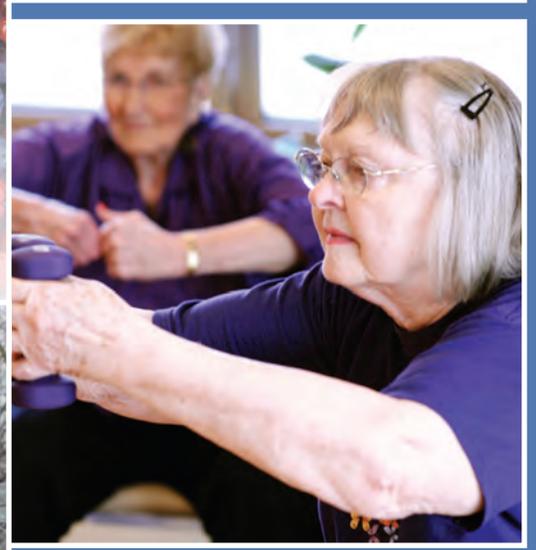
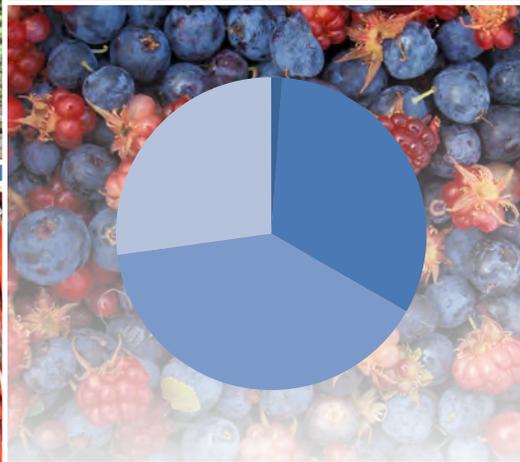
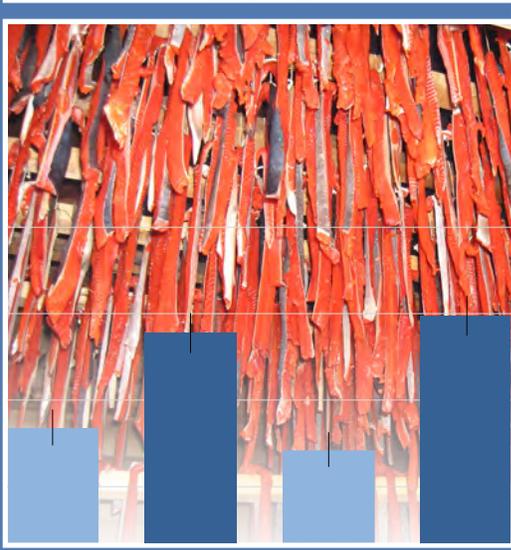


# Alaska Obesity Facts

August 2012



# Alaska

# Obesity Facts

# Report

**2012**

Sean Parnell, Governor

William J. Streur, Commissioner, Department of Health and Social Services

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## I. Introduction

In an effort to support obesity prevention efforts statewide, we have created this report as a way of succinctly communicating the most commonly requested data regarding obesity and overweight in Alaska. Those interested in more detailed information are encouraged to access the Obesity Prevention and Control Program's Publications and Resources webpage (<http://www.hss.state.ak.us/dph/chronic/obesity/resources.htm>) which houses additional data reports, fact sheets, contacts, and other resources.

### Report Highlights

- Obesity costs Alaska \$459 million each year for just the direct medical healthcare costs related to obesity. This financial burden will only increase as Alaska's population ages, and rates of obesity as well as healthcare costs increase.
- **Among Alaska adults:**
  - Rates of obesity have doubled from 13% in 1991 to 27% in 2010
  - Currently 1% are underweight, 32% are at a healthy weight, 40% are overweight, and 27% are obese; 67% are either overweight or obese
  - 26% do not get the recommended amount of physical activity
  - 74% have 2 or more hours of screen time per day
  - 77% are eating less than 5 daily servings of fruits and vegetables
  - 46% drink 1 or more sugar-sweetened beverage per day
  - Initiation and duration of breastfeeding has increased in Alaska over the past 2 decades
  - 66% identify obesity and related risk factors as the number 1 health issue facing Alaska's youth
  - A majority believe government has some responsibility for addressing obesity, and 78% support a government-funded obesity prevention media campaign
- **Among Alaska high school students:**
  - Currently 26% are either overweight or obese
  - Alaska Native youth are significantly more likely to be overweight or obese (combined; 32%) than are White youth (22%)
  - Only 21% get the recommended 60 minutes of daily physical activity
  - 79% are eating less than 5 daily servings of fruits and vegetables
  - 45% drink 1 or more sugar-sweetened beverage per day
- **Among Alaska 3-Year-Olds:**
  - 24% are obese and 41% are either overweight or obese
  - 23% watch more than 2 hours of TV daily
  - Only 14% are drinking the recommended types of milk: 1% (low fat) or skim

## Classifying Overweight and Obesity

For the purposes of this report, weight status is indicated by body mass index, or BMI. BMI is used to estimate risk of weight-related health problems, and is calculated using the formula:  $BMI = \text{weight (in kg)} / [\text{height (in m)}]^2$ . Classifications of *underweight*, *healthy weight*, *overweight*, and *obese* are determined by the following BMI levels for adults:

### Weight Classification for Adults

BMI	Classification
< 18.5	Underweight
18.5 to less than 25.0	Healthy Weight
25.0 to less than 30.0	Overweight
≥ 30.0	Obese

Because children and adolescents are still growing, weight status is determined by referencing age- and sex-specific growth charts. For 2 to 20-year olds, the resulting percentile is used to identify weight status, according to the following:

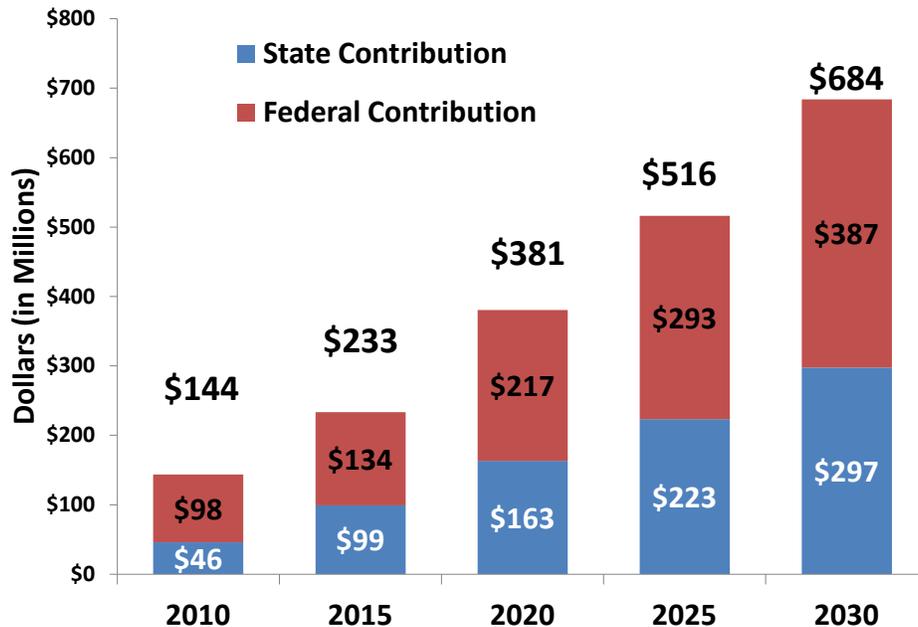
### Weight Classification for 2- to 20-Year Olds

BMI for Age Percentile	Classification
< 5 <sup>th</sup>	Underweight
5 <sup>th</sup> to less than 85 <sup>th</sup>	Healthy Weight
85 <sup>th</sup> to less than 95 <sup>th</sup>	Overweight
≥ 95 <sup>th</sup>	Obese

## II. Economic Costs of Obesity

- It is currently estimated that Alaska spends \$459 million each year on the **direct medical healthcare costs** related to obesity alone.<sup>1</sup> This does not include the additional costs of lost productivity and other “indirect” costs of obesity.
- Among State of Alaska employees, an estimated \$13.2 million is spent on the direct medical costs and total annual work loss cost attributable to overweight and obesity.<sup>2</sup>
- These costs are only expected to increase. The following shows projections for Alaska Medicaid spending (both the Federal and State shares) attributable to obesity, based on increases in Medicaid coverage and healthcare costs in general, as well as the expected rise in obesity prevalence.

**Alaska Medicaid Spending Projection Attributable to Obesity (in Millions),  
Assuming Increase in Obesity Prevalence\***



Source: AK Division of Public Health; \*Per United Health Foundation et al. projections<sup>3</sup>

<sup>1</sup> Trogdon JG, Finkelstein EA, Feagan CW, Cohen JW. State- and payer-specific estimates of annual medical expenditures attributable to obesity. *Obesity* 2012;20(1):214-220.

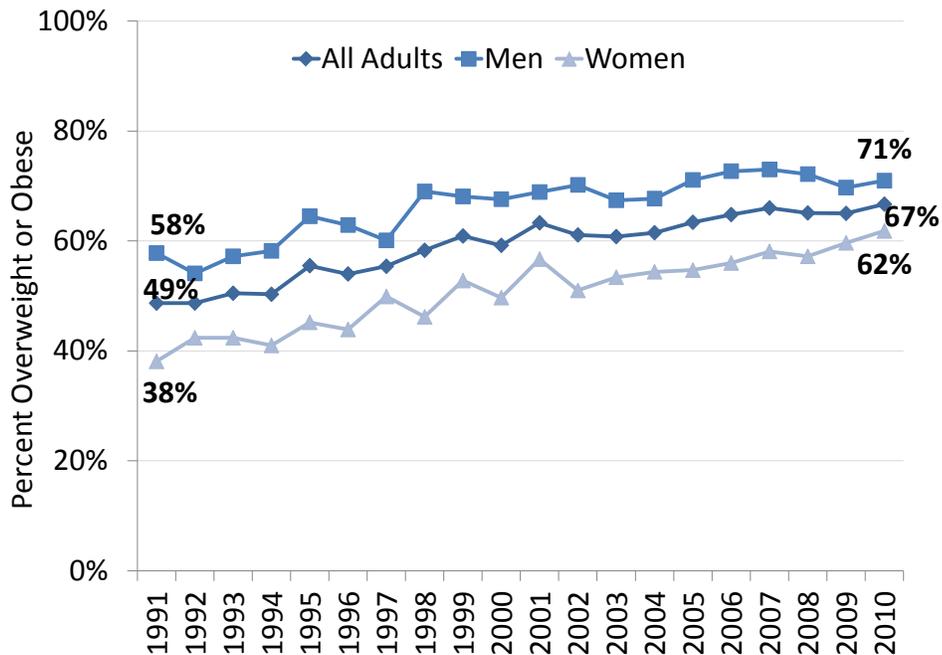
<sup>2</sup> CDC Lean Works Calculator <http://www.cdc.gov/leanworks/costcalculator/index.html> using information from the State of Alaska Workforce Profile SFY11 )

<sup>3</sup> United Health Foundation, the American Public Health Association, and the Partnership for Prevention. The Future Costs of Obesity: National and State Estimates of the Impact of Obesity on Direct Health Care Expenses. November 2009 (Available at: <http://www.nccor.org/downloads/CostofObesityReport-FINAL.pdf>).

### III. Adults

#### A. Adult Weight Status

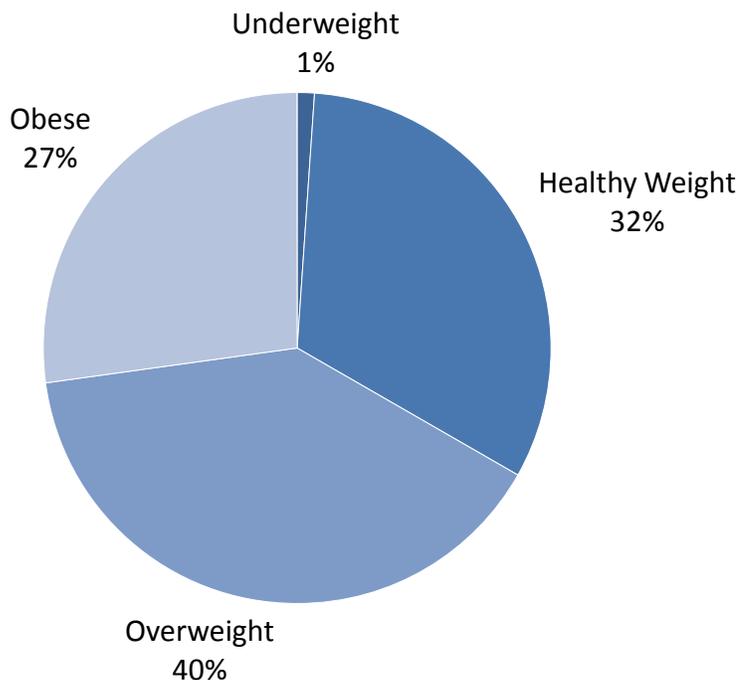
Trend in Prevalence of Overweight/Obesity (BMI  $\geq$  25.0), by Sex, Alaska Adults, 1991-2010



Source: AK BRFSS

- The percentage of Alaska adults who are either overweight or obese increased significantly from 49% in 1991 to 67% in 2010.
- Both men and women experienced this increase, with consistently higher prevalence among men.
- The increasing trend is largely due to a significant increase in obesity among:
  - all adults (from 13% in 1991 to 27% in 2010)
  - men (from 14% in 1991 to 25% in 2010)
  - women (from 13% in 1991 to 30% in 2010)
- Rates of overweight have remained fairly constant over the 2 decades, with men consistently more likely to be overweight than women. Between 1991 and 2010, the prevalence of overweight increased:
  - from 35% to 40% among all adults
  - from 44% to 46% among men
  - from 25% to 32% among women
- Class III obesity (BMI  $\geq$  40.0) doubled from 1.4% in 1991 to 2.9% in 2010.

### Weight Status, Alaska Adults, 2010

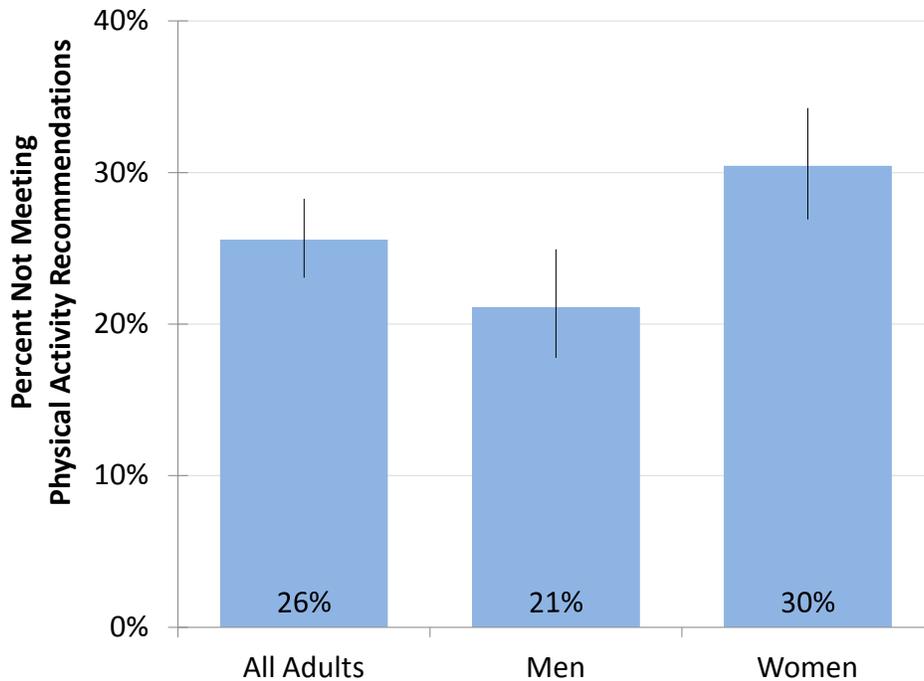


Source: AK BRFSS; Sum may not equal 100% due to rounding

- Currently 1% of Alaska adults are underweight, 32% are at a healthy weight, 40% are overweight, and 27% are obese--including 2.9% who are Class III obese (BMI  $\geq 40.0$ ).
- Women are significantly more likely than men to be underweight (2% versus less than 1%, respectively) and less likely than men to be overweight (32% versus 46%, respectively); there are no significant sex differences in prevalence of obesity or healthy weight.
- There are no significant differences in either obesity or overweight and obesity (combined) by race or region of residence.

## B. Adult Physical Inactivity

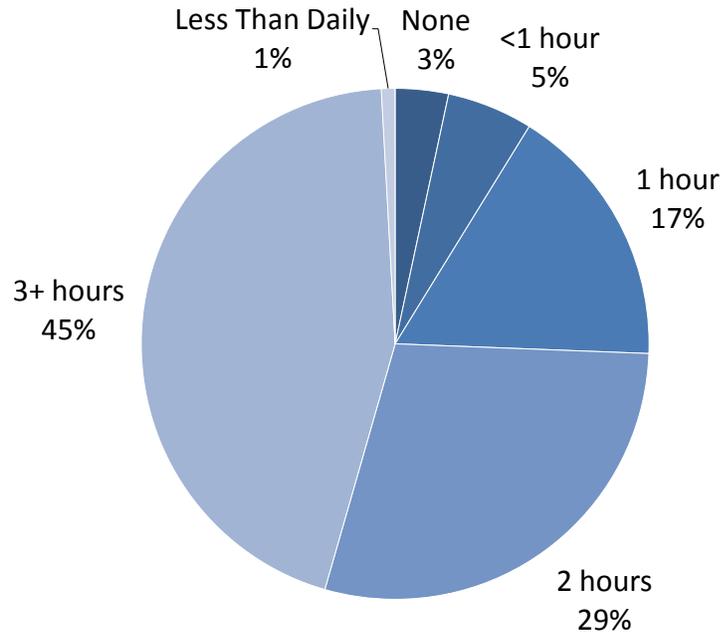
### Prevalence of *Not Meeting* Physical Activity Recommendations, by Sex, Alaska Adults, 2009



Source: AK BRFSS

- For substantial health benefits, the US Department of Health & Human Services recommends adults get at least 150 minutes of moderate-intensity physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity or an equivalent combination of moderate- and vigorous- intensity aerobic activity.
- Approximately 1 in 4 Alaska adults does not meet this recommendation.
- Women are more likely than men to not to meet the recommended amount of physical activity in a given week.
- There are no significant racial or regional differences.

### Number of Hours of Screen Time\* Per Day, Alaska Adults, 2009



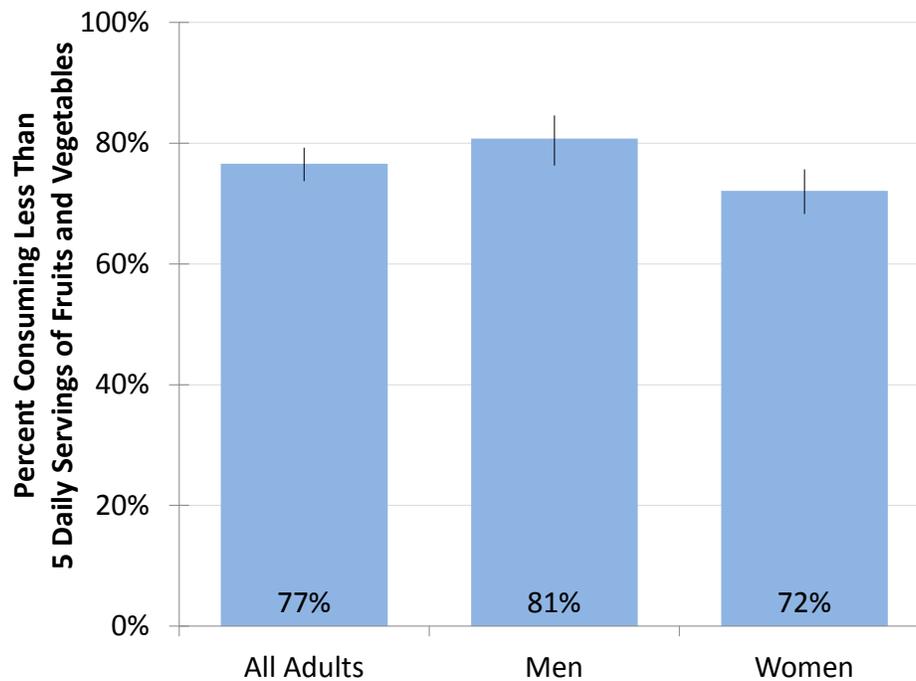
Source: AK BRFSS; Sum may not equal 100% due to rounding

\* Screen time for adults is defined as the number of hours per day outside of work spent watching television, videos, or DVDs.

- Approximately three-quarters (74%) of adult Alaskans have 2 or more hours of screen time per day.

## C. Adult Nutrition

### Prevalence of Consuming Less Than 5 Servings of Fruits & Vegetables Daily, by Sex, Alaska Adults, 2009

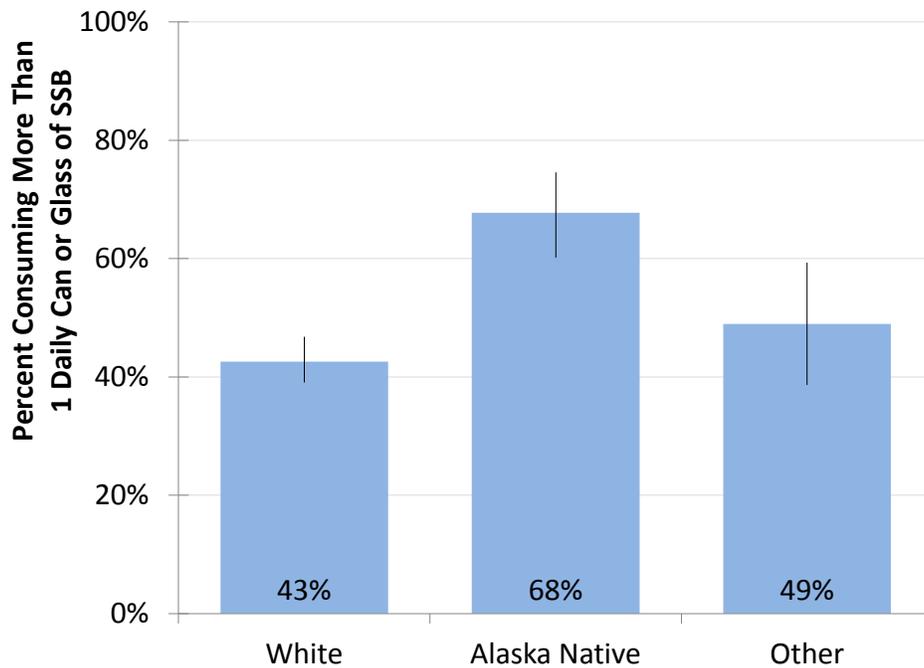


Source: AK BRFSS

- More than three-quarters of adult Alaskans consume fewer than the recommended 5 daily servings of fruits and vegetables.
- The prevalence of not meeting this nutritional recommendation has remained at this level over the past 20 years.
- Men are more likely to not meet this nutritional recommendation than are women.
- Residents in the rural<sup>4</sup> region of state are most likely to **not meet** the fruit and vegetable recommendation (87% in rural Alaska versus 74% - 79% for other regions).
- 57% of adults who say they do not eat enough fruits and vegetables agree that expense is a reason for not consuming enough fruits and vegetables; 36% agree that lack of availability is a reason, and 28% agree that inconvenience is a reason.

<sup>4</sup> Rural as defined by the Behavioral Risk factor Surveillance System (BRFSS; see Data Sources section of this report for definition of this region).

### Prevalence of Drinking 1 or More Cans/Glasses of Non-Diet, Sugar-Sweetened Beverages Daily, by Race, Alaska Adults, 2009

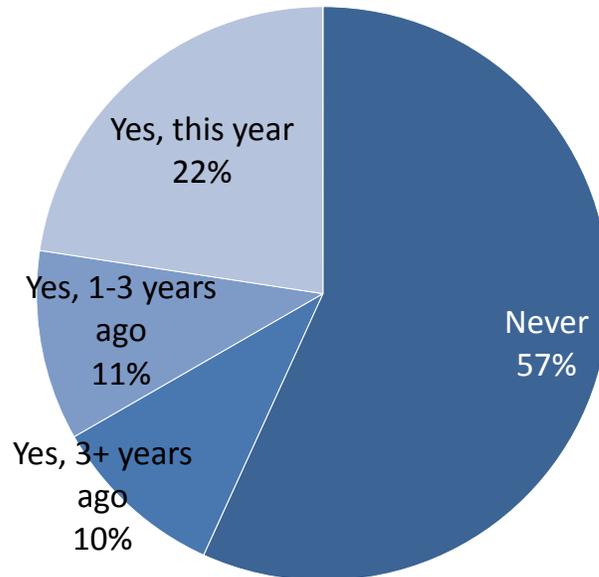


Source: AK BRFSS

- Overall, 46% of Alaska adults consume 1 or more sugar-sweetened beverages (SSB) daily; 16% consume 3 or more daily.
- Alaska Natives are significantly more likely (68%) than Whites (43%) or those of other races (49%) to consume 1 or more SSB daily.
- Alaska adults living in the BRFSS rural region of the state are more likely to consume 1 or more SSB daily (65%) than are those living in any 1 of the other 4 regions (39% to 50%).

## D. Healthcare Provider Advice

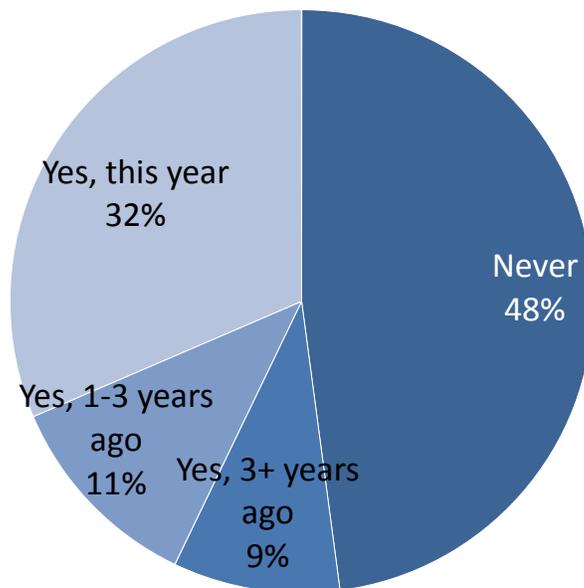
### Percentage of Alaska Adults Advised by Healthcare Provider about Their Diet, Alaska Adults, 2010



Source: AK BRFSS; Sum may not equal 100% due to rounding

- Less than half of all Alaska adults (43%) report ever being given advice about their eating habits by a healthcare provider; 22% were given such advice in the past 12 months.
- Alaska Natives are less likely to report having received dietary advice in the past year (14%) compared to Whites (23%) or those of other races (28%).
- Alaska adults living in the BRFSS defined rural region are less likely to report having received diet advice in the past year (15%) compared to other regions (ranging from 21% to 26%).
- Obese adults are more likely (34%) than are those who are not obese (19%) to report being given dietary advice from a healthcare provider in the past year.
- Healthcare provider advice on diet is also associated with **poverty status** and **education**.
  - Advice on diet in the past year was reported by:
    - 25% of those at 200% of the Federal Poverty Level (FPL) or above, but only 11% of those below 100% of the FPL
    - 25% of those with at least some college, but only 16% of those who had not graduated from high school

## Percentage of Alaska Adults Advised by Healthcare Provider about Their Physical Activity, Alaska Adults, 2010



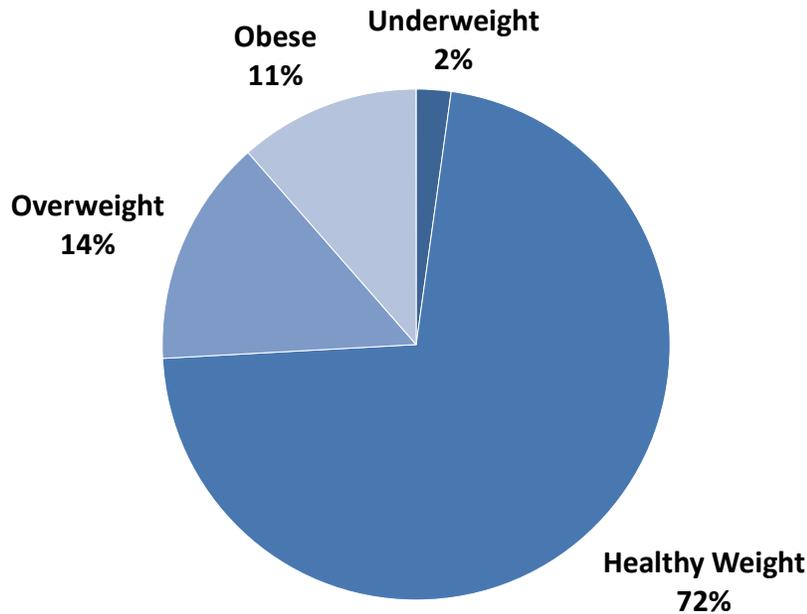
Source: AK BRFSS; Sum may not equal 100% due to rounding

- Just over half of all Alaska adults (52%) report ever being given advice by a healthcare provider about being more physically active; nearly one-third (32%) are given such advice in the past 12 months.
- Women are more likely (35%) than men (28%) to be given advice about physical activity in the past year.
- Alaska Natives are less likely to report having received physical activity advice in the past year (21%) compared to Whites or those of other races (33% for each) .
- Alaska adults living in the BRFSS-defined rural and gulf coast regions of the state are less likely to report having received physical activity advice in the past year (24% and 26%, respectively) compared to other regions (ranging from 32% to 35%).
- Obese adults are more likely (43%) than are those who are not obese (27%) to report being given physical activity advice from a healthcare provider in the last year.
- Healthcare provider advice on physical activity is also associated with **education**. Advice in the past year on physical activity was reported by:
  - 37% of those with at least some college
  - 22% of those with a high school degree or GED
  - 25% of those who had not graduated from high school

## IV. Children and Adolescents

### A. Weight Status of Children and Adolescents

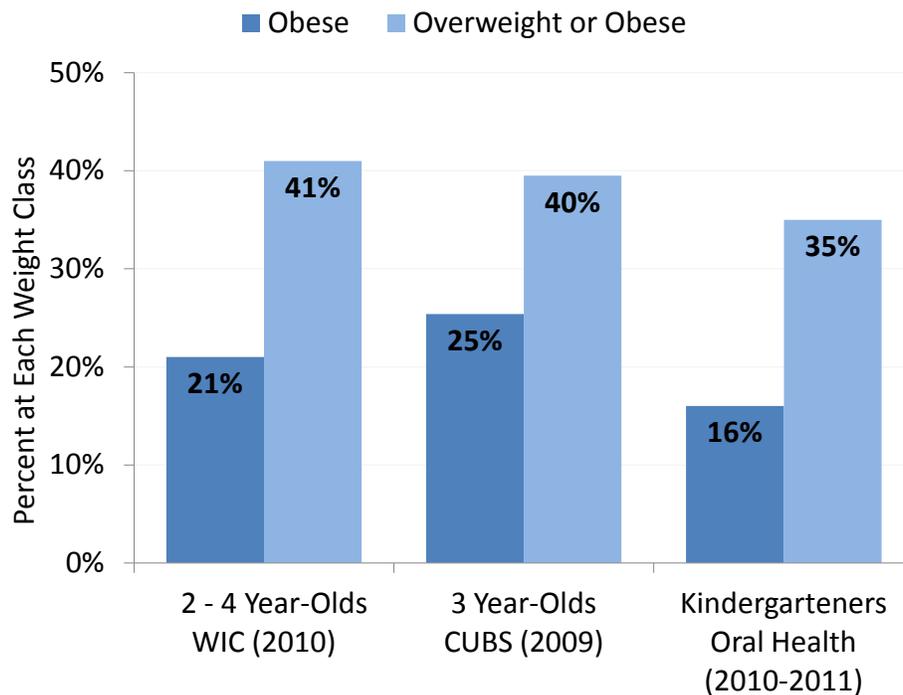
#### Weight Status, Alaska High School Students, 2011



Source: AK YRBS; Sum may not equal 100% due to rounding

- Currently 26% of Alaska high school students are either overweight or obese; this prevalence has remained fairly constant over the 8-year period during which it has been measured, with a low of 25% in 2003 and a high of 27% in 2007.
- Among Alaska high school students, boys (14%) are more likely than girls (9%) to be obese.
- Alaska Native youth are significantly more likely to be overweight or obese (combined; 32%) than are White youth (22%).

**Prevalence of Early Childhood Obesity (BMI  $\geq$ 95<sup>th</sup> Percentile) and Overweight/Obesity (BMI  $\geq$  85<sup>th</sup> Percentile), Alaska Children, Select Programs/Surveys, 2009-2011**



Sources: AK DHSS, Women Infants and Children's Program records; AK Childhood Understanding Behavior Survey; AK DHSS Oral Health Survey.<sup>5</sup>

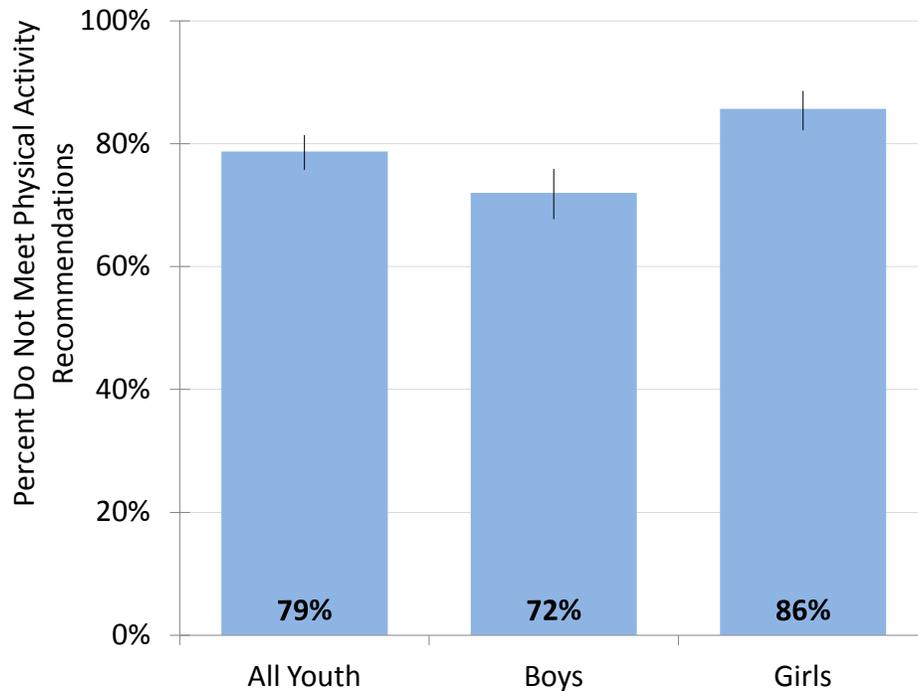
Statewide representative weight status data for children younger than high school age are only available for 3-year-olds. Several different programs in the state maintain or collect height and weight records for children in target populations. The data in the chart above provide the best available estimates of early childhood overweight and obesity in Alaska.

- Several school districts across the state have been examining the aggregate weight status of their student populations. For example:
  - In the Anchorage School District, 36% of kindergarten through 12<sup>th</sup> grade students were overweight or obese in 2007-2008 (<http://www.hss.state.ak.us/dph/chronic/pubs/assets/ChroniclesV2-1.pdf>).
  - In the Matanuska-Susitna Borough School District, 26% of kindergarten, first, third, fifth and seventh grade students were overweight or obese in 2009-2010 (<http://www.hss.state.ak.us/dph/chronic/pubs/assets/ChroniclesV3-1.pdf>).

<sup>5</sup>Eberling S., Results of the 2010/2011 Survey of Alaska Kindergarten Children, a report prepared for the Alaska Oral Health Program, July 2011. Available at: [http://www.hss.state.ak.us/dph/wcfh/Oralhealth/docs/OH\\_Survey\\_Kindergarten\\_2010-11.pdf](http://www.hss.state.ak.us/dph/wcfh/Oralhealth/docs/OH_Survey_Kindergarten_2010-11.pdf)

## B. Physical Inactivity among Children and Adolescents

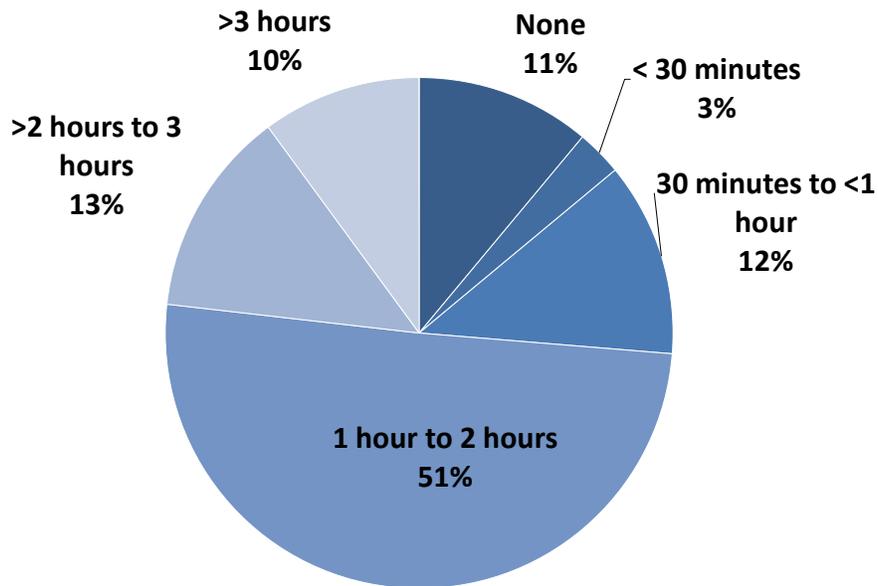
### Prevalence of *Not Meeting* Physical Activity Recommendations (60 Minutes Daily), by Sex, Alaska High School Students, 2011



Source: AK YRBS

- 79% of Alaska high school students are getting less than the recommended 60 minutes of physical activity every day; this means that only 21% are meeting this recommendation.
- Girls are more likely to ***not meet*** this recommendation (86%) than boys (72%).
- The percentage of Alaska high school students attending daily PE has declined significantly over time, from 26% in 1995 to 17% in 2011.
- Boys are more likely to attend PE daily (22%) than are girls (13%).

### Amount of TV Viewed on a Given Day, Alaska 3-Year-Olds, 2009-2010



Source: AK CUBS; Sum may not equal 100% due to rounding

The American Academy of Pediatrics (AAP) recommends limiting children’s total media time to no more than 1 to 2 hours of quality programming per day.<sup>6</sup>

- 23% of Alaska 3-year-olds watch more than 2 hours of TV daily; 10% watch more than 3 hours per day.

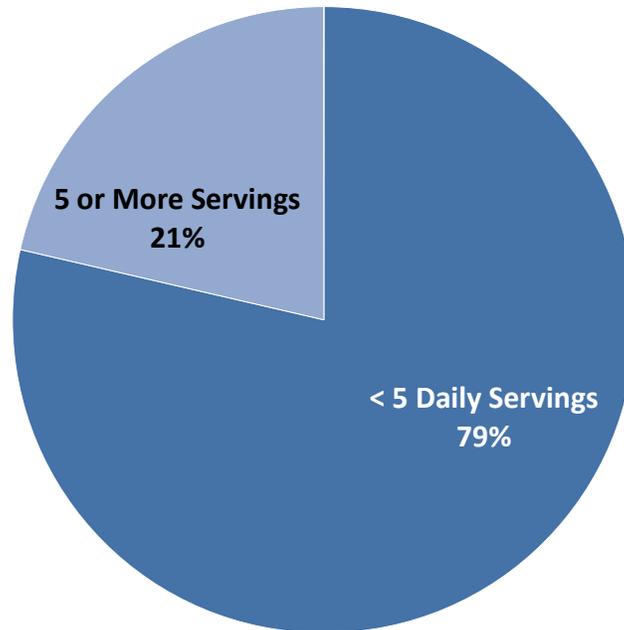
When reporting screen time for high school students, the term refers to time spent watching TV and videos, as well as time spent on the computer not doing school work.

- More than half (53%) of Alaska high school students have 3 or more hours of screen time on an average school day. (2011 AK YRBS)
- Among Alaska high school students, boys are more likely to have more than 3 hours of screen time (57%) than are girls (48%). (2011 AK YRBS)

<sup>6</sup>Academy of Pediatrics Committee on Public Education. Children adolescents, and television. Pediatrics. 2001.107:423-426.

## C. Nutrition among Children and Adolescents

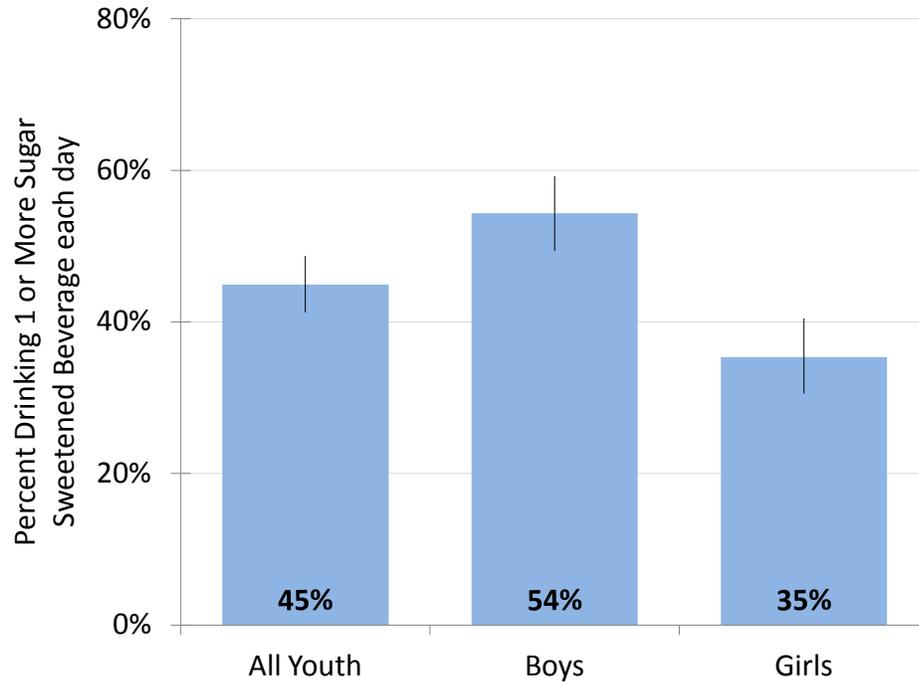
### Servings of Fruits and Vegetables Consumed Daily, Alaska High School Students, 2011



Source: AK YRBS; Sum may not equal 100% due to rounding

- Four out of 5 (79%) high school students in Alaska eat **less than** the recommended number of servings of fruits and vegetables each day.
- The percentage of high school students who eat 5 or more servings daily has increased slightly but significantly over the past 8 years, from 16% in 2003 to 21% in 2011.
- There are no significant differences by race or sex in the prevalence of meeting this nutritional recommendation.

## Prevalence of Drinking 1 or More Sugar Sweetened Beverage\* Daily, by Sex, Alaska High School Students, 2011

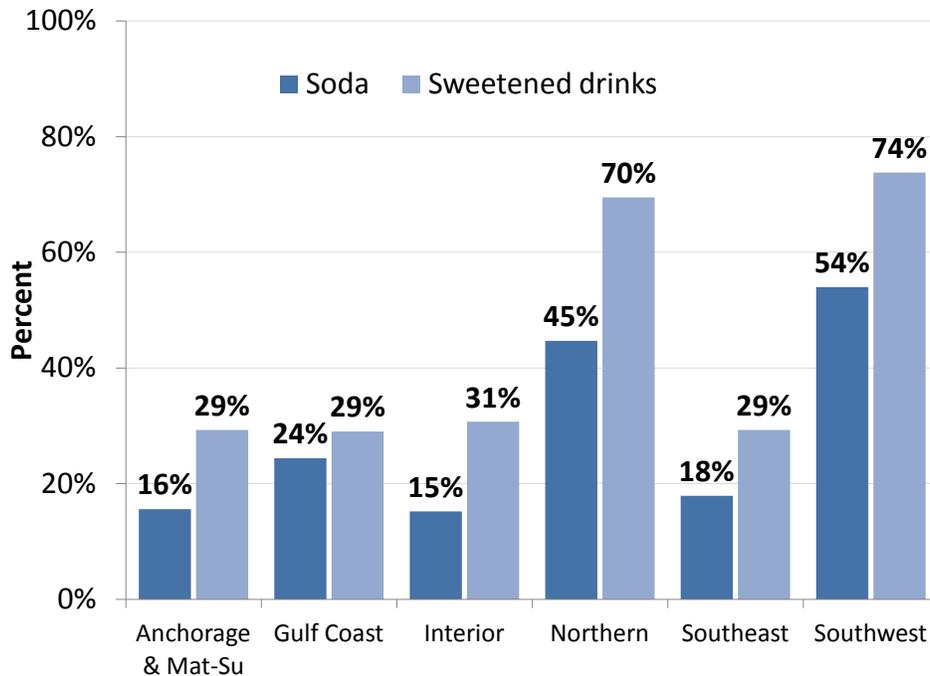


Source: AK YRBS

The Youth Risk Behavior Survey collects information from high school students on the amount of soda or pop (not including diet soda) and other sugar sweetened drinks such as sports drinks, sweetened energy drinks, Snapple, fruit punch, Kool-Aid, Tang or Capri-Sun.

- 45% of Alaska high school students drink at least 1 sugar sweetened beverage (SSB) each day.
- Among Alaska high school students,
  - boys are more likely (54%) than girls (35%) to consume 1 or more SSB each day; and
  - Alaska Native students are more likely (60%) than White students (39%), or those of other races (41%) to consume 1 or more SSB each day.

**Any Consumption of Various Sugar Sweetened Drinks by 3-Year-Olds on a Given Day, by Region<sup>7</sup>, Alaska, 2009-2010**



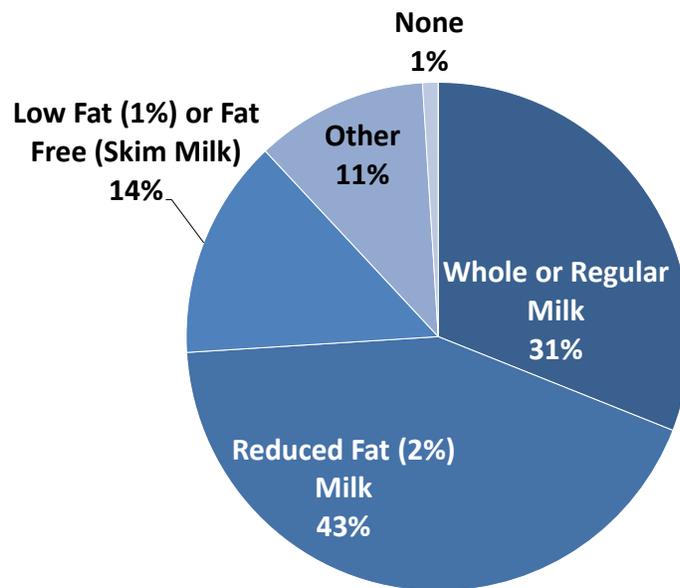
Source: AK CUBS

The Childhood Understanding Behaviors Survey asks mothers of 3-year-olds about how many cups of soda, such as Coke or Sprite, or sweetened or fruit drinks, such as Kool-Aid, Tang or Capri-Sun their child consumed on a given day.

- Three-year olds living in the Northern (45%) and Southwest (54%) regions of the state are more likely than those living in the other regions (ranging from 15% to 24%) to drink any soda on a given day (2009-2010 AK CUBS)
- Similarly, 3-year olds living in the Northern (70%) and Southwest (74%) regions of the state are more likely than those living in the other regions (ranging from 29% to 31%) to drink any amount of sweetened drinks on a given day. (2009-2010 AK CUBS)

<sup>7</sup> See Data Sources section of this report for definition of this region.

### Usual Type of Milk Drank, Alaska 3-Year-Olds, 2009-2010



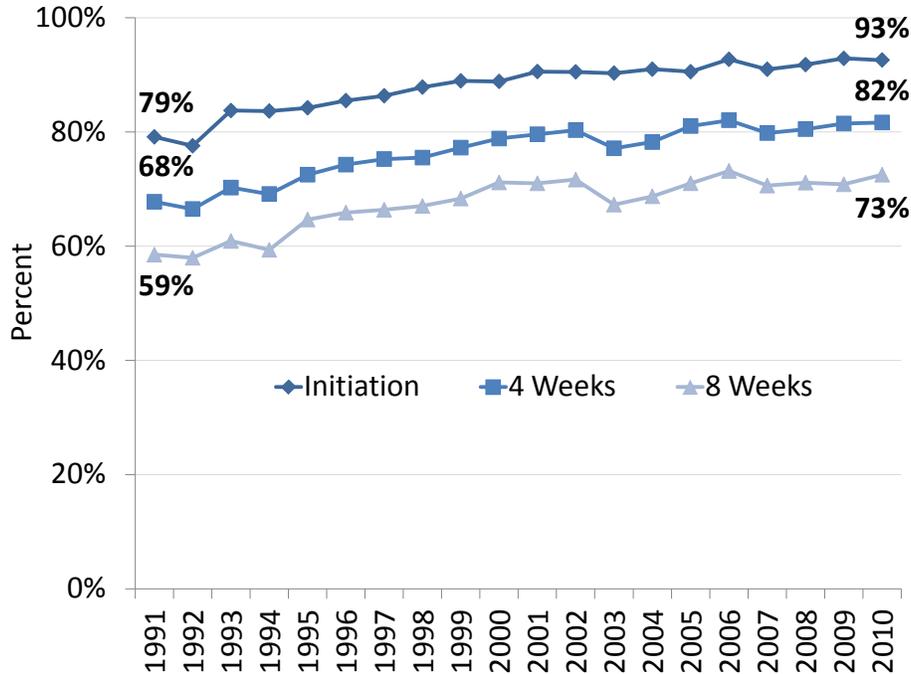
Source: AK CUBS; Sum may not equal 100% due to rounding

The 2010 Dietary Guidelines for Americans recommend all individuals older than age 2 drink only low fat (1%) or fat free (skim) milk.

- Only a minority of 3-year-olds in Alaska (14%) meets this recommendation; most (74%) drink reduced fat or whole milk.

## V. Breastfeeding

**Trend in Prevalence of Breastfeeding Initiation and Duration at 4-Weeks and 8-Weeks Postpartum, Alaska Women Delivering a Live Birth, 1991-2010**

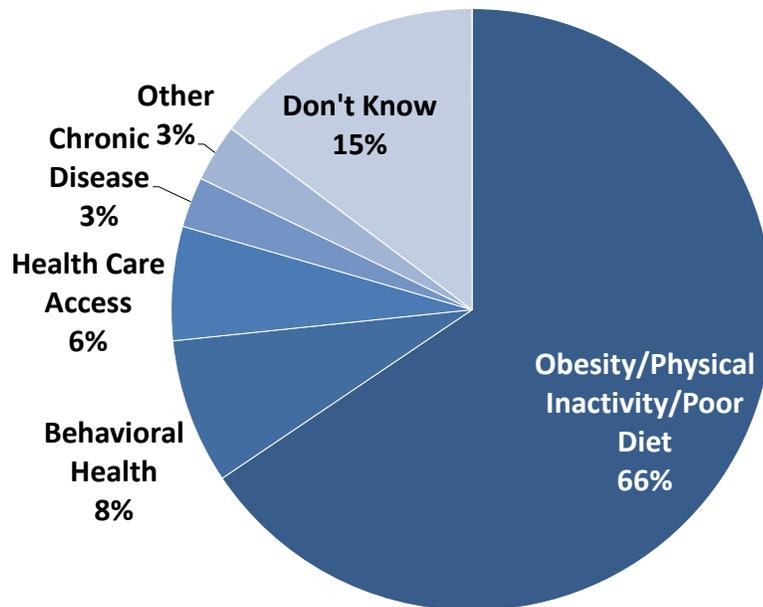


Source: AK PRAMS

- Over the past 2 decades, initiation and duration of 4- and 8-week postpartum breastfeeding (that is, maintaining breastfeeding through 4 and 8 weeks postpartum, respectively) has increased significantly in Alaska.
- The increasing trend in initiation of breastfeeding has been seen among both Alaska Native women (from 73% in 1991 to 93% in 2010) as well as non-Native women (from 81% in 1991 to 93% in 2010).

## VI. Attitudes and Opinions

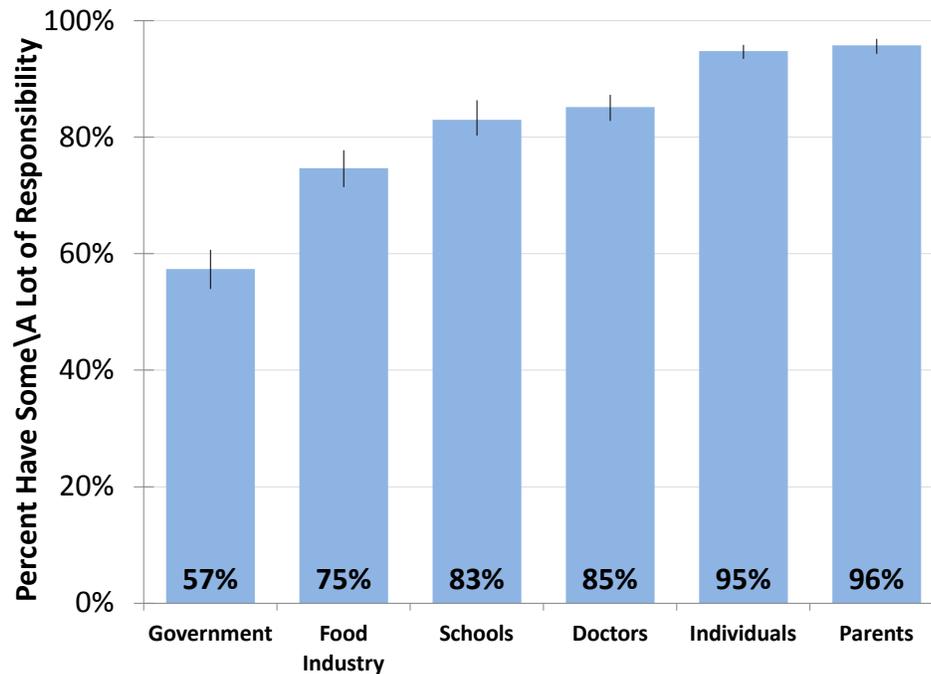
### Opinions on the Number 1 Health Issue for Alaska's Children, Alaska Adults, 2010



Source: AK BRFSS; Sum may not equal 100% due to rounding

- When asked to identify the most important health issue facing Alaska's youth, 66% of Alaska adults identified either obesity or the factors that contribute to obesity, such as physical inactivity and poor diet.
  - The "Behavioral Health" category includes concerns such as suicide, depression, and substance use and abuse.
  - The "Health Care Access" category includes concerns such as inability to find a doctor or to receive preventative services.
  - The "Chronic Disease" category includes concerns such as diabetes, heart disease, and asthma.

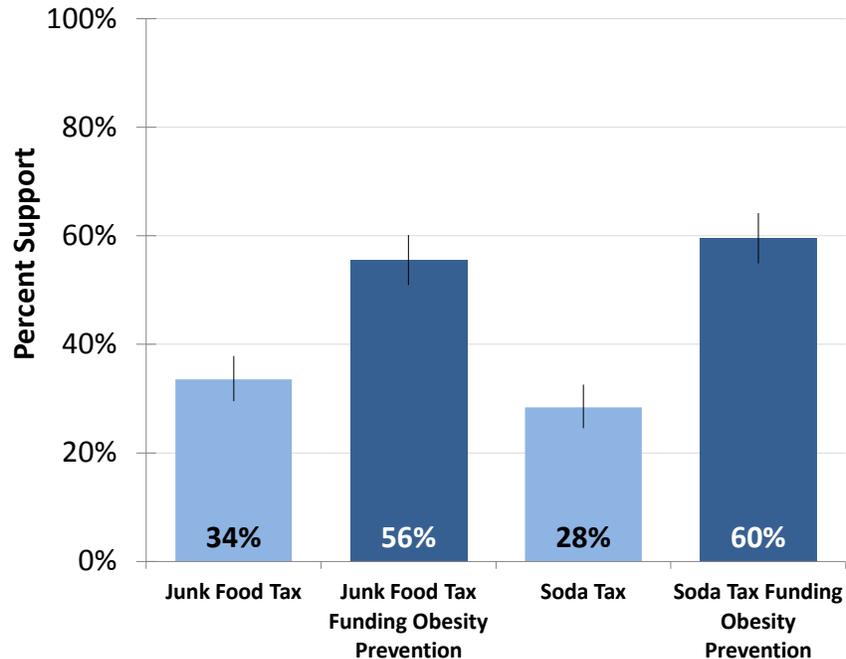
### Percentage Who Believe Each Source Has Some or a Lot of Responsibility for Addressing Obesity in the US, Alaska Adults, 2009



Source: AK BRFSS

- Alaska adults recognize that the responsibility for addressing obesity rests not only with individuals but also with the education, healthcare, and business sectors.
- Over half (57%) of all adults in Alaska agree that government has some responsibility for addressing obesity.
- 95% of adults in Alaska support age-appropriate nutrition and dietary behavior health education in schools. (2008-2009 AK BRFSS)

## Percentage Who Strongly or Somewhat Support Each Obesity-Prevention Strategy, Alaska Adults, 2010

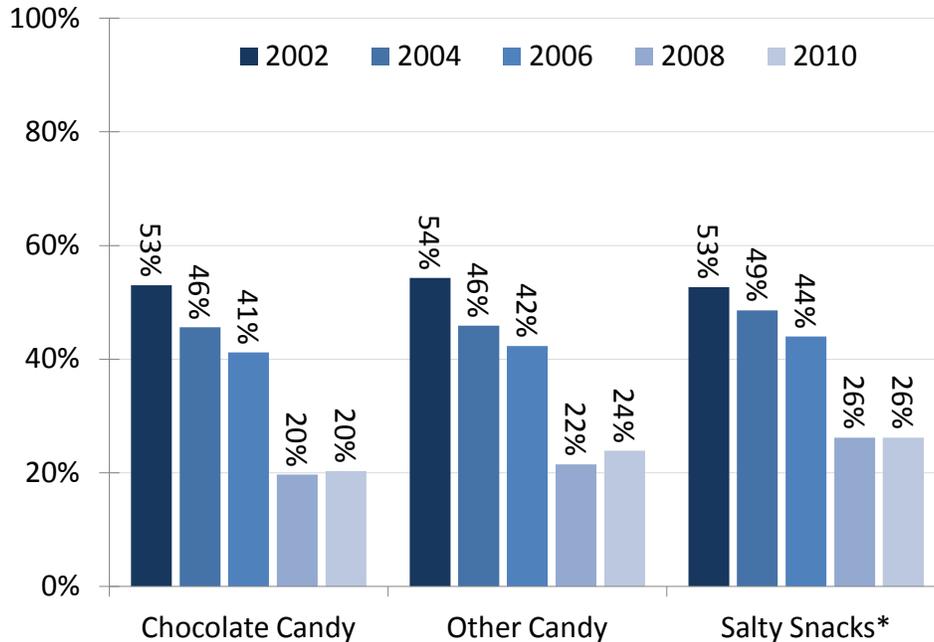


Source: AK BRFSS

- A majority of Alaska adults support the idea of taxes on junk food (56%) or soda (60%) as an obesity prevention strategy, as long as the funding generated would be used to fund obesity prevention efforts.
- Even without an explicit connection to obesity prevention, around one-third of Alaska adults support the idea of such taxes on junk food (34%) and soda (28%).
- In addition:
  - 61% support requiring restaurants to provide nutritional information on their menus
  - 78% support government-funded media campaigns that promote eating right and exercising

## VII. School-Based Strategies/Interventions

Trend in Percentage of Schools in Which Students Could Purchase Candy or Salty Snacks, Alaska Secondary Schools, 2002-2010



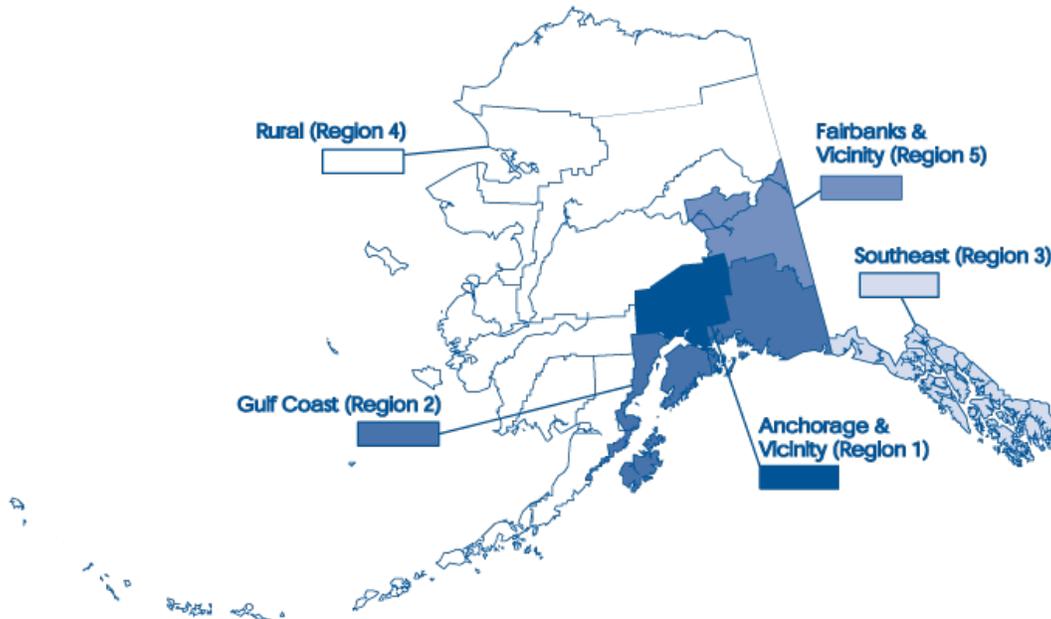
Source: CDC School Health Profiles; \*Excluding low fat snacks.

- Between 2002 and 2010 there were significant declines in the availability of candy and high-fat, salty snacks within Alaska secondary schools.
- Similar declines were seen in the availability of sugar sweetened beverages. Between 2006 and 2010:
  - Availability of soda and “fruit drinks” (excluding 100% fruit juice) declined from 50% in 2006 to only 26% in 2010; and
  - Availability of sports drinks declined from 53% in 2006 to 38% in 2010.

## X. Data Sources

### Behavioral Risk Factor Surveillance System (BRFSS)

#### *Alaska BRFSS Regions*



Source: State of Alaska, DHSS, DPH, Section of Chronic Disease Prevention and Health Promotion

The BRFSS is an anonymous telephone survey conducted by the Alaska Division of Public Health in cooperation with the Centers for Disease Control and Prevention (CDC). It aims to estimate the prevalence of behavioral risk factors in the general population that are known to be associated with the leading causes of morbidity and mortality in adults. The BRFSS has operated continuously in Alaska since it began in 1991.

The BRFSS uses a probability (or random) sample in which all Alaska households have a known, nonzero chance of selection. The sample is stratified into 5 geographic regions, with roughly equal numbers of interviews conducted in each region. This method deliberately oversamples rural areas of the state. Respondents are randomly selected from among the adult (age 18 and older) members of each household reached through a series of random telephone calls. Those living in institutions (i.e., nursing homes, dormitories) are not surveyed. The BRFSS questionnaire covers such topics as general health status, health care access, nutrition, physical activity, tobacco use, diabetes, alcohol use, women's health, injury prevention, HIV/AIDS awareness. There are also questions on the demographic characteristics of respondents.

Throughout this report race is coded as White, Alaska Native, and Other, which comprises all race groups other than White or Alaska Native combined; small numbers preclude meaningful analysis of other racial subgroups. Respondents are classified as Alaska Native if they self-identify as Alaska Native only (not in combination with another race), or for those who self-identify as Alaska Native in combination with another race, report that Alaska Native best represents what their race is.

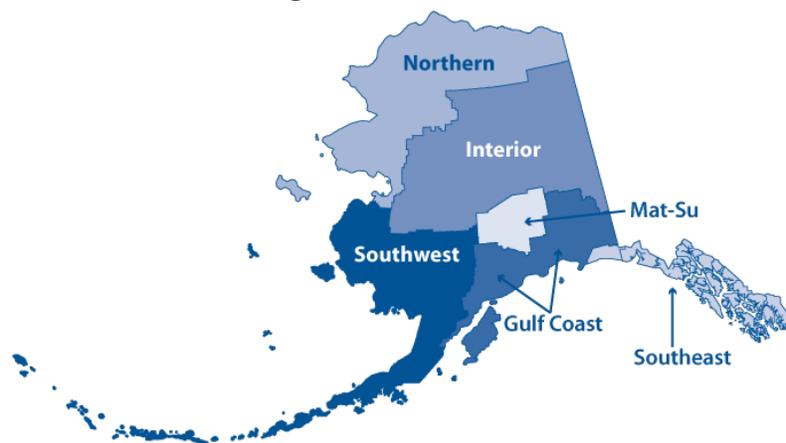
Alaska presently conducts 2 BRFSS surveys: the standard BRFSS (sponsored by the CDC) and a modified BRFSS (sponsored by the State of Alaska). Both surveys are conducted throughout the year, using separate samples drawn using the same methodology. Both the standard and modified BRFSS are weighted (separately) to compensate for the overrepresentation or underrepresentation of persons in various subgroups. The data are further weighted to adjust the distribution of the sample data so that it reflects the total population of the sampled area.

### Childhood Understanding Behaviors Survey

The CUBS provides population-based data on preschool aged children in Alaska. The CUBS uses the methodology of re-interviewing mothers who responded to the Alaska Pregnancy Risk Assessment Monitoring System (PRAMS) survey soon after their child was born. Although PRAMS is conducted in almost 37 states, Alaska is 1 of only 4 states that have a follow-up survey to PRAMS. The purpose of CUBS

is to provide information on health conditions, health care utilization, child development and other health related behaviors of young children and to evaluate the association between prenatal and immediate postnatal factors with early childhood health and welfare. The CUBS asks questions about both the mother and her child. About 115 mothers are sent a CUBS survey in the mail every month. Survey responses are weighted so that reported prevalences accurately describe all mothers of 3-year old children born in Alaska in a single calendar year. Both the CUBS and PRAMS data (described below) can be presented regionally, using the 6 public health or labor market regions outlined in the above map.

#### **Alaska Economic Regions**



Source: <http://labor.alaska.gov/research/census/econregions.pdf>.

## Oral Health Survey

A variety of statewide oral health surveys of children have been conducted by the State of Alaska Oral Health Program since 2004. Visual assessments of the oral health of Alaskan third grade and kindergarten children were conducted in 2010-2011. The assessments evaluated dental decay experience, untreated decay, caries experience in primary maxillary anterior teeth and dental sealants and collected heights and weights. Calculations for BMI and BMI percentile for age were performed using the CDC's BMI tool for schools.

## Pregnancy Risk Assessment Monitoring System (PRAMS)

The PRAMS is a population-based survey of Alaska women who have recently delivered a live-born infant. Administered since 1990 by the Alaska Division of Public Health, PRAMS is conducted in collaboration with the CDC in 40 states to gather information on the health risk behaviors and circumstances of pregnant and postpartum women. A systematic stratified sample is drawn each month from the state's live birth records for infants between 2 and 6 months of age. Sampled mothers receive a series of mailed questionnaires, and since 1997 telephone follow-up has been initiated among those who do not respond to the third mailed request. The PRAMS questionnaire addresses such topics as access to prenatal care, obstetric history, maternal use of alcohol, maternal tobacco use, nutrition, economic status, maternal stress, and early infant development and health status. Survey responses are weighted so that reported prevalences accurately describe Alaska women delivering a live-born infant during the year of the survey. In recent years (2008-2010), the survey has had an average response rate of 68%.

## Youth Risk Behavior Survey (YRBS)

The YRBS is a systematic survey of high school students investigating behaviors related to the leading causes of mortality, morbidity and social problems among youth. The Centers for Disease Control and Prevention sponsors national and state surveys every 2 years in odd years. Alaska first participated in the YRBS in 1995. The statewide survey obtained a statistically valid, representative sample in 1995, 1999, 2003, 2007, 2009 and 2011. Alaska was unsuccessful in its attempt to obtain a statewide representative sample in 2001 and 2005. The Alaska YRBS is conducted using a 2-stage sampling design. Schools are selected first with a probability of inclusion proportional to the size of their enrollment. Once a school is chosen, classes are selected, with each student having an equal opportunity for inclusion. Since 2003, active parental consent was required for each student participating in the YRBS. On the appointed survey day students completed confidential written questionnaires and returned them in class in unmarked, sealed envelopes. Data were weighted to reflect the true distribution of Alaska

high school students by sex and grade level. Following CDC guidelines for YRBS data reporting, data are suppressed in subgroup analyses for which the actual number of respondents is fewer than 100.

### **Women, Infants and Children (WIC) Nutrition Program**

WIC is a supplemental food and nutrition program for pregnant and breastfeeding women and their children from birth to age 5. Alaska WIC provides nutrition information, counseling, breastfeeding support, and periodic health screening, along with supplemental food vouchers for infant formula and healthy foods. Children’s height and weight are measured and recorded at clinics as part of the application and renewal process.



[www.hss.state.ak.us/dph/chronic/obesity/](http://www.hss.state.ak.us/dph/chronic/obesity/)

