Dear Alaskans,

We know that a child’s health is influenced by their daily surroundings and the options their families have available. Children born in Baby-Friendly USA certified hospitals are more likely to get the best nutrition possible, breastmilk. Families that choose to participate in WIC increase their access to healthy food choices and can have free nutrition and breastfeeding education, counseling, support, nutritious foods and referrals to needed services. Families that enroll in a childcare center that is committed to best-practices can improve what their children eat and drink. A committed childcare center can increase a child’s daily physical activity, help reduce their screen time, support families, and help both families and children develop a foundation of healthy habits for life.

We want to better support Alaska’s youngest children and their families in their pursuit to grow up at a healthy weight free from preventable disease. Obesity increases the chances of developing diseases that last a lifetime, including type 2 diabetes, heart disease and many types of cancer. Medical care related to obesity costs Alaskans $459 million annually. State and federal governments pay for more than 25% of these costs in the form of Medicare and Medicaid.¹ In this report, we explore a variety of behaviors, experiences, societal norms, practices and policies related to physical activity and nutrition that are known to impact a child’s lifelong health. We look at the simple things in life such as eating meals together as a family and the more complex, such as a mother and infant’s experience in the hospital.

We intend for those of us invested in Alaska’s young children to use the information presented in this report. Reports about trends, counts and percentages are often considered dry and boring. But, since you are reading this, you know the importance. If we do not know where our families struggle, where our children are unsupported we cannot provide solutions. If we do not monitor our progress we cannot tell if we are making a difference.

Please join us in using this report to make informed decisions, select evidence-based solutions, strengthen commitment for those solutions, and inspire action. We want to make a positive difference in the lives of Alaska’s children and their families and we hope you will join us.

Karol Fink, MS, RDN
On behalf of the Alaska Physical Activity and Nutrition team

Acknowledgements

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Major contributors to the development of this report include:

Program Design and Evaluation Services

- Erik Everson, MPH
- Myde Boles, PhD

Physical Activity and Nutrition unit

- Karol Fink, MS, RDN, Manager
- Lauren Kelsey, MPH, Physical Activity & Nutrition Specialist
- Diane Peck, MPH, RDN, Early Care and Education Program Coordinator

We would like to acknowledge the following individuals and organizations for their contributions to this report:

Alaska Department of Health and Social Services
Division of Public Health

- Section of Women’s, Children’s, and Family Health
  - Kathy Perham-Hester, MS, MPH, PRAMS Coordinator
  - Margaret B. Young, MPH, CUBS Coordinator
  - Sherrell Holtshouser, RN, MPH, Nurse Consultant II

- Section of Chronic Disease Prevention and Health Promotion
  - Andrea Fenaughty, PhD, Deputy Section Chief
  - Dawn Groth, RN, BSN, MSEd, Physical Activity & Nutrition Specialist
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I. Introduction
   A. Report Highlights

Overweight and obesity:
- More than one in three (35%) Alaska 3-year-olds are overweight or obese, which increases their chance of developing weight-related chronic diseases.
- Overweight/obesity prevalence among Alaska 3-year-olds did not change between 2008 and 2014.
- Overweight/obesity prevalence among 3-year-old children is significantly lower among children of White mothers than of Alaska Native mothers, and lower in higher socioeconomic status (SES) families compared to low-SES families.

Breastfeeding:
- 93% of Alaska mothers initiate breastfeeding of their babies and initiation rates did not change significantly between 2012 and 2017.
- 42% of Alaska babies are breastfed exclusively through 6 months.
- Half (51%) are fed breastmilk up to 12 months.
- Among Alaska mothers who had ceased breastfeeding before 8 weeks, almost 20% stated it was because they went back to work or school.
- In 2018, 3.4% of Alaska births occurred at Baby-Friendly USA certified hospitals. By 2020, we estimate 19% of births in Alaska will occur at a certified hospital.

Child care:
- One of every five (21%) Alaska 3-year-olds is cared for regularly at a child care center, preschool, or Head Start program.
- 41% of Alaska mothers of 3-year-olds use some type of child care arrangement on a regular basis.
- Cost is a prohibitive factor for two-thirds (67%) of mothers of 3-year-olds who are not using their preferred type of child care.

Beverages and screen time
- 28% of Alaska 3-year-old children drink a sugary drink every day.
- Alaska 3-year-old children in:
  - low SES families were more likely to consume sugary drinks than those in higher SES families, 39% vs 21%.
  - the Northern and Southwest regions were significantly more likely than children in other regions to consume sugary drinks.
- Children of Alaska Native mothers are significantly more likely than children of White mothers to consume a sugary drink on a typical day, 57% vs 17%.
- 77% of Alaska 3-year-olds have an hour or more of screen time (watching television, movies, or video games) on a typical day.
- Only 13% of Alaska 3-year-olds typically drink fat-free (skim or nonfat) and low-fat (1%) milk as recommended by the US Dietary Guidelines.
II. Early Care and Education in Alaska

Early care and education (ECE) and quality child care positively impact children, families, and communities. ECE can improve children’s development and act as a protective factor against the future onset of adult disease and disability. The ECE sector in Alaska is comprised of a wide variety of programs and providers that includes licensed child care centers, family child care homes and child care group homes; Head Start and Early Head Start programs; public and private pre-elementary school programs; military child care providers; tribally-approved child care providers; and an unknown number of unregulated/non-licensed providers.

ECE programs that serve low-income and at-risk children can counteract the disadvantage some children experience and provide them with an equal opportunity to achieve school readiness, and lifelong employment, income, and health. Participation in Head Start has been associated with reductions in body mass index (BMI) and obesity.

ECE center policies may directly impact what children consume and how active they are, as well as help them develop a foundation of healthy habits for life. ECE programs can implement national standards and best practices to improve what children eat and drink, increase their physical activity, reduce their screen time, and support families who breastfeed.

In Alaska, there are an estimated 39,000 children under six years of age potentially in need of child care (children in two-parent families, both parents in labor force and children in single-parent families, parent in the labor force). A survey conducted in 2015 of Alaska households with children under 13 years of age showed that 55% of children under six years of age typically received care by someone other than a parent or guardian at some time during the month preceding the survey. Among children under six years of age who received care the month prior to the survey:

- 41% were in pre-elementary school or licensed center-based care
- 34% received care at someone else’s home

---

• 30% received care in the child’s home
• 8% were in Early Head Start/Head Start programs
• 4% received various other forms of care (some children received care from more than one type of provider)

B. Licensed Child Care Facilities

Licensed child care facilities within the Municipality of Anchorage (MOA) are regulated by the Anchorage Health Department. All other licensed child care facilities in the state are regulated by the State of Alaska Department of Health and Social Services, Child Care Program Office (CCPO).

Licensed child care facilities in Alaska and the MOA include:

• 221 Child Care Centers
• 260 Family Child Care Homes
• 76 Child Care Group Homes (includes foster group homes [no more than 8 children in care] and residential group homes [no more than 12 children in care])

The total capacity for these licensed facilities in Alaska is 17,307 children.

In Alaska there are 14 centers that are not licensed, but are approved by CCPO or monitored to ensure they meet or exceed state licensing regulations. These include Department of Defense, Coast Guard, and Tribally Approved or Certified sites.

C. Head Start and Early Head Start

Head Start (ages 3-5) and Early Head Start (birth-3 years) are federally-funded programs specifically serving low-income and at-risk children. Head Start programs are typically center-based, while Early Head Start can be provided in a center or through home visits. Most Head Start programs in Alaska are not licensed, but grantees receive funding from the Alaska Department of Education and Early Development (EED) to support quality activities in Head Start programs.

• 17 grantees operate 107 Head Start programs, reaching 2,501 children
• 9 grantees operate 21 Early Head Start program, reaching 498 children (Some grantees have both Head Start and Early Head Start programs.)

---

D. Pre-Elementary (or Pre-K) School Programs

School districts and Head Start agencies can receive approval from the Alaska Department of Education and Early Development (EED) Early Learning Program to operate pre-elementary programs for children ages 3-5. These programs are exempt from licensing, but may become licensed to access federal Child Care Development Funds (CCDF).

- 11 school districts have Pre-K programs in 295 schools/sites (2017/18 school year)\(^\text{10}\)
- All Head Starts have to apply for EED Pre-K approval (which is why they are exempt from licensing)\(^\text{11}\)

E. Tribally-Approved Child Care Providers

Child care sites and family child care providers may be tribally-approved, but not state approved or licensed. These providers can receive federal Child Care Development Block Grant (CCDBG) Tribal Allocations to run their programs.

- 30 grantees distribute CCDBG funds to an unknown number of providers in 2018.\(^\text{12}\)
  In 2006, there were close to 280 tribally-approved child care providers.\(^\text{2}\) (More recent data are not available.)

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\(^{11}\) Personal communication with Supanika Ackerman, Alaska EED Early Learning Program. 1/10/19.

\(^{12}\) Personal communication with Staci Collier, Alaska DHSS Child Care Program Office. 1/11/19.
III. Nutrition Assistance Programs for ECEs and Families with Young Children

A. Child and Adult Care Food Program

The Child and Adult Care Food Program (CACFP) is a federally-funded, state-administered program that provides healthy meals and snacks to children and adults receiving day care. It plays a vital role in improving the quality of day care and making healthy meals more affordable for low-income families.

In Alaska, participating sites include:

- 219 Child Care Centers (includes Head Start Programs)
- 230 Family Child Care Homes

B. Women, Infants and Children Program

The Women, Infants and Children Program (WIC) is a federally-funded, state-administered public health program providing nutrition and breastfeeding education, counseling, support, nutritious foods, and referrals to needed services. WIC serves low-income and at-risk babies and children up to age five, pregnant women, and new mothers.

In Alaska:

- 43.5% of income-eligible women, infants, and children participated in WIC in 2016
  - 56.8% of eligible infants participated
  - 56.7% of eligible children age 1 participated
  - 38.5% of eligible children age 2 participated
  - 36.1% of eligible children age 3 participated
  - 27.7% of eligible children age 4 participated

C. Supplemental Nutrition Assistance Program

The Supplemental Nutrition Assistance Program (SNAP) is a federally-funded, state-administered program that provides food benefits to supplement the budget of low-income families.

In Alaska, there are (data from 2018, unduplicated count):

- 14,228 SNAP households with children age 5 years or younger
- 21,102 children age 5 years or younger that received SNAP benefits

---


14 Personal communication with Ginger Shoemaker, DHSS Division of Public Assistance. 1/17/19.
IV. Weight status

A. Classifying Weight Status

For the purposes of this report, weight status for people of at least 2 years age is indicated by body mass index, or BMI. BMI correlates with amount of body fat and can be used to estimate risk of weight-related health problems. BMI is a useful measure because the calculation requires only height and weight, is easy to analyze, and provides a good approximation of obesity and overweight prevalence across the population.\(^{15}\)

BMI is calculated using the formula: \(\text{BMI} = \frac{\text{weight (in kg)}}{\text{[height (in m)]}^2}\). Classifications of underweight, healthy weight, overweight, and obese are determined by the following BMI levels for adults:

<table>
<thead>
<tr>
<th>BMI</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5 to less than 25.0</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>25.0 to less than 30.0</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥ 30.0</td>
<td>Obese</td>
</tr>
</tbody>
</table>

Because children and adolescents are still growing, their weight status is determined by referencing calculated BMI to age- and sex-specific growth charts. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among a standardized set of children of the same sex and age. For 2 to 20-year-olds, the resulting percentile is used to identify weight status, according to the following:

<table>
<thead>
<tr>
<th>BMI for Age Percentile</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5(^{\text{th}})</td>
<td>Underweight</td>
</tr>
<tr>
<td>5(^{\text{th}}) to less than 85(^{\text{th}})</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>85(^{\text{th}}) to less than 95(^{\text{th}})</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥ 95(^{\text{th}})</td>
<td>Obese</td>
</tr>
</tbody>
</table>

For children under 2 years of age, this report includes the classification of high weight-for-length. High weight-for-length is defined as \(\geq 2\) standard deviations above the sex and age-specific median in the World Health Organization (WHO) growth standards.\(^{16}\)

\(^{15}\) Additional information about BMI can be found at this site: https://www.cdc.gov/healthyweight/assessing/index.html

\(^{16}\) Information on WHO growth charts can be found at this site: https://www.cdc.gov/growthcharts/who_charts.htm
B. Women, Infants, and Children (WIC) Participants

Figure 1. High weight-for-length ratio, Alaska WIC 3-23 month olds, 2008-2014^"}

- The percentage of Alaska WIC-enrolled children age 3-23 months with a high weight-for-length decreased between 2008 and 2014 from 19% to 14%. The percent children with a high weight-for-length in 2014 is significantly less than in 2008.

- Among WIC 3-23 month olds, boys have consistently had a higher prevalence of high weight-for-length than girls.

- WIC-enrolled children are not necessarily representative of Alaska’s overall 3-23 month-old population.

Source: Women, Infants, and Children (WIC) Participant and Program Characteristics
^At the time of this publication, 2014 was the most current state-specific WIC PPC results available.
High weight-for-length prevalence was significantly higher among WIC Alaska Native/American Indian 3-23 month-olds in 2014 than it was among children of other racial/ethnic groups.

White, Black, Hispanic and Asian/Pacific Islander children had similar prevalence rates of high weight-for-length.
Overweight prevalence (not including obesity) among WIC 2-4 year-old boys decreased slightly between 2008 and 2014 from 19% to 17%.

Overweight prevalence among WIC girls was steady over this time period.
Health disparities exist in childhood overweight prevalence between groups of WIC-enrolled 2-4 year olds:

- For WIC-enrolled 2-4 year-olds, overweight prevalence in 2014 was significantly higher among Alaska Native/American Indian children than among Hispanic children and non-Hispanic White or Black children.

- Overweight prevalence was also significantly higher among WIC-enrolled Asian/Pacific Islander 2-4 year-olds than among non-Hispanic Black 2-4 year-olds.

Source: Women, Infants, and Children (WIC) Participant and Program Characteristics
Overweight: Between 85th and 95th percentile of BMI for age and sex
PI = Pacific Islander
Note: White and Black categories do not include Hispanic-identified children
Figure 5. Obesity prevalence, Alaska WIC 2-4 year-olds, 2008-2014

- Obesity prevalence among WIC-enrolled 2-4 year-olds remained relatively flat between 2008 and 2014. Apparent decreases are not statistically significant.
Figure 6. Obesity prevalence, Alaska WIC 2-4 year-olds, 2014

Health disparities exist in childhood obesity between groups of WIC-enrolled 2-4 year olds:

- Obesity prevalence was significantly higher among WIC-enrolled 2-4 year-old boys than among girls in 2014.

- Alaska Native/American Indian and Asian/Pacific Islander 2-4 year-olds each experienced significantly higher rates of obesity than did children of other race/ethnicity groups.

- Obesity prevalence was significantly lower among non-Hispanic Whites than among 2-4 year-olds of all other race/ethnicity groups.
C. Alaska 3-year-olds

Figure 7. Overweight/obesity prevalence among Alaska 3-year-olds, by age of mother^, 2012-2017

- Overweight/obesity prevalence among Alaska 3 year-olds remained relatively flat between 2012 and 2017. Apparent decreases are not statistically significant.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Overweight/obesity: 85th percentile and higher of BMI for age and sex
^Age of mother at the time the child was born
Disparities exist in overweight/obesity prevalence among Alaska 3-year olds in 2017:

- Overweight/obesity prevalence was significantly lower among 3-year-old children of White mothers than among children of Alaska Native/American Indian mothers.

- 3-year-old children in low-SES families had a significantly higher prevalence of overweight/obesity than children in higher-SES families.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Overweight/obesity: 85th percentile and higher of BMI for age and sex
Age of mother at the time the child was born
§ Estimate based on 30-60 responses, may be unreliable
Current child enrollment in Medicaid was used as a proxy measure of low socioeconomic status (SES).
Figure 9. Overweight prevalence among Alaska 3-year-olds, by age of mother\textsuperscript{*}, 2012-2017

- Overweight prevalence (not including obesity) among Alaska 3-year-olds has remained relatively stable since 2012. All trends are non-significant.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Overweight: Between 85\textsuperscript{th} and 95\textsuperscript{th} percentile of BMI for age and sex
\textsuperscript{*}Age of mother at the time the child was born
Overweight prevalence among Alaska 3-year-olds did not vary significantly by age of mother, race, or SES in 2017.
Figure 11. Obesity prevalence among Alaska 3-year-olds, by age of mother\(^\star\), 2012-2017

- Obesity prevalence among Alaska 3-year-olds decreased significantly between 2012 and 2017.

- The decrease in obesity prevalence was significant among children with mothers under age 25 when the child was born, but not among those born to older mothers.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Obese: 95th percentile and higher of BMI for age and sex
\(^\star\)Age of mother at the time the child was born
Figure 12. Obesity prevalence among Alaska 3-year-olds, by maternal demographics, 2017

- Obesity prevalence in 2017 was significantly lower among Alaska 3-year-old children of White mothers than among children of Alaska Native/American Indian mothers. No differences were found by age of mother or SES.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Obese: 95th percentile and higher of BMI for age and sex
Age of mother at the time the child was born
§ Estimate based on 30-60 responses, may be unreliable
Current child enrollment in Medicaid was used as a proxy measure of low socioeconomic status (SES).
D. Alaska Kindergarten Students

Figure 13. Overweight/obesity prevalence, Kindergarten students, Anchorage and Matanuska-Susitna Borough School Districts combined, 2003-04 to 2017-18 school years

Source: Alaska Student Weight Status Surveillance System
Overweight/obesity: 85th percentile and higher of BMI for age and sex

- The prevalence of overweight/obesity decreased slightly but not significantly between the 2003-04 and 2017-18 school years for Kindergarten students in the Anchorage and Matanuska-Susitna Borough school districts.

- Approximately 75% of Kindergarten students in these districts were 5 years old at the time of measurement.

- Kindergarten students in the Anchorage and Matanuska-Susitna Borough school districts in 2017-18 represented over half of the Kindergarten students in the state (51%).
Figure 14. Overweight/obesity prevalence, Kindergarten students, Anchorage and Matanuska-Susitna Borough School Districts combined, 2016-17 and 2017-18 school years*

- Overweight/obesity prevalence was significantly lower among White Kindergarten students than among Alaska Native students or students of other races in the 2017-18 school year.

- Students of low socioeconomic status (SES) had a significantly higher prevalence of overweight/obesity than higher-SES students in 2016-17.

Source: Alaska Student Weight Status Surveillance System
*SES data is from 2016-17 school year, all other metrics from 2017-18 school year
Low SES: Enrollment in free- and reduced-price meal programs, a proxy measure of low socioeconomic status (SES)
Overweight/obesity: 85th percentile and higher of BMI for age and sex
Figure 15. Overweight prevalence, Kindergarten students, Anchorage and Matanuska-Susitna Borough School Districts combined, 2003-04 to 2017-18 school years

- Overweight prevalence (not including obesity) decreased significantly between the 2003-04 and 2017-18 school years for Anchorage/Matanuska-Susitna Borough Kindergarten students.

- The decrease in overweight prevalence was significant among Kindergarten boys but not Kindergarten girls.

Source: Alaska Student Weight Status Surveillance System
Overweight: Between 85th and 95th percentile of BMI for age and sex
Health disparities exist in overweight prevalence among Anchorage and Matanuska-Susitna Borough school district Kindergarten students in 2016-18:

- Overweight prevalence was significantly higher among Alaska Native Kindergarteners than among students identified as White or other races.

- Low SES Kindergarten students had a significantly higher overweight prevalence than higher-SES students.
Figure 17. Obesity prevalence, Kindergarten students, Anchorage and Matanuska-Susitna Borough School Districts combined, 2003-04 to 2017-18 school years

[Graph showing obesity prevalence from 2003-04 to 2017-18 for boys and girls in Anchorage and Matanuska-Susitna Borough School Districts.]

- Obesity prevalence among Anchorage and Matanuska-Susitna Borough Kindergarten students did not significantly change between the 2003-04 and 2017-18 school years.

Source: Alaska Student Weight Status Surveillance System

Obesity: 95th percentile and higher of BMI for age and sex
Health disparities exist in obesity prevalence among Anchorage School District and Matanuska-Susitna Borough School District Kindergarten students in 2016-18:

- Obesity prevalence was significantly lower among White Kindergarten students than among Alaska Native students or students of other races.

- Low-SES Kindergarten students had significantly higher obesity prevalence than higher-SES students.
### E. Mothers of Young Children

**Figure 19. Excess maternal weight gain by pre-pregnancy weight status, Alaska, 2017**

- The Institute of Medicine (IOM) recommendations for weight gain during pregnancy consider both infant and maternal health. The recommendations are based on a woman’s pre-pregnancy weight status and differ if the mother is pregnant with one child or twins. The best health outcomes for both mother and child are achieved when women start their pregnancy at a healthy weight and gain the recommended amount of weight during pregnancy.\(^\text{17}\)

- Approximately half of Alaska mothers were overweight or obese just before their pregnancy (data not shown).

- In half of all Alaska births in 2017, mothers exceeded the recommended amount of maternal weight gain.

- Mothers who were overweight or obese just before their pregnancy were significantly more likely to experience excess maternal weight gain than were healthy-weight or underweight mothers.

- In 28% of births, the mother gained within the recommended weight range (data not shown).

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V. Breastfeeding

A. Initiation

Figure 20. Breastfeeding initiation by age of mother\(^a\), Alaska, 2012-2017

- Breastfeeding, with its many known health benefits for infants, children, and mothers, is a key strategy to improve public health.\(^{18}\) In the United States, the American Academy of Pediatrics (AAP) currently recommends:\(^{19}\)
  - Infants should be fed breast milk exclusively for the first 6 months after birth. Exclusive breastfeeding means that the infant does not receive any additional foods (except vitamin D) or fluids unless medically recommended.
  - After the first 6 months and until the infant is 1 year old, the AAP recommends that the mother continue breastfeeding while gradually introducing solid foods into the infant's diet.

- In recent years, over 90% of Alaska mothers have initiated breastfeeding; this is well above the Healthy People 2020 target of 82%.\(^{20}\)

- Breastfeeding initiation rates did not change significantly between 2012 and 2017.

While Alaska’s breastfeeding initiation rates are well above the Healthy People 2020 target of 82%\(^\text{21}\), health disparities exist in breastfeeding initiation for Alaska infants.

Breastfeeding initiation in 2017 was significantly higher among White mothers than among Alaska Native mothers or mothers of other races. Initiation was also significantly higher among Alaska Native mothers than among mothers of other non-White races.

Although over 90% of mothers in lower-SES households initiated breastfeeding, the rate of initiation was significantly higher for higher-SES households.

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B. Duration and Exclusivity

Figure 22. Exclusive breastfeeding at 4 weeks by maternal demographics, Alaska, 2017

- While 62% of Alaska women exclusively breastfed their babies at 4 weeks postpartum, disparities exist in breastfeeding exclusivity:
  - Exclusive breastfeeding at 4 weeks was significantly higher among White mothers (70%) than among Alaska Native mothers (52%) or mothers of other races (44%).
  - Mothers in higher-SES households were significantly more likely to exclusively breastfeed at 4 weeks than were mothers in lower-SES households, 69% vs 57%, respectively.

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)
Age of mother at the time the child was born
Equal to or less than 200% Federal Poverty Level (FPL), based on household size and income, was used as a proxy measure of low socioeconomic status (SES).
The majority (56%) of Alaska women exclusively breastfed their babies at 8 weeks.

Mothers aged 25 or older were significantly more likely than younger mothers to exclusively breastfeed their babies at 8 weeks, 58% vs 47%, respectively.

Exclusive breastfeeding at 8 weeks was significantly higher among White mothers (65%) than among Alaska Native mothers (44%) or mothers of other races (38%).

Mothers in higher-SES households were significantly more likely to exclusively breastfeed at 8 weeks than were mothers in lower-SES households, 65% vs 50%, respectively.
Figure 24. Breastfeeding duration and exclusivity, among U.S. and Alaska children born in 2016

- **Alaska mothers’ breastfeeding duration and exclusivity rates are significantly higher than the national average. Compared to other states, Alaska has some of the highest duration and exclusivity breastfeeding rates in the nation.**
Figure 25. Reasons mothers stopped breastfeeding, at time of survey, Alaska, 2015

- The major reasons mothers reported stopping breastfeeding is useful to health professionals when helping mothers overcome breastfeeding barriers and to devise targeted breastfeeding interventions. Among Alaska mothers who had initiated but then stopped breastfeeding at the time of the survey (typically around 8 weeks):

- Over half (56%) stated they thought they were not producing enough milk.
- Almost one of five (19%) stated they went back to work or school.
- Almost one of five (18%) stopped because they felt it was the right time to do so.
C. Mother’s Experiences

Figure 26. Sources that provided breastfeeding information, Alaska, 2017

- 85% of Alaska mothers reported receiving information about breastfeeding from a nurse, midwife, or doula.
- Only 8% of mothers reported receiving information from a breastfeeding hotline.
- Among Alaska women who had a prenatal care visit, 97% reporting being asked by a doctor, nurse, or other health care provider about their breastfeeding plans (PRAMS 2017; data not shown).
Evidence-based practices and policies supportive of breastfeeding, such as the Ten Steps to Successful Breastfeeding, are associated with improved rates of breastfeeding initiation and duration. The breastfeeding experiences reported during a mother’s hospital stay are reflective of the practices that support breastfeeding initiation and duration.

- In 2017, 97% of Alaska mothers who gave birth at a hospital breastfed their newborns while there; 84% breastfed within the first hour after giving birth.

- 11% of Alaska babies born in 2015 received formula before 2 days of age, compared to 17% of babies nationwide (data not shown).

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24 CDC National Immunization Survey (NIS) 2016-2017, among 2015 births. The rate for infants receiving formula before 2 days of age is calculated among breastfed infants.
D. Healthcare Facilities and Providers

Figure 28. Ideal maternity practice response, Alaska hospitals, 2015

CDC conducts the Maternity Practices in Infant Nutrition & Care (mPINC) survey of maternity hospitals and birth centers to assess national and state-level adherence to ideal maternity practices known to improve breastfeeding outcomes. In 2015,

- 72% of Alaska birthing hospitals (n=21) completed the CDC’s Maternity Practices in Infant Nutrition & Care (mPINC) survey.
- 24% of surveyed Alaska hospitals had a complete breastfeeding policy including all 10 model policy elements assessed by mPINC, compared to 8% reported in the 2007 survey.
- 57% of hospitals had appropriate feeding practices, where supplemental feedings to breastfeeding infants are rare.
- 57% of hospitals had adequate discharge planning including referrals to breastfeeding support.
- 18% of new maternity care staff received appropriate breastfeeding education (data not shown).

Baby-Friendly USA\(^\text{25}\) has certified three Alaska hospitals for maintaining the highest standards of breastfeeding practices: Bartlett Regional Hospital in Juneau was designated October of 2014; SEARHC Mt. Edgecumbe Hospital in Sitka was designated December of 2018; and Alaska Native Medical Center (ANMC) was designated May of 2019 (data not shown).

- In 2018, 3.4% of Alaska births occurred at Baby-Friendly USA certified hospitals.\(^\text{26}\) By 2020 due to ANMC designation we estimate, 19% of births in Alaska will occur in a Baby-Friendly USA certified hospitals (data not shown).


VI. Healthcare and Child Care

A. Healthcare Access

Figure 29. Health insurance coverage before, during, and after^ pregnancy, Alaska, 2017

- 98% of Alaska women had some type of insurance coverage during their pregnancy, though coverage was lower in the months before and after their pregnancy.
- 95% of Alaska 3-year-olds were covered by some type of health insurance (Alaska CUBS 2017; data not shown).

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)
^After pregnancy reflects responses 4 to 4.5 months postpartum on average.
Health disparities exist in insurance coverage for Alaska mothers in 2017:

- Alaska Native mothers were significantly more likely than mothers of other, non-White races to have had some form of health insurance coverage in the month before pregnancy in 2017.

- Alaska women living in higher-SES households were more likely than those in lower-SES households to have had insurance in the month before pregnancy.
In 2017, 98% of Alaska women had some form of health insurance coverage while pregnant.

Alaska women living in higher-SES households were significantly more likely than those in lower-SES households to have health insurance coverage during pregnancy.
Figure 32. Health insurance coverage after pregnancy\textsuperscript{a}, Alaska, 2017

- Among Alaska mothers who had recently given birth, those age 25 and older were significantly more likely than younger mothers to have health insurance, 93% and 84%, respectively.

- Alaska women living in higher-SES households were significantly more likely than those in lower-SES households to have post-pregnancy health insurance coverage, 97% vs 87%, respectively.

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)
\textsuperscript{a}After pregnancy' reflects responses 4 to 4.5 months postpartum on average.
Equal to or less than 200% Federal Poverty Level (FPL), based on household size and income was used as a proxy measure of low socioeconomic status (SES)
B. Child Care Access

Figure 33. Child care types regularly used, Alaska mothers of 3-year-olds, 2017

- 41% of Alaska mothers of 3-year-olds used at least one type of child care arrangement on a routine or regular basis.
- The most common regularly-used type of child care was a child care center, preschool, or Head Start program.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Respondents were able to select all that applied.
Figure 34. Reasons for not using preferred type of child care, Alaska mothers of 3-year-olds, 2017

- In 2017, among the 17% of the Alaska mothers of 3-year-olds who were not currently using their preferred type of child care, two-thirds (67%) stated cost as a reason.

- Almost half (48%) of mothers who stated they were not using their preferred type of child care gave ‘could not afford to stay home’ as a reason.

- Among Alaska mothers of 3-year-olds not using their preferred type of child care, 4% stated there were no child care options that could accommodate their child’s special needs.
C. Healthcare Provider Advice

Figure 35. Prior to pregnancy, discussed maintaining a healthy weight with health care worker, Alaska, 2017

- Among Alaska mothers who had a health care visit with a doctor, nurse, or other health care worker in the 12 months before becoming pregnant, 36% discussed maintaining a healthy weight.

Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)
Equal to or less than 200% Federal Poverty Level (FPL), based on household size and income was used as a proxy measure of low socioeconomic status (SES)
Among Alaska mothers who had a prenatal health care visit with a doctor, nurse, or other health care worker, 69% were asked if they knew how much weight they should gain during pregnancy.

Alaska Native women were significantly less likely than White women to be asked during their prenatal visit if they knew about how much weight they should gain, 61% and 71%, respectively.
Among Alaska mothers who had a postpartum checkup, 67% discussed healthy eating, exercise, and losing weight gained during pregnancy with a doctor, nurse, or other health care worker.

White women were significantly less likely than women of other, non-Alaska Native races to have discussed eating, exercise, and losing weight during their postpartum checkup.
Among Alaska mothers who had a postpartum checkup, 59% discussed how long to wait before becoming pregnant again with a doctor, nurse, or other health care worker.

White women were significantly less likely than Alaska Native women to have discussed how long to wait before becoming pregnant again during their postpartum checkup, 56% and 65%, respectively.

Women in higher-SES households were significantly less likely than lower-SES mothers to have discussed how long to wait before becoming pregnant again during their postpartum checkup, 53% and 64%, respectively.
VII. Nutrition & Screen Time Measures

A. 100% Juice

Figure 39. Daily 100% fruit juice consumption, Alaska 3-year-olds, 2017

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)

The American Academy of Pediatrics recommends less than ½ cup (4 ounces) of 100% fruit juice per day for 3-year-olds.\textsuperscript{27}

- 36% of Alaska 3-year-olds consumed at least one cup of 100% fruit juice on an average day in 2017.

B. Milk

Figure 40. Daily milk consumption, Alaska 3-year-olds, 2017

- In 2017, 79% of Alaska 3-year-olds consumed at least one cup of milk on an average day.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
The US Dietary Guidelines for Americans recommends fat-free (skim or nonfat) and low-fat (1%) milk for children 2 years of age and older.28

In 2017, only 13% of Alaska 3-year-olds typically drank the recommended fat-free (skim or nonfat) and low-fat (1%) milk.
C. Water

Figure 42. Daily water consumption, Alaska 3-year-olds, 2017

- Children ages 1- to 3-years old should drink 1 to 4 cups (8-32 ounces) per day of plain, fluoridated drinking water, with the specific amount to be determined based on the amount of plain milk consumed.29

- In 2017, 56% of Alaska 3-year-olds consumed three or more cups of plain water on an average day.

D. Sugary Drinks

Figure 43. Daily soda consumption, Alaska 3-year-olds, 2017

![Soda Consumption Chart]

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)

Soda and other sugary drinks, such as fruit drinks, fruit-flavored drinks, fruitades, sports drinks, energy drinks, sweetened waters and soda, can lead to a number of serious health problems that can last throughout a child’s lifetime such as unhealthy weight gain, type 2 diabetes, heart disease, and cavities. Therefore, sugary drinks are not recommended for children ages 0- to 5-years of age.

11% of Alaska 3-year-olds consumed some amount of soda (not including diet soda) on an average day.

Figure 44. Daily sweetened or fruit drink consumption, Alaska 3-year-olds, 2017

In 2017, 28% of Alaska 3-year-olds consumed some amount of sweetened or fruit drinks (such as Tang, Kool-Aid, Capri Sun, energy or sports drinks) on an average day.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Sugary drinks include Soda and/or Sweetened or fruit drinks (such as Tang, Kool-Aid, Capri Sun, energy or sports drinks). It does not include Diet drinks (such as Crystal light and diet soda).

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28% of Alaska 3-year-olds drink some sugary drink on an average day. This combined measure of all sugary drinks (28.3%) and is only slightly different from the percent of Alaska 3-year-olds who drink sweetened fruit drinks (27.7%). This suggests that the 11% of 3-year-olds who are drinking soda are also drinking sweetened fruit drinks.

Disparities exist in sugary drink consumption among Alaska 3-year-olds:

- Alaska 3-year-old children of Alaska Native/American Indian mothers were significantly more likely than children of White mothers to consume a sugary drink, 57% vs 17%.
- Low SES 3-year-old children were more likely to consume sugary drinks than higher SES children, 39% vs 21%.
Figure 46. Any daily sugary drink consumption, Alaska 3-year-olds, by region, 2015-2017

- Alaska 3-year-old children in the Northern and Southwest regions were significantly more likely than children in other regions to consume a sugary drink.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Sugary drinks include Soda and/or Sweetened or fruit drinks (such as Tang, Kool-Aid, Capri Sun, energy or sports drinks). It does not include Diet drinks (such as Crystal light and diet soda).
In 2017, 8% of Alaska 3-year-olds consumed some amount of diet drinks, such as diet soda or Crystal Light, on an average day.
83% of Alaska 3-year-olds had a parent or household member eat a meal with them every day of the week on average in 2017.

There were no differences by age of mother, race, SES, or sex of child in the percent of mothers who reported that a household member ate a meal with their child every day in the past week.
E. Food Security

Figure 49. Use of food assistance services in past 3 months, Alaska mothers of 3-year-olds, 2017

- In 2017, 41% of Alaska mothers of 3-year-olds used some form of food assistance to feed their families in the 3 months before the survey. (data not shown)

- In 2017, 29% of Alaska mothers of 3-year-olds had made use of WIC to feed their family in the past 3 months.

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)
Respondents were able to select all that apply.
F. Screen Time

Figure 50. Daily time spent in front of a screen, Alaska 3-year-olds, 2017

<table>
<thead>
<tr>
<th>Time Range</th>
<th>Percentage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None, 0 minutes</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>30 minutes to less than 1 hour</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>1 hour to less than 2 hours</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>2 hours to less than 3 hours</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>3+ hours</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Alaska Childhood Understanding Behaviors Survey (CUBS)

The American Academy of Pediatrics recommends limiting media to one hour or less per day of high-quality programming in children older than 2 years.\(^{40}\)

- 77% of Alaska 3-year-olds had an hour or more of screen time (watching television, videos, movies, or playing video games) on an average day in 2017.

VIII. Data Sources

Pregnancy Risk Assessment Monitoring System (PRAMS)

The Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing, population-based surveillance system designed to identify and monitor selected maternal behaviors and experiences that occur before and during a woman’s pregnancy and during the early infancy of her child. PRAMS was developed by the Centers for Disease Control and Prevention (CDC) Division of Reproductive Health in 1987 as part of an initiative to reduce infant mortality and low birth weight. The Alaska PRAMS Project was initiated by the State of Alaska, Division of Public Health, Section of Maternal, Child and Family Health in 1990.

PRAMS was designed to supplement data from vital records and to generate data for planning and assessing perinatal health programs in participating states. Because PRAMS data are population-based, findings from data analyses can be generalized to an entire state’s population of women having a live birth. PRAMS is designed not only to generate state-specific data, but also to allow comparisons among states through the use of standardized data collection methods.

Currently PRAMS operates in 51 project sites and surveillance covers approximately 83% of all U.S. births. Each site utilizes the same core questions and adds a limited number of its own state-specific questions. Topics covered include preconception health; prenatal care; use of tobacco and alcohol and other substances; insurance coverage; breastfeeding; intimate partner violence; infant sleep environment, and life stressors such as illness, job loss, debt; plus many other topics.

In Alaska, approximately one of every six mothers of newborns is selected for PRAMS. Mothers are surveyed approximately 2 to 6 months after delivery of their baby. See http://dhss.alaska.gov/dph/wcfh/Pages/mchepi/prams for more information about PRAMS questionnaires and methodology.

Race definition for PRAMS

Race refers only to the race of the mother as reported on the birth certificate. For the purposes of this report:

- “Alaska Native” refers to women who identify as Alaska Native or American Indian, either alone or in combination with other races.
- “White” refers to women who identify as White alone.
- “Other” refers to women who identify as any race other than Alaska Native (alone or in combination) or White (alone).
Mother’s age grouping
Mother’s age grouping (less than 25 and 25 years or older) were dichotomized and presented in this report to explore behaviors and access to services of younger mothers.

The World Health Organization and United Nations have identified those 24 years and under as a period needing special attention.\(^{41}\) Additionally research has pointed to a number of changes in the brain and behavior which have implications for young adult health care.\(^{42}\) It has been noted that during the transition years (age 19 - 25), individuals receive few preventative health visits\(^{43}\), lack of transition services\(^{44}\) and lack health insurance.\(^{45}\) Due to these circumstances we determined the difference were worth exploring and dichotomizing the results by age.

**Childhood Understanding Behaviors Survey (CUBS)**

Alaska Childhood Understanding Behaviors Survey (CUBS) is a program designed to find out about the health and early childhood experiences of young children in Alaska. CUBS collects information by conducting a follow-up survey to the Alaska Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS sends a survey to approximately one of every 6 mothers of newborns in Alaska, and CUBS sends a follow-up survey three years later to all mothers who completed PRAMS and are still living in Alaska. CUBS asks questions about both the mother and her child. About 90 Alaskan mothers are sent a CUBS survey every month.

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. Survey responses are weighted so that the reported prevalence accurately describes all mothers of 3-year old children born in Alaska in a single calendar year. See [http://dhss.alaska.gov/dph/wcfh/Pages/mchepi/cubs/default.aspx](http://dhss.alaska.gov/dph/wcfh/Pages/mchepi/cubs/default.aspx) for more information about CUBS questionnaires and methodology.

**Race definition for CUBS**
Race refers only to the race of the mother as reported on the birth certificate. For the purposes of this report:

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\(^{43}\) National Adolescent and Young Adult Health Information Center. [http://nahic.ucsf.edu/resource_center/new-article-increasing-preventive-services-does-the-preventive-visit-help/](http://nahic.ucsf.edu/resource_center/new-article-increasing-preventive-services-does-the-preventive-visit-help/)


“Alaska Native” refers to women who identify as Alaska Native or American Indian, either alone or in combination with other races.

“White” refers to women who identify as White alone.

“Other” refers to women who identify as any race other than Alaska Native (alone or in combination) or White (alone).

Student Weight Status Surveillance System (SWSSS)

SWSSS is comprised of Alaska student weight status data obtained voluntarily from partner school districts that have contributed their data as a means of monitoring obesity trends. Participating school districts provide the Department of Health and Social Services (DHSS) de-identified student data (i.e., measured height and weight, age, and sex). DHSS conducts the analysis to generate body mass index (BMI) percentile, and the associated weight status classifications of underweight, healthy weight, overweight and obese, as described in the Introduction, Classifying Weight Status. SWSSS data differs slightly from other data sources by reporting ‘American Indian/Alaska Native’ on breakdowns by race because that is how the school district partners classify the data.

School districts across the state vary in the grades for which they routinely collect height and weight data. Some districts aim to measure and weigh every student, every year, while other districts target only students in Kindergarten, 1st, 3rd, 5th, and 7th grades. Analysis scales measurement results to represent the enrolled population for each grade.

Anchorage and Matanuska-Susitna Borough school districts combined are used in Healthy Alaskans 2020 and in this report because they have the longest trend and represent a large proportion of students in the state (15% of Kindergarten students in 2017-2018).

The following school districts have participated in SWSSS in various years since its inception: Anchorage, Dillingham, Kenai Peninsula Borough, Ketchikan Gateway Borough, Kodiak Island Borough, Lake & Peninsula, Matanuska-Susitna Borough, Nome, North Slope Borough, Petersburg, and Sitka. Individual school district weight status reports are available at http://dhss.alaska.gov/dph/Chronic/Pages/Obesity/weightstatus.aspx
**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 by a health care professional at clinics as part of the application and renewal process. Alaska data are available at the United States Department of Agriculture, Food and Nutrition Service website: [https://www.fns.usda.gov/pd/wic-program](https://www.fns.usda.gov/pd/wic-program).

**Maternity Practices in Infant Nutrition and Care (mPINC) Survey**

In 2007, CDC administered the first national survey of maternity care practices related to breastfeeding to every facility in the United States and territories that routinely provided maternity care services. Known as the Maternity Practices in Infant Nutrition and Care (mPINC) survey, this survey is a national census of facilities routinely providing maternity care.

The initial survey established measures of practices in place at intrapartum care facilities across the United States and territories and showed how the practices varied by state. CDC administered the survey every other year thereafter until 2015 to monitor and examine changes in practices over time. After the 2015 administration, CDC redesigned the survey to reflect changes in maternity care practices that had occurred in the United States over the past decade. The newly designed survey launched in 2018.

Each survey year CDC screens hospitals by telephone. CDC contacts the mother-baby nurse manager or the manager of the labor and delivery unit to help identify the best person to complete a survey that includes questions about infant nutrition, such as breastfeeding, using formula to feed healthy newborns, and feeding routines. Because CDC follow this process each time that we administer a new survey, the person identified to receive the survey one year is not necessarily the person identified to receive the survey in a later cycle.
National Immunization Surveys (NIS)

Each year, CDC’s National Center for Immunizations and Respiratory Diseases (NCIRD), in partnership with the National Center for Health Statistics, conducts the National Immunization Survey (NIS). The NIS uses random-digit dialing to survey households with children and teens. The telephone survey asks questions about childhood immunization. Beginning in July 2001 and continuing through December 2002, a subsample of respondents was asked about breastfeeding. Starting in January 2003, all respondents with children aged 19 to 35 months are asked the breastfeeding questions.

The Council of American Survey and Research Organizations response rates for landline sample of NIS years 2001–2017 ranged from 51.9% to 76.1%. Response rates for the cellular telephone sample of NIS years 2011–2018 ranged from 24.6% to 33.5%. A more detailed description of the methods can be found at the National Immunization Survey website (https://www.cdc.gov/vaccines/imz-managers/nis/about.html).