

*State of Alaska
Epidemiology*



Bulletin

**Recommendations
and
Reports**

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Regional Changes in Parent-reported Early Childhood Caries and Associated Factors — Alaska CUBS, 2009–2011 and 2016–2019

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Executive Summary

Early childhood caries (ECC) is defined as the presence of one or more decayed, missing (due to caries), or filled tooth surfaces in any primary tooth in a child younger than 6 years of age. ECC is related to delayed growth and development and decreased overall physical, psychological, and social well-being. Moreover, restorative dental procedures, especially those that must take place in an operating room, can be traumatic for children and their families, and costly for both families and payers.

The factors related to ECC development are broadly related to biological, behavioral, environmental, and socioeconomic. Access to and utilization of dental care is another important factor. Risk factors are often interrelated and dynamic, contributing to the difficulty in preventing ECC.

Historically, Alaska has had a higher estimated prevalence of ECC than national estimates. The goals of this report were to provide updated estimates of ECC, and specific etiologic factors in Alaska.

The Alaska Childhood Understanding Behaviors Survey (CUBS) data were used to estimate ECC prevalence among Alaska 3-year-olds. CUBS responses are weighted to represent all mothers of 3-year-old children born in Alaska each year. The survey years of 2009–2011 and 2016–2019 were used to test for differences over time. The related factors to ECC that were measured and reported are access to or utilization of dental care by 3 years of age, consumption of ≥ 3 cups of sweetened beverages (SB) on the day prior, whether a child was enrolled in Medicaid insurance, and whether a parent reported having earned a college degree.

During 2016–2019, Alaska parents reported significantly lower prevalence of early childhood caries (ECC) in their children compared to during 2009–2011. Additionally, fewer parents indicated that their child had not yet seen a dental professional or had consumed ≥ 3 cups of SB. Despite these improvements, regional disparities persist. Regionally, the prevalence of parents reporting ECC was correlated with socioeconomic indicators such as Medicaid insurance and college degree attainment.

Although certain regions in Alaska exhibit the highest percentage of parent-reported dental visits by age 3 years, these areas also demonstrate elevated rates of parent-reported ECC. Integrating preventive dental care into non-dental settings and involving non-dental professionals may offer a viable approach for reducing ECC in high-prevalence regions. Given the strong correlation between socioeconomic indicators and parent-reported ECC rates (by region), intervention programs should prioritize strategies that effectively reach children, despite a family's socioeconomic status.

In regions with limited access to or utilization of dental care, there is likely an underestimation of ECC, especially in areas where community water fluoridation (CWF) has been discontinued.

The recommendations of this report emphasize the integration of preventive dental care and evidence-based interventions. Furthermore, ongoing advocacy and policy efforts are essential to promote the addition or reinstatement of CWF.

Introduction

Early childhood caries (ECC) is a form of tooth decay occurring in children younger than 6 years of age. Early childhood caries is defined as the presence of one or more decayed, missing (due to caries), or filled tooth surfaces in any primary tooth in children of this age.¹ The consequences of ECC can be severe, impacting a child's growth and development, especially in speech. It can lead to acute and chronic pain, making it difficult to learn and eat comfortably.^{2,3} Furthermore, ECC can adversely impact the quality of life and psychological and social well-being of both the child and their family.^{4,5} When ECC requires restorative dental treatment, young children often struggle to cooperate, necessitating the use of sedation and anesthesia, which pose additional risks.⁶ This kind of dental care is costly to families and society, as parents often miss work days, and insurance payers and healthcare systems bear burdens.^{3,7,8}

Despite being preventable, approximately 20% of 3-year-old children in the U.S. are estimated to experience ECC, making it one of the most common chronic health conditions affecting young children.^{3,9,10} Experiencing caries at a young age is a strong predictor of developing caries in later in childhood, underscoring the critical importance of primary prevention.¹¹ Primary prevention of ECC is challenging due to the dynamic and complex interrelationships among many risk factors, which can be environmental, behavioral, socioeconomic, and biological.^{3,9}

At the individual biological level, children who have acquired cariogenic bacteria (i.e., *Streptococcus mutans*) are more likely to develop ECC, although bacterial presence does not guarantee their development.¹²

Behavioral and family norms around oral hygiene and dietary factors play important roles in the development of ECC. Consumption of sugar-sweetened beverages (SSBs), fruit juices, and highly processed carbohydrates creates an environment conducive to caries development. Bacteria metabolize the sugar in these foods and drinks into acids, which then break down tooth enamel.¹³ Some Alaska communities have shown

an increasing trend towards the consumption of SBs.¹⁴

Establishing a routine oral hygiene regimen before the eruption of the first tooth is crucial. Helping children brush their teeth with fluoridated toothpaste twice daily helps maintain strong tooth enamel. The mechanical actions of teeth brushing also aids in removing cariogenic residue left by foods and drinks from teeth.

Behavioral choices related to oral health can be influenced by environmental factors. Limited access to in-home piped water or nutritious foods can impact the decisions parents make regarding their children's oral hygiene and dietary habits.^{15,16}

Optimal fluoridation of water can strengthen and promote remineralization of teeth with early signs of decay.¹⁷ Public water fluoridation has been proven to reduce cavities and is considered safe for people of all ages.¹⁷ In Canadian and Alaskan communities where community water fluoridation (CWF) was ceased, rates of childhood caries increased and restorative dental practices increased.^{18,19} Despite the proven benefits, organized opposition to the practice of CWF has persisted since its inception.²⁰

While the specific causal pathways between socioeconomic factors and ECC are not fully understood, extensive research underscores the association between these factors and ECC.^{3,9,10,21} Caregiver oral health behaviors can be influenced by social, economic, and environmental conditions.

Access to and utilization of preventive dental care is essential for maintaining oral health. Dental professionals are trained to recognize signs of decay and can provide preventive interventions such as fluoride varnish, dental sealants, and education on proper toothbrushing techniques.

In Alaska, the Dental Health Aide Therapist (DHAT) model was developed to address the lack of regular access to dental care in rural communities.²² Over a 10-year period (2006–2015) of DHATs practicing in the Yukon-Kuskokwim Delta Region, the percentage of Medicaid-insured children receiving preventive

dental care increased from 7% prior to DHATs to 36% in 2015.²³

National Health and Nutrition Examination Survey (NHANES) data from 2013–2018 estimate the prevalence of ECC in children under 6 years old was 18.6% nationally.¹⁰ However, among respondents with incomes below 100% of the federal poverty guidelines, this estimate was substantially higher than those in higher income categories (24.9% vs 10.5% respectively).¹⁰

A Basic Screening Survey (BSS) was conducted in 2010 and 2011 in randomly selected schools across Alaska. The BSS uses consistent methodologies to examine children’s teeth, and helps states identify comparable oral health indicators.²⁴ Alaska’s BSS in 2010 estimated that 41.4% of Alaska’s kindergartners were estimated to have experienced caries (falling within the definition of ECC) statewide.²⁵ This percentage was higher than the national estimate of 33.3% among 2–5-year-old children during the same period.²⁵ No additional BSSs have occurred in Alaska since 2011 due to lack of funding.

The objectives of this investigation are twofold. First, to describe changes in parent-reported ECC and key oral health indicators over time using data from the Childhood Understanding Behaviors Survey (CUBS) spanning from 2009–2011 to 2016–2019. Second, to explore the socioeconomic indicators associated with parent-reported ECC during 2016–2019.

Methods

Data Source

Administered annually, CUBS is a 3-year follow-up survey to the Pregnancy Risk Assessment Monitoring System (PRAMS) survey; a population-representative survey of mothers delivering a live birth each year.²⁶ Parents who participated in PRAMS shortly after their child was born are contacted again when their child turns 3 years of age for participation in CUBS. The CUBS data are statistically weighted to represent the yearly birth cohorts of 3-year-old children born in Alaska. Throughout this report, references to children pertain to the 3-year-old children whose parents responded to the CUBS survey.

We combined CUBS survey response data into two groups for comparison, 2009–2011 and 2016–2019. Analyses were further stratified by the 10 Alaska Behavioral Health Systems Regions (referred to as regions in this report).²⁷ Due to small numbers, the “Other Southeast - Northern” and “Other Southeast - Southern” regions were combined into one “Southeast” region. Results of analyses are reported as percentages.

Outcomes

The CUBS question used to measure parent-reported ECC is as follows: *Has a health care provider ever told you your child has tooth decay or cavities?* Calculations of the percentage of parents who answered “yes” to this question include only children whose parent reported they had seen a dentist or dental care provider at some point in their life. In 2009–2011, among the 1,731 CUBS respondents, 947 reported having seen a dentist or dental provider. In 2016–2019, among the 2,240 CUBS respondents, 1,624 reported having seen a dentist or dental care provider. Throughout this report, we refer to a child who has seen a dentist or dental care provider as having had a dental visit.

Etiologic factors

The percentage of children who had not had a dental visit by age 3 years, and the percentage consuming ≥ 3 cups of sweetened beverages (SBs) on the day prior were used as etiologic factors for this report. Sweetened beverages included soda, 100% fruit juice, and SSBs such as Tang or Gatorade. Chi-squared tests were used to detect statistically significant changes in these measures and parent-reported ECC between the two time periods.

This report used two indicators of SES to assess their correlation with parent-reported ECC: Medicaid insurance enrollment (child), and college degree attainment (parent). Due to income eligibility requirements, Medicaid insurance coverage serves as a generalized proxy for lower-income families and is often used to examine relationships between income, dental insurance, and oral health outcomes.⁷ College degree attainment of parents is another proxy for

SES and is useful for examining relationships between the social determinants of health and oral health outcomes.²⁸ The strength and direction of the correlation between these factors and parent-reported ECC at the regional level are presented. Only children with a parent-reported dental visit were included in these comparisons.

Results

Statewide Changes Between Time Periods

Relative to 2009–2011, during 2016–2019:

- The percentage of parents who answered “yes” to the question: “*Has a health care provider ever told you your child has tooth decay or cavities?*” decreased by 16% ($p=0.034$).
- The percentage of children who had not had a dental visit by age 3 years decreased by 40% ($p<0.01$).
- The percentage of parents reporting their child had consumed ≥ 3 cups of SBs the day prior decreased by 41% ($p<0.01$).

Figure 1 provides a visual representation of these data and estimates by region; Table 1 provides the exact estimates and their 95% confidence intervals.

Parent-reported ECC Changes Between Time Periods, by Region

The Matanuska-Susitna Borough was the only region to report a significant decline in the percentage of parents reporting ECC from 2009–2011 to 2016–2019.

- Parent-reports of ECC decreased by 47% ($p=0.025$) in the Matanuska-Susitna Borough.

Early Childhood Dental Visit Changes Between Time Periods, by Region

The percentage of children who had not had a dental visit by age 3 years significantly decreased in four regions:

- In the Anchorage Municipality, the percentage decreased by 48% ($p<0.01$).
- In the Matanuska-Susitna Borough, the percentage decreased by 30% ($p=0.046$).
- In the Northwest Region, the percentage decreased by 54% ($p=0.020$).

- In the Yukon-Kuskokwim Delta Region, the percentage decreased by 53% ($p<0.01$).

Sweetened Beverage Consumption Changes Between Time Periods, by Region

The percentage of parents reporting their child had consumed ≥ 3 cups of SBs on the day prior declined in three regions:

- In the Anchorage Municipality, the percentage decreased by 47% ($p<0.01$).
- In the Kenai Peninsula Borough, the percentage decreased by 69% ($p=0.014$).
- In the Matanuska-Susitna Borough, the percentage decreased by 68% ($p=0.017$).

Regional Variation in Parent-Reported ECC, 2016–2019

While the state has made progress in decreasing parental reported ECC, regional comparisons reveal disparities that persist. Figure 2 illustrates these regional differences in parent-reported ECC. For instance, there is a striking difference between the Yukon-Kuskokwim Delta Region (67.9%) and the Matanuska-Susitna Borough (17.6%). This example highlights the considerable variation in parent-reported ECC across different regions.

Regional Variation in Children Without a Dental Visit, 2016–2019

Figure 3 provides a visual comparison of the percentage of parents who report their child has not yet had a dental visit across different regions. Compared to other regions, the Fairbanks North Star Borough and the Other – Interior Region have higher percentages of parents reporting no dental visit, at 46.7% and 40.2%, respectively. In contrast, 10.1% of parents in the Northwest Region reported that their child had not yet had a dental visit yet.

Regional Variation in Parent-Reported Sweetened Beverage Consumption, 2016–2019

Figure 4 highlights regional disparities in the percentage of parents reporting their child consumed ≥ 3 cups of SB on the previous day. In the Yukon-Kuskokwim Delta Region, 51.1% of parents reported this level of consumption, while

only 3.5% of parents in the Matanuska-Susitna Borough reported consumption at this level.

Socioeconomic Status and Parent-reported ECC

Regions with the highest percentages of parents reporting ECC in 2016–2019 (Figure 2) also had the highest percentage of parents reporting Medicaid insurance enrollment for their children (Figure 5). Similarly, regions with larger percentages of parents reporting they had not earned a college degree had a higher percentage of reported ECC (Figure 6).

- There was a strong correlation ($r=0.88$, $p<0.01$) between child Medicaid enrollment and parent-reported ECC.
- There was also a strong correlation ($r=0.77$, $p<0.01$) between no parent-reported college degree attainment and parent-reported ECC.

Discussion

In Alaska, parent-reported ECC declined from 2009–2011 to 2016 – 2019 (30.1% to 25.2%). Correspondingly, a lower percentage of parents reported that their child consumed ≥ 3 cups of SB during 2016–2019 compared to 2009–2011. The relationship between sugar consumption and caries is well understood: bacteria in the mouth metabolizing sugar, producing acid that breaks down tooth enamel.¹³

Increasing access to and utilization of dental care has provided children and their families with preventive treatments and education, and likely contributed to the reductions in parent-reports of ECC. The expansion of Medicaid eligibility in Alaska in 2015 might have further increased access to dental care for young children.²⁹ Despite this, the Northwest Region and the Yukon-Kuskokwim Delta Region, which have the highest percentages of parents reporting dental care access, also have the highest percentages of parent-reported ECC. These results suggest that access to care alone cannot fully prevent ECC. Since the risk factors for ECC extend beyond typical dental practices, integrating preventive care with other professionals and settings is essential.

Non-dental professionals can play a key role in preventive oral health care. Those who provide

health and social-related counseling are particularly well-positioned. Motivational interviewing has been shown as effective in helping caregivers improve oral health behavioral changes including oral hygiene and reducing SB consumption.^{3,30,31} Studies show that motivational interviewing use with caregivers to improve oral health behaviors can reduce the prevalence of dental caries by about 10% relative to no use.³¹ Another study documented that using motivational interviewing to promote fluoride varnish application significantly increased varnish applications and subsequently reduced decayed, missing, and filled primary tooth surfaces (dmfs) scores at a 2 year follow up.³¹

While it is challenging to distinguish the differential effects of fluoride varnish applications versus oral health education, there are promising research findings.³¹ For instance, in a study where children received fluoride varnish applications four times per year alongside educational interventions, there was a notable 17% relative decrease in caries by the time they reached 6 years of age.³¹ This suggests that combining fluoride varnish applications with education effectively reduces tooth decay in young children.

Highlighting the importance of early intervention, it's crucial to note the role of early education and school-based fluoride varnish or rinse programs. These initiatives aim to provide dental care beyond routine dental visits. Early education professionals (e.g., child care providers) and school health personnel (e.g., school nurses) play pivotal roles in delivering and advocating for these preventive measures.³²

In addition to integrating preventive care into non-dental settings, interventions must be designed to address SES disparities. This report underscores that disparities in SES indicators are correlated with parent-reported ECC. Both the national health improvement plan (Healthy People 2030) and Alaska's Healthy Alaskans 2030 emphasize the importance of addressing social determinants of health (e.g., economic stability and access to education) to improve health outcomes.^{33,34} Policies that increase the availability of healthier foods and optimally

fluoridated drinking water can help reduce consumption of sweetened beverages and improve nutritional choices, thereby decreasing the prevalence of ECC.

Reaching all young children with preventive care is challenging. For example, socioeconomic factors can adversely impact access to care. Many Alaskan children don't have access to community water fluoridation or community-based fluoride varnish/rinse programs. Moreover, while most children aged <2 years routinely see a medical provider for well-child visits, dental visits during this time are typically less frequent.³⁵ As such, pediatric medical providers should ensure that young children receive appropriate oral health interventions, including fluoride supplementation when no community-based programs are available.

Juneau stands out due to its unique position concerning socioeconomic factors and their apparent correlation with ECC (Figures 5 and 6). The cessation of CWF in 2007 provides a compelling explanation for the higher percentage of parent-reported ECC compared to areas with similar socioeconomic indicators during 2016–2019. A study published in 2022 comparing dental procedure rates among Medicaid-enrolled children in Anchorage and Juneau showed that the children in Juneau (but not Anchorage) experienced an increase in restorative procedures after Juneau ceased CWF.³⁶ Restorative dental procedures are primarily indicated due to caries.

Community water fluoridation serves as a tool to mitigate inequities in ECC and SES (as observed in the Yukon-Kuskokwim Delta and Northwest Regions) and in access to, or utilization of dental care (evident in the Fairbanks North Star Borough and the Other – Interior Region). Notably, Fairbanks ceased CWF in 2011, yet the impact in this area remains unclear due to insufficient data.³⁷ Considering that ECC in young children often goes untreated,^{3,10,31} and the significant percentage of children without a dental visit following CWF cessation, parent-reported ECC may be underestimated in this region.

Limitations

Parent-reported CUBS data are susceptible to both recall bias and social desirability bias, which can distort the accuracy of the information collected. Social desirability bias occurs when parents respond to survey questions based on societal expectations rather than providing truthful responses. This tendency could result in the underestimation of ECC prevalence and misrepresentation of SB consumption levels. Recall bias arises when parents have difficulty accurately remembering past events, leading to inaccuracies in their responses. Consequently, the presence of these biases underscores the importance of interpreting survey results cautiously, recognizing the potential for skewed data due to subjective factors influencing parental responses.

Regional analyses of CUBS results with small sample sizes can exacerbate variability in estimation, particularly across different regions. Moreover, it is important to note that the CUBS analysis weights are designed to represent the entire Alaska-born 3-year-old population, rather than smaller regions. Consequently, interpreting estimates at the regional level requires caution due to the potential for inaccuracies stemming from limited sample sizes and mismatch between analysis weights and regional demographics.

Despite these inherent limitations, the findings presented here align with broader research findings on ECC. Specifically, the observed association between SES status, SB consumption, and access to dental care with ECC prevalence are consistent with existing literature. Thus, while acknowledging the constraints of regional analyses and data weighting, the reported results offer valuable insights that complement and reinforce findings from broader ECC research.

Communities interested in leveraging CUBS data to inform oral health initiatives now have access to a user-friendly public data center. This online data center presents various health indicators and can be filtered by public health regions, facilitating targeted analysis and informed decision making.³⁸ For more information on CUBS data or the CUBS dashboard, contact mch-epi@alaska.gov.

Conclusion

From 2009–2011 to 2016–2019, there was a considerable decrease in the percentage of parents reporting that a healthcare provider had told them their child had tooth decay or cavities (from 30.1% to 25.2%). However, disparities persist between regions in terms of access to and utilization of dental care for young children, as well as in parent-reported SB consumption and proxy measures for SES. These disparities underscore the ongoing challenges communities face in addressing oral health inequalities, particularly among vulnerable populations.

Efforts to address these challenges must encompass a comprehensive approach that targets social and other determinants of health. Lowering sugar-sweetened beverage consumption in young children, enhancing access to and utilization of dental care services, and tackling socioeconomic disparities are all key elements to success on this front. By addressing these interconnected factors, communities can move closer to achieving equitable oral health outcomes for all children, regardless of their socioeconomic background or geographic location.

Recommendations

1. Alaska stakeholders should promote optimally fluoridated public drinking water and discourage consumption of sweetened beverages and other sugary foods.
2. Alaska stakeholders should prioritize equitable access to preventive dental services (i.e., cavity prevention through fluoride varnish, rinse, supplementation, or application of dental sealants) in schools and other community settings.
3. Pediatric medical providers should educate parents about the importance of starting dental visits at 1 year of age, application of topical fluoride treatments or fluoride supplementation, appropriate oral hygiene including toothbrushing techniques for infants and young children, and continuing regular preventive dental care throughout childhood.
4. Alaska providers should seek educational opportunities to develop or support

culturally-competent motivational interviewing with patients regarding healthy diets and good oral hygiene for children.

Figure 1. Changes in the percentage of parent-reported early childhood caries among 3-year-old children who have had a dental visit, those not having had a dental visit, and those consuming ≥ 3 cups of sweetened beverages the day prior from 2009–2011 to 2016–2019, by region — Alaska

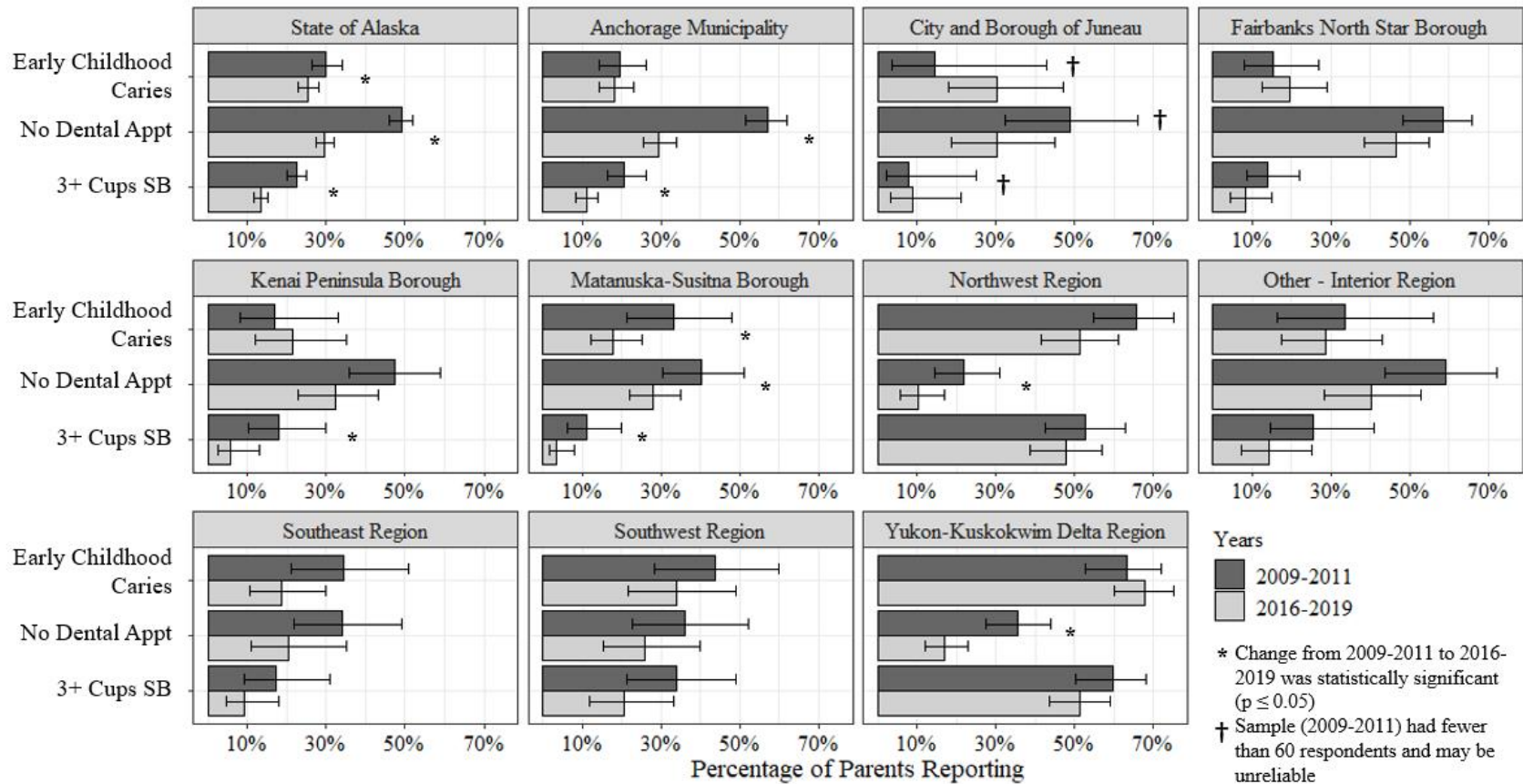


Table 1. Changes in the percentage of parent-reported early childhood caries among 3-year-old children who have had a dental visit, those not having had a dental visit, and those consuming ≥ 3 cups of sweetened beverages, and 95% confidence intervals, from, by region — Alaska, 2009–2011 to 2016–2019

Behavioral Health System Regions	2009–2011 (95% Confidence Intervals)		
	ECC amongst children with a dental visit	Children with no dental visit by age 3	3 + cups of sweetened beverage consumption
State of Alaska	30.1% (26.4, 34.0) *25.2% (22.7, 28.0)	49.0% (45.8, 52.0) *29.6% (27.2, 32.0)	22.4% (19.9, 25.0) *13.3% (11.7, 15.0)
Anchorage Municipality	19.6% (14.4, 26.0) 18.1% (14.3, 23.0)	56.9% (51.4, 62.0) *29.4% (25.5, 34.0)	20.7% (16.5, 26.0) *10.9% (8.2, 14.0)
City & Borough of Juneau	†14.4% (3.7, 43.0) 30.3% (17.9, 47.0)	†48.9% (32.2, 66.0) 30.1% (18.5, 45.0)	†7.6% (2.0, 25.0) 8.8% (3.3, 21.0)
Fairbanks North Star Borough	15.3% (8.0, 27.0) 19.4% (12.4, 29.0)	58.3% (48.4, 66.0) 46.7% (38.3, 55.0)	13.9% (8.6, 22.0) 8.4% (4.5, 15.0)
Kenai Peninsula Borough	17.0% (8.0, 33.0) 21.4% (12.1, 35.0)	47.3% (35.7, 59.0) 32.2% (22.9, 43.0)	18.0% (10.2, 30.0) *5.5% (2.3, 13.0)
Matanuska-Susitna Borough	33.3% (21.2, 48.0) *17.6% (12.2, 25.0)	40.2% (30.5, 51.0) *28.0% (21.9, 35.0)	11.1% (6.0, 20.0) *3.5% (1.6, 8.0)
Northwest Region	65.6% (54.8, 75.0) 51.3% (41.4, 61.0)	21.8% (14.5, 31.0) *10.1% (5.76, 17.0)	52.8% (42.4, 63.0) 47.8% (38.5, 57.0)
Other – Interior Region	33.6% (16.5, 56.0) 28.5% (17.3, 43.0)	59.1% (43.7, 72.0) 40.2% (28.4, 53.0)	25.5% (14.6, 41.0) 14.1% (7.4, 25.0)
Southeast Region	34.6% (20.9, 51.0) 18.6% (10.7, 30.0)	34.0% (21.7, 49.0) 20.3% (11.0, 35.0)	17.3% (9.0, 31.0) 9.3% (4.6, 18.0)
Southwest Region	43.7% (28.3, 60.0) 33.9% (21.5, 49.0)	36.1% (22.6, 52.0) 25.9% (15.2, 40.0)	33.8% (21.1, 49.0) 20.4% (11.8, 33.0)
Yukon-Kuskokwim Delta Region	63.1% (52.8, 72.0) 67.9% (59.9, 75.0)	35.4% (27.4, 44.0) *16.8% (12.0, 23.0)	59.7% (50.3, 68.0) 51.1% (43.7, 59.0)

*Indicates a p -value ≤ 0.05

† Indicates the sample had fewer than 60 respondents and may be unreliable

An [accessible version](#) of this table is available on Alaska Epidemiology website.

Figure 2. Percentage of parents reporting early childhood caries among children that have had a dental visit, by region — Alaska, 2016–2019

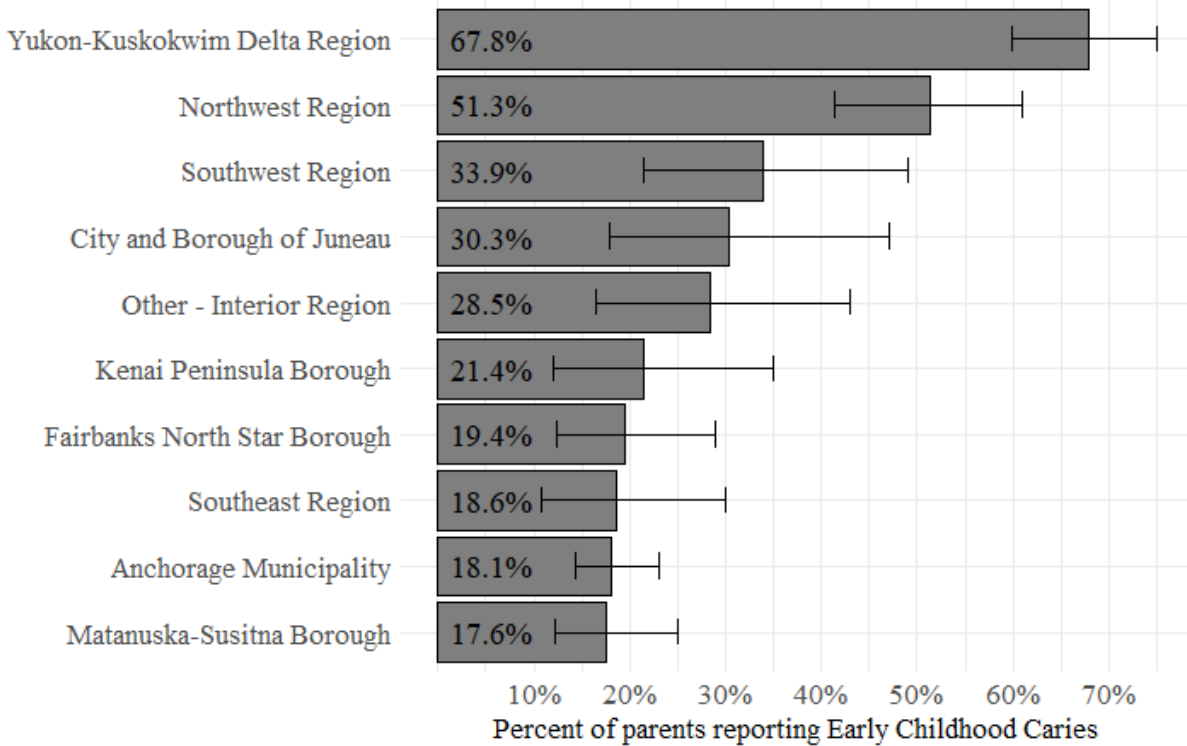


Figure 3. Percentage of parents reporting no dental visit by age 3 years, by region — Alaska, 2016–2019

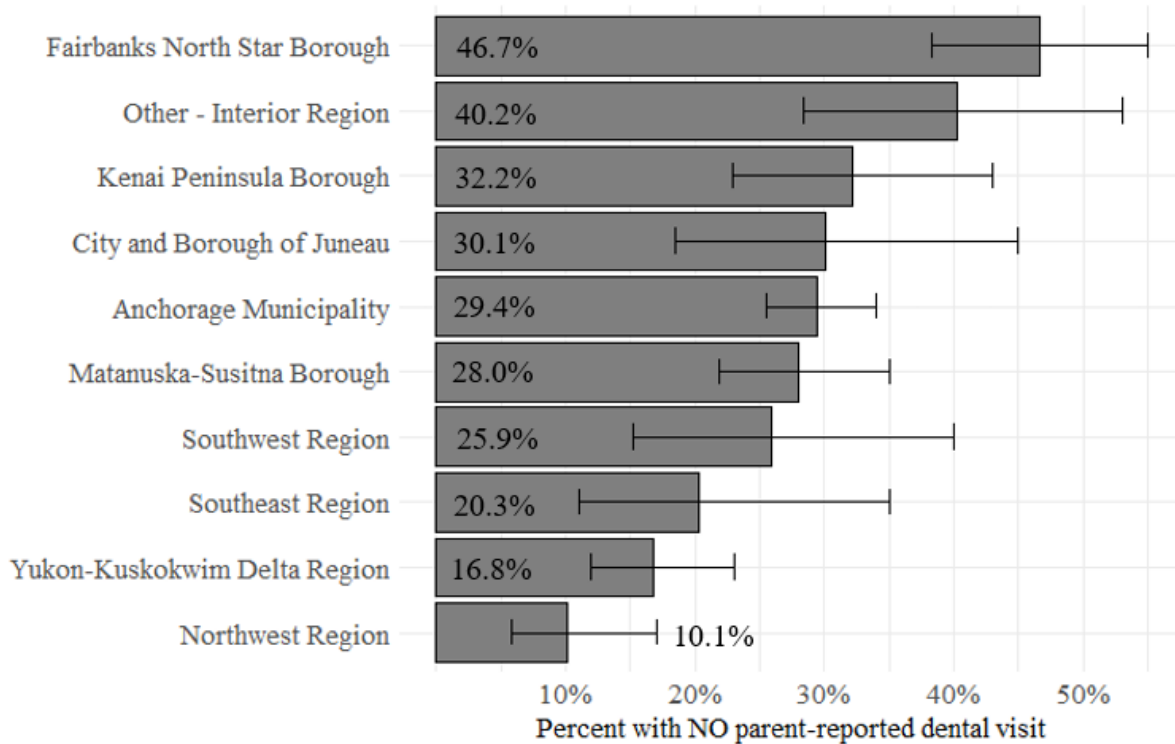


Figure 4. Percentage of parents reporting 3 or more cups of sweetened beverage consumption by their 3-year-old child, by region — Alaska, 2016–2019

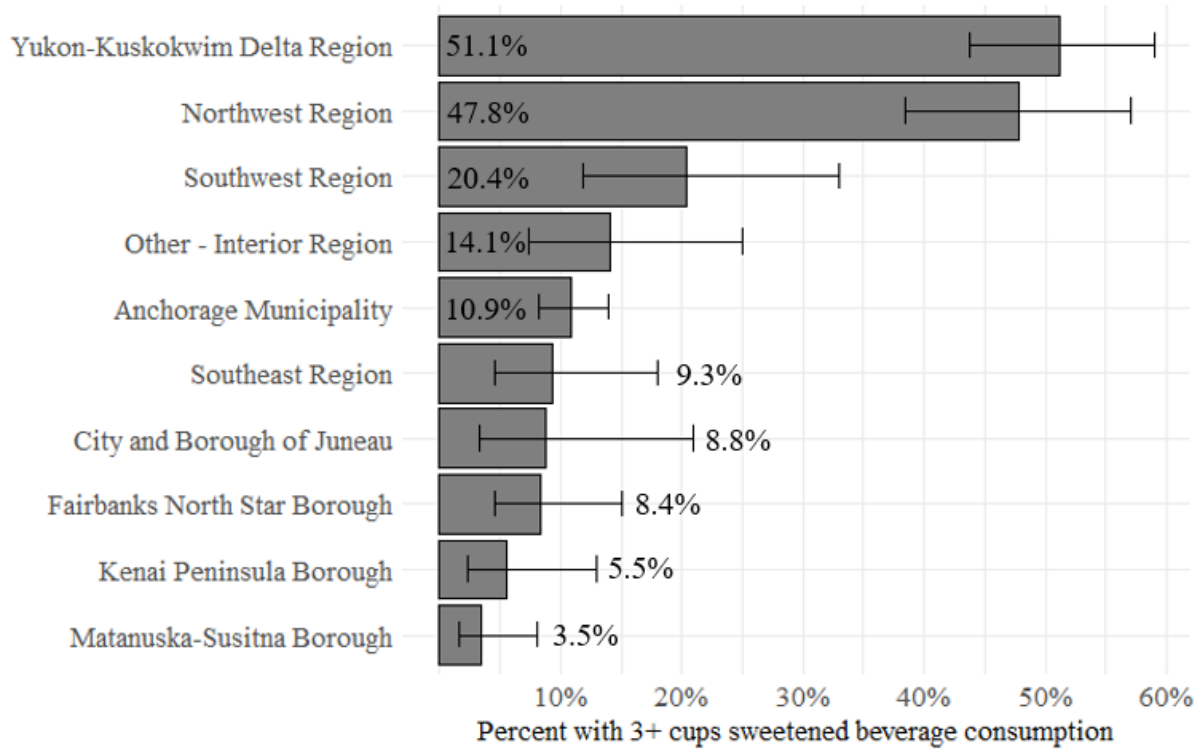


Figure 5. Correlation between percent of children enrolled in Medicaid with percent of parents reporting ECC for children with a dental visit, by region — Alaska, 2016–2019

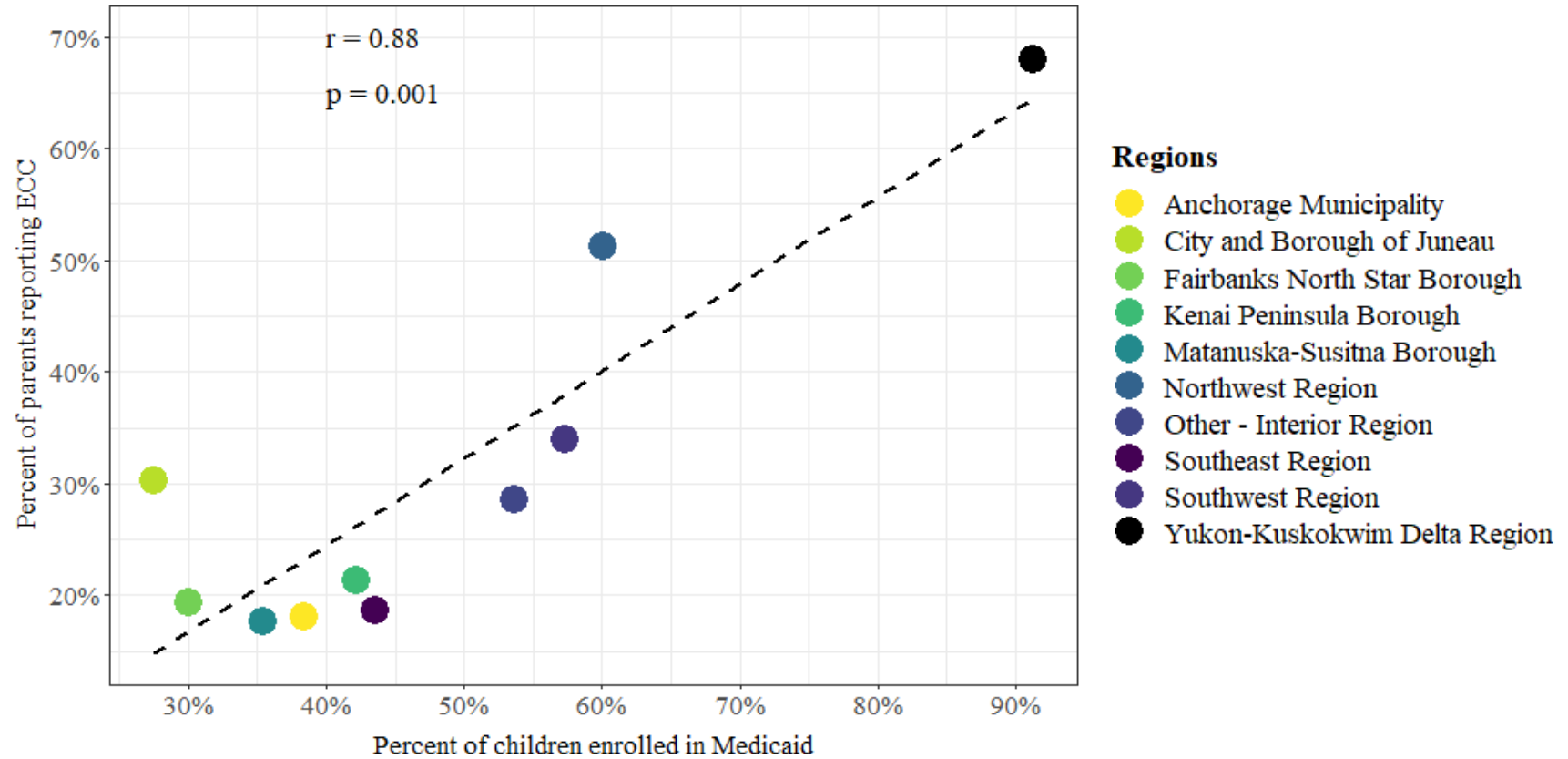
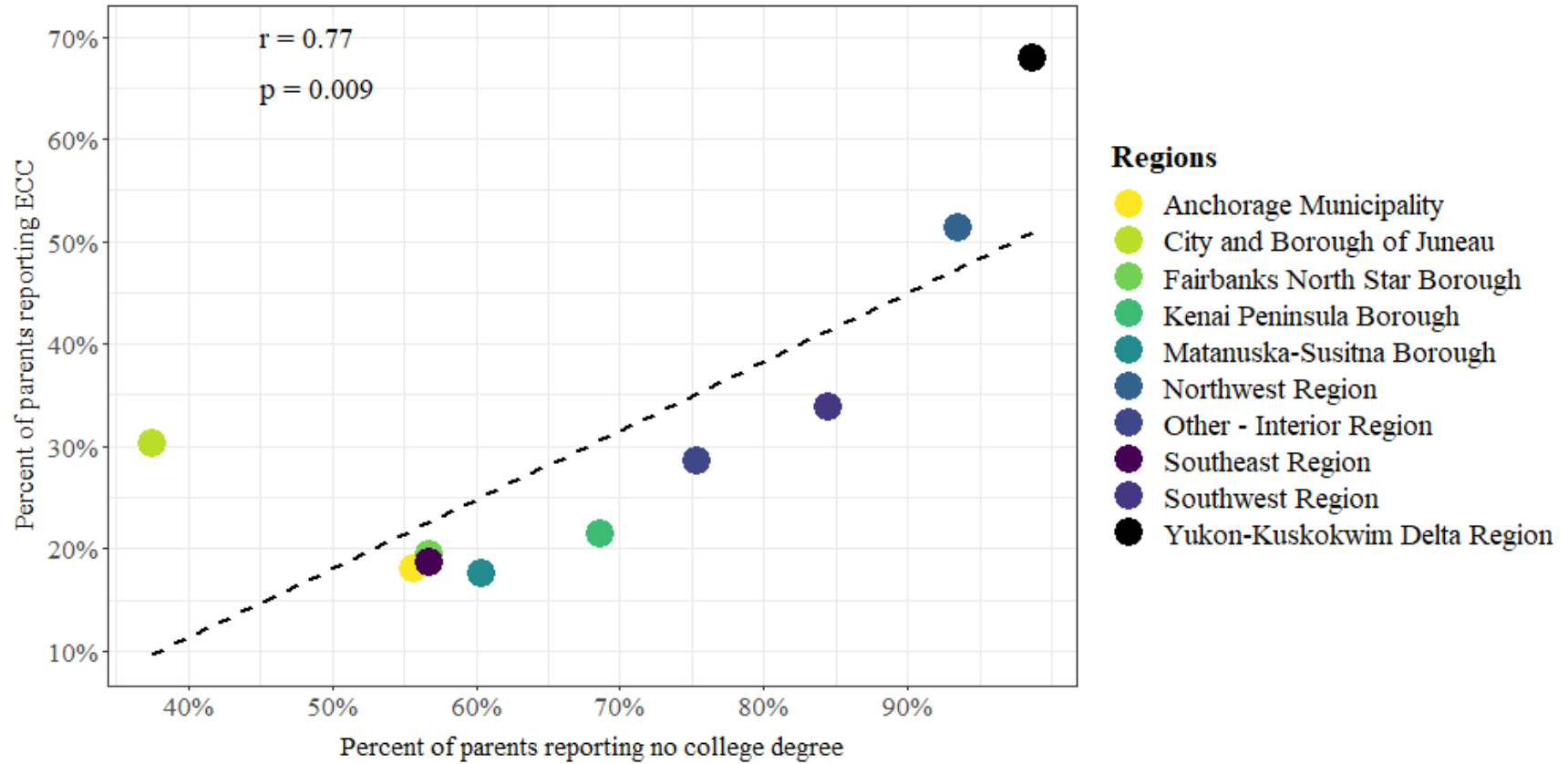


Figure 6. Correlation between percent of parents reporting no college degree attainment with those reporting early childhood caries for children with a dental visit, by region — Alaska, 2016–2019



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