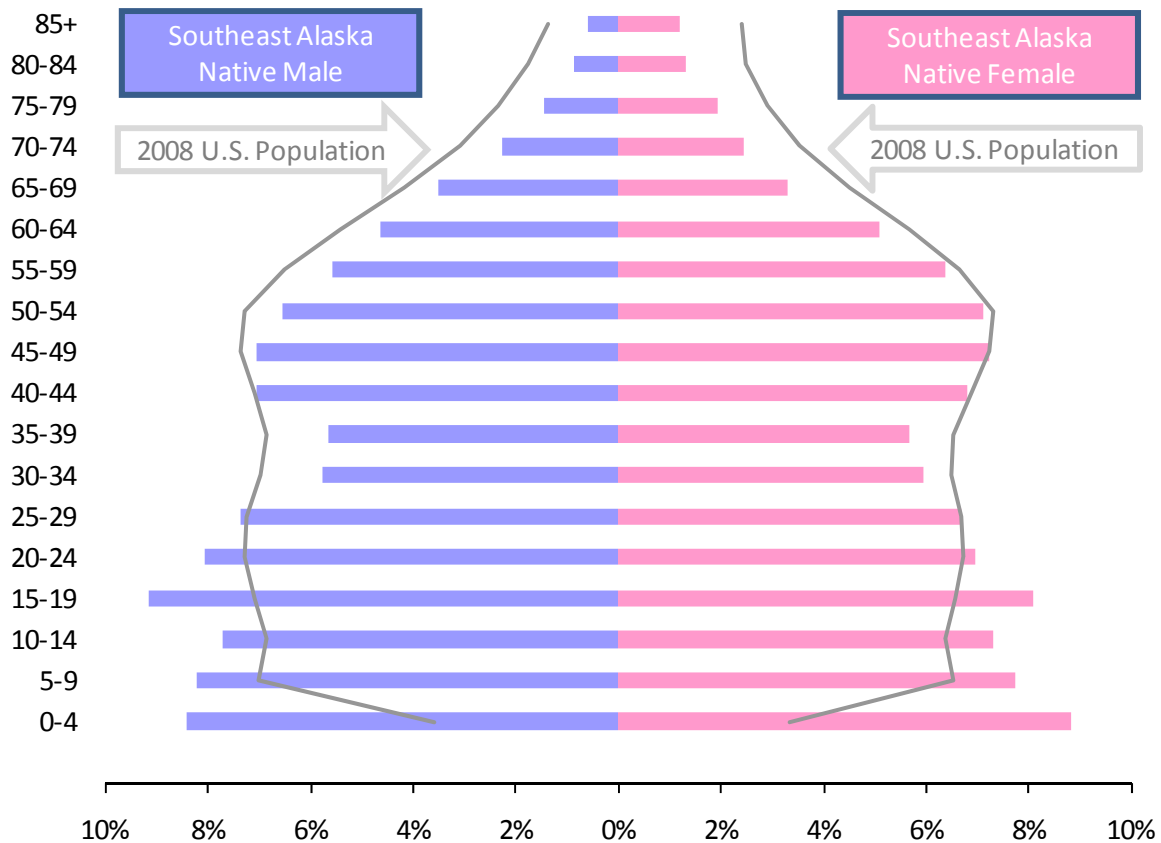
**Definition:** A **population pyramid** is a graphical representation of the age and sex distribution of a population. The proportion of the males and females in each group are displayed as horizontal bars. The gray lines show the distribution of the U.S. total population.

### Summary

- A larger proportion of the Southeast Alaska Native population is under the age of 24 compared to the U.S. total population.
- Elders over the age of 70 account for a smaller proportion of the population compared to the U.S. total population.

**Figure 2. Population Pyramid Alaska Natives, Southeast, 2009**

Data Source: Alaska Department of Labor and Workforce Development



## User Population

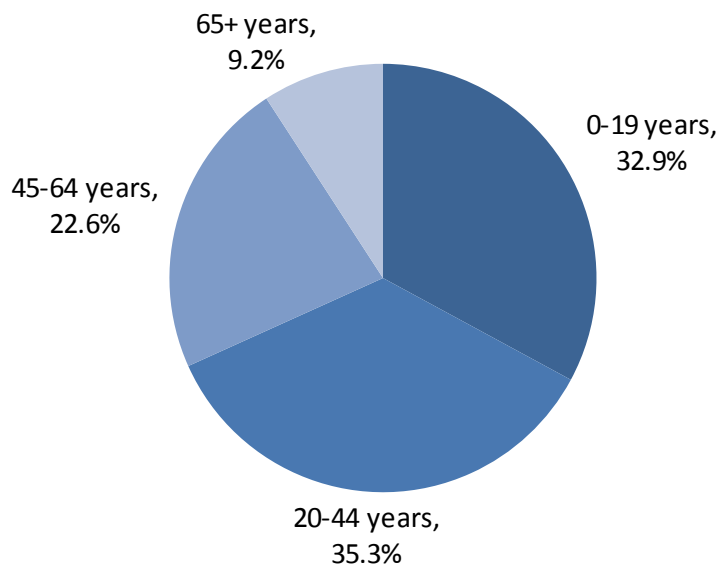
**Definition:** The Indian Health Service defines the **user population** as an eligible American Indian or Alaska Native who used a tribal health facility at least once in the previous three year period. The facility must be one that reports to the national Indian Health Service data system. User population data are provided by federal fiscal year; fiscal year 2009 is October 1, 2008 to September 30, 2009.

### Summary

- 32.9% of the Southeast user population is under the age of twenty.
- 9.2% of the user population is 65 years of age or older.

**Figure 3. User Population by Age Group, Southeast, Fiscal Year 2009**

Data Source: National Patient Information Reporting System, Indian Health Service National Data Warehouse



## User Population

**Table 2. User Population by Sex and Age Group, Southeast, Fiscal Year 2009**

Data Source: National Patient Information Reporting System, Indian Health Service National Data Warehouse

Age	Male		Female		Total	
	N	%	N	%	N	%
<1	82	0.3%	97	0.4%	179	1.1%
1-4	512	2.1%	492	2.0%	976	5.8%
5-9	630	2.5%	632	2.5%	1,262	7.6%
10-14	664	2.7%	744	3.0%	1,342	8.0%
15-19	869	3.5%	965	3.9%	1,736	10.4%
20-24	719	2.9%	783	3.1%	1,502	9.0%
25-34	1,239	5.0%	1,188	4.8%	2,427	14.5%
35-44	960	3.8%	1,009	4.0%	1,969	11.8%
45-54	1,092	4.4%	1,151	4.6%	2,243	13.4%
55-64	744	3.0%	789	3.2%	1,533	9.2%
65+	717	2.9%	812	3.3%	1,529	9.2%
<b>Total</b>	<b>8,228</b>	<b>49.3%</b>	<b>8,662</b>	<b>51.9%</b>	<b>16,698</b>	<b>100.0%</b>

## 2001 and 2009 Population Change by Borough/Census Area

**Population change by borough/census area** is based on estimates derived from census data. These data may differ from user population data as active user population is based on only the American Indian or Alaska Native population that has visited a facility that reports to the national Indian Health Service data system at least once in the previous three year period, while census data includes the total population. Beneficiaries who do not use a facility, or that use a facility that does not report to the national Indian Health Service data system are not included in the active user population.

### Summary

- All boroughs/census areas in Southeast Alaska had lower numbers of Alaska Native persons from 2001 to 2009 except Sitka, Haines and Juneau, which gained persons.
- Overall, Southeast Alaska saw a decline in the Alaska Native population (-1.0%) and the total population (-3.4%).

**Table 3. Population Change by Borough/Census Area, 2001 and 2009 Bridged Population Estimates**

Data Source: Alaska Department of Labor and Workforce Development

Borough or Census Area	2001		2009		% Change	
	Alaska Native Population	Total Population	Alaska Native Population	Total Population	Alaska Native Population	Total Population
Skagway						
Hoonah						
Angoon	1,241	3,358	952	2,908	-23.3%	-13.4%
Yakutat	293	696	261	628	-10.9%	- 9.8%
Wrangell						
Petersburg	1,277	6,589	1,066	5,852	-16.5%	-11.2%
Prince of Wales	2,452	5,816	2,292	5,392	- 6.5%	- 7.3%
Haines	329	2,383	333	2,286	1.2%	- 4.1%
Ketchikan	2,400	13,747	2,376	12,984	- 1.0%	- 5.6%
Sitka	1,927	8,727	1,971	8,627	2.3%	- 1.1%
Juneau	4,360	30,458	4,885	30,661	12.0%	0.7%
<b>Total Southeast</b>	<b>14,279</b>	<b>71,774</b>	<b>14,136</b>	<b>69,338</b>	<b>- 1.0%</b>	<b>- 3.4%</b>
<b>Total Alaska</b>	<b>110,694</b>	<b>632,200</b>	<b>125,200</b>	<b>692,314</b>	<b>13.1%</b>	<b>9.5%</b>

## 2001 and 2009 Population Change by Age Group

**Table 4. Southeast Population Change by Age Group, 2001 and 2009 Bridged Population Estimates**

Data Source: Alaska Department of Labor and Workforce Development

Age Group	2001 Southeast		2009 Southeast		% Change in Southeast	
	Alaska Native Population	Total Population	Alaska Native Population	Total Population	Alaska Native Population	Total Population
0-4	1,173	4,625	1,218	4,696	3.8%	1.5%
5-9	1,302	5,203	1,128	4,677	-13.4%	-10.1%
10-14	1,499	5,986	1,062	4,721	-29.2%	-21.1%
15-19	1,418	5,721	1,220	5,167	-14.0%	- 9.7%
20-24	1,003	3,792	1,064	3,611	6.1%	- 4.8%
25-29	827	3,919	994	3,710	20.2%	- 5.3%
30-34	906	4,993	829	4,214	- 8.5%	-15.6%
35-39	1,041	5,842	800	4,495	-23.2%	-23.1%
40-44	1,131	6,894	980	4,983	-13.4%	-27.7%
45-49	981	6,904	1,010	5,886	3.0%	-14.7%
50-54	821	6,039	966	6,195	17.7%	2.6%
55-59	581	3,873	843	5,712	45.1%	47.5%
60-64	508	2,627	688	4,290	35.4%	63.3%
65-69	386	1,655	482	2,622	24.9%	58.4%
70-74	291	1,441	334	1,732	14.8%	20.2%
75-79	189	1,053	238	1,065	25.9%	1.1%
80-84	127	664	152	775	19.7%	16.7%
85-89	56	353	81	507	44.6%	43.6%
90+	39	190	47	280	20.5%	47.4%
<b>Total</b>	<b>14,279</b>	<b>71,774</b>	<b>14,136</b>	<b>69,338</b>	<b>- 1.0%</b>	<b>- 3.4%</b>

## 2009-2030 Population Change

### Summary

- The Skagway-Hoonah-Angoon Census Area will see the largest decrease in population by the year 2030 (-33.1%)
- The Boroughs of Juneau and Sitka are the only borough/census areas expected to see an increase in population by the year 2030 (5.2% and 0.4%, respectively) in Southeast Alaska.
- Southeast's total population is predicted to decline by -6.2% by the year 2030.

**Table 5. Southeast Total Population Change by Borough or Census Area, 2009 and 2030**

Data Source: Alaska Department of Labor and Workforce Development

Borough or Census Area	2009	2030	% Change
Haines	2,286	1,571	-31.3%
Juneau	30,661	32,260	5.2%
Ketchikan	12,984	11,095	-14.5%
Prince of Wales - Outer Ketchikan	5,392	3,894	-27.8%
Sitka	8,627	8,658	0.4%
Skagway - Hoonah - Angoon	2,908	1,945	-33.1%
Wrangell - Petersburg	5,852	5,076	-13.3%
Yakutat	628	574	- 8.6%
<b>Total</b>	<b>69,338</b>	<b>65,073</b>	<b>- 6.2%</b>

## Population Pyramid - Population Projections from 2009-2030

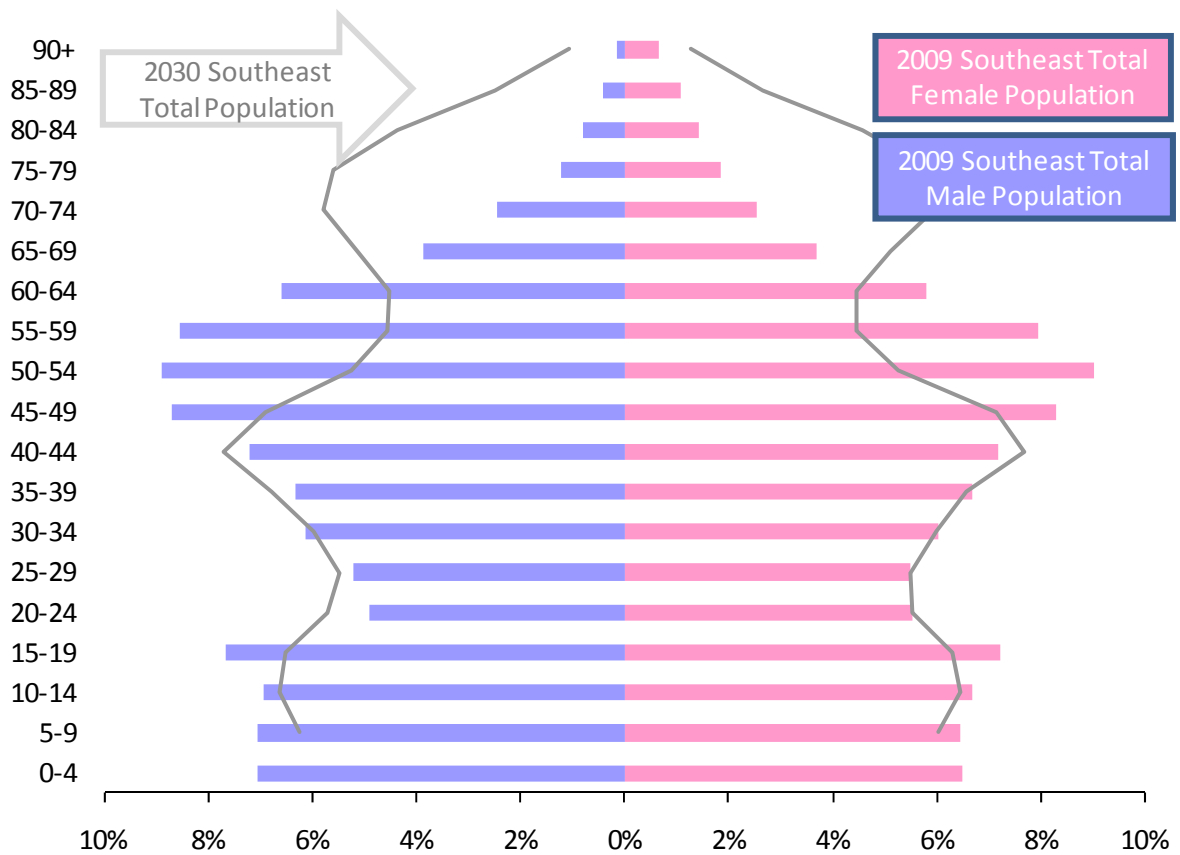
**Definition:** A **population pyramid** is a graphical representation of the age and sex distribution of a population. The proportion of the males and females in each group are displayed as horizontal bars. The black lines show the distribution of the U.S. total population.

### Summary

- The Southeast total population is expected to decrease for the majority of age groups under the age of 65 by the year 2030.
- The elder population (65+) will increase significantly by the year 2030.

**Figure 4. Population Projections, Southeast Total Population, 2009 and 2030**

Data Source: Alaska Department of Labor and Workforce Development





## Population Pyramid - Population Projections from 2009-2030

**Table 6. Population Projections, Southeast Total Population, 2009 and 2030**

Data Source: Alaska Department of Labor and Workforce Development

Age	2009				2030			
	Males		Female		Males		Females	
	N	%	N	%	N	%	N	%
0-4	2,490	7.1%	2,206	6.5%	1,946	6.0%	1,867	5.8%
5-9	2,483	7.0%	2,194	6.4%	2,122	6.5%	2,041	6.3%
10-14	2,453	6.9%	2,268	6.7%	2,217	6.8%	2,130	6.6%
15-19	2,709	7.7%	2,458	7.2%	2,027	6.2%	1,938	6.0%
20-24	1,731	4.9%	1,880	5.5%	1,702	5.2%	1,636	5.0%
25-29	1,839	5.2%	1,871	5.5%	1,885	5.8%	1,916	5.9%
30-34	2,163	6.1%	2,051	6.0%	2,025	6.2%	1,958	6.0%
35-39	2,226	6.3%	2,269	6.7%	2,396	7.3%	2,285	7.1%
40-44	2,537	7.2%	2,446	7.2%	2,624	8.0%	2,701	8.3%
45-49	3,072	8.7%	2,814	8.3%	1,890	5.8%	1,930	6.0%
50-54	3,126	8.9%	3,069	9.0%	1,535	4.7%	1,491	4.6%
55-59	3,012	8.5%	2,700	7.9%	1,436	4.4%	1,388	4.3%
60-64	2,324	6.6%	1,966	5.8%	1,525	4.7%	1,493	4.6%
65-69	1,366	3.9%	1,256	3.7%	1,827	5.6%	1,825	5.6%
70-74	867	2.5%	865	2.5%	1,947	6.0%	2,025	6.2%
75-79	437	1.2%	628	1.8%	1,718	5.3%	1,797	5.5%
80-84	286	0.8%	489	1.4%	1,138	3.5%	1,162	3.6%
85-89	144	0.4%	363	1.1%	478	1.5%	555	1.7%
90+	50	0.1%	230	0.7%	225	0.7%	272	0.8%
<b>Total</b>	<b>35,315</b>	<b>100.0%</b>	<b>34,023</b>	<b>100.0%</b>	<b>32,663</b>	<b>100.0%</b>	<b>32,410</b>	<b>100.0%</b>

## Educational Attainment

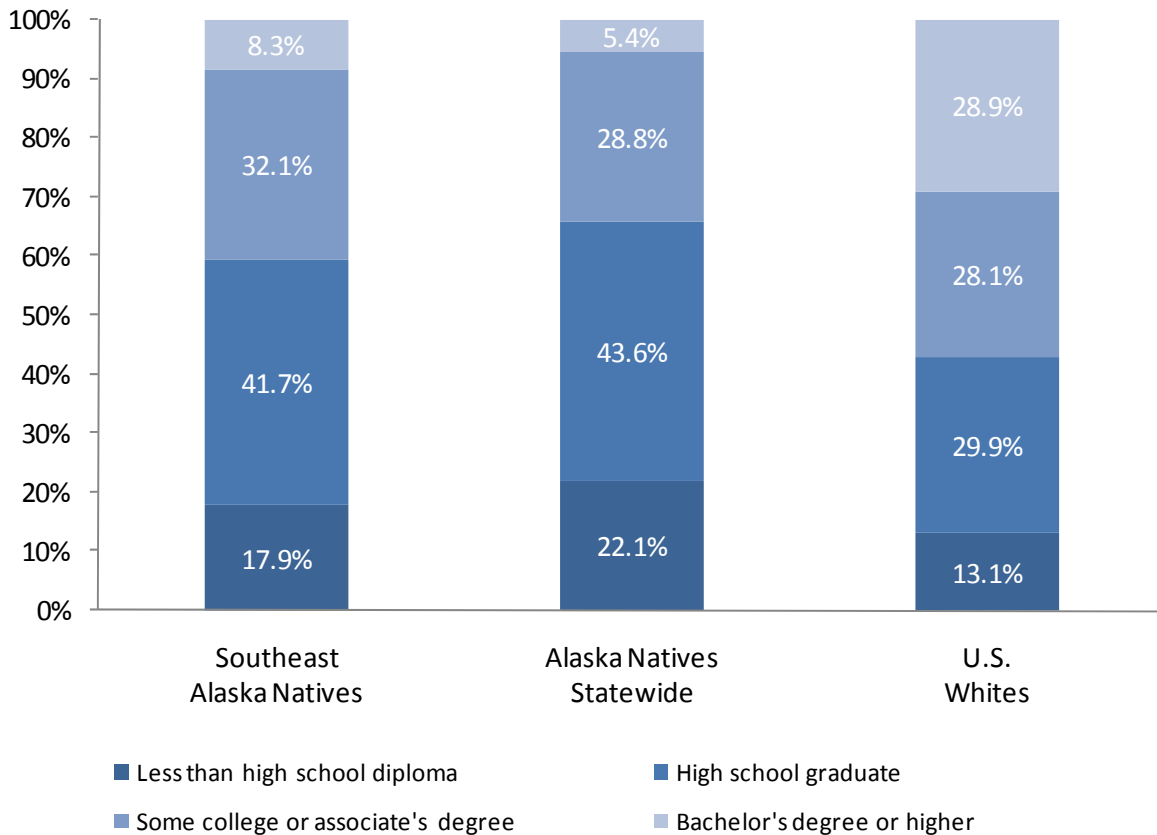
**Definition: Educational Attainment** is the highest level of school that a person has completed.

### Summary

- 8.3% of Southeast Alaska Natives' highest level of educational attainment was a bachelor's degree or higher.
- 82.1% of Southeast Alaska Native people received a high school diploma or higher.
- 28.9% of U.S. Whites received a Bachelor's degree or higher. This is nearly 3.5 times than Southeast Alaska Native people (8.3%).

**Figure 5. Highest Educational Attainment, 25 Years and Older, 2006-2008**

Data Source: American Community Survey, Sealaska



## Unemployment

**Definition: Unemployment** includes anyone who has made an active attempt to find work in the four week period up to and including the week that includes the 12th of the referenced month. Due to the scarcity of employment opportunities in rural Alaska, many individuals do not meet the official definition of unemployed because they are not conducting active job searches.

### Summary

- In 2009, the unemployment rate for Juneau (6.1%), Sitka (6.6%) and the Ketchikan Gateway Borough (7.3%) were below the statewide unemployment rate (8.0%).
- In 2009, Prince of Wales - Outer Ketchikan (16.1%), Skagway - Hoonah - Angoon (15.1%), Yakutat (11.2%), Wrangell - Petersburg (10.5%), and Haines (9.4%) were above the statewide unemployment rate (8.0%).

**Table 7. Unemployment Percent of Labor Force by Borough, Total Population, 2004-2009**

Data Source: Alaska Department of Labor and Workforce Development

Borough or Census Area	2004	2005	2006	2007	2008	2009
	%	%	%	%	%	%
Alaska Statewide	7.4	6.9	6.5	6.1	6.5	8.0
Haines	9.9	9.0	8.0	7.2	8.5	9.4
Juneau	5.8	5.3	4.8	4.3	4.6	6.1
Ketchikan Gateway	7.4	6.7	6.1	5.5	5.7	7.3
Prince of Wales - Outer Ketchikan	13.4	13.1	14.2	13.1	13.3	16.1
Sitka	6.3	5.6	5.3	5.0	5.6	6.6
Skagway - Hoonah - Angoon	13.1	13.3	12.6	12.2	12.5	15.1
Wrangell - Petersburg	12.3	10.1	9.5	9.4	10.3	10.5
Yakutat	10.7	10.6	9.6	6.5	7.2	11.2

## Poverty Status

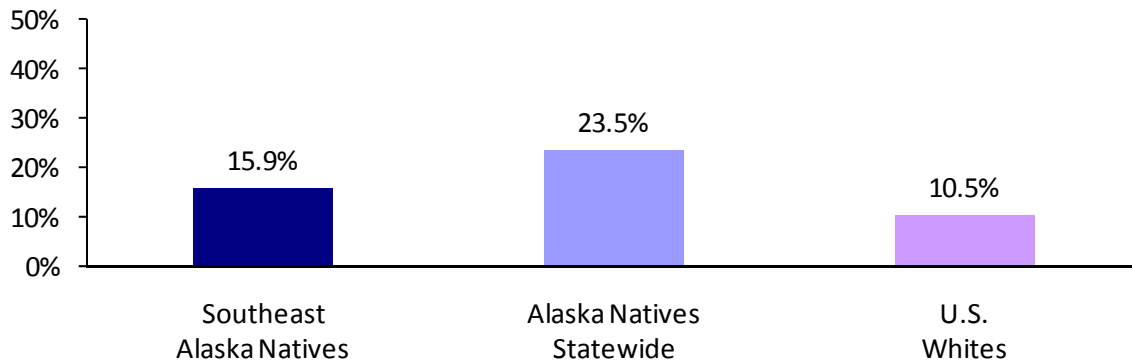
**Definition:** The U.S. Census Bureau uses a set of income thresholds that vary by family size and composition to determine who is in poverty. If a family’s total income is less than the threshold, then that family and every individual in it is considered in **poverty**. The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index. The official poverty definition uses income before taxes and does not include capital gains or non-cash benefits (such as public housing, Medicaid, and food stamps).

### Summary

- 15.9% of Southeast Alaska Natives lived below the federal poverty level.
- 18.7% of Southeast Alaska Native children lived below the federal poverty level.

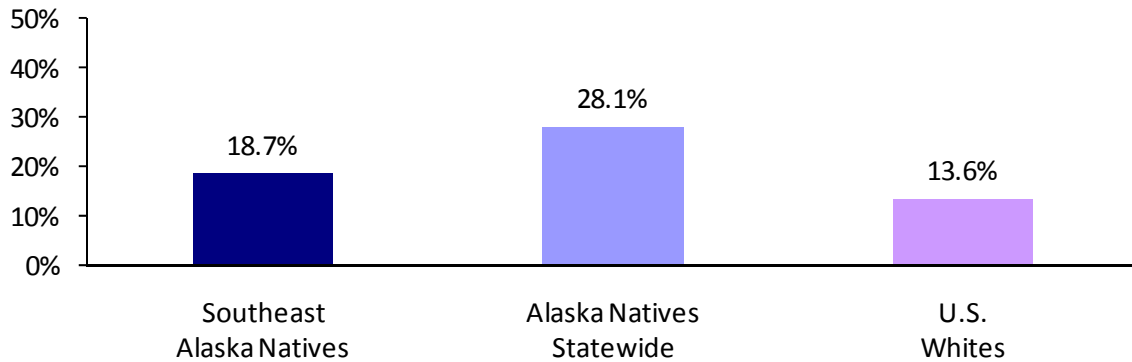
**Figure 6. Estimated Percent of Residents below the Poverty Level, 2006-2008**

Data Source: American Community Survey, Sealaska



**Figure 7. Estimated Percent of Residents below the Poverty Level, Under 18, 2006-2008**

Data Source: American Community Survey, Sealaska



## Household Income

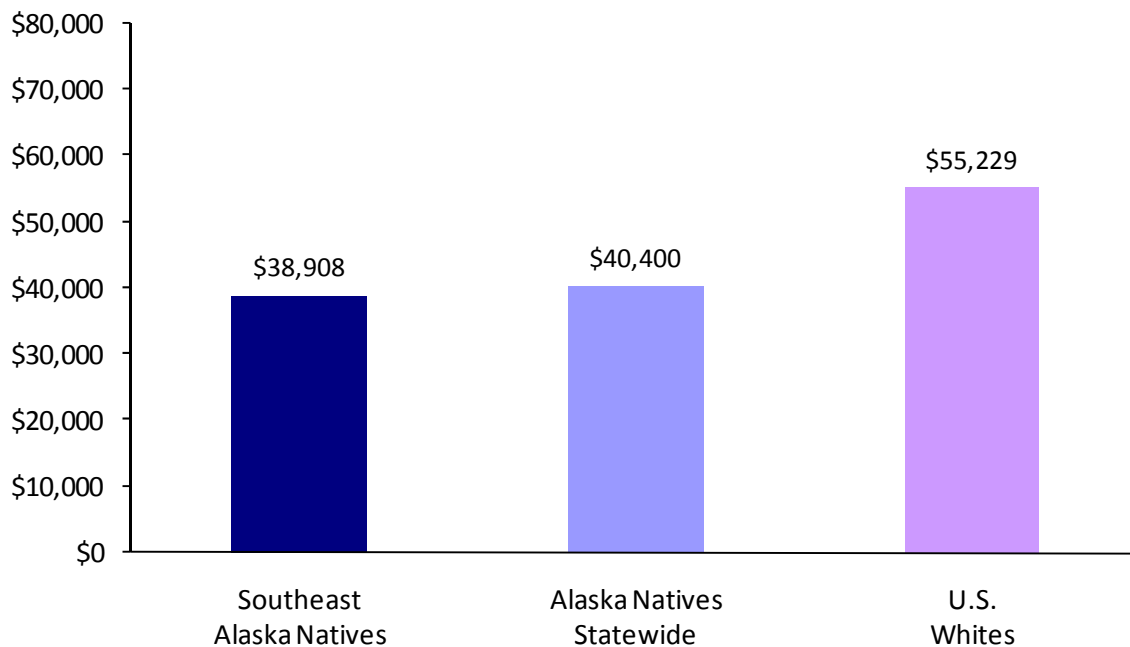
**Definition:** The **household income** is determined by the reported household income of the person who completed the American Community Survey. Income includes all monetary sources including wages, the Permanent Fund Dividend, corporation dividends and public assistance. Income does not include subsistence resources.

### Summary

- The estimated median household income for Southeast Alaska Native people was \$38,908 for 2006-2008.
- The median household income for U.S. Whites (\$55,229) was 1.4 times the median household income for Southeast Alaska Native people (\$38,908).

**Figure 8. Estimated Median Household Income, 2006-2008**

Data Source: American Community Survey, Sealaska



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# **Mortality and Morbidity**

## Mortality - Leading Causes of Death

**Definition: Leading causes of death** is a list of the primary causes of death within a population. These lists are used frequently to measure the health status of a population when compared to the rank of causes of death among other populations.

### Summary

- Cancer is the leading cause of death among Southeast Alaska Native people.
- The top three leading causes of death among Southeast Alaska Native people are the same as Alaska Native people statewide.

**Table 8. Leading Causes of Death, Southeast Alaska Natives, 2004-2007**

Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: Surveillance, Epidemiology, and End Results Program\*

\*U.S. Rates are for the 2004-2005 time period

Southeast Alaska Natives by Rank	N	% Deaths	Rate per 100,000	U.S. Whites	Alaska
				Rank (2004-2005)	Native Statewide Rank
1 - Cancer	89	22.9%	205.1	2	1
2 - Heart Disease	60	15.5%	149.5	1	2
3 - Unintentional Injury	37	9.5%	76.0	5	3
4 - Cerebrovascular Disease	20	5.2%	51.2	3	5
5 - Chronic Obstructive Pulmonary Disease	17	4.4%	39.1	4	6
<b>All Other Causes</b>	<b>165</b>	<b>42.5%</b>			
<b>All Causes of Death</b>	<b>388</b>	<b>100.0%</b>	<b>886.5</b>		



## Mortality - Cancer

**Definition:** Cancer mortality is defined as the number of deaths due to all types of cancer per 100,000 of the population.

**Healthy People 2010, Goal 3.1:** Reduce the overall cancer death rate to 158.6 deaths per 100,000 of the population (age-adjusted).

### Summary

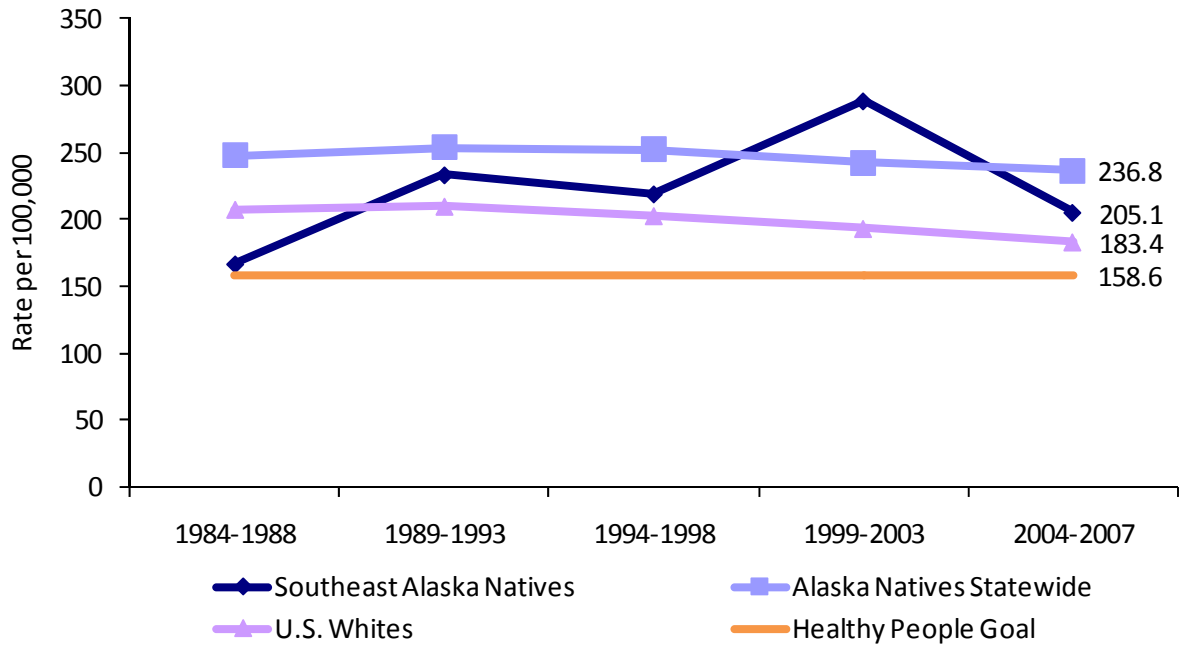
- Southeast Alaska Native deaths due to cancer were 205.1 per 100,000 from 2004-2007.
- Deaths due to cancer increased 23.2% from 1984-1988 to 2004-2007 for Southeast Alaska Native people.

**Figure 9. Age-Adjusted Cancer Death Rates per 100,000, 1984-2007**

Alaska Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: Surveillance, Epidemiology, and End Results Program

Note: 2004-2007 time period, U.S. rates are calculated only on 2004-2005 data.



## Mortality - Coronary Heart Disease

**Definition: Coronary heart disease mortality** is defined as the total number of deaths due to heart disease per 100,000 of the population.

**Healthy People 2010, Goal 12.1:** Reduce coronary heart disease deaths to 162 per 100,000 population (age-adjusted).

### Summary

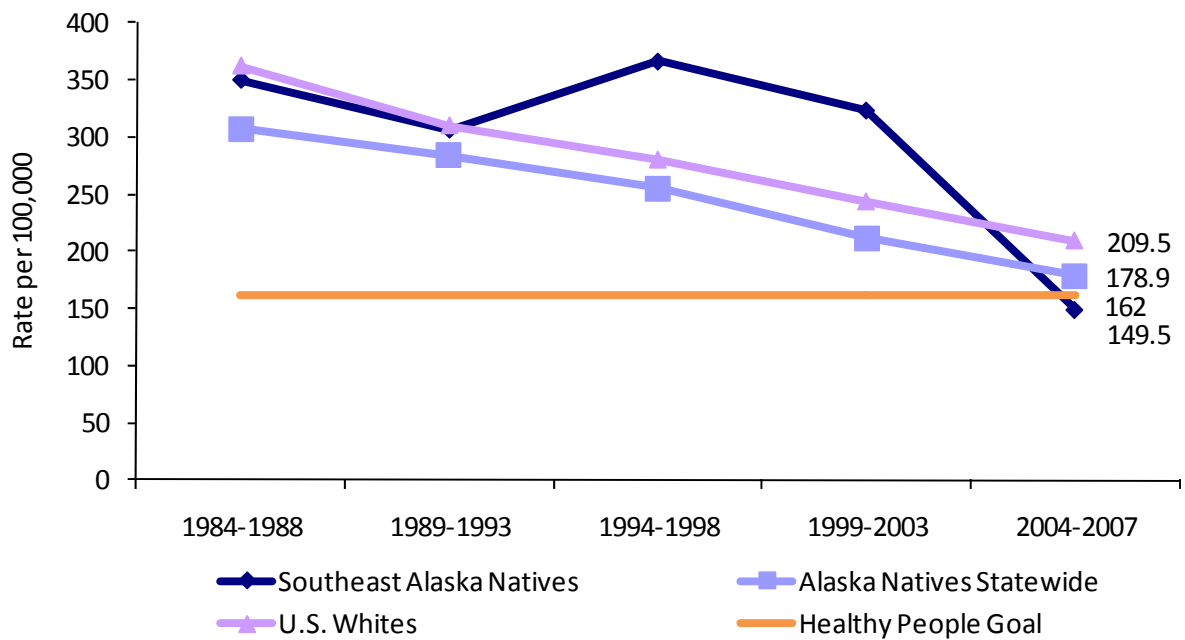
- The heart disease death rate of Southeast Alaska Native people was 149.5 per 100,000 people during 2004-2007.
- Deaths due to heart disease decreased 57.3% from 1984-1988 to 2004-2007 for Southeast Alaska Native people

**Figure 10. Age-Adjusted Coronary Heart Disease Death Rates per 100,000, 1984-2007**

Alaska Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: Surveillance, Epidemiology, and End Results Program

Note: 2004-2007 time period, U.S. rates are calculated only on 2004-2005 data.



## Mortality - Cerebrovascular Disease

**Definition: Cerebrovascular disease mortality** is defined as the total number of deaths due to cerebrovascular disease per 100,000 of the population.

**Healthy People 2010, Goal 12.7:** Reduce cerebrovascular disease death rates to 50 per 100,000 population (age-adjusted).

### Summary

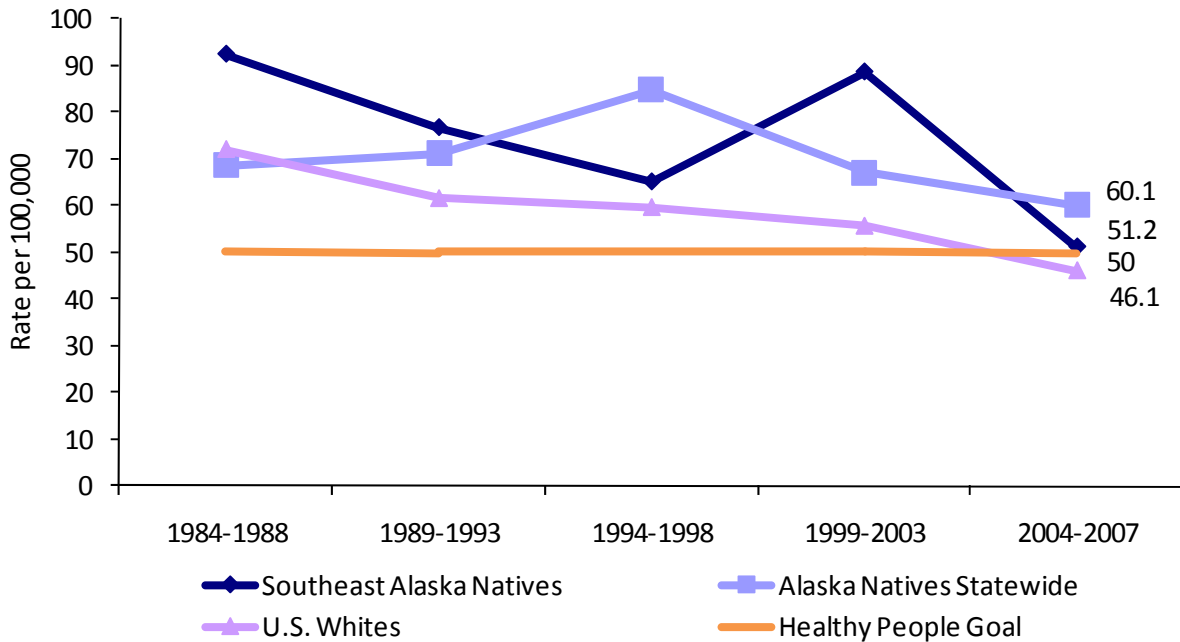
- The cerebrovascular disease death rate for Southeast Alaska Native people was 51.2 per 100,000 from 2004-2007.
- Deaths from cerebrovascular disease declined 44.6% from 1984-1998 to 2004-2007 for Southeast Alaska Native people.

**Figure 11. Age-Adjusted Cerebrovascular Disease Death Rates per 100,000, 1984-2007**

Alaska Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: Surveillance, Epidemiology, and End Results Program

Note: 2004-2007 time period, U.S. rates are calculated only on 2004-2005 data.



## Mortality - Unintentional Injury

**Definition: Unintentional injury mortality** is defined as the total number of deaths due to unintentional injuries per 100,000 of the population.

**Healthy People 2010, Goal 15.13:** Reduce deaths caused by unintentional injury to 17.1 per 100,000 population (age-adjusted).

### Summary

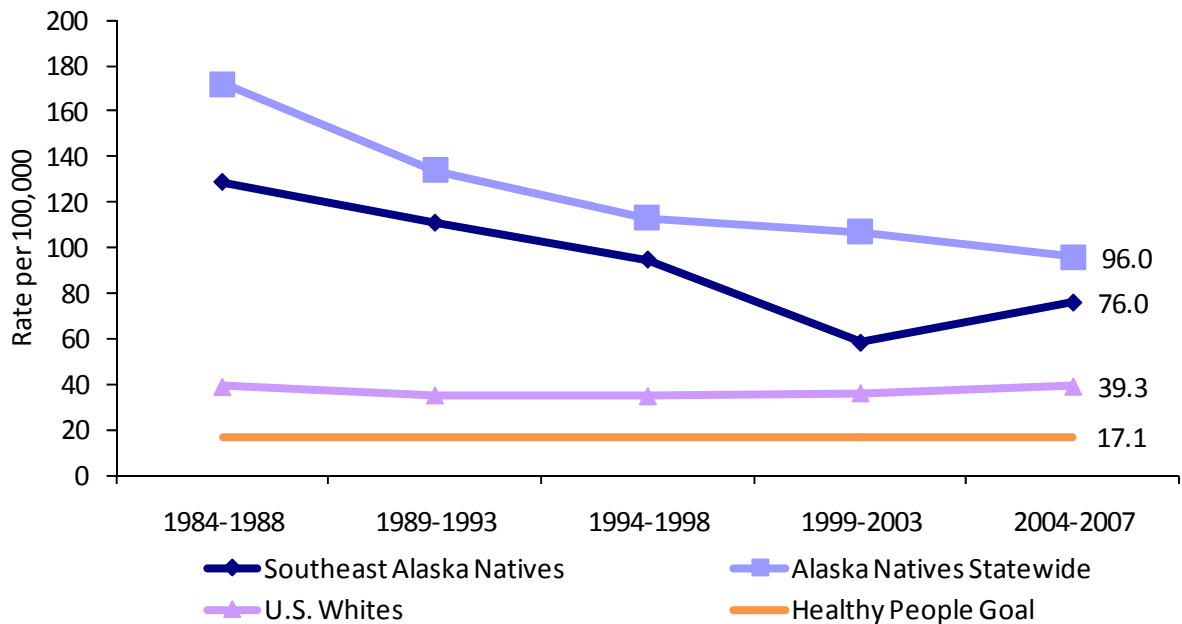
- Deaths due to unintentional injuries decreased 40.9% from 1984-1998 to 2004-2007 for Southeast Alaska Native people.
- Although unintentional injury deaths appear to be decreasing for Southeast Alaska Native people, the death rate was approximately two times (76.0) that of U.S. Whites (39.3).

**Figure 12. Age-Adjusted Unintentional Injury Death Rates per 100,000, 1984-2007**

Alaska Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: Surveillance, Epidemiology, and End Results Program

Note: 2004-2007 time period, U.S. rates are calculated only on 2004-2005 data.



## Leading Causes of Injury Death

**Definition:** The **leading causes of injury death** ranks the leading causes of injury related death due to all types of causes.

### Summary

- Drowning was the leading cause of injury-related death among Southeast Alaska Native people.
- Southeast Alaska Native people were less likely to die of injuries than Alaska Native people statewide.

**Table 9. Leading Causes of Injury Death, Southeast Alaska Natives, 1999-2005**

Data Source: Alaska Bureau of Vital Statistics

Leading Causes by Rank	N	% Total	Age-Adjusted Rate per 100,000	Rate Ratio <sup>2</sup> :
				Southeast vs. Alaska Natives
Drowning	17	20%	20.1 <sup>1</sup>	1.6
Motor Vehicle	15	18%	16.6 <sup>1</sup>	0.9
Homicide	12	14%	14.1 <sup>1</sup>	1.0
Suicide	11	13%	11.1 <sup>1</sup>	0.3
Other	29	35%		
<b>Total Injury</b>	<b>84</b>	<b>100%</b>	<b>100.3</b>	<b>0.6*</b>
<b>Total Unintentional</b>	<b>55</b>	<b>65%</b>	<b>69.4</b>	<b>0.7*</b>

\* Significant difference at the p<0.05 probability level

<sup>1</sup> Rate is based on 10-19 deaths and should be interpreted with caution.

<sup>2</sup> Rate ratio: A Rate Ratio less than 1 means that the rate in the population of interest is lower than that of the comparison population. Conversely, a Rate Ratio greater than 1 means that the rate in the population of interest is higher than the comparison population.

## Infant Mortality Rate

**Definition: Infant mortality death** rate is defined as number of deaths within the first year of life per 1,000 live births.

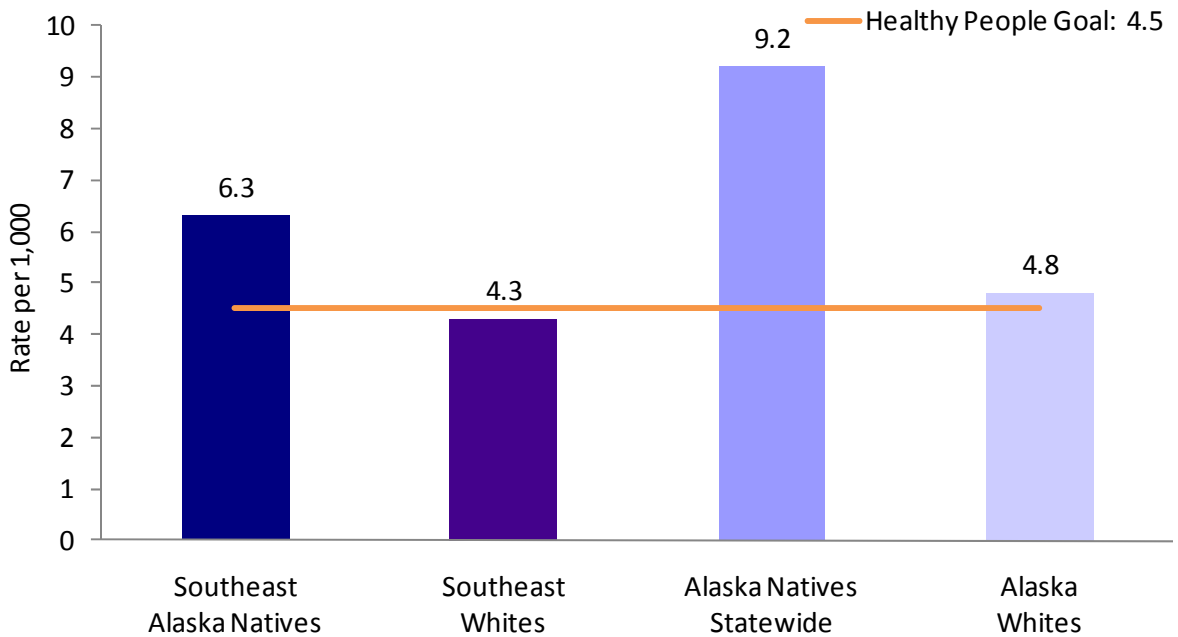
**Healthy People 2010, Goal 16.1c:** Reduce infant death rate to 4.5 per 1,000 live births.

### Summary

- The infant mortality rate for Southeast Alaska Native people was 6.3 per 1,000 live births from 1999-2008.
- The infant mortality rate for Alaska Native people statewide was 9.2 per 1,000 live births from 1999-2008.

**Figure 13. Infant Mortality Rates per 1,000 live births, 1999-2008**

Data Source: Alaska Bureau of Vital Statistics



# **Health Behavior**

## Tobacco Use - Smoking - Adults

**Definition:** Current smokers are adults who smoked at least 100 cigarettes during their lifetime and currently smoke some days or everyday.

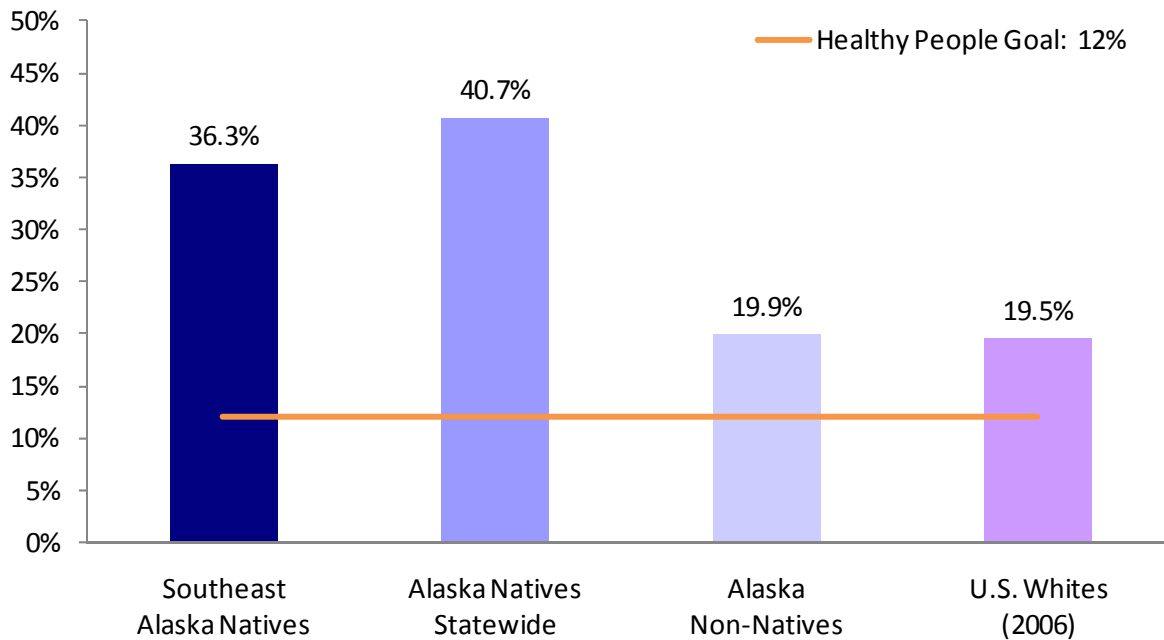
**Healthy People 2010, Goal 27.1a:** Reduce tobacco use by adults to 12%.

### Summary

- Southeast Alaska Native people reported a current smoking prevalence of 36.3%.
- During 2005-2007, Southeast Alaska Native people reported a current smoking prevalence approximately 16.0% higher than Alaska Non-Natives (19.9%) and U.S. Whites (19.5%).
- The prevalence of Southeast Alaska Native smokers was significantly higher than Alaska Non-Natives and U.S. Whites, but did not differ significantly from Alaska Natives statewide.

**Figure 14. Adults who are Current Smokers, 2005-2007**

Data Source: Behavioral Risk Factor Surveillance System





## Tobacco Use - Smokeless Tobacco - Adults

**Definition: Smokeless tobacco use** is defined as adults who currently use smokeless tobacco products including chewing tobacco, snuff, Iq'mik, or Blackbull. Iq'mik is a mixture of ash and leaf tobacco.

**Healthy People 2010, Goal 27.1b:** Reduce spit tobacco use by adults to 0.4%.

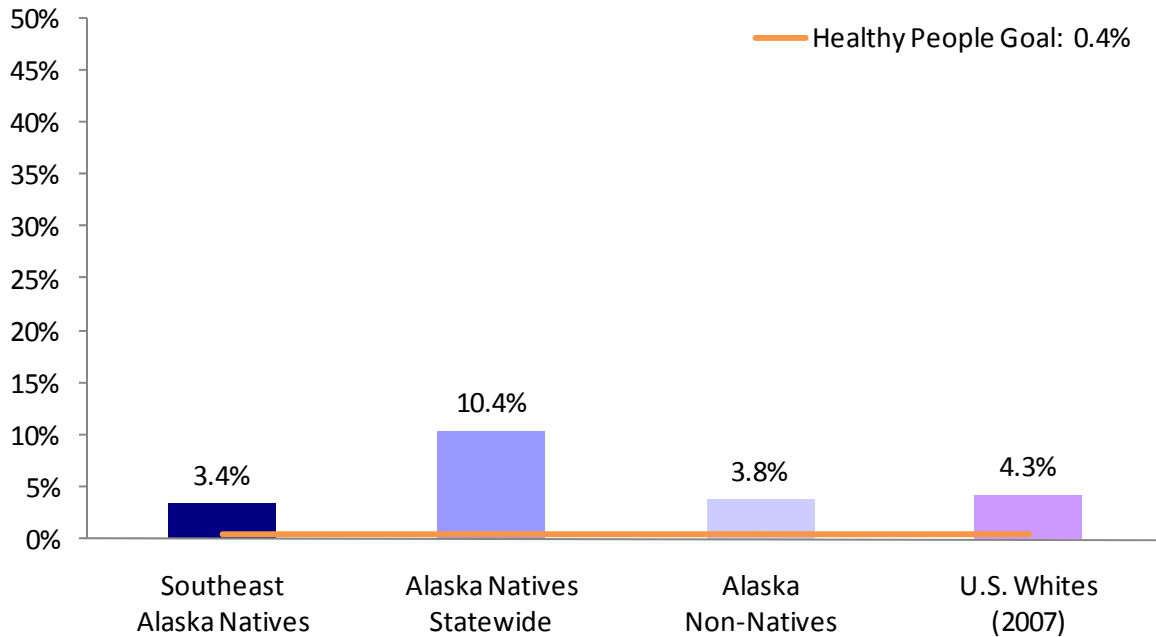
### Summary

- 3.4% of Southeast Alaska Native people are current smokeless tobacco users.
- Alaska Natives statewide reported a prevalence of current smokeless tobacco use of 10.4%, which was significantly higher than the Southeast Alaska Native rate.

**Figure 15. Current Smokeless Tobacco Users, 18 Years and Older, 2005-2007**

Data Source: Behavioral Risk Factor Surveillance System

U.S. Data Source: Substance Abuse and Mental Health Services Administration. Results from the 2007 National Survey on Drug Use and Health: Detailed Tables. Rockville (MD): Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2007.



## Physical Activity - Adults

**Definition:** The recommended physical activity for adults is **moderate physical activity** (30 or more minutes a day, 5 or more days per week) or **vigorous physical activity** (20 or more minutes a day, 3 times or more a week).

**Healthy People 2010, Goal 22.2:** Increase to 50% the proportion of adults who engage in moderate physical activity for at least 30 minutes per day 5 or more days per week or vigorous physical activity for at least 20 minutes per day 3 or more days per week.

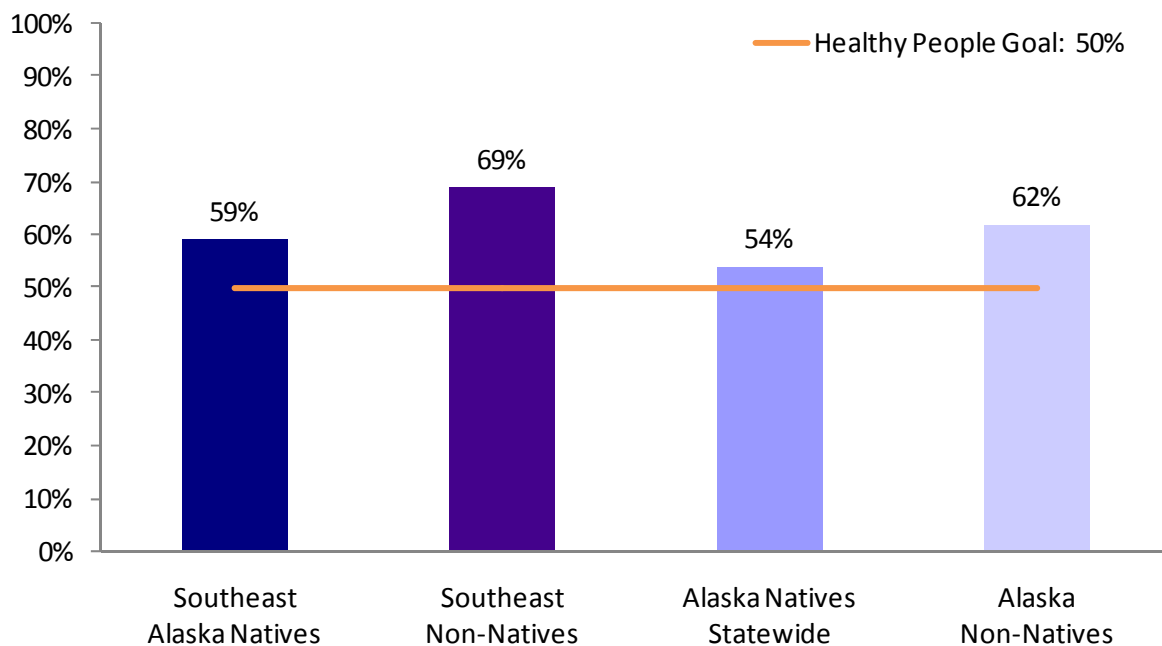
### Summary

- 59% of Southeast Alaska Native people participated in the recommended levels of moderate and/or physical activity.
- All groups exceeded the Healthy People Goal for moderate and/or vigorous physical activity during 2007.

**Figure 16. Adults Who Meet Moderate and/or Vigorous Physical Activity Recommendations, 2007**

Southeast Data Source: SEARHC Steps Data

Alaska Data Source: Behavioral Risk Factor Surveillance System



## Obesity - Adults

**Definition:** **Obesity** is defined as having a body mass index (BMI) of 30.0 or greater.

**Healthy People 2010, Goal 19.2:** Reduce the proportion of adults who are obese to 15%.

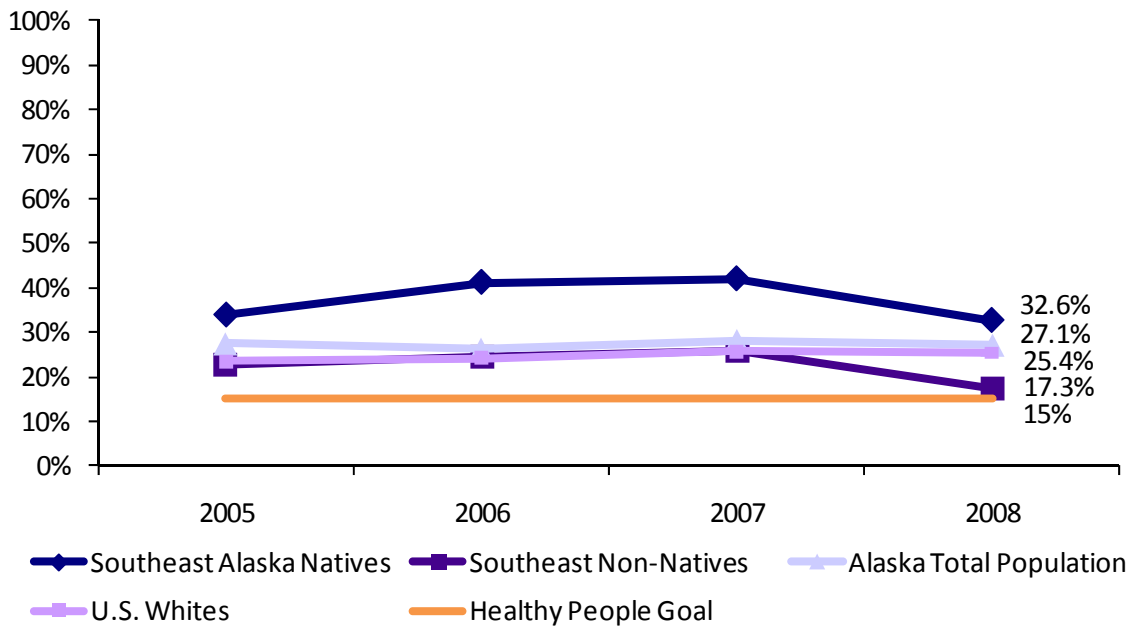
### Summary

- One out of three (32.6%) Southeast Alaska Native people reported a prevalence of BMI  $\geq$  30.
- All populations did not meet the Healthy People Goal of 15%.

**Figure 17. Obesity (BMI  $\geq$  30), 18 Years and Older, 2005-2008**

Southeast Data Source: SEARHC Steps Data

Alaska and U.S. Data Source: Behavioral Risk Factor Surveillance System



## Overweight - Adults

**Definition:** **Overweight** is defined as having a body mass index (BMI) from 25.0 to 29.9.

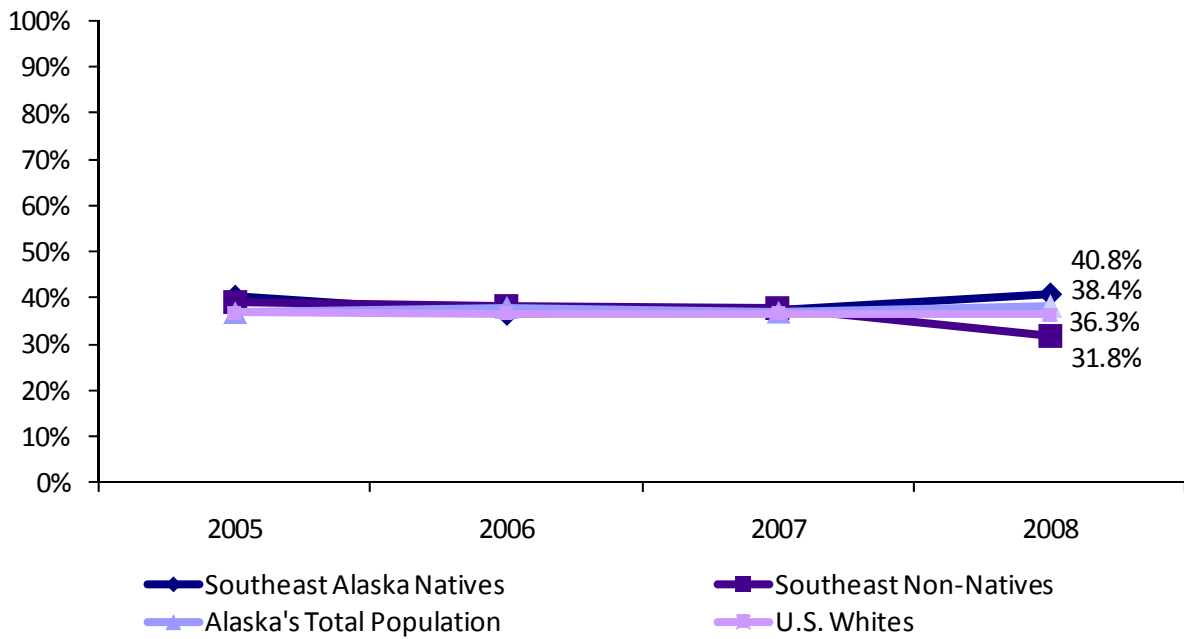
### Summary

- Southeast Alaska Native, Southeast Non-Native people, Alaska’s total population, and U.S. Whites reported a similar prevalence of overweight persons (Range: 31.8% to 40.8%).
- 40.8% of Southeast Alaska Native people reported a BMI between 25.0 and 29.9 in 2008.

**Figure 18. Overweight (25 ≤ BMI ≤ 29.9), 18 Years and Older, 2005-2008**

Southeast Data Source: SEARHC Steps Data

Alaska and U.S. Data Source: Behavioral Risk Factor Surveillance System



## Breastfeeding Initiation

**Definition: Breastfeeding Initiation** is defined as mothers of newborns who initiated breastfeeding at birth.

**Healthy People 2010, Goal 16.19a:** Increase the proportion of mothers who breastfeed their babies in the early postpartum period to 75%.

### Summary

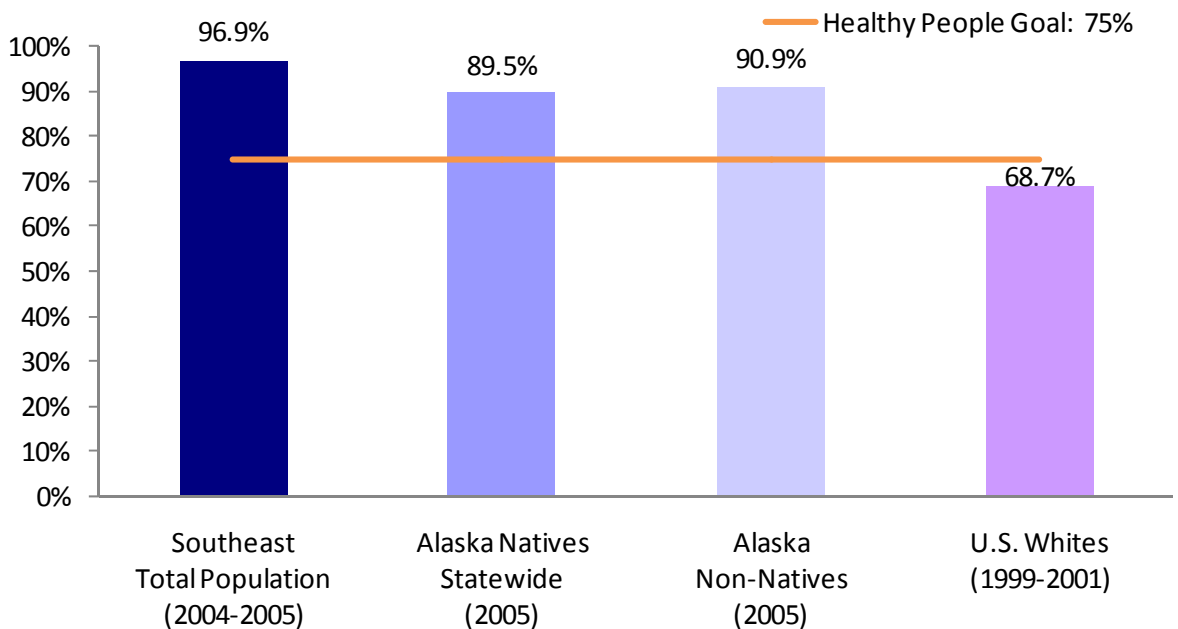
- Among Southeast Alaska mothers, 96.9% initiated breastfeeding among their newborns.
- Among Alaska Native mothers statewide, 89.5% initiated breastfeeding among their newborns.

**Figure 19. Percent of Mothers Who Initiated Breastfeeding, 2004-2005**

Primary Data Source: Pregnancy Risk Assessment Monitoring System

Secondary Data Source: Alaska Maternal and Child Health Data Book 2008: Health Status Edition, State of Alaska

U.S. Data Source: National Center for Health Statistics, Health, United States, 2008, With Chartbook, Hyattsville, MD: 2009



## Abstaining from Smoking during Pregnancy

**Definition:** **Abstaining from smoking during pregnancy** is defined as women who reported that they did not smoke anytime during their pregnancy as documented on the birth certificate.

**Healthy People 2010, Goal 16.17c:** Increase abstinence from cigarette smoking among pregnant women to 99%.

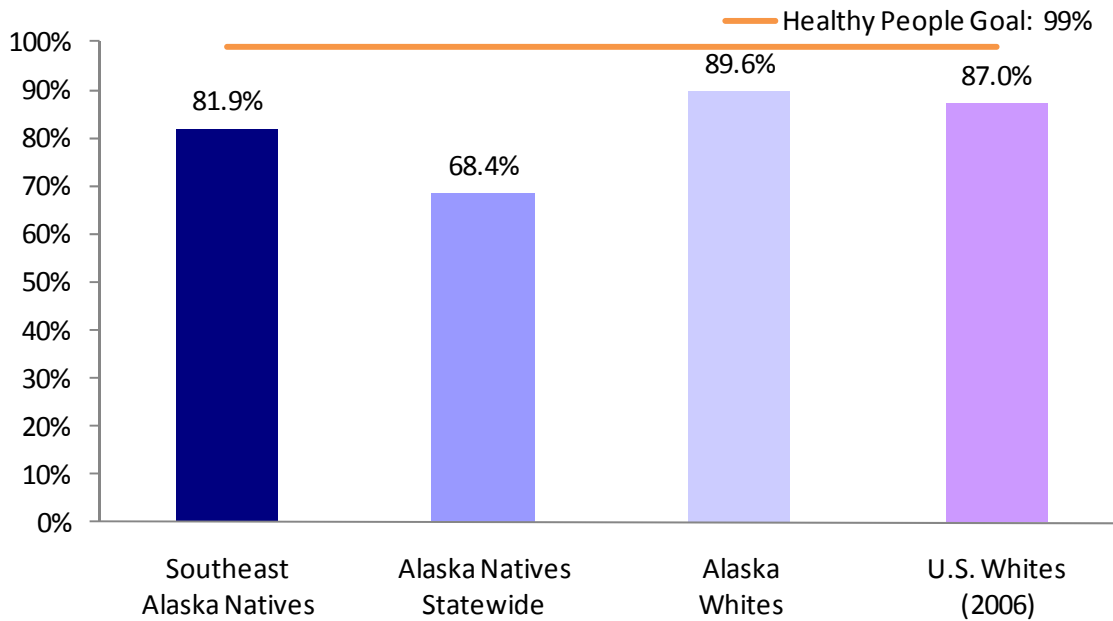
### Summary

- Among Southeast Alaska Native mothers, 81.9% abstained from smoking during pregnancy.
- 68.4% of Alaska Native mothers statewide and 89.6% of Alaska White mothers abstained from smoking during pregnancy.

**Figure 20. Percent of Women Reporting Abstinence from Smoking during Pregnancy, 2006-2008**

Primary Data Source: Alaska Bureau of Vital Statistics

U.S. Data Source: National Center for Health Statistics. Health, United States, 2009: With Special Feature on Medical Technology. Hyattsville, MD. 2010.



## Abstaining from Alcohol Consumption during Pregnancy

**Definition: Abstaining from alcohol consumption during pregnancy** is defined as women who reported that they did not drink alcohol anytime during their pregnancy as documented on the birth certificate.

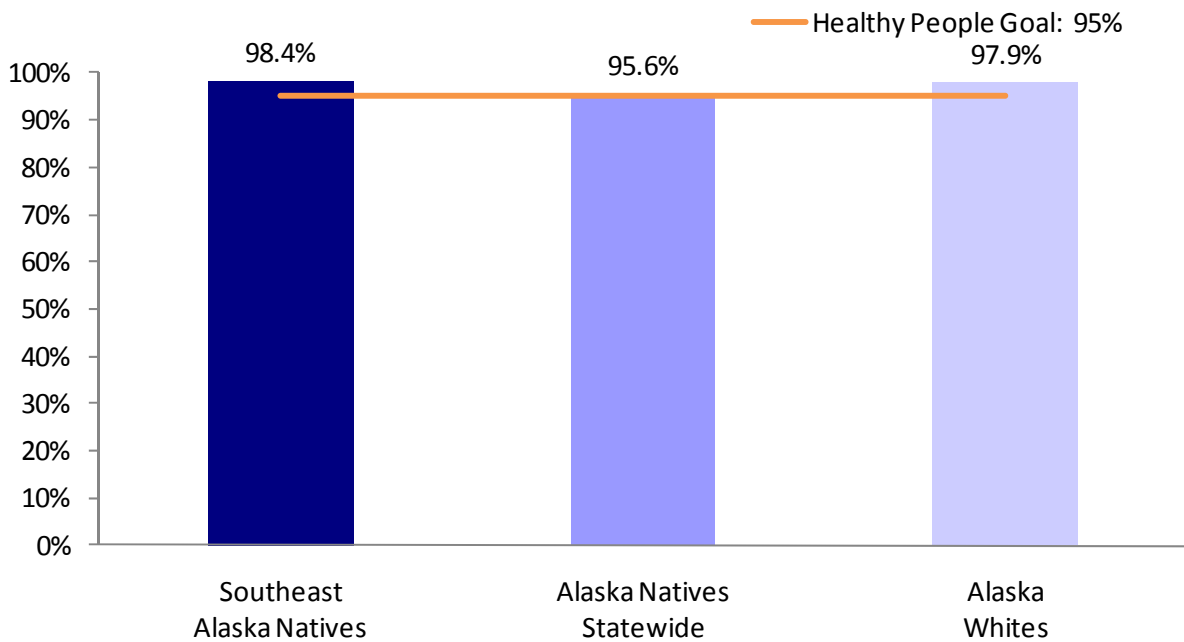
**Healthy People 2010, Goal 16.17a:** Increase abstinence from alcohol among pregnant women to 95%.

### Summary

- 98.4% of Southeast Alaska Native mothers abstained from alcohol during pregnancy.
- Southeast Alaska Native (98.4%), Alaska Native Statewide (95.6%), and Alaska White (97.9%) mothers reported a similar prevalence of abstaining from alcohol use during pregnancy.

**Figure 21. Percent of Women Reporting Abstinence from Alcohol Use during Pregnancy, 2006-2008**

Primary Data Source: Alaska Bureau of Vital Statistics



## Adult Intimate Partner Lifetime Violence

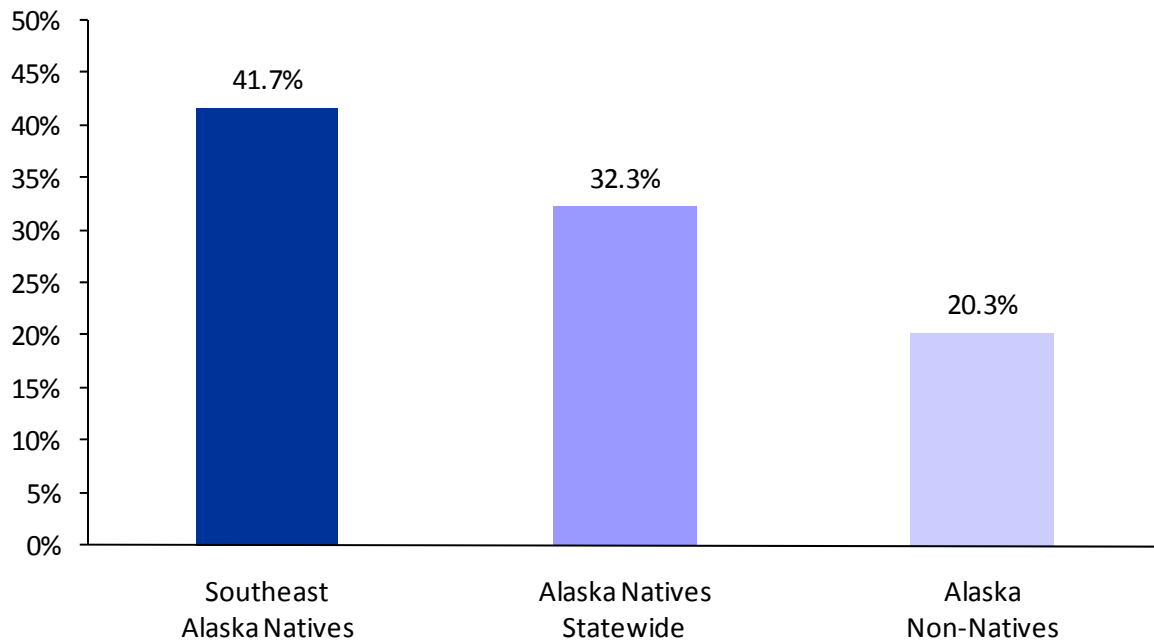
**Definition: Adult intimate partner lifetime violence** is defined as someone who reported ever having an intimate partner ever hit, slap, punch, shove, kick, choke, hurt or threatened the individual.

### Summary

- Southeast Alaska Native people (41.7%) and Alaska Native people statewide (32.3%) reported a significantly higher prevalence of having experienced violence from an intimate partner than Alaska Non-Natives (20.3%).

**Figure 22. Percent of Individuals Reporting Intimate Partner Violence in Their Lifetime, 2006**

Data Source: Behavioral Risk Factor Surveillance System





## Juvenile Justice

**Definition:** Juvenile justice includes unduplicated youth who were referred to the State of Alaska Division of Juvenile Justice for criminal activity during the fiscal year.

### Summary

- In Southeast Alaska, 525 juveniles were referred from law enforcement to the State of Alaska Division of Juvenile Justice.
- Southeast accounted for 24.4% (243) of Alaska's total out-of-home placements (994).
- In 2006, the majority of juveniles from Southeast Alaska in out-of-home placements were placed in foster care or group home (208). None were placed in residential psychiatric treatment and 35 were placed in a Division of Juvenile Justice facility.

**Table 10. Juvenile Justice Statistics, State Fiscal Year 2006**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services

Region/Census Area	Crimes		Caseload*		Out-of-Home Placements			Total Placements
	Referrals from Law Enforcement	Unduplicated Individuals	Non-custody	Custody	Level A	Level B	Level C	
Juneau	458	270	170	0	118	0	35	153
Ketchikan	239	153	128	0	60	0	0	60
Petersburg	27	18	2	0	0	0	0	0
Prince of Wales	36	30	27	0	0	0	0	0
Sitka	75	54	24	0	30	0	0	30
<b>Southeast Total</b>	<b>835</b>	<b>525</b>	<b>351</b>	<b>0</b>	<b>208</b>	<b>0</b>	<b>35</b>	<b>243</b>

\* Caseload is the number of unduplicated juveniles supervised by the State of Alaska Division of Juvenile Justice at any time during the fiscal year.

Level A: Foster care and group home

Level B: Residential Psychiatric Treatment Center in-state and out-of-state

Level C: Division of Juvenile Justice facility placement

## At Risk of Being Overweight - Adolescents

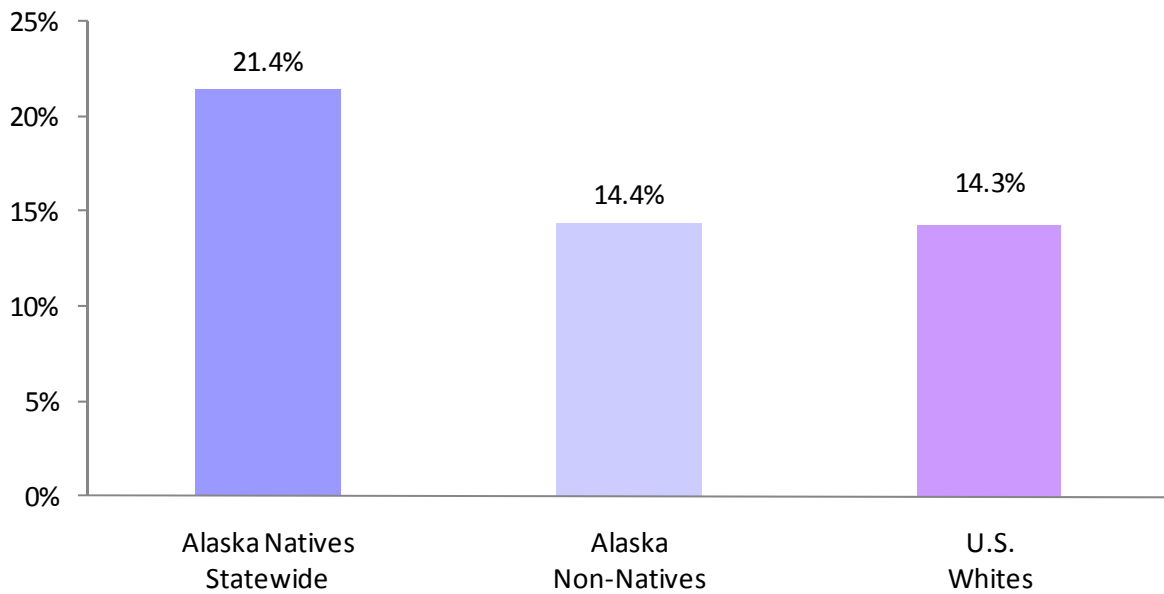
**Definition:** Adolescents at risk of being overweight are in the 85th to 95th percentile of BMI.

### Summary

- 21.4% of Alaska Native high school students are at risk of being overweight.
- 14.4% of Alaska Non-Native high school students are at risk of being overweight.

**Figure 23. Percent of High School Students Who Are at Risk for Becoming Overweight, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Overweight - Adolescents

**Definition:** In children and adolescents, **overweight** is defined as having a body mass index (BMI) greater than or equal to the 95th percentile of the CDC growth charts.

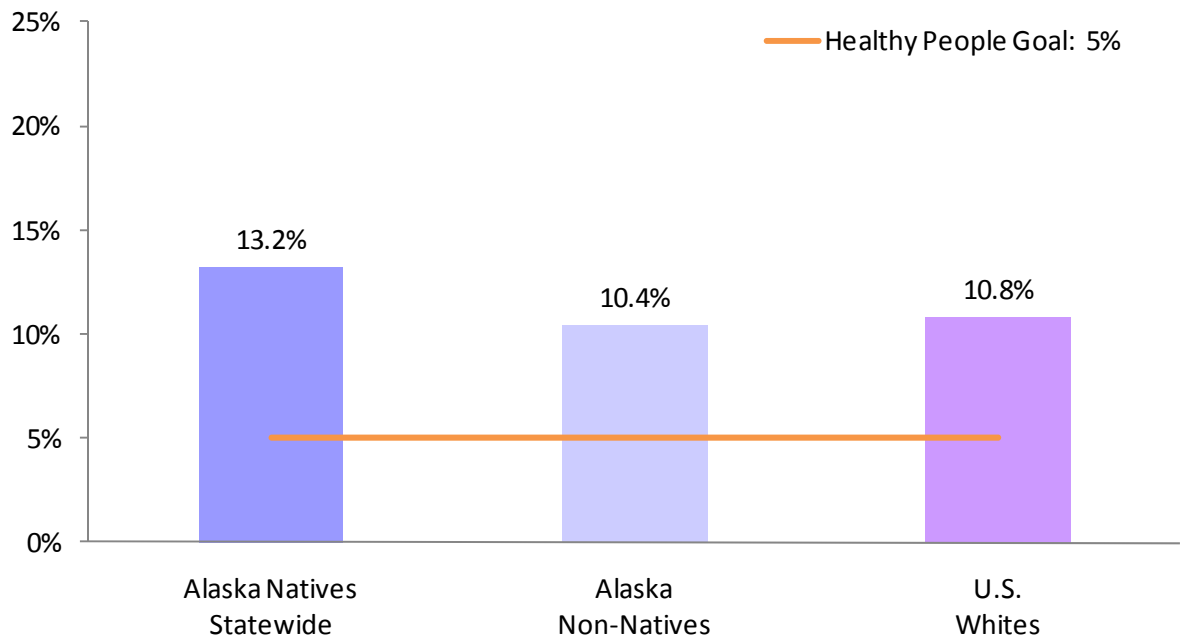
**Healthy People 2010, Goal 19.3b:** Reduce the proportion adolescents aged 12 to 19 who are overweight to 5.0%.

### Summary

- 13.2% of Alaska Native high school students reported a BMI in the 95th percentile.
- Alaska Native, Alaska Non-Native, and U.S. White high school students have not achieved the Healthy People 2010 Goal.

**Figure 24. Percent of High School Students Who are Overweight, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Physical Activity - Adolescents

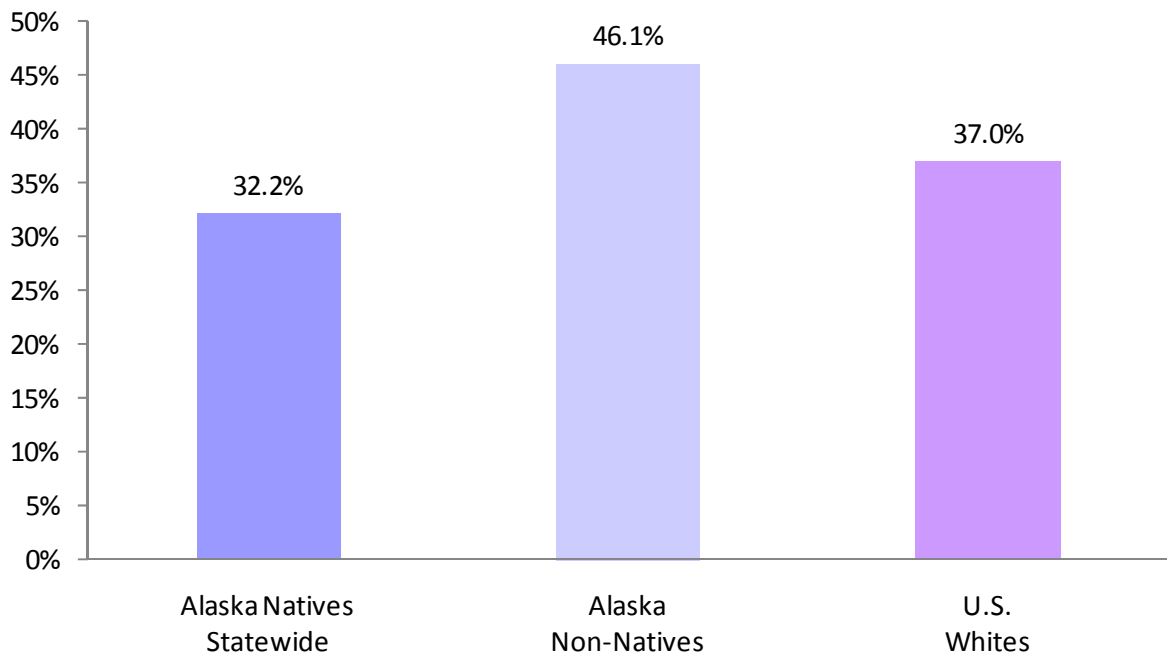
**Definition:** Recommended levels of **physical activity** for adolescents are defined as students who were physically active for a total of at least sixty minutes per day on five or more of the past seven days.

### Summary

- 32.2% percent of Alaska Native high school students engaged in recommended levels of physical activity.
- Alaska Native high school students participated in physical activity significantly less than Alaska White students (46.1%) and U.S. White (37.0%) students.

**Figure 25. Percent of High School Students Who Engage in Recommended Levels of Physical Activity, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Alcohol Use - Adolescents

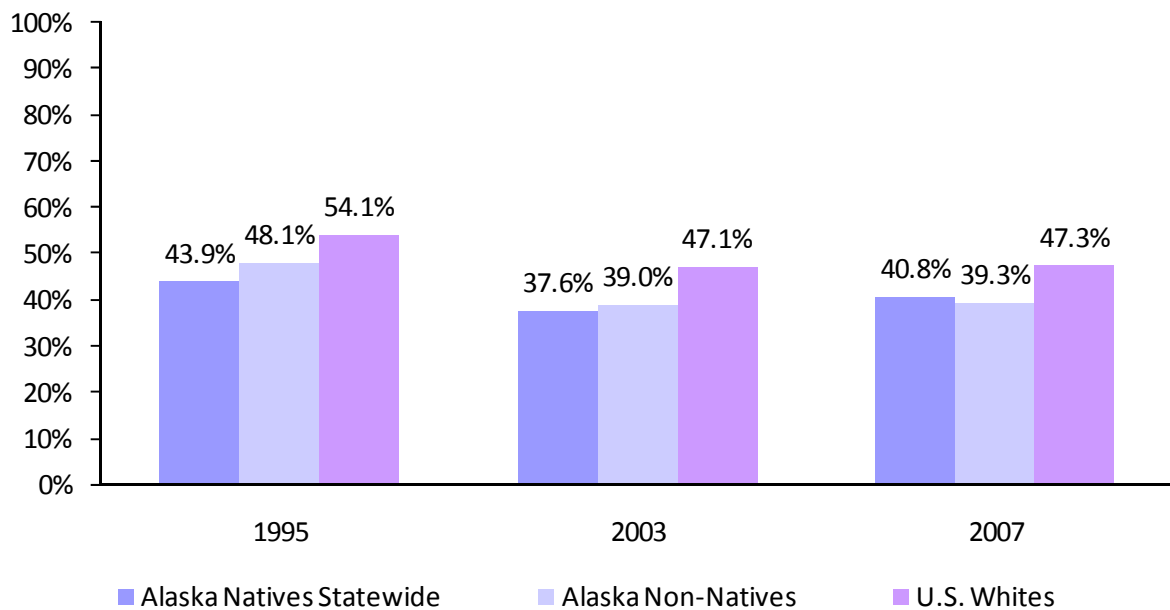
**Definition: Adolescent alcohol use** is the percent of high school students, grades 9-12, who consumed alcohol in the past 30 days.

### Summary

- U.S. White students reported the highest percent of current drinking in 1995, 2003, and 2007 compared to Alaska Native students and Alaska Non-Native students.
- The prevalence of current drinking decreased 7.1% from 1995 to 2007 for Alaska Natives, 18.3% for Alaska Non-Natives, and 12.6% for U.S. Whites.

**Figure 26. Percent of High School Students Who Had at Least One Drink of Alcohol on One or More of the Past 30 Days, 1995, 2003, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Tobacco Use - Smoking - Adolescents

**Definition:** Current **tobacco use** is defined as the percent of high school students grade 9-12 who have smoked cigarettes on one or more of the past 30 days.

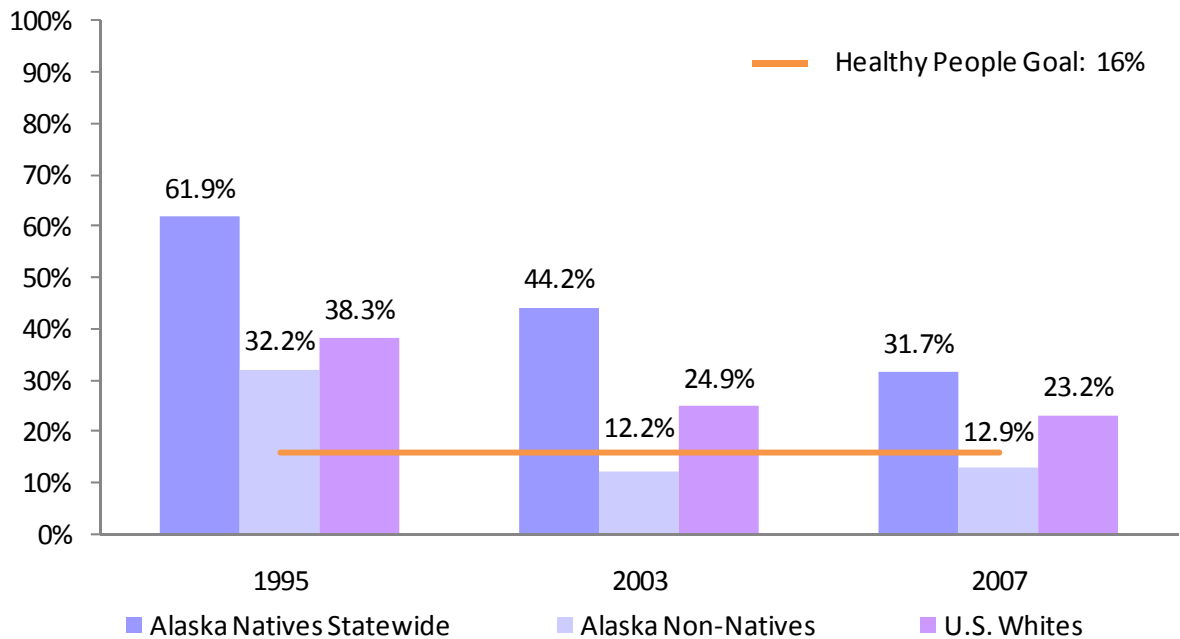
**Healthy People 2010, Goal 27.2b:** Reduce cigarette smoking by adolescents in the past month to 16%.

### Summary

- Current smoking decreased among Alaska Native youth (-48.8%), Alaska Non-Native youth (-59.9%), and U.S. Whites (-39.4%) from 1995 to 2007.
- Alaska Native youth reported a significantly higher prevalence of smoking (31.7%) than Alaska Non-Native youth (12.9%) and U.S. Whites (23.2%) in 2007.

**Figure 27. Percent of High School Students Who Smoked Cigarettes on One or More of the Past 30 Days, 1995, 2003, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Tobacco Use - Smokeless - Adolescents

**Definition:** Current **smokeless tobacco use** is defined as the percent of high school students grade 9-12 who have used smokeless tobacco on one or more of the past 30 days.

**Healthy People 2010, Goal 27.2c:** Reduce spit tobacco use by adolescents in the past month to 1%.

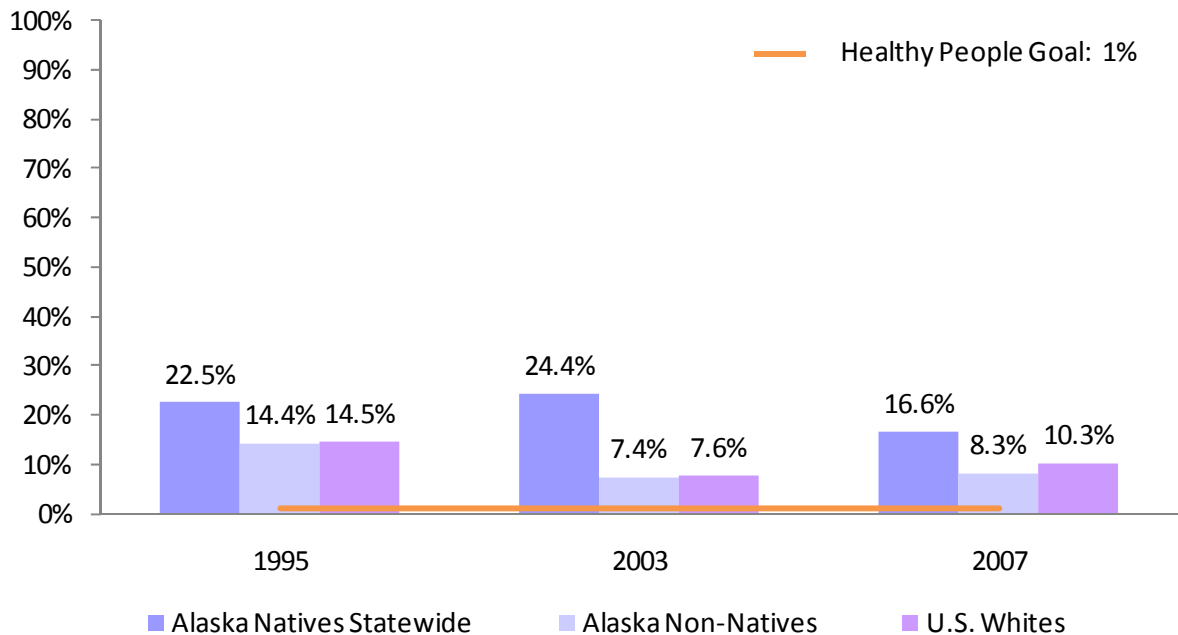
### Summary

- 16.6% of Alaska Native, 8.3% of Alaska Non-Native, and 10.3% of U.S. White high school students reported smokeless tobacco use in 2007.
- Self-reported smokeless tobacco use among Alaska Native students declined 26.2% from 1995 (22.5%) to 2007 (16.6%).

**Figure 28. Percent of High School Students Who Used Chewing Tobacco or Snuff on One or More of the Past 30 days, 1995, 2003, 2007**

Data Source: Youth Risk Behavior Surveillance System

U.S. Data Source: YRBS Factsheet. Health Risk Behaviors by Race/Ethnicity National YRBS: 2007. Centers for Disease Control and Prevention.



## Substance Use - Marijuana - Adolescents

**Definition: Substance Abuse - Marijuana** among adolescents, grades 9-12, is defined as having used marijuana in the past 30 days.

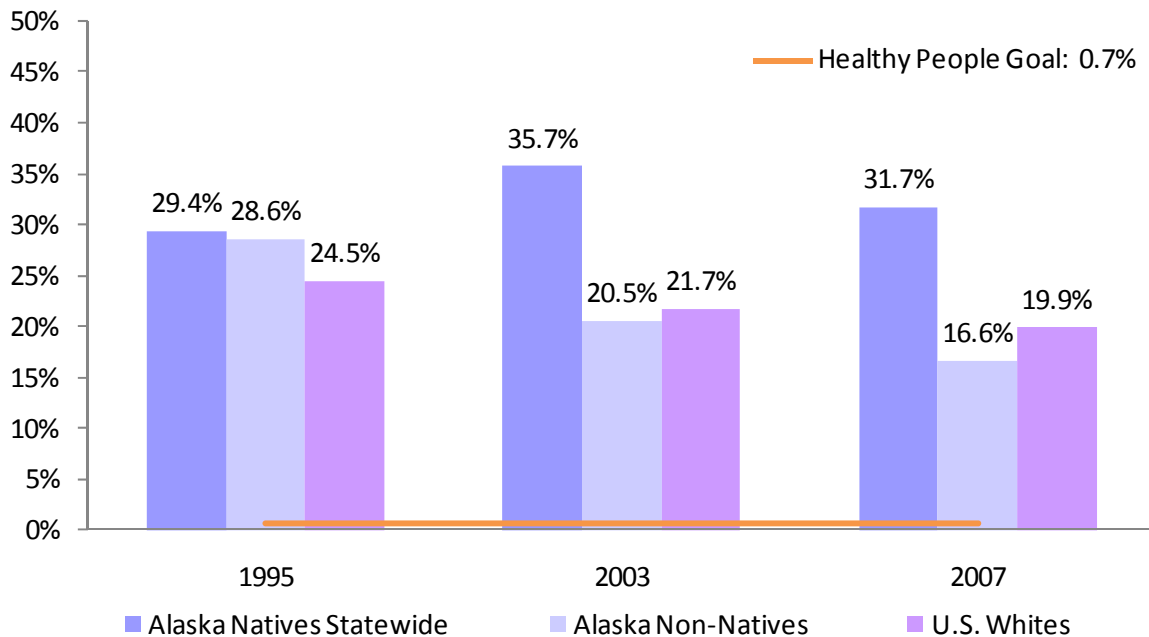
**Healthy People 2010, Goal 26.10b:** Reduce the proportion of adolescents reporting the use of marijuana during the past 30 days to 0.7%.

### Summary

- Alaska Native students (31.7%) reported a significantly higher percent of using marijuana in the past 30 days than Alaska Non-Native (16.6%) and U.S. White students (19.9%) in 2007.
- The prevalence of marijuana use among Alaska Native students increased 2.3% between 1995 and 2007, while the prevalence decreased for Alaska Non-Native students (12.0%) and U.S. White students (4.6%).

**Figure 29. Percent of High School Students Who Used Marijuana on One or More of the Past 30 Days, 1995, 2003, 2007**

Data Source: Youth Risk Behavior Surveillance System





## Substance Use - Cocaine - Adolescents

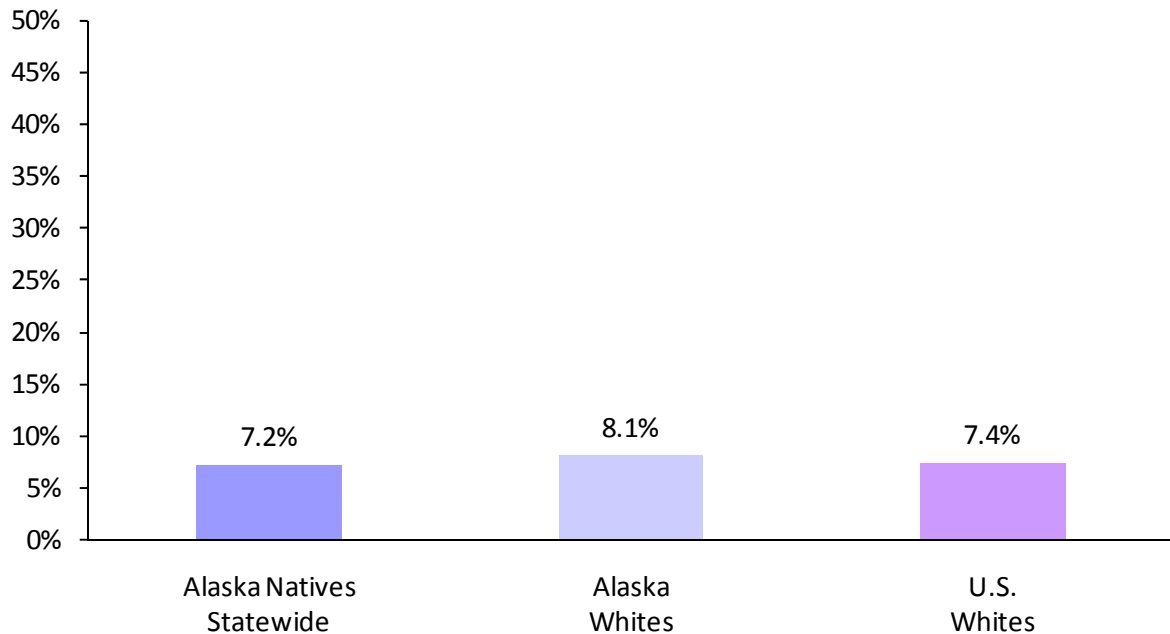
**Definition: Substance Abuse - Cocaine** among adolescents, grades 9-12, is defined as having used any form of cocaine in their lifetime.

### Summary

- Alaska Native students (7.2%), Alaska Whites (8.1%), and U.S. Total Population students (7.4%) reported a similar prevalence of lifetime cocaine use in 2007.

**Figure 30. Percent of High School Students Who Used Any Form of Cocaine, Including Powder, Crack or Freebase during their Lifetime, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Responsible Sexual Behavior - Adolescents

**Definition:** Responsible sexual behavior of adolescents, grades 9-12, is defined as having never engaged in sexual intercourse.

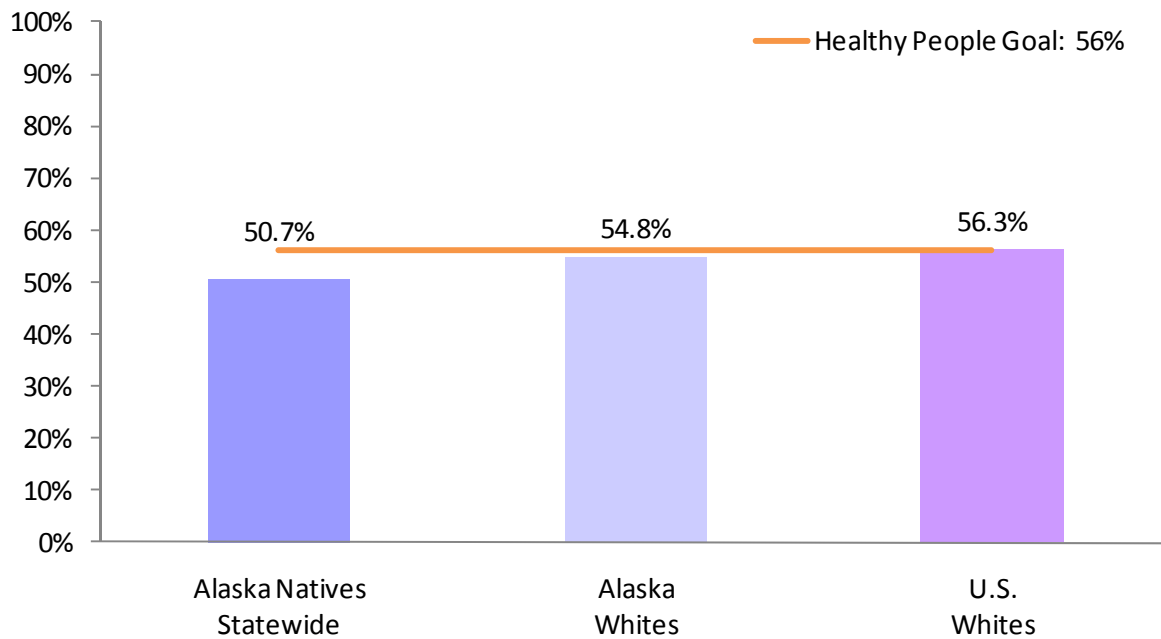
**Healthy People 2010, Goal 25.11a:** Increase the proportion of adolescents who have never engaged in sexual intercourse to 56%

### Summary

- One-half of Alaska Native high school students are sexually active.
- Alaska Native youth reported similar percents to Alaska White and U.S. White students for having never engaged in sexual intercourse.

**Figure 31. Percent of High School Students Who Have Never Engaged in Sexual Intercourse, 2007**

Data Source: Youth Risk Behavior Surveillance System



## Safety of Children

**Definition: Safety of children** is measured by substantiated reports of harm to children to the State of Alaska's Office of Children's Services.

### Summary

- 8.9% (444) of Alaska's total instances of substantiated reports of child abuse (5,010) occurred in Southeast Alaska.
- Neglect was the leading cause of substantiated reports of harm in Southeast Alaska.

**Table 11. Safety of Children, Selected Measures of Reported Harm, Federal Fiscal Year 2006**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services

Borough or Census Area <sup>†</sup>	Physical		Medical	Sexual	Psychological	Total Instances of Abuse <sup>**</sup>
	Abuse	Neglect <sup>*</sup>	Neglect	Abuse	or Emotional Maltreatment	
Haines	0	0	0	0	0	0
Juneau	40	129	16	12	76	273
Ketchikan Gateway	18	53	5	0	19	95
Prince of Wales	5	11	0	1	16	33
Sitka	3	13	2	5	7	30
Skagway-Hoonah-Angoon	0	0	0	0	0	0
Wrangell						
Petersburg	1	5	0	3	4	13
Yakutat	0	0	0	0	0	0
<b>Southeast Total</b>	<b>67</b>	<b>211</b>	<b>23</b>	<b>21</b>	<b>122</b>	<b>444</b>

<sup>†</sup> The Child Protective Services' census area or borough to which the report of substantiated maltreatment was assigned.

<sup>\*</sup> Neglect category also includes abandonment.

<sup>\*\*</sup> Not an unduplicated count of individuals.

## Childhood Violence

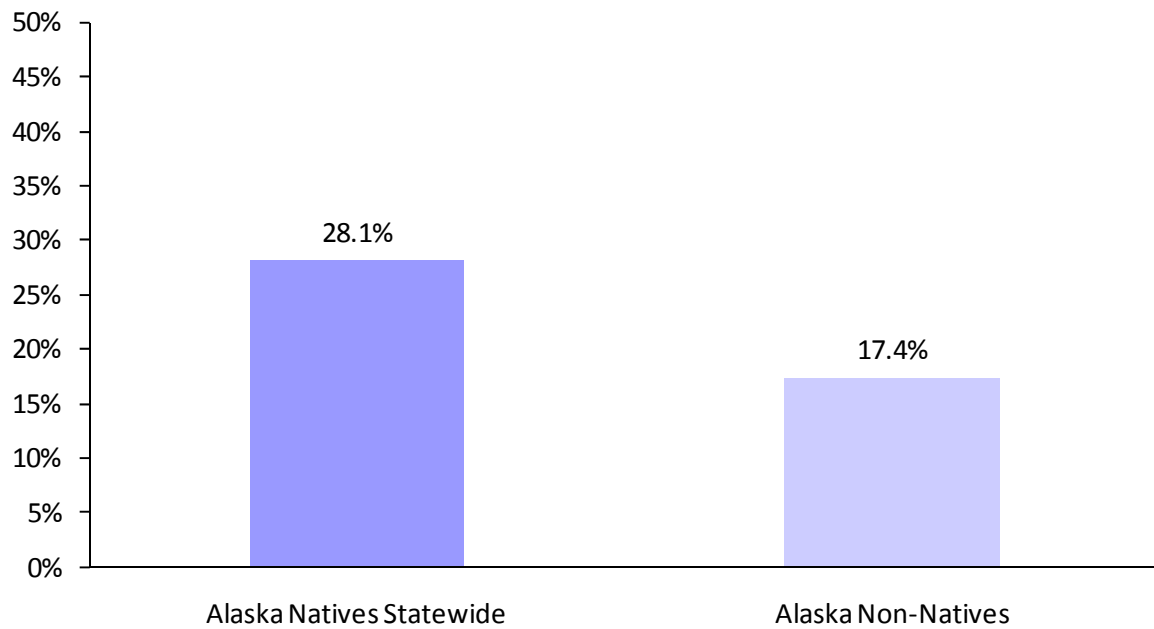
**Definition:** **Childhood violence** is an adult who saw or heard a parent or guardian being hit, slapped, punched, shoved, kicked, or otherwise physically hurt by their spouse or partner as a child.

### Summary

- 28.1% of Alaska Native adults reported that they saw intimate partner violence as a child.
- 17.4% of Alaska Non-Native adults reported that they saw intimate partner violence as a child.

**Figure 32. Percent of Adults Who Witnessed Intimate Partner Violence as a Child, 2006**

Data Source: Behavioral Risk Factor Surveillance System



# **Health Indicators**

## Leading Causes of Inpatient Hospital Discharges

**Definition:** An **inpatient hospital discharge** is the primary International Classification of Disease discharge diagnosis for inpatient visits as reported to the Indian Health Service's National Patient Information Reporting System for the federal fiscal year.

### Summary

- Live births were the leading cause of hospitalizations in Southeast (12.3%) in FY 2009.
- The top 10 discharge diagnoses accounted for 42.9% of the hospitalizations in Southeast in FY 2009.
- The average length of a hospitalization stay was 3.7 days in FY 2009.

**Table 12. Leading Causes of Inpatient Hospital Discharges, Southeast, Fiscal Year 2009**

Data Source: National Patient Information Reporting System - Indian Health Service National Data Warehouse

Primary Discharge Diagnosis Clinical Classification Group by Rank	N	% of Total	Total Days	Average Length of Stay
1 - Liveborn	185	12.3%	425	2.3
2 - Alcohol-related disorders	72	4.8%	300	4.2
3 - Biliary tract disease	68	4.5%	146	2.1
4 - Pneumonia (except that caused by tuberculosis or sexually transmitted disease)	57	3.8%	323	5.7
5 - OB-related trauma to perineum and vulva	56	3.7%	121	2.2
6 - Nonspecific chest pain	44	2.9%	88	2.0
7 - Skin and subcutaneous tissue infections	44	2.9%	207	4.7
8 - Cardiac dysrhythmias	43	2.9%	145	3.4
9 - Abdominal hernia	41	2.7%	106	2.6
10 - Other complications of birth; puerperium affecting management of mother	32	2.1%	76	2.4
<b>Top 10 Causes</b>	<b>642</b>	<b>42.9%</b>	<b>1,937</b>	<b>3.0</b>
<b>All Other Causes</b>	<b>856</b>	<b>57.1%</b>	<b>3,613</b>	<b>4.2</b>
<b>Total</b>	<b>1,498</b>	<b>100.0%</b>	<b>5,550</b>	<b>3.7</b>

Note 1: Includes inpatient visits reported from Mt. Edgecumbe Hospital and SEARHC Health Center, Juneau

Note 2: Injuries are also a substantial reason for hospitalizations. The system used to group diagnoses for this report split injuries into multiple groups, but if all injuries had been grouped together, they would have been #2 on the list (representing 85 discharges with 292 total days and an average length of stay of 3.4). More information on hospitalized injuries is available on the "Injury Hospitalizations" pages of this report.

Note 3: This table includes Indian Health Service beneficiary and non-Indian Health Service beneficiary visits.

## Leading Causes of Outpatient Visits

**Definition:** An **outpatient visit** is based on the primary International Classification of Disease - 9 diagnoses as reported to the Indian Health Service's National Patient Information Reporting System for the federal fiscal year.

### Summary

- The top three reasons for outpatients visits in Southeast during fiscal year 2009 were:
  1. Essential hypertension (elevated blood pressure not due to other reasons)
  2. Medical examination/evaluation
  3. Other upper respiratory infections
- The top 10 causes of outpatient visits accounted for 33.4% of the workload.
- Injuries and poisonings are a substantial reason for outpatient visits.

**Table 13. Leading Causes of Outpatient Visits, Southeast, Fiscal Year 2009**

Data Source: National Patient Information Reporting System - Indian Health Service National Data Warehouse

Ambulatory Patient Care Visits		
by Rank	Total	%
1. Essential hypertension†	7,698	4.2%
2. Medical examination/evaluation	7,452	4.1%
3. Other upper respiratory infections	7,444	4.1%
4. Other aftercare	6,626	3.7%
5. Rehabilitation care; fitting of prostheses; and adjustment of devices	6,136	3.4%
6. Spondylosis; intervertebral disc disorders; other back problems	5,958	3.3%
7. Other non-traumatic joint disorders	5,092	2.8%
8. Mood disorders	5,004	2.8%
9. Diabetes mellitus without complication	4,914	2.7%
10. Other screening for suspected conditions (not mental disorders or infectious disease)	4,234	2.3%
<b>Top 10 Total</b>	<b>60,558</b>	<b>33.4%</b>
<b>All Other Causes</b>	<b>120,744</b>	<b>66.6%</b>
<b>Grand Total</b>	<b>181,302</b>	<b>100.0%</b>

† Essential hypertension refers to increased blood pressure without an identifiable cause.

Note 1: Includes Angoon, Bartlett Memorial Hospital, Front Street Clinic, Haines, Hoonah, Hydaburg, Kake, Kasaan, Ketchikan General Hospital, KIC Tribal Health Clinic, Klawock, Klukwan, Metlakatla Health Center, Mt. Edgumbe Hospital, Pelican City, SEARHC Health Center, Juneau, Wrangell, Yakutat Community HC.

Note 2: Administrative reasons (including prescription refills) were excluded from this analysis.

Note 3: This table includes Indian Health Service beneficiary and non Indian Health Service beneficiary visits.

Note 4: The system used to group diagnoses for this report split injuries into multiple groups, however, if all injuries had been grouped together, they would have been #5 on this list, representing 3.6% (6,464) of all outpatient visits. More information on hospitalized injuries is available in the "Injury Hospitalizations" pages of this report.

## Leading Causes of Injury Hospitalizations

**Definition:** An **injury hospitalization** is defined as having sustained an injury that results in either inpatient admission or transfer to an acute care facility.

### Summary

- Falls were the leading cause of nonfatal injury hospitalizations for Southeast Alaska Native people in 1994-2004.
- Southeast Alaska Native people had an unintentional injury hospitalization rate of 120.2 per 10,000.

**Table 14. Leading Causes of Injury Hospitalizations, Southeast Alaska Natives, 1994-2004**

Secondary Data Source: Alaska Native Injury Atlas of Mortality and Morbidity, The Injury Prevention Program and the Alaska Native Epidemiology Center, Alaska Native Tribal Health Consortium, January 2008

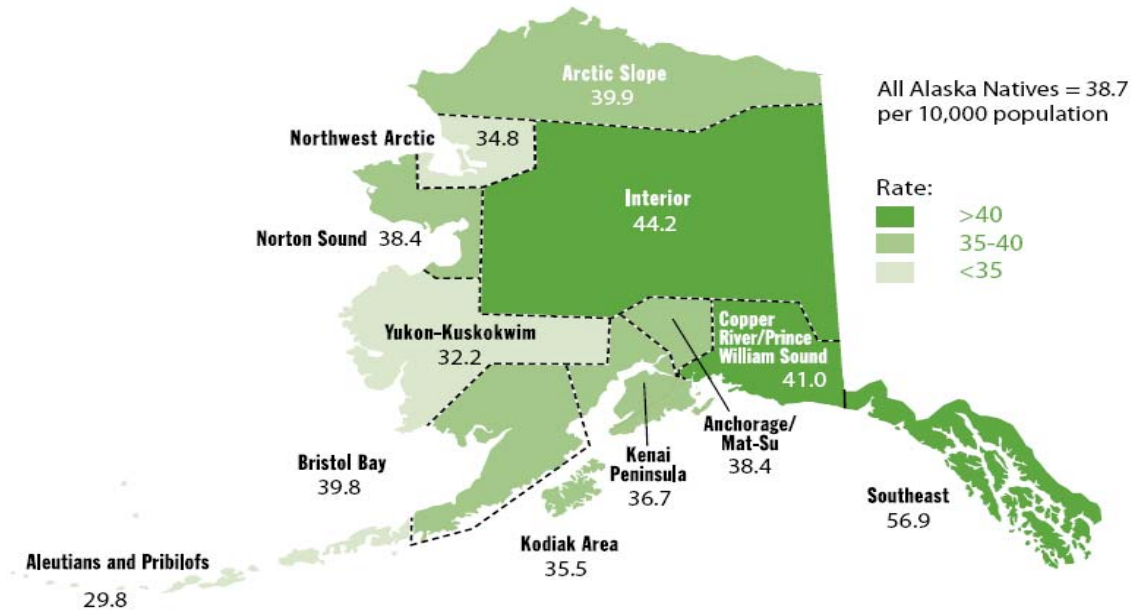
Leading Causes by Rank	N	% Total	Crude Rate per 10,000
1. Falls	858	33.1%	56.2
2. Suicide Attempt	409	15.8%	26.8
3. Assault	327	12.6%	21.4
4. Motor Vehicle Traffic	254	9.8%	16.6
5. Struck by an Object/Person	139	5.4%	9.1
All Others	606	23.4%	39.7
<b>Total Injuries</b>	<b>2,593</b>	<b>100.0%</b>	<b>169.9</b>
<b>Total Unintentional Injuries</b>	<b>1,835</b>	<b>70.8%</b>	<b>120.2</b>



## Injury Hospitalizations – Falls

**Figure 33. Fall Hospitalization Rate by Region, Alaska Natives, Rate per 10,000, 1991-2003**

Data Source: Alaska Trauma Registry



## Leading Cancers

**Definition:** **Leading Cancers** is a count of the top ten cancers reported to the Alaska Native Tumor Registry.

### Summary

- The most frequently diagnosed cancers for Southeast Alaska Natives from 1998-2007 were breast (16.4%), colorectal (13.0%), and lung (9.1%).
- The top three account for 38.5% of all cancer for Southeast Alaska Native people from 1998-2007.

**Table 15. Leading Cancers, Southeast Alaska Natives, 1998-2007**

Data Source: Alaska Native Tumor Registry

Site of Cancer by Rank	N	%
1. Breast*	97	16.4%
2. Colorectal Cancer	77	13.0%
3. Lung	54	9.1%
4. Prostate	52	8.8%
5. Non-Hodgkin Lymphoma	28	4.7%
6. Kidney	20	3.4%
7. Oral	17	2.9%
8. Uterus	15	2.5%
9. Stomach	15	2.5%
10. Urinary Bladder	15	2.5%
<b>Total Top Ten Cancers</b>	<b>390</b>	<b>66.0%</b>
<b>Total All Cancers</b>	<b>591</b>	<b>100.0%</b>

\*In situ cases not included (Breast = 29 and Colorectal Cancer = 9).

## Diabetes

**Definition:** **Diabetes** is a metabolic disease characterized by high blood sugar levels, which result from defects in insulin secretion, insulin action, or both. The measures for diabetes include diabetes prevalence and the rate of increase of prevalence.

**Healthy People 2010, Goal 5.3:** Reduce the overall cases of diabetes that are clinically diagnosed to 25 per 1,000 population

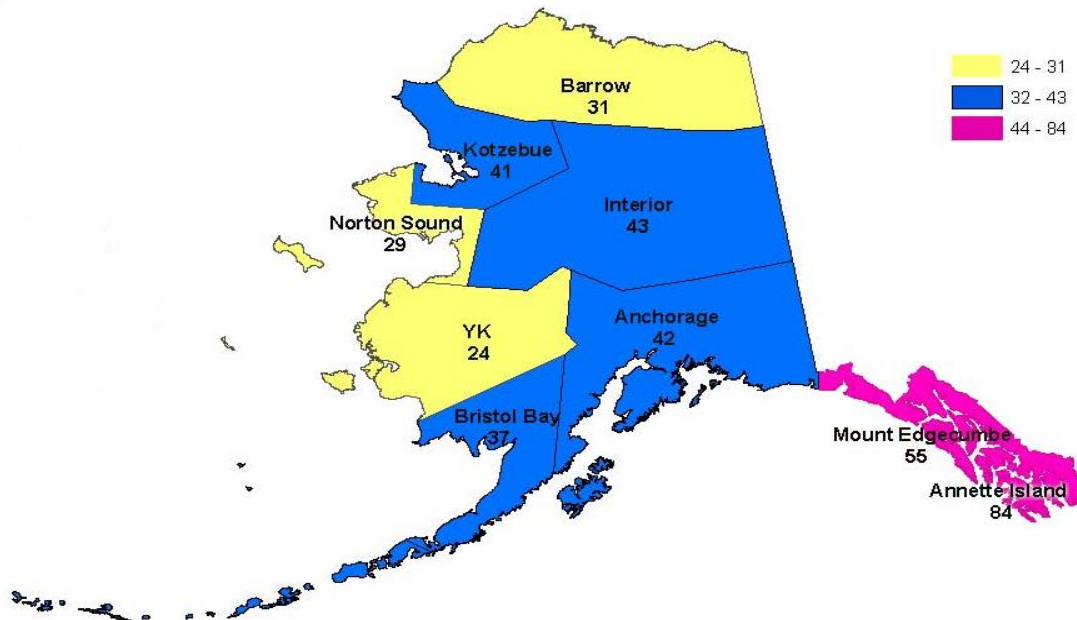
### Summary

- The 2007 age-adjusted prevalence of diabetes among Southeast Alaska Native people was 55 per 1,000 people and, among Alaska Native people statewide, it was 40 per 1,000 people.
- The prevalence of diabetes increased 118% from 1990 to 2007 among Alaska Native people in the Southeast region. The Alaska Native statewide increase was 117% for the same time period.

**Figure 34. Diabetes Prevalence among Alaska Natives, Rate per 1,000, 2007**

Data Source: Alaska Area Diabetes Registry

\*The Indian Health Service user population is the denominator and the data was age - adjusted to the Standard U.S. 2000 Population.

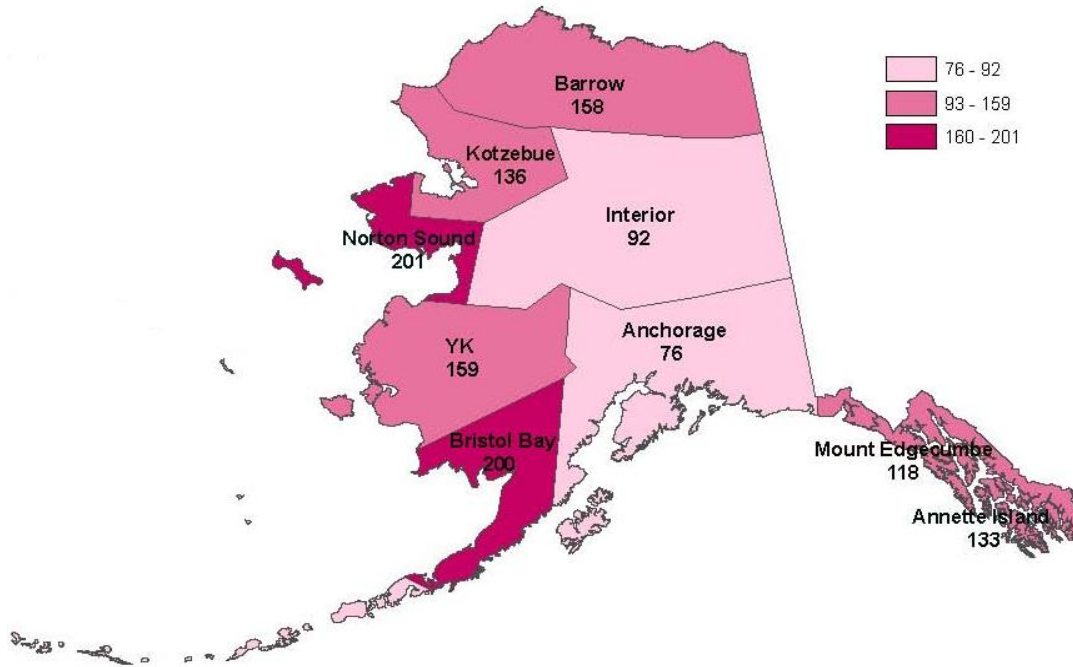


**Diabetes**

**Figure 35. Percent Increase in Diabetes Prevalence among Alaska Natives, 1990-2007**

Data Source: Alaska Area Diabetes Registry

\*The Indian Health Service user population is the denominator and the data was age-adjusted to the Standard U.S. 2000 Population.



## Asthma

**Definition:** Asthma is a respiratory disease characterized by coughing, wheezing, and chest tightness. Asthma prevalence is defined as ever been diagnosed with asthma by a health care provider

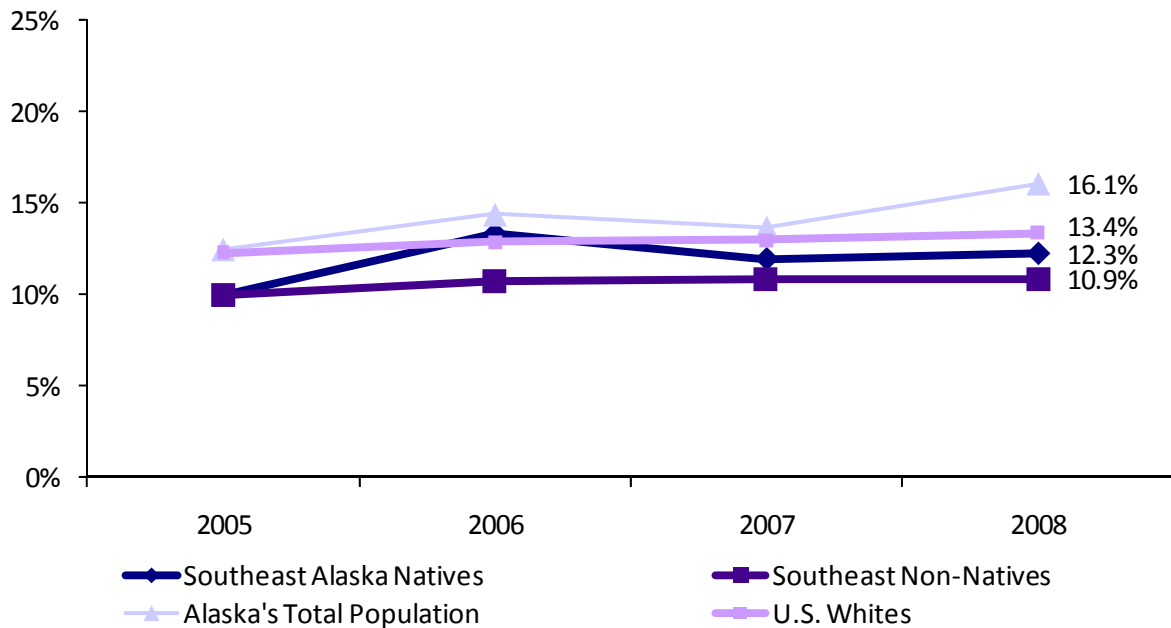
### Summary

- There was a self-reported asthma prevalence of 12.3% among Southeast Alaska Natives people in 2008.
- The self-reported asthma prevalence increased 23.0% between 2005 and 2008 among Southeast Alaska Native people.

**Figure 36. Percentage of Southeast Alaska Natives Who Reported Asthma, 2005-2008**

Southeast Data Source: SEARHC Steps Data

Alaska and U.S. Data Source: Behavioral Risk Factor Surveillance System



## Low Birth Weight

**Definition:** Low birth weight is defined as births less than 2500 grams.

**Healthy People 2010, Goal 16.10a:** Reduce low birth weight to 5.0% of live births.

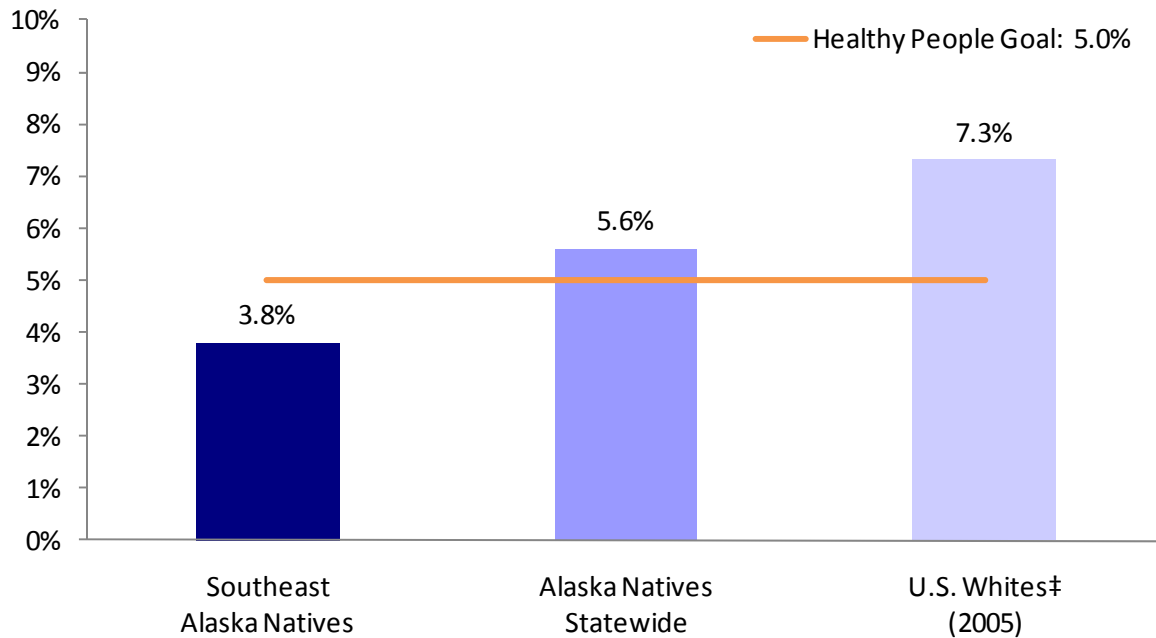
### Summary

- 3.8% of Alaska Native live births in the Southeast region were born with low birth weight; achieving the Healthy People Goal of 5.0% between 2001-2005.
- The prevalence of low birth weight births among Alaska Native people statewide was 5.6% (2001-2005) and among U.S. Non-Hispanic Whites it was 7.3% (2005).

**Figure 37. Percentage of Live Births with Low Birth Weight, 2001-2005**

Primary Data Source: Alaska Bureau of Vital Statistics

Secondary Data Source: Alaska Native Maternal and Child Health Report: Trends and Data, Alaska Native Epidemiology Center



‡ Non Hispanic

## Teen Birth Rate

**Definition:** The **teen birth rate** is the number of births to girls 15-19 years of age per 1,000 females in this age group in the population per year.

**Healthy People 2010, Goal 9.7:** Reduce pregnancies among adolescent females to 39 per 1,000 females (15 to 17 years).

\*Note: Data presented are for teen births aged 15-19 years. The Healthy People 2010 Goals are to reduce young teen births aged 15-17 years.

### Summary

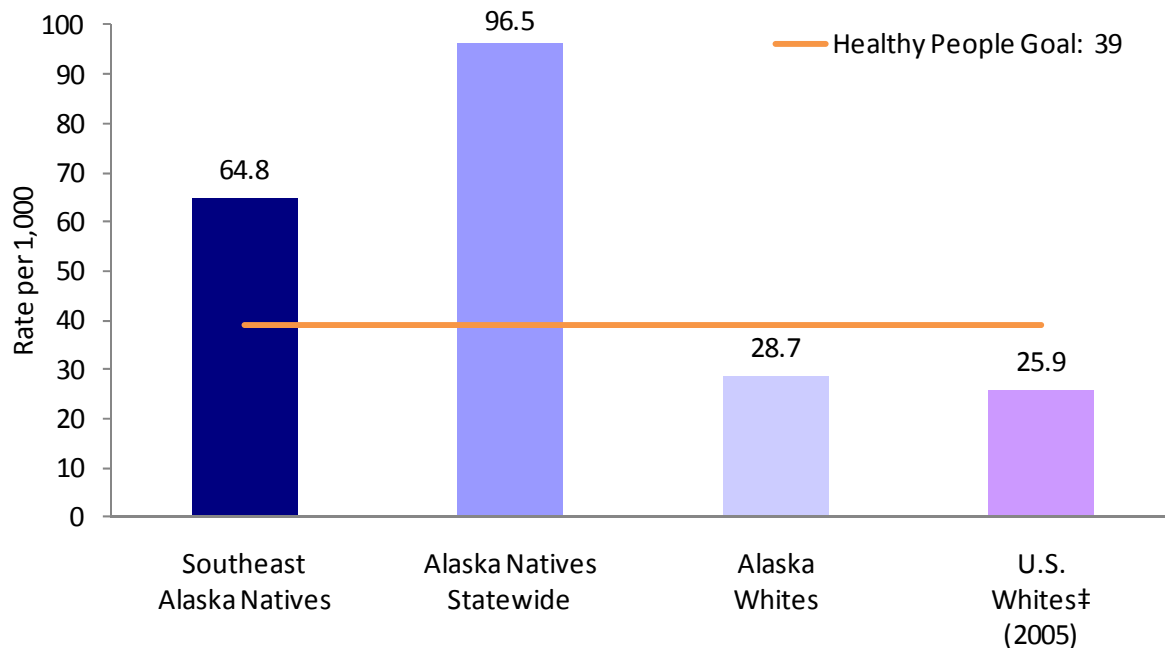
- The teen birth rate among Southeast Alaska Native teens was 64.8 and among Alaska Natives Statewide it was 96.5.
- The teen birth rate for Southeast Alaska Native teens was more than twice the teen birth rate of U.S. Non-Hispanic Whites.

**Figure 38. Teen Birth Rate per 1,000 Live Births, Females 15-19 Years, 2001-2005**

Primary Data Source: Alaska Bureau of Vital Statistics

Secondary Data Source: Alaska Native Maternal and Child Health Report: Trends and Data, Alaska Native Epidemiology Center 2008

U.S. Whites Data Source: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports; vol 56 no 6. Hyattsville, MD: National Center for Health Statistics, 2007.



‡ Non-Hispanic

## Sexually Transmitted Infections - Gonorrhea

**Definition:** **Gonorrhea** is a sexually transmitted infection caused by the bacterium *Neisseria gonorrhea*.

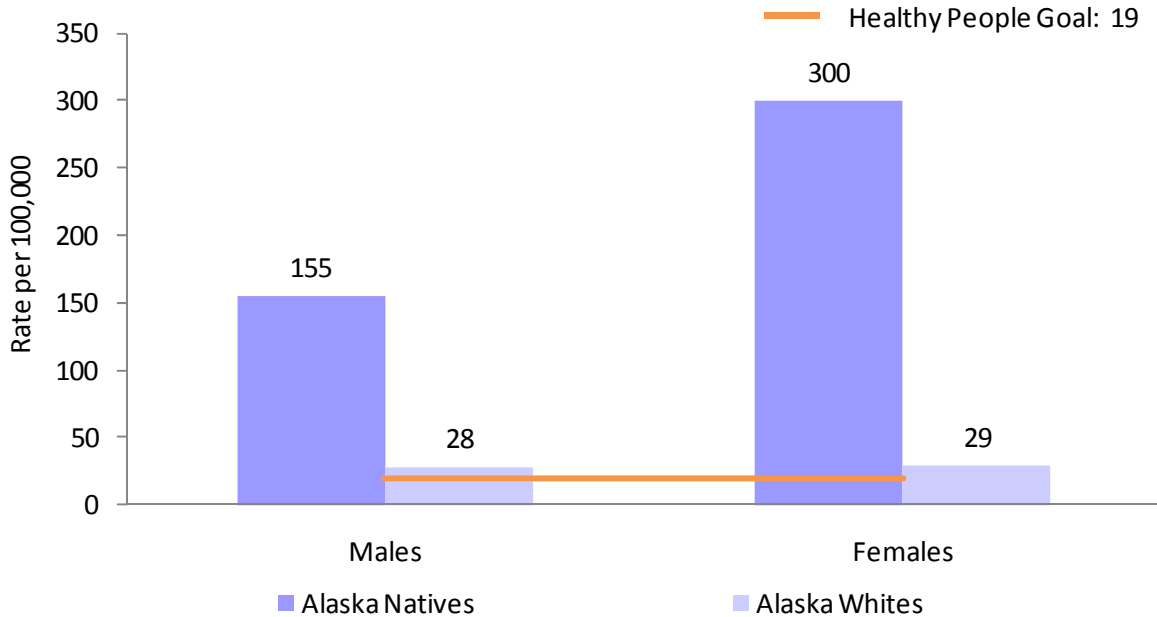
**Healthy People 2010, Goal 25.2:** Reduce the new cases of gonorrhea in the total population to a rate of 19 per 100,000.

### Summary

- The gonorrhea rate for Alaska Native men is 5.5 times the rate among Alaska White men.
- The gonorrhea rate for Alaska Native women is 10.3 times the rate among Alaska White women.

**Figure 39. Statewide 2007 Gonorrhea Rate per 100,000**

Data Source: State of Alaska Epidemiology/HIV/STD Program





## Sexually Transmitted Infections - Chlamydia

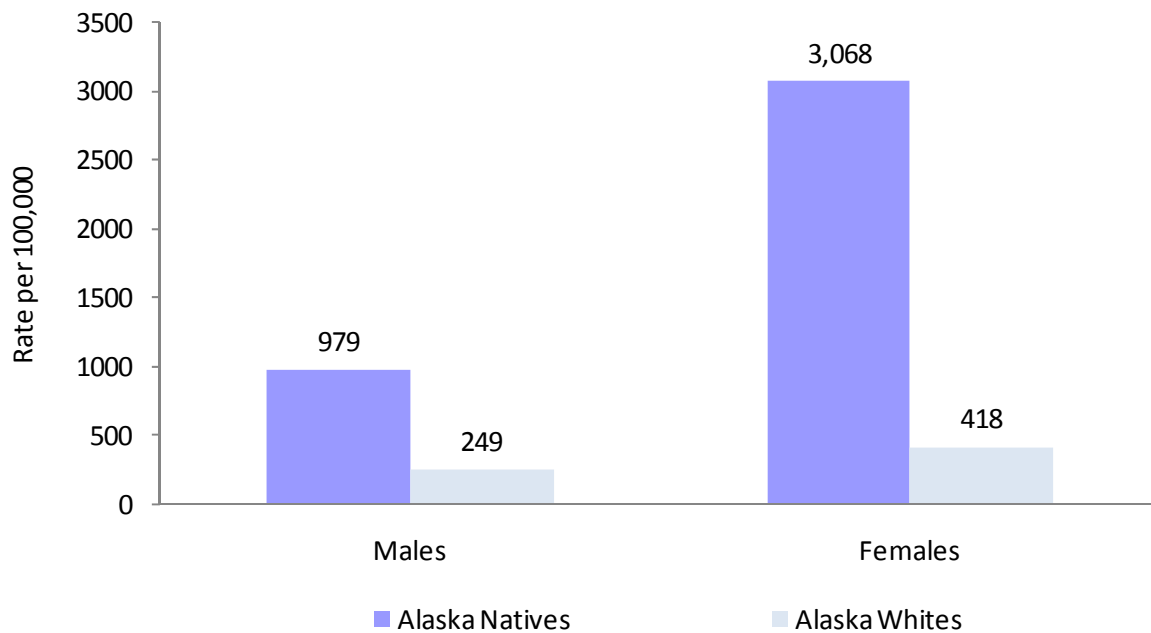
**Definition:** **Chlamydia** is a common sexually transmitted infection caused by the bacterium *Chlamydia trachomatis*.

### Summary

- The chlamydia rate for Alaska Native men is about 4 times the rate among Alaska White men.
- The chlamydia rate reported for Alaska Native women is about 7 times the rate among Alaska White women.

**Figure 40. Statewide 2007 Chlamydia Rate per 100,000**

Data Source: State of Alaska Epidemiology/HIV/STD Program



## Dental - Caries Experience

**Definition:** A **child caries experience** is a percent of third graders who have untreated cavities or treated fillings on their primary and/or permanent teeth based upon a visual examination.

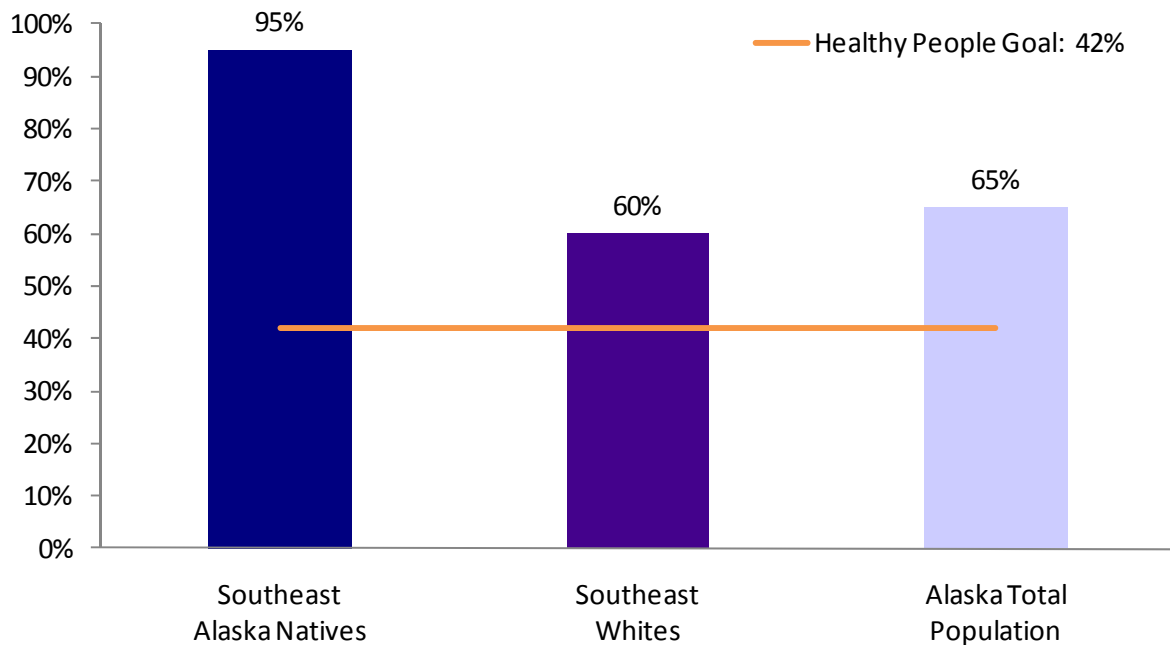
**Healthy People 2010, Goal 21.1b:** Reduce the proportion of young children with dental caries in their primary and permanent teeth to 42%.

### Summary

- 95% of Southeast Alaska Native, 60% of Southeast White, and 60% of Alaska's third graders had cavities in their teeth.
- Southeast and Alaska did not meet the Healthy People Goal of 42%.

**Figure 41. Caries Experience for Third Graders, 2004**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services



## Dental - Untreated Caries

**Definition:** **Untreated caries** is a percent of third graders that have untreated cavities based upon a visual examination.

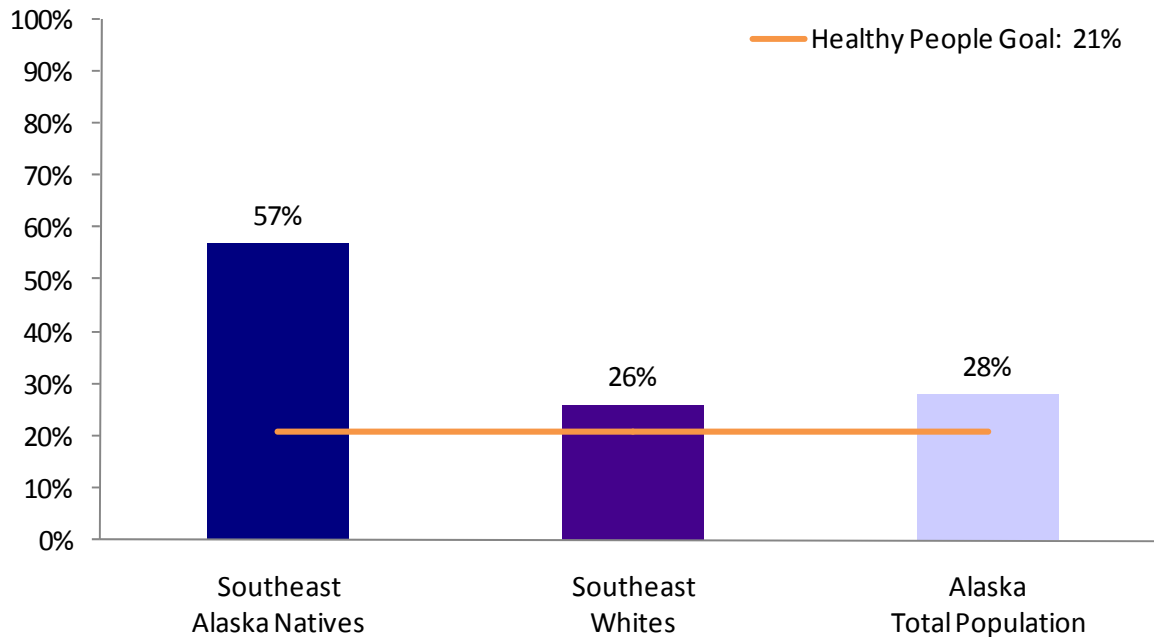
**Healthy People 2010, Goal 21.2b:** Reduce the proportion of children with untreated dental decay in their primary and permanent teeth to 21%.

### Summary

- 57% of Southeast Alaska Native third graders had untreated cavities in 2004.
- Southeast Alaska Native third grader's had nearly 2 times the amount of untreated cavities than Southeast White third graders (26%) and Alaska's total population (28%).

**Figure 42. Child Untreated Caries Experience, Third Graders, 2004**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services



## Dental - Sealant Utilization

**Definition: Sealant utilization** is percent of children in third grade who received dental sealants on their molar teeth based upon a visual examination.

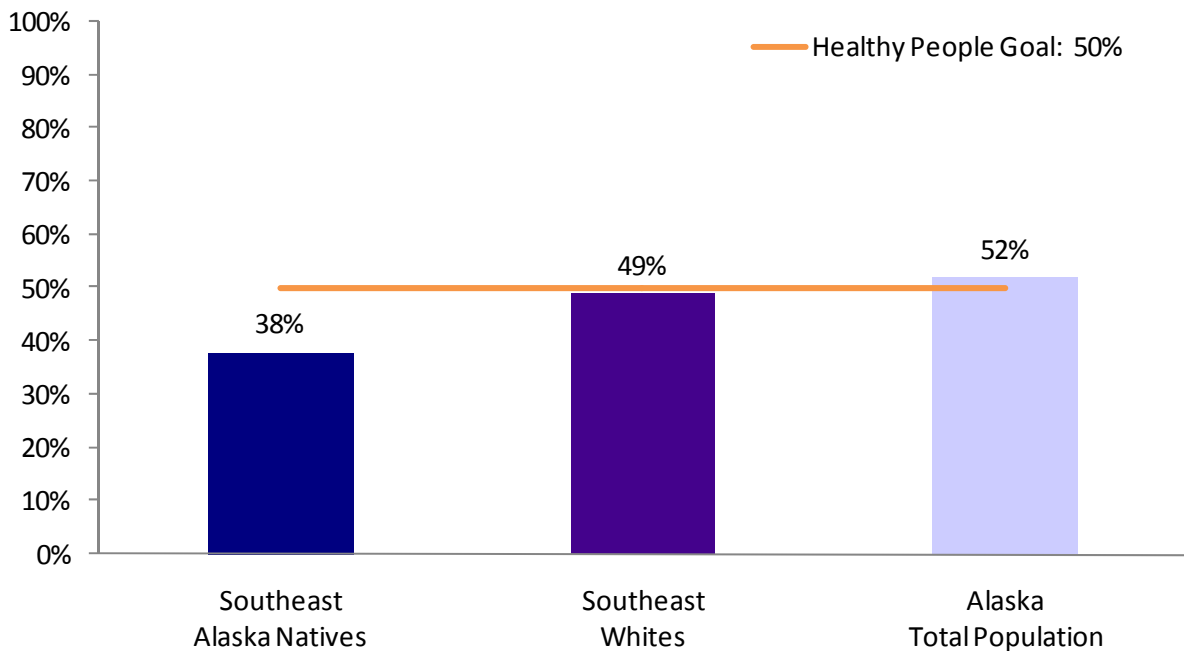
**Healthy People 2010, Goal 21.8a:** Increase the proportion of children who have received dental sealants on their molar teeth to 50%.

### Summary

- 38% of Southeast Alaska Native third graders received dental sealants on their molar teeth in 2004.
- 49% of Southeast White and 52% of Alaska’s children received dental sealants on their teeth.

**Figure 43. Child Sealant Utilizations, Third Graders, 2004**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services and



**Preventive  
Services and  
Access to  
Health Care**

## Cervical Cancer Screening

**Definition: Cervical cancer screening** is defined as females aged 18 and older who report at least one Pap test within the last three years.

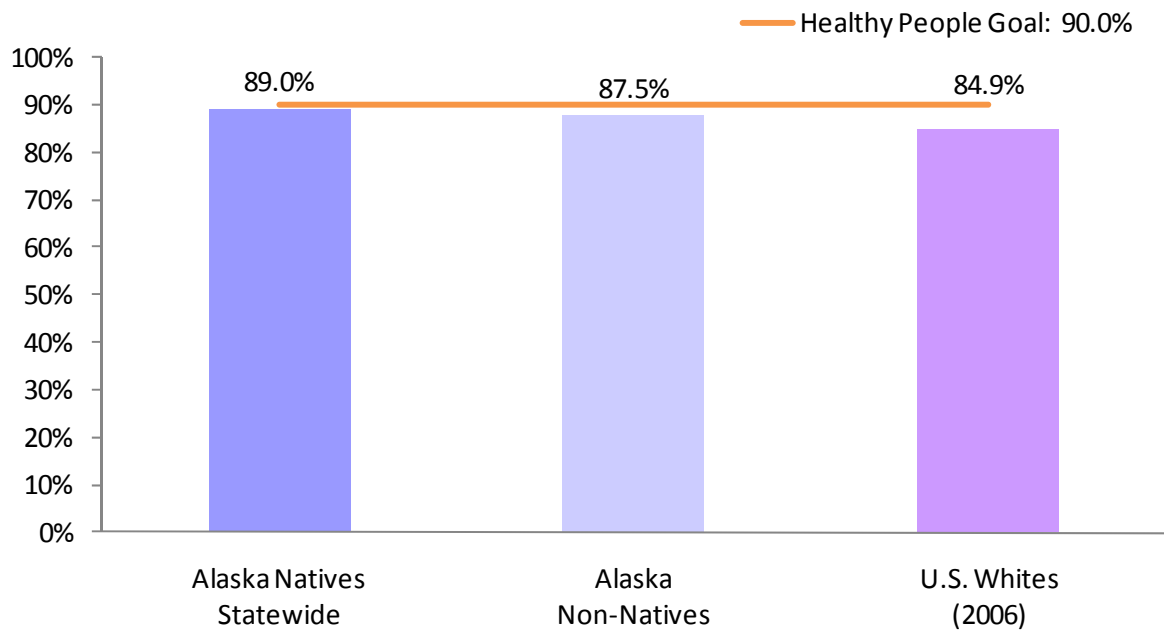
**Healthy People 2010, Goal 3.11b:** Increase the proportion of women aged 18 years and older who received a Pap test within preceding 3 years to 90%.

### Summary

- Alaska Native and Alaska Non-Native women had cervical cancer screening rates close to the Healthy People 2010 goal of 90%.
- U.S. Whites reported a cervical cancer screening rate of 84.9%.

**Figure 44. Percent of Women with a Pap Test within the Past Three Years, 18 Years and Older, 2004 and 2006**

Data Source: Behavioral Risk Factor Surveillance System



## Breast Cancer Screening

**Definition: Breast cancer screening** is defined as females aged 40 and older who report a mammogram within the last 2 years.

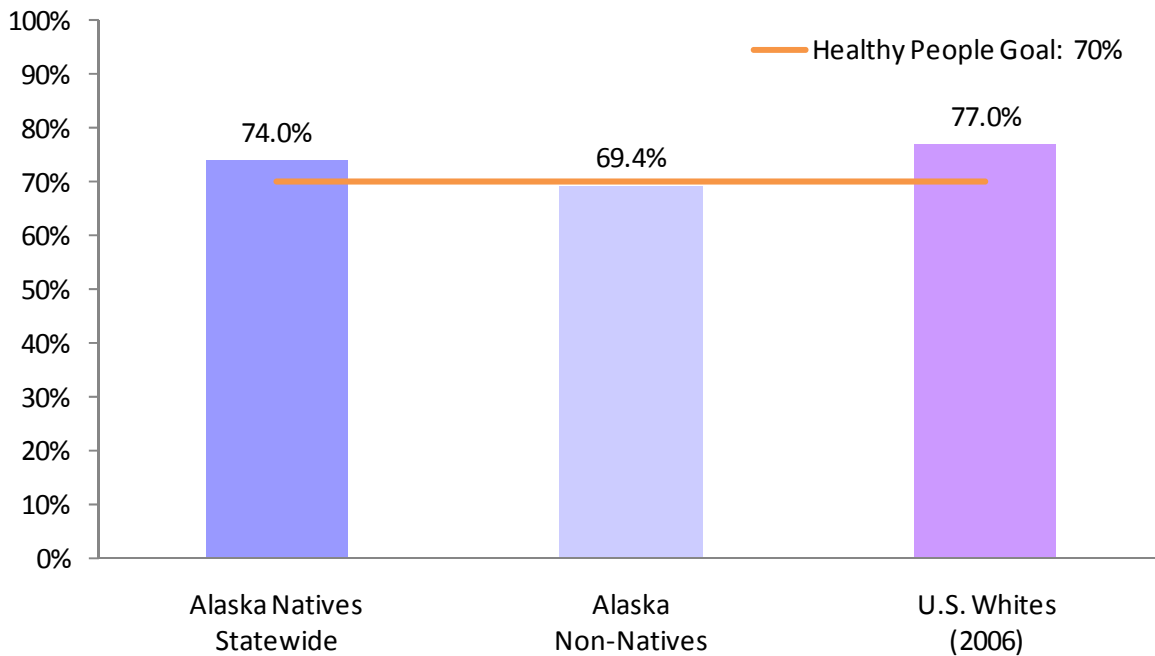
**Healthy People 2010, Goal 3.13:** Increase the proportion of women aged 40 years and older who have received a mammogram within the preceding 2 years to 70%.

### Summary

- Alaska Native women exceeded the Healthy People Goal of 70% for having a mammogram within the past two years (74.0%).
- 69.4% of Alaska Non-Natives and 77.0% of U.S. Whites received a mammogram in the last two years.

**Figure 45. Percent of Women with a Mammogram in the Last Two Years, 40 Years and Older, 2004 and 2006**

Data Source: Behavioral Risk Factor Surveillance System



## Colon Cancer Screening

**Definition: Colon cancer screening** is defined as adults aged 50 and older who report ever having a flexible sigmoidoscopy or colonoscopy.

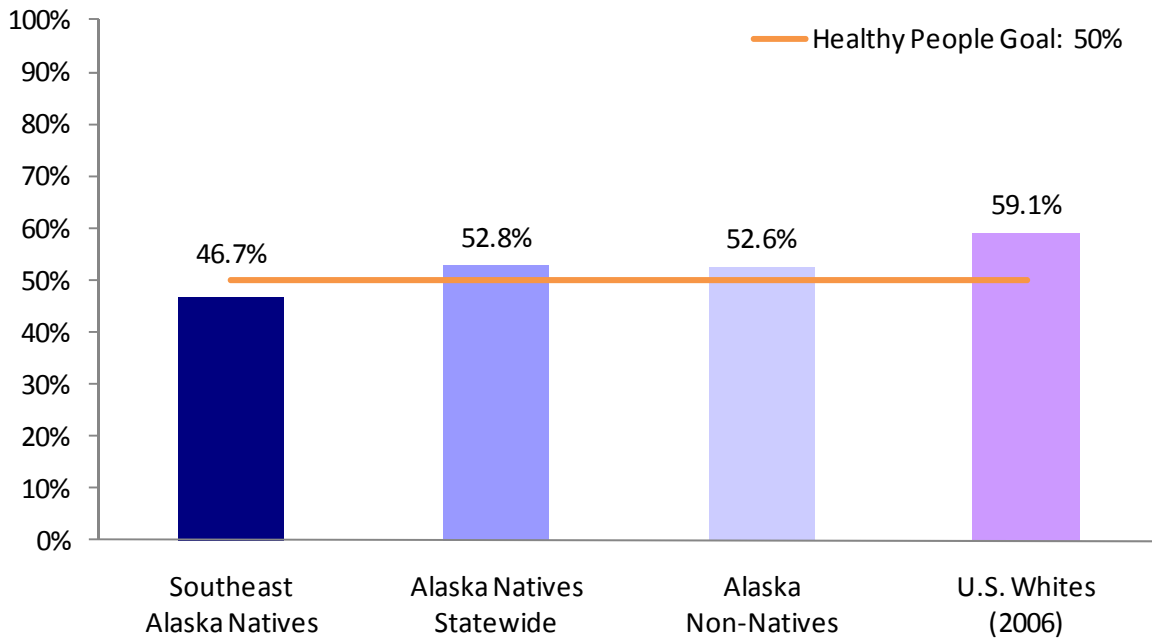
**Healthy People 2010, Goal 3.12b:** Increase the proportion of adults aged 50 years and older who have ever received a sigmoidoscopy to 50%.

### Summary

- 52.8% of Alaska Native people aged 50 years and older reported ever having a flexible sigmoidoscopy or colonoscopy; achieving the Healthy People Goal of 50%.
- Alaska Non-Natives (52.6%) and U.S. Whites (59.1%) also achieved the Healthy People Goal.

**Figure 46. Percent Who Have Had a Flexible Sigmoidoscopy or Colonoscopy Ever, 50 Years and Older, 2004 and 2006**

Data Source: Behavioral Risk Factor Surveillance System





## Seasonal Influenza Vaccine

**Definition: Seasonal influenza vaccine** is defined as adults aged 65 years and older who received the influenza vaccine or flu nasal spray in the prior twelve months.

**Healthy People 2010, Goal 14.29a:** Increase the proportion of adults age 65 years and older who are vaccinated against influenza in the past 12 months to 90%.

### Summary

- All populations did not meet the Healthy People goal of 90%.
- 48.7% of Southeast Alaska Natives aged 65 and older were immunized against seasonal influenza in the past year ending June 30, 2010 in Juneau, Ketchikan, Metlakatla, or Sitka.

**Table 16. Seasonal Influenza Vaccination in the Past Year Ending June 30, 2010, Adults Age 65 and Older**

Alaska Data Source: Alaska Native Tribal Health Consortium Immunization Registry

U.S. Data Source: Center for Disease Control and Prevention Wonder, Healthy People

	N	%
Alaska Natives - Juneau clinic	137	39.6%
Alaska Natives - Ketchikan clinic	100	53.8%
Alaska Natives - Metlakatla clinic	92	64.3%
Alaska Natives - Sitka clinic	102	48.6%
Alaska Natives Statewide	3,169	48.9%
U.S. Whites (2008)	N/A	69.0%

N/A Not Available

Alaska Natives visiting clinics may not be residents of that community.

## Childhood Immunizations - 4:3:1:3:3

**Definition:** By two years of age, it is recommended that all children should have received 4 doses of diphtheria-tetanus-pertussis (DTP), 3 doses of polio, 1 dose of measles-mumps-rubella (MMR), 3 doses of Hepatitis B, and 3 doses of Haemophilus Influenzae, type B (Hib) vaccines. This recommendation is referred to as **4:3:1:3:3**.

**Healthy People 2010, Goal 14.24a:** Increase the proportion of young children aged 19-35 months who have received the 4:3:1:3:3 series to 80%.

Note: The age groups are slightly different between the Healthy People Goal and the data presented.

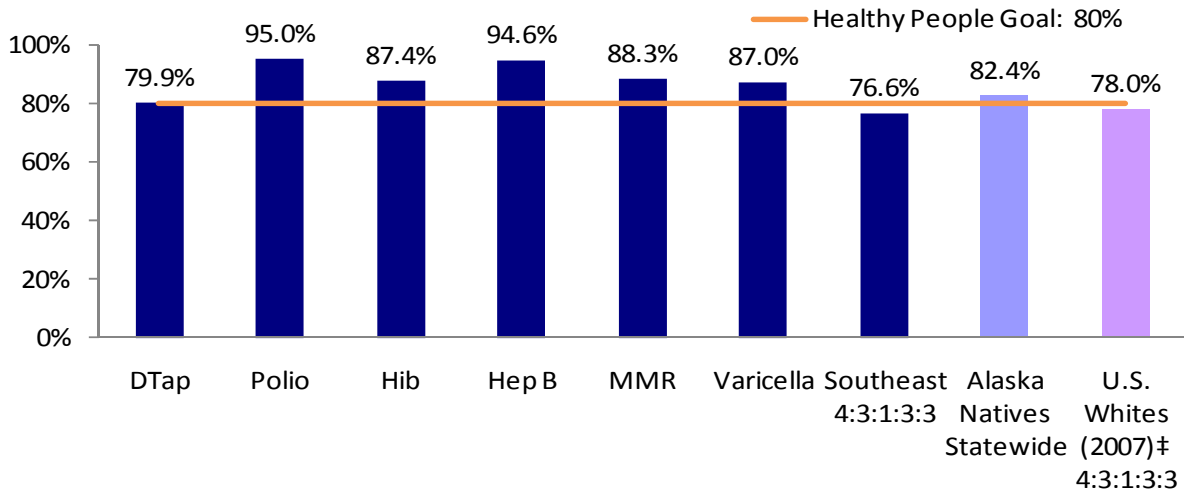
### Summary

- As of June 30, 2010, the Southeast region did not meet the Healthy People Goal. They achieved a 76.6% immunization coverage (4:3:1:3:3) for Alaska Native two-year olds.
- 82.4% of Alaska Native two year old children statewide received the appropriate immunization coverage.
- Southeast achieved over 90.0% coverage for polio and Hepatitis B vaccination rates.

**Figure 47. Two-Year Old Vaccination Coverage, Southeast<sup>1</sup> Alaska Native Two-Years Olds, as of June 30, 2010**

Data Source: Alaska Native Tribal Health Consortium Immunization Registry

U.S. Data Source: National Center for Health Statistics, Health, United States, 2009, With Special Feature on Medical Technology: Hyattsville, MD: 2009



† Non-Hispanic

<sup>1</sup> Southeast Alaska Native Two-Year Olds covers those seen in Juneau, Ketchikan, Metlakatla and Sitka

## Adequate Prenatal Care

**Definition:** The Kessner Index of Care is a method of categorizing **adequacy of prenatal care**, based on the month the pregnancy care started, number of visits, and length of gestation. This index adjusts for the fact that women with short gestations have less time in which to make prenatal care visits. The Kessner Index assigns three levels of care - adequate, intermediate, and inadequate. Adequate prenatal care is defined as care that begins in the first trimester and includes nine visits throughout the pregnancy. Intermediate prenatal care is defined as care that begins during the first or second trimester and includes five to eight visits. Inadequate prenatal care is defined as beginning in the third trimester and includes no more than four visits.

**Healthy People 2010, Goal 16.6b:** Increase the proportion of women who receive early and adequate prenatal care to 90%.

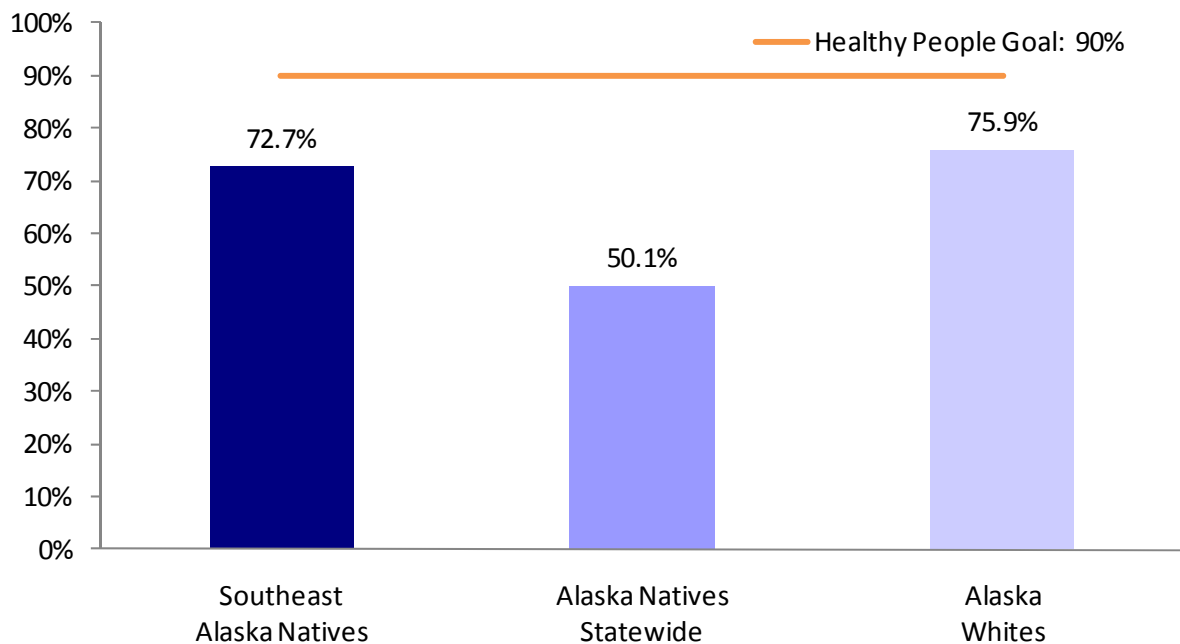
### Summary

- 72.7% of Southeast Alaska Native pregnant women received adequate prenatal care from 2001-2005.
- 50.1% of Alaska Native people statewide received adequate prenatal care from 2001-2005.

**Figure 48. Percent of Pregnant Women who Received Adequate Prenatal Care, 2001-2005**

Primary Data Source: Alaska Bureau of Vital Statistics

Secondary Data Source: Alaska Native Maternal and Child Health: Trends and Data, Alaska Native Epidemiology Center



## Healthcare Coverage

**Definition: Healthcare coverage** is defined as the proportion of the population who reported that they have healthcare coverage including health insurance, pre-paid plans such as HMO's or government plans such as Medicare, Native Health Service or Indian Health Service.

**Healthy People 2010, Goal 1.1:** Increase the proportion of persons with health insurance to 100%.

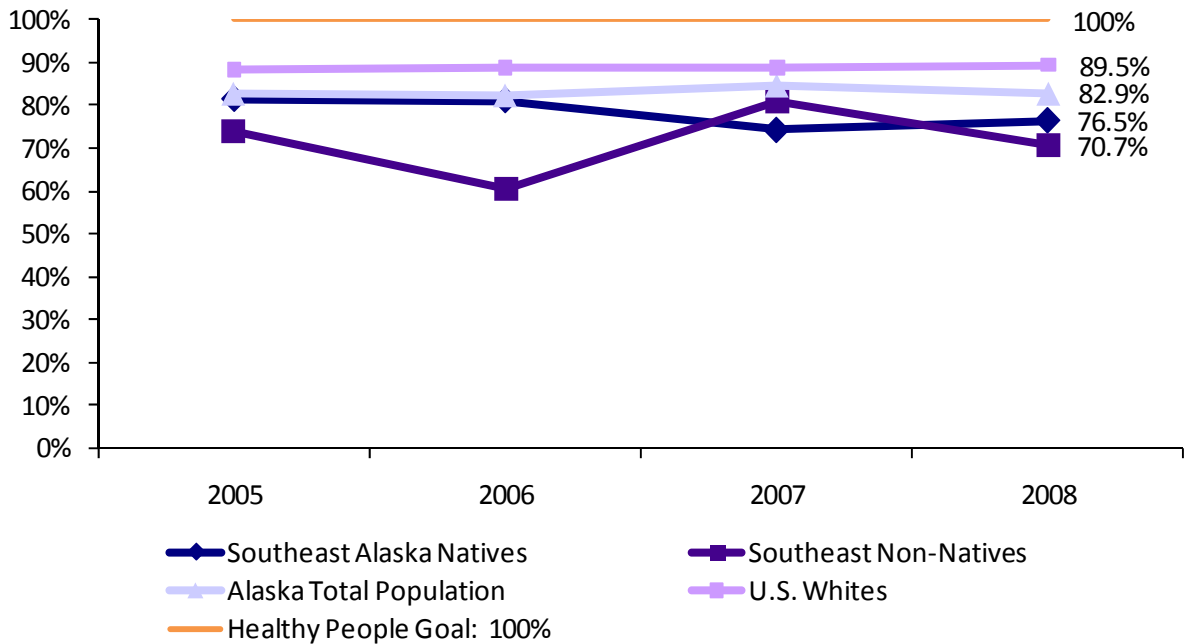
### Summary

- 76.5% of Southeast Alaska Native people reported that they had healthcare coverage in 2008.
- 82.9% of Alaska's total population and 89.5% of U.S. Whites reported that they had healthcare coverage in 2008.

**Figure 49. Healthcare Coverage, 2005-2008**

Southeast Data Source: SEARHC Steps Data

Alaska and U.S. Data Source: Behavioral Risk Factor Surveillance System



**Access for Care - Cost**

**Definition:** Proportion of people who have had a time in the past year when they needed to see a doctor, but could not because of the **cost**.

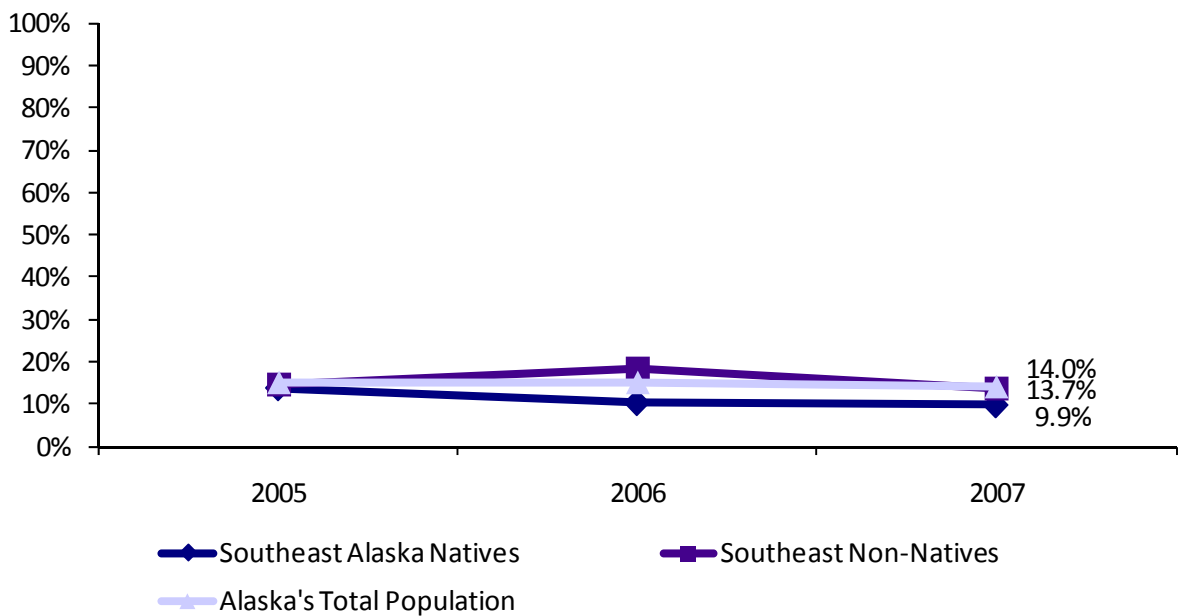
**Summary**

- In 2007, 9.9% of Southeast Alaska Native people reported that they had a time when they needed to see a doctor, but they did not because it was too expensive.
- 13.7% of Southeast Non-Natives reported that financial costs prevented them from obtaining healthcare in 2007.

**Figure 50. Could Not Afford to See a Doctor Due to Health Costs, 2005-2007**

Southeast Data Source: SEARHC Steps Data

Alaska Data Source: Behavioral Risk Factor Surveillance System



## Prenatal Women, Infants, and Children Participation

**Definition:** The **Women, Infants, and Children (WIC)** program provides economic support to buy food during pregnancy and for children less than five. In addition, the program provides nutrition counseling, support and information about breastfeeding. This indicator's data includes **prenatal WIC participation**, this time period includes pregnancy and mothers of newborns six months or younger.

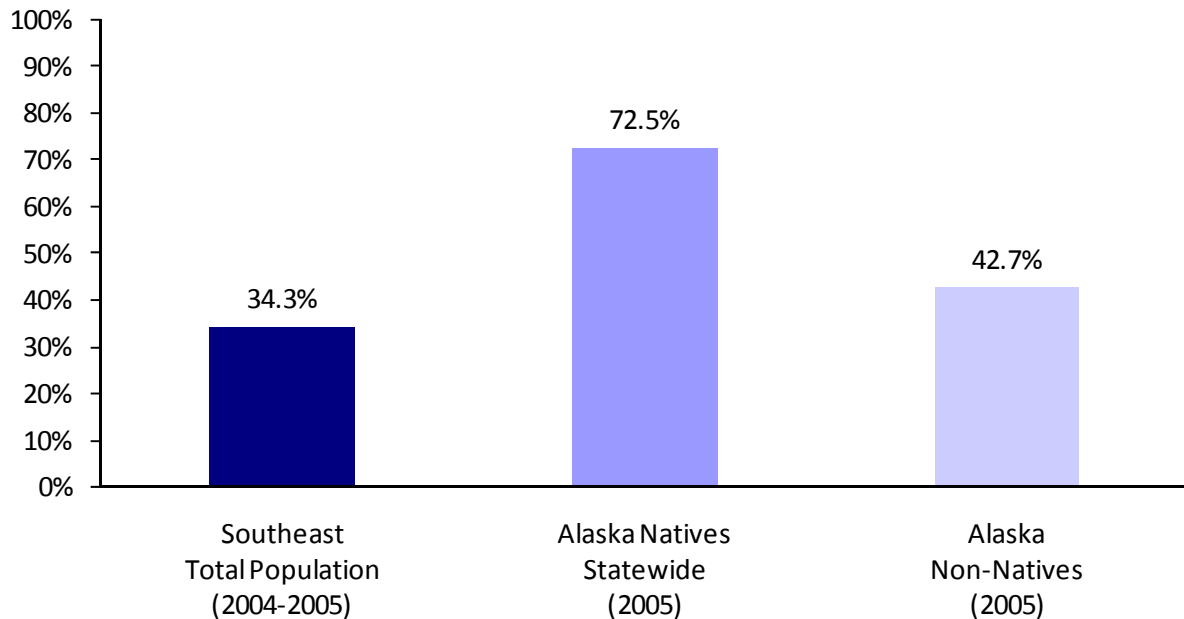
### Summary

- 34.3% of Southeast's general population participated in WIC during the prenatal period.
- 72.5% of Alaska Natives statewide and 42.7% of Alaska Non-Natives participated in WIC during the prenatal period.

### Figure 51. Prenatal Participation in the Women, Infants, and Children Program, 2004-2005

Primary Data Source: Alaska Pregnancy Risk Assessment Monitoring System, MCH Epidemiology Unit

Secondary Data Source: Alaska Maternal and Child Health Data Book 2008: Health Status Edition, State of Alaska



## Medicaid Enrollment

**Definition:** **Medicaid enrollment** is defined as the percent of the population enrolled in Medicaid.

### Summary

- In Southeast Alaska, the average monthly Medicaid enrollment was 8,715 persons, which accounted for 12.4% of the total population. This is similar to the statewide rate.
- The percent of the population enrolled in Medicaid ranged from a low of 10.2% (Juneau) to a high of 20.4% (Prince of Wales - Outer Ketchikan) in Southeast Alaska.

**Table 17. Medicaid Enrollment, State Fiscal Years 2006 and 2007**

Data Source: Alaska Health Care Databook Selected Measures, 2007, Alaska Department of Health & Human Services

Region and Census Area	Average Monthly Medicaid Enrollment (AME)		2007 AME Percent of 2006 Population
	SFY 2006	SFY 2007	
	Statewide	95,834	91,117
<b>Southeast</b>	<b>9,168</b>	<b>8,715</b>	<b>12.4%</b>
Haines	290	264	11.8%
Juneau	3,256	3,119	10.2%
Ketchikan Gateway	1,960	1,921	14.6%
Prince of Wales - Outer Ketchikan	1,130	1,117	20.4%
Sitka	1,091	967	10.9%
Skagway - Hoonah - Angoon	466	429	14.2%
Wrangell - Petersburg	859	794	13.2%
Yakutat	116	104	16.4%

Note: Enrollment is for Medicaid only and excludes persons eligible only for CAMA or state - only benefits.  
SFY - State Fiscal Year

## Environmental Health - Water and Sewer Service

**Definition: Water and sewer service** is defined as a housing unit with water/sewer pipes or closed haul services. Housing units which have received funding for pipes or closed haul services but have not yet been connected are not included in the percent of housing units with served water and sewer.

### Summary

- As of 2008, 98% of the communities in the Southeast region and 76% of communities statewide had water and sewer service.
- Southeast had one of the highest percentages of water and sewer service among regions statewide.

**Table 18. Water and Sewer Service by Region, 2008**

Data Source: Alaska Native Tribal Health Consortium, Department of Environmental Health and Engineering

Major Rural Regional Health Corporation	2008 Housing Units		% Served
	with Flush Toilets & Pressurized Water	2008 Total Housing Units	
<b>Southeast Alaska Regional Health Consortium</b>	<b>2,288</b>	<b>2,329</b>	<b>98.2%</b>
Kodiak Area Native Association	349	356	98.0%
Bristol Bay Area Health Corporation	1,364	1,572	86.8%
Maniilaq Association	865	1,140	75.9%
Norton Sound Health Corporation	970	1,509	64.3%
Tanana Chiefs Conference	1,150	1,930	59.6%
Yukon - Kuskokwim Health Corporation	2,753	4,760	57.8%



# Appendixes

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## Appendix A. Methods and Description of Data Sources

### Statistical Significance

Throughout the document, differences were considered statistically significant if they were different at the 95% level ( $p < 0.05$ ). Statistical significance was denoted as “significantly higher” or “significantly less” in the summary boxes. Differences between rates and percentages were considered to be significantly different if the 95% confidence intervals did not overlap. Rate ratios were considered to be statistically significant if the 95% confidence interval of the rate ratio did not contain one.

### Alaska Area Diabetes Registry

The Alaska Area Diabetes Registry is a clinical and epidemiologic resource for tribal health care facilities all around Alaska. The registry is used to keep track of patients who have various diabetes diagnoses and provide care based on national standards for diabetes care. It is also used to highlight the prevalence and incidence of diabetes and its complications in the Alaska Native Population. The data presented in this document were provided by the Alaska Area Diabetes Registry. The data are aggregated by the former Indian Health Service Units. More information about the data may be found at <http://www.anmc.org/services/diabetes/epidemiology/>.

### Alaska Area Indian Health Service

The Alaska Area Indian Health Service works in conjunction with Alaska Native Tribes and Tribal Organizations to provide comprehensive health services to 136,065 Alaska Natives (Eskimos, Aleuts, and Indians). The Alaska Area Indian Health Service Division of Planning and Evaluation and Health Statistics provided the data presented in this report based on the U.S. Census data. More information about the Alaska Area Indian Health Service may be found at: <http://www.ihs.gov/facilitieservices/areaoffices/alaska/index.asp>.

### Alaska Bureau of Vital Statistics

The State of Alaska provided the Alaska Bureau of Vital Statistics data. The Alaska Native Epidemiology Center analyzed the data throughout this document and the analyses are described in the subcategories listed below. More information about the Alaska Bureau of Vital Statistics may be found at: <http://www.hss.state.ak.us/DPH/bvs/data/default.htm>.

### Mortality Trends and Injury Death

Mortality data for Southeast Alaska Native people and Alaska Native people statewide covered the years 1999 to 2007, with the exception of the table titled, “Leading Causes of Injury Death,” which was reported for the years 1999 to 2005. Rates are age-adjusted to the U.S. Standard Population. “Bridged” population estimates from the National Center for Health Statistics were used as the denominator to calculate the mortality rates. Bridged estimates were necessary to adjust for the new option in the Census 2000 to choose multiple races, rather than one race.

The rates were calculated for those causes that had at least five deaths during the designated time period. Data for U.S. Whites were available through the National Cancer Institute’s Surveillance

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## Appendix A. Methods and Description of Data Sources

Epidemiology and End Results Program. We calculated rate ratios with confidence intervals to compare Southeast Alaska Native people to U.S. Whites. We considered differences between rates to be significant if the 95% confidence interval did not contain a value of one. We used the on-line SEERStat software to calculate mortality rates.

### Infant Mortality

The infant mortality rates were grouped into a ten year period (1999-2008).

### Low Birthweight, Adequate Prenatal Care, Smoking and Alcohol Consumption during Pregnancy

These data were based upon data reported on the birth certificates. More details regarding the data may be found in the report titled, "Alaska Native Maternal and Child Health: Trends and Data," located at <http://www.anthc.org/cs/chs/epi/upload/anmchdatobook.pdf>.

### **Alaska Department of Labor and Workforce Development**

The Alaska Department of Labor and Workforce Development produces statistics about population, wages, employment, industry information, occupational information, and cost of living.

The population estimates presented in this report are produced in the years between the censuses and are based on the census as a baseline. The estimates use administrative records as indicators of change in a population and use these to adjust the population numbers. Examples of such records are birth and death records, income tax returns, Permanent Fund applications, school enrollment and drivers licenses. More information about the Alaska Department of Labor and Workforce Development population statistics may be found at <http://labor.alaska.gov/>

The unemployment statistics exclude anyone who has not made an active attempt to find work in the four-week period up to and including the week that includes the last day of the reference month. Many individuals in rural Alaska do not meet the definition because they have not conducted an active job search due to the scarcity of employment opportunities. More information about the unemployment statistics may be found at <http://labor.alaska.gov/>.

### **Alaska Native Tribal Health Consortium Department of Environmental Health and Engineering**

The Division of Environmental Health and Engineering, Alaska Native Tribal Health Consortium's second-largest division, provides planning, design, construction and operations support of public health infrastructure in Native communities throughout the state of Alaska. As part of the Alaska tribal health system, Division of Environmental Health and Engineering is focused on the delivery of sustainable public health solutions.

The data provided in this regional health profile are for areas off the road system and provided by Division of Environmental Health and Engineering. More information regarding the program and services may be found at <http://www.anthc.org/cs/dehe/>.

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## Appendix A. Methods and Description of Data Sources

### **Alaska Native Tribal Health Consortium Immunization Registry**

The Alaska Native Tribal Health Consortium Immunization Program works to coordinate tribal immunization programs, educate tribal staff on immunization recommendations and vaccine-preventable disease, and advocate with outside agencies for the needs of tribal programs.

The goal of the Alaska Native Tribal Health Consortium Immunization Program is to eliminate disparities in vaccine-preventable disease in Alaska Natives through immunization.

The data provided in this regional health profile were provided by the Immunization Registry. More information about the program may be found at:  
<http://www.anthc.org/cs/chs/immunization/>

### **Alaska Native Tribal Health Consortium Alaska Native Tumor Registry**

The Alaska Native Tumor Registry is a statewide population based registry of all cancers diagnosed among Alaska Native people. The Alaska Native Tumor Registry includes Alaska Native patients living in Alaska at the time of diagnosis who met eligibility requirements for Indian Health Service benefits. The registry is part of the National Cancer Institute's Surveillance Epidemiology and End Results programs.

### **Alaska Trauma Registry**

The Alaska Trauma Registry is an information system of the most seriously injured patients in Alaska, and the treatment that they have received. Since 1991, the trauma registry has collected data from all 24 of Alaska's acute care hospitals.

The purpose of the registry is to evaluate the quality of trauma patient care and to plan and evaluate injury prevention programs. The criteria for inclusion in the trauma registry are patients with injuries who are admitted to an Alaska hospital, held for observation, transferred to another acute care hospital, or declared dead in the emergency department, and for whom contact with the health care system occurred within 30 days of the injury. Injuries include trauma, poisoning, suffocation, and the effects of reduced temperature.

Trauma Registry data are confidential and protected under Alaska Statute 18.23.010-070. All trauma registry personnel and those requesting trauma registry data are required to sign a confidentiality statement. The trauma registry does not include patient, physician, hospital, clinic, or ambulance service identifiers.

Trauma registry information is also used by a variety of agencies and individuals in the planning and evaluation of injury prevention programs, for research and public education, for Emergency Medical Service training, and in developing public policy. (Description from:  
[http://www.hss.state.ak.us/dph/ipems/injury\\_prevention/trauma.htm](http://www.hss.state.ak.us/dph/ipems/injury_prevention/trauma.htm))

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## Appendix A. Methods and Description of Data Sources

The Alaska data was analyzed by the Alaska Native Tribal Health Consortium Injury Prevention Program. More information about the program may be found at: <http://www.anthc.org/chs/wp/injprev/index.cfm>.

### **Behavioral Risk Factor Surveillance System**

The Behavioral Risk Factor Surveillance System is an on-going national telephone-based survey supported by the Centers for Disease Control and Prevention. Alaska began participating in the Behavioral Risk Factor Surveillance System in 1990. The Centers for Disease Control and Prevention now provides funding and technical assistance to all 50 states, Washington DC, and 3 territories to conduct the survey annually. The survey includes questions about health status and perceptions, preventive health practices, and risky behaviors that influence the prevalence of chronic disease, injury and preventable infectious diseases.

The Behavioral Risk Factor Surveillance System is a standardized telephone interview conducted with a computer-assisted script. There is a fixed core of questions asked by all states every year and a rotating core asked by all states in alternating years. In addition, there are a number of optional modules that states may or may not choose to use and states may add questions on their own. The entire interview takes less than 30 minutes to complete. Interviews are conducted during every month of the year. Approximately 500 Alaska Native adults are interviewed each year in Alaska.

Respondents are adults 18 years and older living in households. Individuals living in military barracks, dormitories, nursing homes, and other group living situations are excluded. Apart from that exclusion, each state's sample is designed to be representative of the state's population.

Respondents are contacted by telephone using a selection process based on area codes and prefixes that are highly likely to be associated with residential listings. Alaska uses an additional sampling procedure to take into account differences in telephone coverage by geographic and economic factors.

The analysis of Behavioral Risk Factor Surveillance System data requires complex statistical procedures to take into account the fact that not every adult resident of the state has an equal chance of being contacted for an interview. The analysis assigns a probability to each respondent which reflects their likelihood of being contacted. In addition, each person interviewed is treated as a representative for other, similar persons. The probability factor and assumption of representation are used to calculate a statistical weighting factor to be used in analyses to draw inferences about the overall population.

The Alaska results were taken from the annual reports located at: <http://www.hss.state.ak.us/dph/chronic/hsl/brfss/publications.htm>.

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## Appendix A. Methods and Description of Data Sources

The U.S. Results were pulled from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System interactive tool located at: <http://apps.nccd.cdc.gov/brfss/>.

The Behavioral Risk Factor Surveillance System respondents from the Southeast Region were analyzed by the Alaska Native Epidemiology Center. The Southeast Region includes all respondents residing in communities served by the Southeast Alaska Regional Health Corporation. In order to achieve a meaningful sample size, multiple years of data were combined for the analysis. The Behavioral Risk Factor Surveillance System survey contains slightly varied questions yearly depending on the health topics that are of interest for that particular year. Due to this variation, years presented in this report may vary between indicators.

Readers should use these estimates with caution since the number of respondents who are Alaska Native people from the region is relatively small. Confidence intervals were not calculated for these estimates and the differences between populations, age groups, gender, and time cannot be determined significant due to a small sample. Behavioral Risk Factor Surveillance System data are not age-adjusted to account for the different age distributions between the comparison populations. Since the Alaska Native population is younger than the general Alaska and U.S. populations, comparisons between these populations should be interpreted with caution.

### **Healthy People 2010**

The Healthy People 2010 measures reported in this document were taken from the Centers for Disease Control and Prevention's online query system titled, "CDC WONDER - Healthy People 2010." It may be found online at: <http://wonder.cdc.gov/data2010/>.

### **National Patient Information Reporting System - Indian Health Service National Data Warehouse**

The National Patient Information Reporting System is a part of the Indian Health Service National Data Warehouse designed to allow Indian Health Services to aggregate the Resource and Patient Management System data to track clinical practice patterns and episodes of care, provide measures of quality of care and clinical outcomes, perform epidemiologic studies, report on patient demographics and health care utilization patterns and provide data from which health care costs can be estimated.

In this report, the Indian Health Service populations data were pulled from *User Population Report - Three Year Age Groups and Gender By Areas and Service Units*. The *Leading Causes of Hospital Inpatient Discharges* and the *Leading Causes of Outpatient Visits* were calculated by the Alaska Native Epidemiology Center using the National Patient Information Reporting System data. The data were calculated based on the primary outpatient/inpatient diagnoses. The ICD-9 Codes were categorized using the Agency for Healthcare Research and Quality's Clinical Classification Software for ICD-9-CM.

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## Appendix A. Methods and Description of Data Sources

More information about National Patient Information Reporting System and National Data Warehouse may be found at: <http://www.ihs.gov/CIO/DataQuality/warehouse/>.

### **Surveillance Epidemiology and End Results Program**

The Surveillance Epidemiology and End Results Program is part of the National Cancer Institute. Surveillance Epidemiology and End Results' primary purpose is to collect information on the incidence, survival, and prevalence of cancer. In addition, Surveillance Epidemiology and End Results collects standard population data, U.S. mortality data, and U.S. population data. The data presented in this report were analyzed by Alaska Native Epidemiology Center staff using the non-cancer data in Surveillance Epidemiology and End Results with SEERStat (a computer program provided by Surveillance Epidemiology and End Results). More information about Surveillance Epidemiology and End Results may be found at: <http://seer.cancer.gov/index.html>.

### **State of Alaska Epidemiology - HIV/STD Program**

The HIV/STD Program addresses public health issues and activities with the goal of preventing sexually transmitted diseases and HIV infection in Alaska as well as their impact on health. HIV/STD Program staff apply the best available scientific information, public health program experience, and epidemiologic methods to help guide statewide disease control strategies, policies, and activities. The data presented in this report were provided by the State of Alaska Epidemiology - HIV/STD Program. More information may be found at: <http://www.epi.hss.state.ak.us/hivstd/default.stm>.

### **U.S. Census**

The U.S. Census provides data about the U.S. population and the economy. The data used in this report were pulled from the 2000 decennial census using the American Factfinder, which is a tool on the U.S. Census website to pull summary statistics. More information about the U.S. Census may be found at: [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en).

### **U.S. Census - Small Area Income and Poverty Estimates**

The U.S. Census Bureau's Small Area Income and Poverty Estimates program provides annual estimates of income and poverty statistics for all states, counties, and school districts. The main objective of this program is to provide estimates of income and poverty for the administration of federal programs and the allocation of federal funds to local jurisdictions.

The estimates are not direct counts from enumerations or administrative records, nor direct estimates from sample surveys. Instead, for states and counties, Small Area Income and Poverty Estimates models income and poverty estimates by combining survey data with population estimates and administrative records. For school districts, Small Area Income and Poverty Estimates uses the model-based county estimates and inputs from the decennial census and federal tax information to produce estimates of poverty.

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## Appendix A. Methods and Description of Data Sources

Beginning with the Small Area Income and Poverty Estimates program's estimates for 2005, data from the American Community Survey are used in the estimation procedure. More information about Small Area Income and Poverty Estimates may be found at: <http://www.census.gov/did/www/saipe/index.html>.

### **Youth Risk Behavior Surveillance System**

The Youth Risk Behavior Surveillance System was established in 1988 by the Centers for Disease Control and Prevention. The Youth Risk Behavior Survey monitors the prevalence of behaviors that put Alaskan youth at risk for the most significant health and social problems that can occur during adolescence and adulthood, in order to assist in prevention and intervention planning and evaluation. The Youth Risk Behavior Surveillance System survey is a school-based survey of high school students administered in cooperation with the Department of Education and Early Development. This anonymous survey examines a minimum of six categories of adolescent behavior:

- Behaviors that result in unintentional and intentional injuries
- Tobacco use
- Alcohol and other drug use
- Sexual behaviors that can result in HIV infection, other sexually transmitted diseases and unintended pregnancies
- Dietary behaviors
- Physical activity

The Youth Risk Behavior Surveillance System has been administered in Alaska five times, 1995, 1999 (excluding Anchorage), 2001, 2003, 2005 and 2007. Weighted (representative) data were collected in 1995, 1999, 2003, and 2007 resulting in published reports statewide. We excluded 1999 in this report since it did not include Anchorage, and 2001 and 2005 data, because weighted (representative) data were not collected.

The Alaska data presented in this report were provided to the Alaska Native Epidemiology Center by State of Alaska Youth Risk Behavior Surveillance System program. More information about the state-level data may be found at: <http://www.hss.state.ak.us/dph/chronic/school/YRBS.htm>.

The U.S. White data were obtained from the following sources listed respectively by the following years 1995, 2003 and 2007 :



## Appendix A. Methods and Description of Data Sources

Centers for Disease Control and Prevention. *CDC Surveillance Summaries*, September 27, 1996 MMWR; 45(No.SS-4).

Centers for Disease Control and Prevention. *Surveillance Summaries*, May 21, 2004. MMWR 2004: 53(No. SS-2)

Centers for Disease Control and Prevention. *Health Risk Behaviors by Race/Ethnicity National YRBS: 2007*. [http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07\\_us\\_disparity\\_race.pdf](http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_us_disparity_race.pdf)

## Appendix B. Race/Ethnicity Classification by Data Source

Data Source	Racial Classification
Alaska Area Diabetes Registry	Alaska Native or American Indian persons who visited Indian Health Services or a tribal health facility in the past three years
Alaska Area Indian Health Service - Census Data	One tribe alone, or in combination with one other tribe, or in combination with any other race group in addition to Alaska Native or American Indian
Alaska Bureau of Vital Statistics	Alaska Native or American Indian
Alaska Department of Labor & Workforce Development	Alaska Native or American Indian
Alaska Native Tribal Health Consortium Immunization Registry	Alaska Native or American Indian person who uses the Alaska Tribal Health System
Alaska Native Tumor Registry	Alaska Native or American Indian persons living in Alaska at the time of a cancer diagnosis
Alaska Trauma Registry	Any mention of Alaska Native or American Indian
American Community Survey	Alaska Native or American Indian alone
Behavioral Risk Factor Surveillance System	Any mention of Alaska Native or American Indian
National Patient Information Reporting System - Indian Health Service National Data Warehouse	American Indian or Alaska Native persons who used Indian Health Service or a tribal facility that reports data through the Indian Health Service data system
Pregnancy Risk Assessment Monitoring System	Alaska Native or American Indian mother
State of Alaska Epidemiology HIV/STD Program	Alaska Native or American Indian
Surveillance, Epidemiology and End Results Program	Alaska Native or American Indian
U.S. Census	Alaska Native or American Indian alone
Youth Risk Factor Surveillance System	Any mention of Alaska Native or American Indian

## Appendix C. Figures and Tables

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## Appendix D. Glossary of Terms

**Age-Adjusted** - Rates have been mathematically weighted to allow comparisons of populations with different age distributions. Adjustment is usually made to a standard population. This report was adjusted to the 2000 U.S. Standard Population.

**Body Mass Index** - A weight by height measure; defined as weight in kilograms divided by the square of height in meters. This measure correlates closely with body density and skin fold thickness.

Underweight..... BMI <18.5 kg/m <sup>2</sup>	Overweight..... 25 ≤ BMI < 30 kg/m <sup>2</sup>
Normal Weight ..... 18.5 ≤ BMI < 25 kg/m <sup>2</sup>	Obese ..... BMI ≥ 30 kg/m <sup>2</sup>

**Crude Rate** - The proportion of a population that experiences the event of interest (e.g. injury hospitalization rate) during a specified period. It is calculated by dividing the number of observations by the appropriate population multiplied by 100,000 (or other appropriate multiplier). When interpreting crude rates, be aware that the rates may be affected by differences in the age distribution between the comparison populations.

**Healthy People Goal** - Healthy People 2010 national goals sets health targets to be achieved by the year 2010. Healthy People 2010 provides a framework for health promotion and disease prevention.

**Infant Mortality Rate** - A rate calculated by dividing the number of infant deaths during a calendar year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births. Infant is defined as age from birth up to one year.

**International Classification of Diseases (ICD Code)** - An international system designed to classify diseases and other health problems in medical records. The ICD is developed collaboratively between the World Health Organization and ten international centers.

**Mortality Rate** - The proportion of a population that dies during a specified period. It is calculated by dividing the number of deaths by the appropriate population. It is generally reported as the number of deaths per 100,000. This is also referred to as death rate.

**Prevalence** - The number of cases of illness or other condition in a population at a point in time divided by the total number of persons in that population.

**Rate Ratio** - A comparison of two groups in terms of incidence rates, person-time rates, or mortality rates.

**Weighted percent** - The resulting percent after responses of persons in various subgroups (e.g. region, age, sex) are adjusted to compensate for the over-representation or under-representation of these persons in a sample.