

# Barrow Health Profile

This village health profile provides a brief summary of the results of the 2010 NSB Census. The intent of this profile is to provide individual communities with information on some basic health measures at the village-level to guide community health promotion and planning efforts.

The largest community within the NSB and the regional center for governmental and commercial activity, Barrow has a more ethnically diverse population than the other NSB villages. Because of Barrow's relatively larger population, the health measures described in this section were, in most cases, able to be analyzed by gender, age group, and ethnic group—the two largest groups, Iñupiat and Caucasian, and a third group comprised of all other ethnicities represented in the NSB. Notable findings and differences among these groups are discussed in the text and presented in graphs and tables for each topic.

Please refer to the 2010 Census NSB Health Profile section for further discussion of each health question and an overview of the census health module results for the NSB. The NSB Health Profile also examines health differences between Barrow and the other North Slope communities as a whole. Please refer to the *NSB Baseline Community Health Analysis* report for expanded discussions of each of the health topics addressed below as well as many more aspects of community health.

NSB and Alaska estimates are provided for general reference only, and comparisons should be made with caution, as results are not adjusted for differences in the age composition of the populations. State and national survey methods may also vary considerably from that used in the 2010 NSB Census.

## General Health

**Table A.21: Reported General Health Status Among Adults**

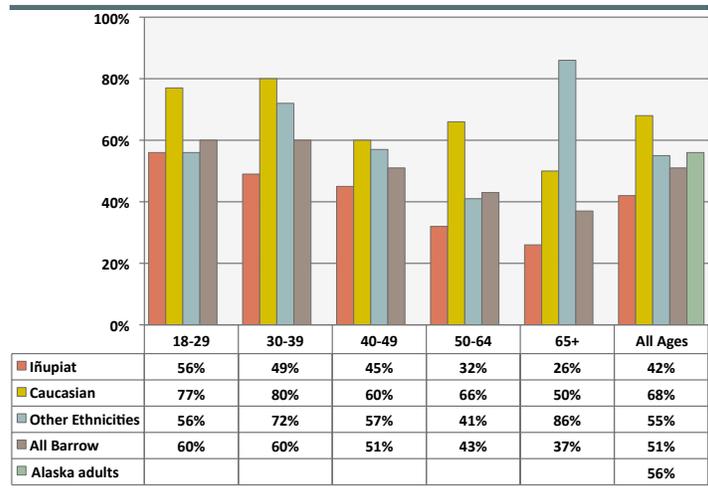
	Barrow Household Heads	NSB Household Heads	All Barrow Adults*	All NSB Adults*	Alaska Adults
Very Good or Excellent	50%	44%	53%	46%	56% <sup>1</sup>
Fair to Poor	17%	20%	13%	16%	13% <sup>2</sup>

A large majority of Barrow adults reported or were reported to have at least good general health. Slightly more than half of Barrow adults (51% of household heads and 53% of all adult household members) had very good to excellent, reported general health, and 17% of household heads (13% of all adults) had fair or poor reported general health. These estimates are fairly similar to current estimates of overall health among adults in national surveys such as the annual BRFSS telephone survey.

Self-reported general health varied significantly by ethnicity. Except in the older-than-65 years age group, Caucasian household heads were most likely to report very good to excellent health and were the only group to report better general health than their statewide counterparts. A high percentage of residents aged 65 years and older of other ethnicities reported very good to excellent health, although this group represented a very small group.

As noted in the NSB Health Profile, reported general health status of adults living in Barrow was significantly better than in the other villages, as a whole. This was true when comparing all ethnic groups combined and when comparing Iñupiat adults only.

**Figure A.26: Barrow Household Heads Reporting Very Good to Excellent General Health**

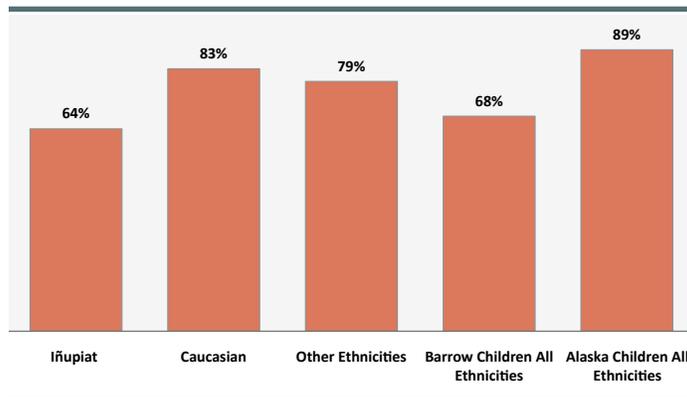


Alaska data source: Alaska BRFSS, 2008.

Children (under age 18 years) in Barrow were considerably less likely than their statewide counterparts<sup>2</sup> to be reported by the household head as having very good to excellent health. Reported general health status among Iñupiat children was significantly lower than among Caucasian children or children of other ethnic groups. The largest discrepancy was found in the 10- to 17-year-old age group, where 66% of Iñupiat children, 94% of Caucasian children, and 78% of children of other ethnic groups were reported to have very good to excellent health.

As noted in the NSB Health Profile, the reported general health status of children in Barrow was significantly better than of children living in other North Slope communities, as a whole.

**Figure A.27: General Health Status Among Barrow Children:**  
*Percent of children reported to have very good to excellent health*



Alaska data source: National Survey of Children's Health, 2007.

## Chronic Health Conditions

Household heads were asked whether they or the other members of their households have experienced any of a number of common chronic health problems.

**Table A.22: Chronic Health Conditions Among Adults**

	Barrow Household Heads	NSB Household Heads	All Barrow Adults*	All NSB Adults*	Alaska Adults
Ever told by a health professional have:					
Thyroid problems	6%	6%	4%	4%	9% (U.S.) <sup>3</sup>
Diabetes	8%	7%	7%	6%	6% (Alaska) <sup>1</sup> 9% (U.S.) <sup>4</sup>
High blood pressure	27%	28%	21%	20%	25% (Alaska) <sup>5</sup> 24% (U.S.) <sup>4</sup>
High cholesterol	19%	19%	14%	13%	38% (Alaska) <sup>5</sup>
Heart disease	7%	7%	4%	5%	12% (U.S.) <sup>4</sup>
In the past 12 months, experienced:					
Daily pain or arthritis that limits activities or requires prescription pain medicine	28%	29%	22%	21%	(see ref) <sup>6</sup>
Frequent (three or more) or chronic ear infections	5%	5%	4%	4%	N/A
Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away)	12%	13%	7%	8%	(ref) <sup>7</sup>

## Household Heads

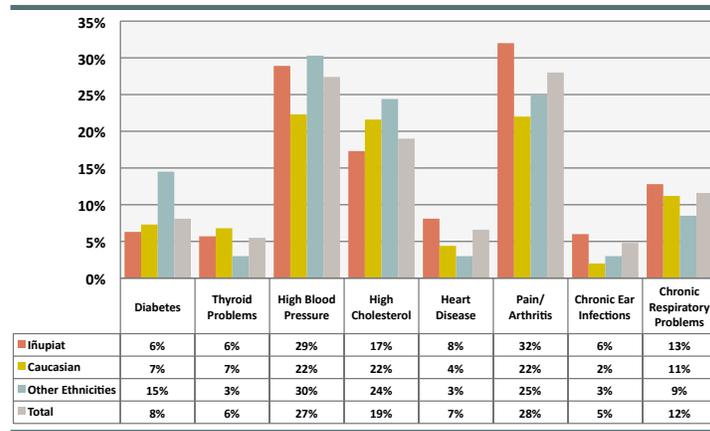
Among household heads, the most common chronic health problems reported were pain and/or arthritis, high blood pressure, high cholesterol, and chronic respiratory problems. Overall, the reported prevalence of chronic health problems among Barrow household heads was similar to statewide estimates, with the exception of high cholesterol, which was reported at only about half the statewide rate.

**Age:** All of the chronic health problems (except chronic ear infections) varied significantly by age, with increasing prevalence in older age groups.

**Ethnic Group:** Iñupiat and Caucasian household heads were significantly less likely to report a diagnosis of diabetes than were those belonging to other ethnic groups ( $p < 0.05$ ). The estimated prevalence of diabetes in ethnic groups other than Iñupiat and Caucasian was more than twice the statewide estimate for adults. Iñupiat were significantly more likely to report a diagnosis of heart disease, chronic ear infections, and chronic pain and/or arthritis than were the other groups ( $p < 0.05$ ). The prevalence of thyroid problems and chronic respiratory problems did not vary significantly by ethnicity, although Iñupiat Barrow residents aged 65 years and older were roughly twice as likely to report chronic respiratory problems as were those of other ethnic groups.

**Gender:** Men were significantly more likely to report diabetes and heart disease than were women, and women were significantly more likely to report thyroid problems, arthritis and/or chronic pain, and chronic ear infections than were men.

**Figure A.28: Self-Reported Chronic Health Conditions: Barrow Household Heads**



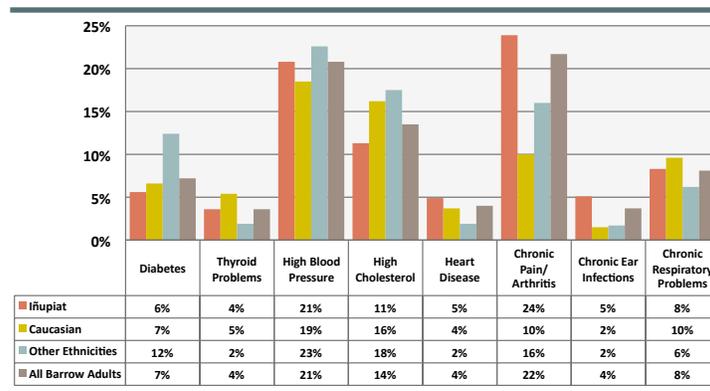
## All Adult Household Members

Household heads were also asked about chronic health problems among household members. Estimates obtained through proxy information tended to be slightly lower for all adults in the household than for household heads themselves, likely reflecting the slightly younger age distribution of this group. These lower estimates may also reflect a lack of full knowledge among the household heads of the health problems of other household members. Overall patterns of disease prevalence were quite similar between the groups, however.

Adult Iñupiat household members were more than twice as likely as their Caucasian counterparts to experience arthritis and/or chronic pain and significantly more likely to have chronic ear infections. Caucasian household members were more likely than Iñupiat to have been told they have high cholesterol. Adult household members of ethnicities other than Iñupiat or Caucasian were significantly more likely than Iñupiat to report a diagnosis of diabetes or high cholesterol. They were less likely than Iñupiat to report thyroid problems, heart disease, chronic ear infections, or arthritis and/or chronic pain, however. There was not a significant relationship between reported respiratory problems and ethnicity among Barrow adults.

As noted in the NSB Health Profile, the estimated prevalence of adult diabetes was higher in Barrow than in the other North Slope villages as a whole. This was true when comparing all ethnic groups combined and when comparing Iñupiat adults only.

**Figure A.29: Reported Chronic Health Conditions: All Adult Household Members**

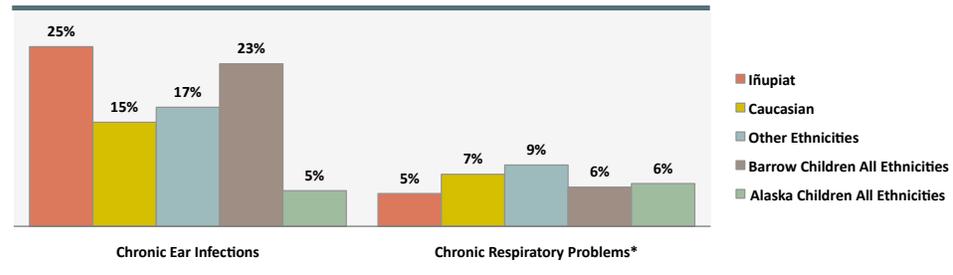


## Chronic Health Problems in Children

Fewer than 1% of household members less than 18 years of age were reported to have any of the chronic health problems mentioned previously, except ear infections and respiratory problems. The 2010 Census did not include a number of common chronic health conditions in children, such as dental decay and attention and/or developmental problems.

Significantly more Iñupiat children were reported to have frequent or chronic ear infections than were Caucasian children or those of other ethnic groups ( $p < 0.05$ ). There was not a significant relationship between reported respiratory problems and ethnicity among Barrow children. Overall, the reported prevalence of breathing problems among Barrow children (6%) was fairly similar to statewide estimates of current asthma among children statewide (5%–6%).<sup>6,11</sup> The prevalence of frequent or chronic ear infections among children is the highest in Barrow among all the North Slope villages and is more than four times the statewide estimate.

**Figure A.30: Reported Chronic Health Conditions Among Barrow Children**



\*Alaska estimate for child respiratory problems is for current asthma diagnosis only, as reported by a parent. Alaska data source: National Survey of Children's Health 2007.

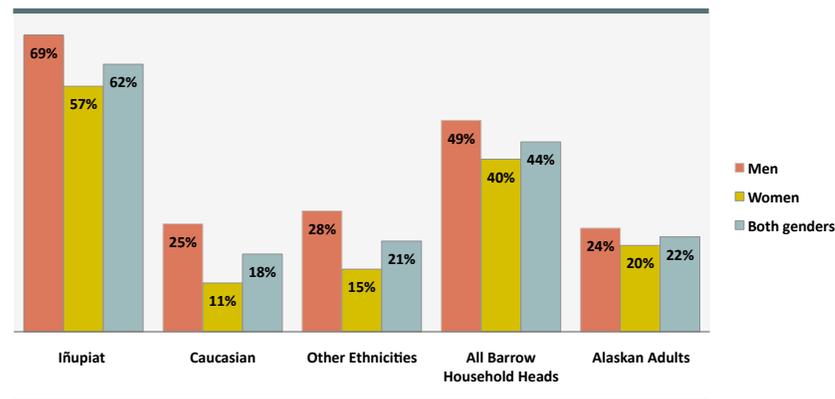
## Tobacco Smoking

### Smoking Among Household Heads

Overall tobacco smoking rates among Barrow household heads were roughly twice those of statewide rates. Smoking rates among Iñupiat household heads were roughly three times those of statewide smoking rates.<sup>1</sup>

Among Barrow household heads, reported tobacco smoking was significantly more common among Iñupiat than among either Caucasians or other ethnicities. In all ethnic groups, male household heads were significantly more likely to smoke tobacco than female household heads. Reported tobacco smoking did not vary significantly by age group, although reported smoking was lowest in the 65 years and older age group.

**Figure A.316: Tobacco Smoking: Barrow Household Heads**

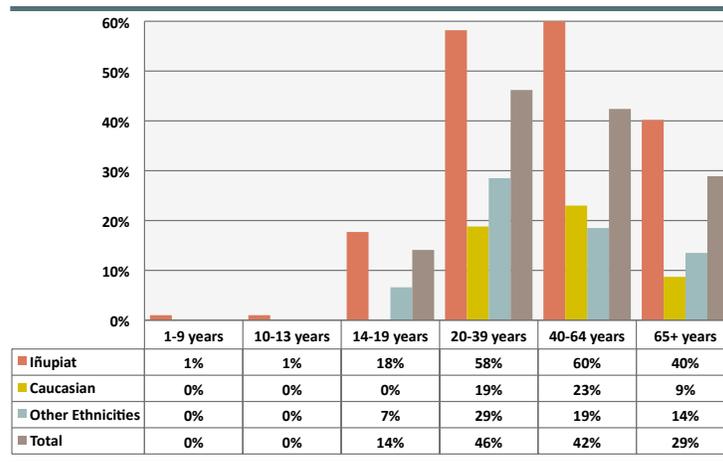


Alaska data source: Alaska BRFSS, 2008.

## Tobacco Smoking Among All Barrow Household Members

When household heads were asked about tobacco smoking in other household members, estimates for all adults were slightly lower but showed a similar pattern as far as ethnic and gender differences.

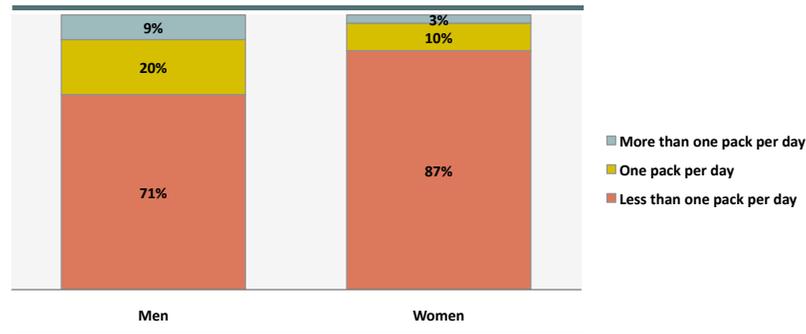
**Figure A.32: Reported Tobacco Smoking Among All Barrow Household Members**



As discussed in the NSB Health Profile, household heads' reporting of tobacco smoking among high-school-aged household members in this survey likely underestimated the teen smoking rates, based on estimates from other surveys.<sup>9</sup> Also, as noted in the NSB Health Profile, teen smoking rates in Barrow were significantly lower than in the other North Slope villages, as a whole. This was also true when looking at Iñupiat teens only.

**Amount Smoked:** Among Barrow household heads, men were more than twice as likely as women to report smoking one or more packs per day (29% vs. 13%, respectively). Amount smoked did not vary significantly by ethnic group.

**Figure A.33: Among Smokers, Amount Smoked**



**Smoking in House:** Among Barrow household heads, 69% of smokers and 95% of non-smokers did not allow smoking in the house. Younger household heads were significantly less likely to permit smoking in the house.

**Interest in Quitting Smoking:** Among Barrow household heads who smoked, 70% of smokers stated that they are interested in quitting, and this did not differ significantly by age, ethnicity, or gender.

**Tried Quitting Smoking:** Among Barrow household heads who smoked, 61% reported stopping smoking for one day or longer in the last year because they were trying to quit. This did not differ significantly by ethnicity or age, but women were more likely than men to have tried quitting (68% vs. 56%, respectively).

**Support Tobacco Tax:** Of the 86% of household heads who answered this question, a majority (59%) supported a tobacco tax to support tobacco prevention programs. Caucasians were the ethnic group most likely to support the tax.

## Health Insurance

Health insurance coverage was relatively high in Barrow. When eligibility for Indian Health Service-funded care is included, over 97% of Barrow household heads report having some form of health insurance, compared to only 83% statewide.<sup>1</sup>

A majority of Barrow household heads had health insurance other than eligible use of healthcare-funded through the Indian Health Service.

**Table A.23: Health Insurance Other Than IHS Eligibility**

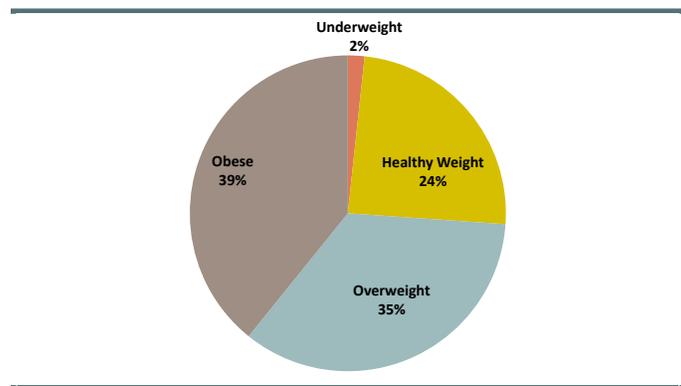
Iñupiat	59%
Caucasian	96%
Other Ethnicities*	88%
Total	73%

\*A small percentage of "other ethnicity" were Alaska Native or American Indian and, thus, also eligible for IHS-funded services.

## Obesity

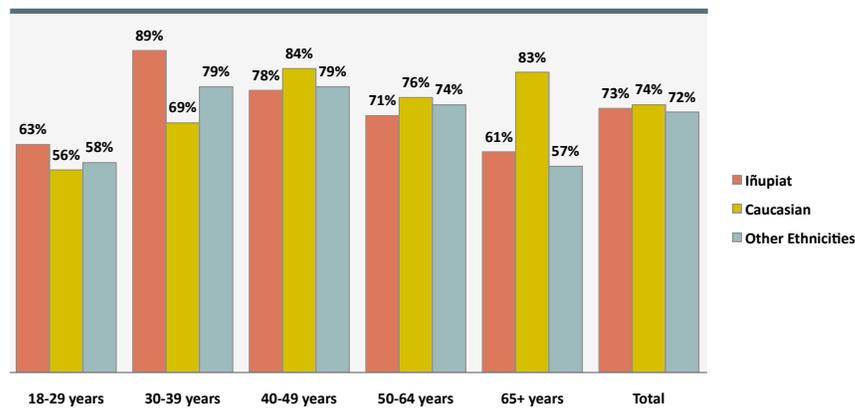
According to standard BMI guidelines, roughly one in four Barrow household heads were at a healthy weight and almost three of four were overweight or obese, based on self-reported height and weight.

**Figure A.34: Weight Category of Barrow Household Heads**



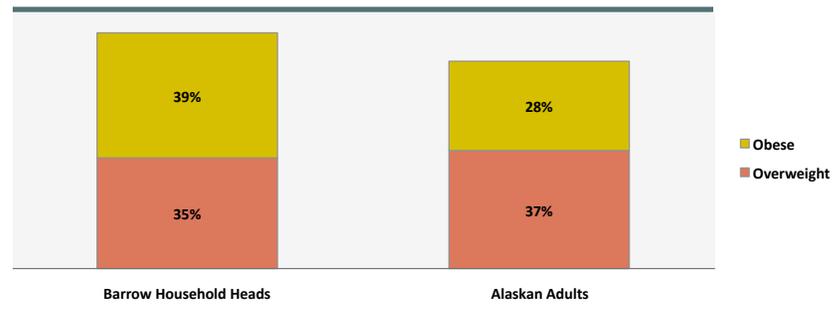
Overweight and obesity were common in all age groups. The likelihood of being overweight or obese did not vary significantly by ethnic group or gender.

**Figure A.35: Percent of Barrow Household Heads Who Are Overweight or Obese, by Age Group (Based on Self-Reported Height and Weight)**



Barrow household heads were slightly less likely to be overweight but more likely to be obese than were adults statewide.<sup>1</sup>

**Figure A.36: Overweight and Obesity: Barrow Household Heads and Alaskan Adults**



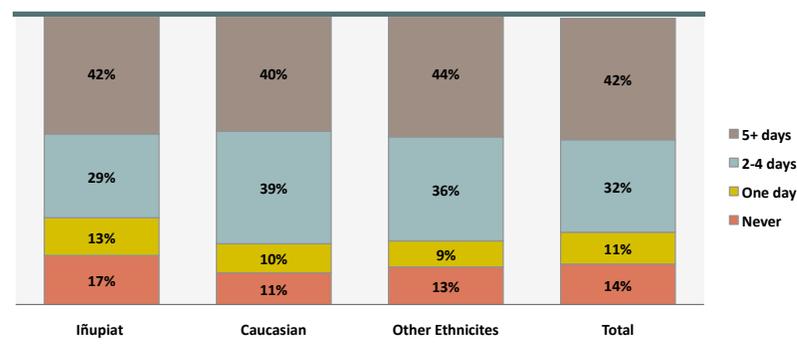
Alaska data source: Alaska BRFSS, 2008.

## Physical Activity

Overall, about 40% of Barrow household heads reported achieving the recommended goal of getting at least 30 minutes of moderate exercise 5 or more days per week, whereas 14% reported never doing so. These estimates are similar to the estimates derived from the 2007 Alaska BRFSS telephone survey.<sup>5</sup>

Level of exercise did not vary significantly among different ethnic groups. Among Iñupiat and Caucasian household heads, younger respondents were more likely than their older counterparts to report getting moderate exercise at least twice a week and less likely to report never exercising. As noted in the NSB Health Profile, household heads in other North Slope villages, as a whole, were more likely than Barrow household heads to report getting 30 minutes or more of moderate exercise at least 5 days a week.

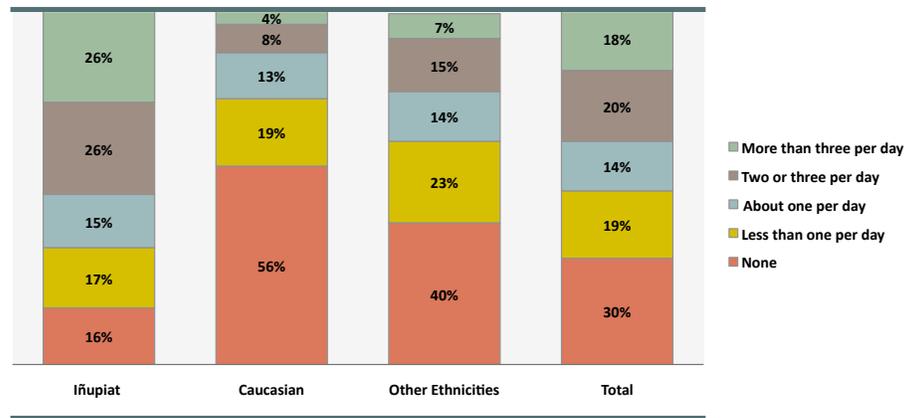
**Figure A.37: Exercise Among Barrow Household Heads: Number of days per week get 30+ minutes of moderate exercise**



## Soda and Other Sugar-Sweetened Beverage (SSB) Consumption

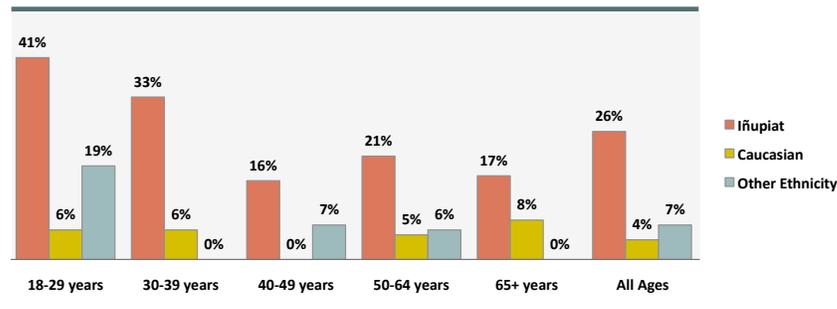
Consumption of SSBs was highest among Iñupiat household heads and lowest among Caucasian household heads. Consumption varied significantly among ethnic groups, with Caucasians more likely to report not drinking SSBs at all and Iñupiat more likely to report drinking more than three per day.

**Figure A.38: Consumption of Sodas and Other SSBs Among Barrow Household Heads**



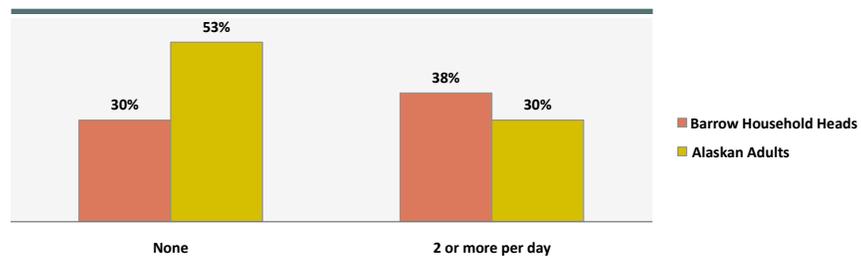
Among Iñupiat, consumption of SSBs varied significantly by age, with younger household heads more likely to report higher levels of consumption.

**Figure A.39: Consumption of More than Three Sodas or Other SSBs per Day: Barrow Household Heads**



Barrow household heads were less likely to report no consumption of these beverages and more likely to report drinking two or more per day than were adults statewide.<sup>10</sup> As noted in the NSB Health Profile, however, Barrow household heads—both Iñupiat and all—reported drinking significantly fewer of these beverages than their counterparts in the other North Slope villages as a whole.

**Figure A.40: Consumption of Sodas and Other SSBs Among Barrow Household Heads, Compared to Adults Statewide**

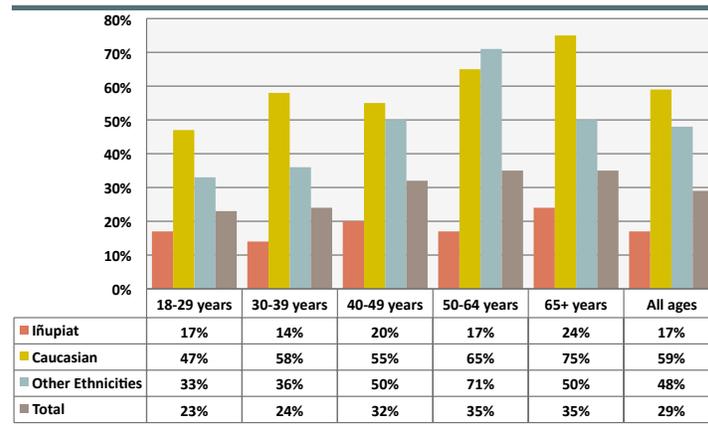


Alaska data source: State of Alaska Department of Health and Social Services: *Obesity Facts: Sugar-sweetened beverages in Alaska*, based on 2009 Alaska BRFSS.

## Helmet Use

Overall, only 29% of Barrow household heads who rode snowmachines or four-wheelers reported wearing helmets when riding. Reported helmet use was significantly lower among Iñupiat household heads, compared to Caucasian and those of other ethnicities. Overall helmet use among household heads in Barrow, and particularly among Iñupiat, was considerably lower than statewide estimates for snowmachine helmet use (57%).<sup>1</sup> As discussed in the NSB Health Profile, however, helmet use was higher in Barrow than in the other North Slope villages, as a whole, both among Iñupiat and all ethnic groups combined.

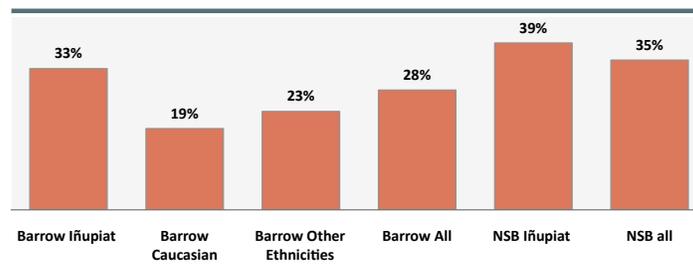
**Figure A.41: Helmet Use When Riding a Snowmachine or Four-Wheeler: Barrow Household Heads**



## Food Security

In Barrow, more than one in four household heads reported difficulty getting the foods needed to eat healthy meals. One in three Iñupiat household heads reported such difficulty, a significantly higher proportion than among Caucasians or other ethnicities. This measure did not vary significantly by age or gender. Barrow household heads were less likely than household heads slope-wide to report difficulty getting foods for healthy meals. As noted in the NSB Health Profile, Iñupiat household heads living in Barrow were significantly less likely than their counterparts in the other North Slope villages overall to report difficulty getting food for healthy meals.

**Figure A.42: Food Insecurity in Barrow: Percentage of Household Heads Reporting Difficulty Getting Food for Healthy Meals in the Last Year**



The vast majority of Barrow household heads reporting difficulty getting food to eat healthy meals reported that it was because of not being about to get enough store foods. Among Iñupiat reporting difficulty getting foods for healthy meals, however, almost half also reported that it was because they couldn't get enough subsistence foods.

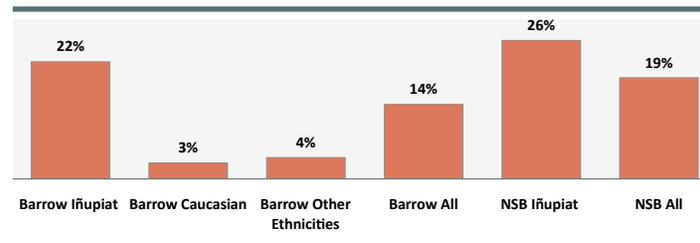
**Table A.24: Food Insecurity in Barrow: Subsistence and Store Foods**

	Among household heads reporting difficulty getting foods for healthy meals, percent who couldn't get enough subsistence foods	Among household heads reporting difficulty getting foods for healthy meals, percent who couldn't get enough store foods
Iñupiat	46%	91%
Caucasian	11%	97%
Other Ethnicities	20%	97%
Total	36%	93%

Overall, 14% of Barrow household heads reported that, at times last year, household members did not have enough to eat. Overall, Barrow reported lower levels of food insecurity than did the NSB as a whole. Within Barrow, however, Iñupiat household heads were seven times more likely than were Caucasian household heads to report household members who, at times, did not have enough to eat.

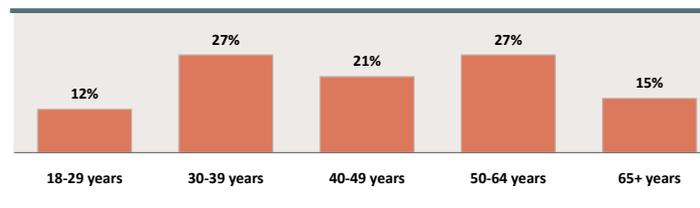
As noted in the NSB Health Profile, Barrow household heads were significantly less likely than those in the other North Slope villages overall to report household members who did not have enough to eat. This was true looking at Iñupiat only as well as all ethnic groups combined.

**Figure A.43: Food Insecurity in Barrow: Percentage of household heads reporting “Last year, at times household members did not have enough to eat”**



Among Iñupiat households, there was a significant relationship between the age of the household head and the likelihood of having household members who did not have enough to eat at time. Household heads in the youngest and oldest age groups were less likely than were those in the middle age groups to report household members not having enough to eat.

**Figure A.44: Food Insecurity in Barrow Inupiat Households, by Age Group of Household Head: Percent of household heads reporting that, last year, household members at times did not have enough to eat**

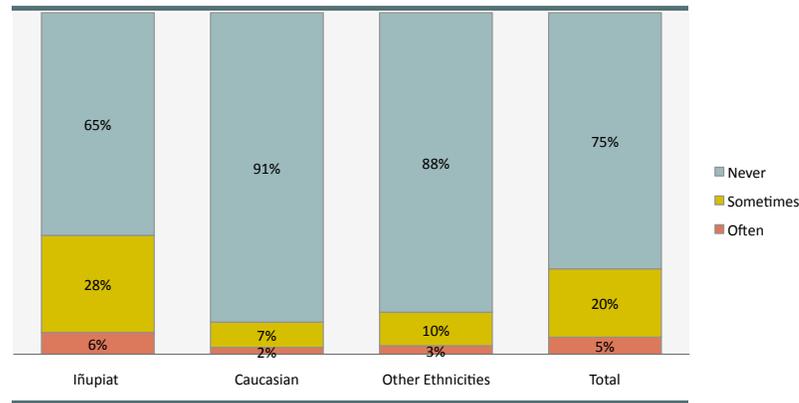


# Alcohol and Drug Problems

## Impact on Household

Three of four Barrow household heads did not believe that anyone in their household had been hurt by alcohol or drugs in the past year. Iñupiat household heads were significantly more likely than were Caucasians or those in other ethnic groups to report that a household member had been hurt by alcohol or drugs in the last year. Responses to this question did not vary significantly by gender or age group. As noted in the NSB Health Profile, Iñupiat household heads living in Barrow were significantly more likely than their counterparts in the other North Slope villages overall to believe that a member of their household had been hurt by alcohol or drugs in the last year.

**Figure A.45: Barrow Household Heads: “In the last 12 months, do you feel that anyone in your household has been hurt by alcohol or drugs?”**



## Impact on Community

Caucasian household heads in Barrow were more likely than Iñupiat household heads to report thinking that the health of the community had “often” been hurt by alcohol and drugs in the last year. Among Caucasians, the responses to this question differed significantly by gender, with Caucasian women the most likely to believe that the health of the community had often been hurt by alcohol or drugs in the last year. Responses did not vary significantly by age group.

**Figure A.46: Barrow Household Heads: “In the last 12 months do you feel that the health of your community has been hurt by alcohol or drugs?”**

