

ALASKA ORAL HEALTH ASSESSMENT SUMMARY REPORT 2004-2005

Introduction: The State of Alaska, Department of Health and Social Services, Division of Public Health, Oral Health Program conducted a statewide assessment of children's oral health in 2004 and 2005. The following is a summary report of the information collected. A statistically appropriate number of children enrolled in Head Start, Kindergarten and Third-grade elementary school programs participated in an open mouth assessment by dental professionals. The guidelines for the open mouth survey (Basic Screening Survey) were a collaborative effort between the Association of State and Territorial Dental Directors (ASTDD) and the Ohio Department of Health, with technical assistance provided by the Division of Oral Health at the U.S. Centers for Disease Control and Prevention (CDC). The Alaska screenings were conducted to correspond with the objectives found in the national Healthy People 2010 document and oral health indicators established in the CDC National Oral Health Surveillance System. The assessment provides statewide data and data based on the five regions used for the Behavioral Risk Factor Surveillance Survey (BRFSS).

Oral Health Indicators:

- **Sealants:** Percentage of 3rd grade students with dental sealants on at least one permanent molar tooth. Dental sealants are an evidenced-based approach at reducing decay in the pits and fissures of teeth.
- **Caries Experience:** Percentage of students/children with caries experience (treated/restored and untreated tooth decay count as "caries experience".)
- **Untreated Tooth Decay:** Percentage of students/children with untreated tooth decay.

Findings: The survey indicates that the Alaska sealant rate exceeded 50 % and meets the Healthy People 2010 target for sealant utilization (statewide rate of 52.5% of 3rd grade children in 2004). Survey results indicate higher dental sealant utilization in American Indian/Alaska Native (AI/AN) children, even those whose parents indicate enrollment in Medicaid or Denali KidCare (State Child Health Insurance Program) programs. High caries rates in American Indian/Alaska Native (AI/AN) children has been noted previously in other surveys (e.g., 1991 and 1999 Indian Health Service dental screenings of American Indian/Alaska Natives).

The survey results reflect a racial/ethnic variation in caries experience and untreated caries, and a variation in caries based on socioeconomic status (with Medicaid eligibility indicating children from low income families). The small number of children (n=21) in the Native Hawaiian/Pacific Islander results in wide confidence intervals, however, the results on caries experienced and untreated caries warrants further investigation of this racial/ethnic groups in future assessments. Asian children also experienced high rates of decay and lower sealant utilization.

Recommendations: Survey results indicate priorities for dental sealant programs should include outreach to Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander racial/ethnic groups and to White children enrolled in the Medicaid/Denali KidCare Program. Some attention to prioritizing dental access strategies and dental sealant programs towards non-Native racial/ethnic minorities should be given in addition to ongoing efforts to reduce dental disease in Alaska Native children. Strategies for improving children's oral health include advocating for sealant programs through federally funded Community Health Center dental programs, partnering with the Alaska Primary Care Association efforts to increase access to dental care and working with coalitions focusing on disease prevention and health promotion activities for children.

ALASKA – Oral Health Assessment, 2004 (Third grade children)

Survey results listing the mean, confidence intervals and number of children in each category from the project for state totals, racial/ethnic groups and Medicaid enrolled children were as follows (2004/2005 school year – third grade children):

Caries Experience:

| | | <u>National (NHANES 1988-94)</u> |
|---|--------------------|----------------------------------|
| Total (n=1,206) | 65.1% (62.3, 67.8) | 52% |
| American Indian/Alaska Native (n=283) | 87.3% (82.8, 90.9) | 90% (1999 – IHS) |
| White (n=580) | 54.7% (50.5, 58.7) | 51% |
| Asian (n=93) | 84.9% (76.0, 91.5) | |
| Black/African American (n=54) | 53.7% (39.6, 67.4) | 50% |
| Hispanic/Latino (n=51) | 51.0% (36.6, 65.2) | |
| Native Hawaiian/Pacific Islander (n=21) | 85.7% (63.7, 97.0) | 79% (1999 – Hawaii) |
| Medicaid/Denali KidCare (n=336) | 76.2% (71.3, 80.6) | |
| American Indian/Alaska Native (n=128) | 91.4% (85.1, 95.6) | |
| White (n=99) | 63.6% (53.4, 73.1) | |

Untreated Caries:

| | | <u>National (NHANES 1988-94)</u> |
|---|--------------------|----------------------------------|
| Total (n=1,205) | 28.0% (25.3, 30.7) | 29% |
| American Indian/Alaska Native (n=283) | 43.5% (37.6, 49.5) | 69% (1999 – IHS) |
| White (n=580) | 18.6% (15.6, 22.1) | 26% |
| Asian (n=93) | 49.5% (38.9, 60.0) | |
| Black/African American (n=54) | 29.6% (18.0, 43.6) | 36% |
| Hispanic/Latino (n=50) | 30.0% (17.9, 44.6) | |
| Native Hawaiian/Pacific Islander (n=21) | 52.4% (29.8, 74.3) | 39% (1999 – Hawaii) |
| Medicaid/Denali KidCare (n=336) | 34.2% (29.2, 39.6) | |
| American Indian/Alaska Native (n=128) | 50.8% (41.8, 59.7) | |
| White (n=99) | 15.2% (8.7, 23.8) | |

Dental Sealants Present:

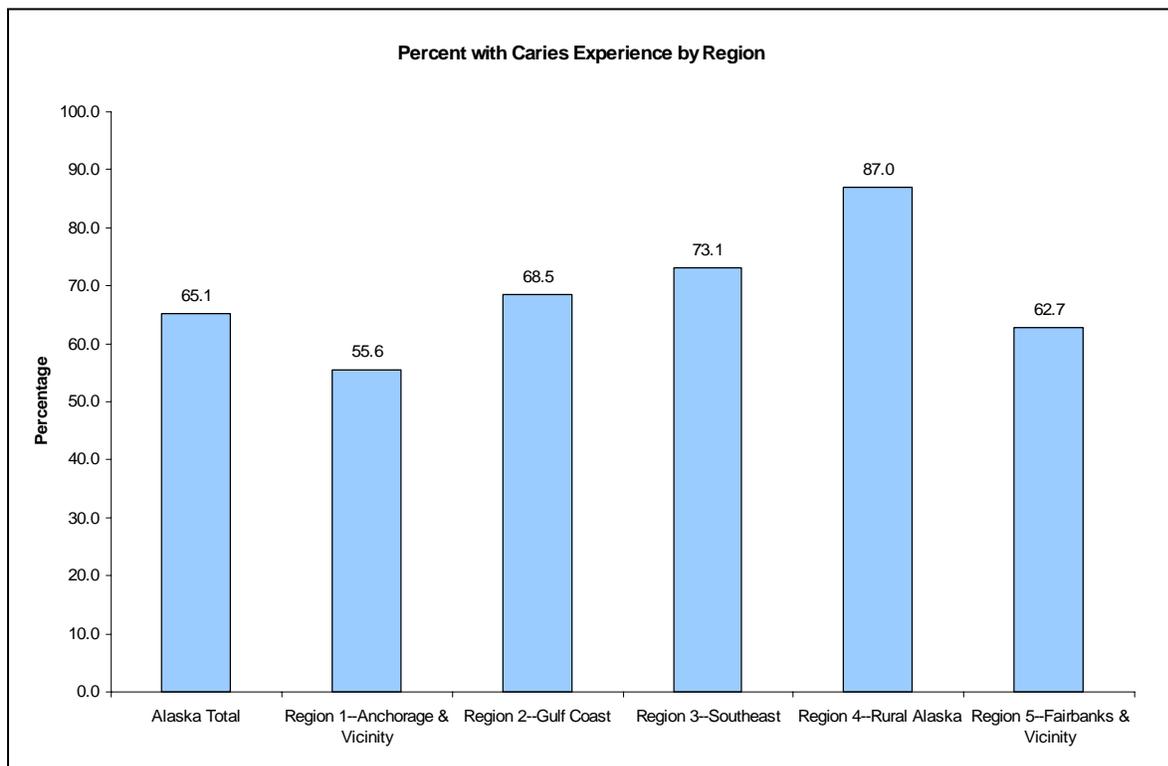
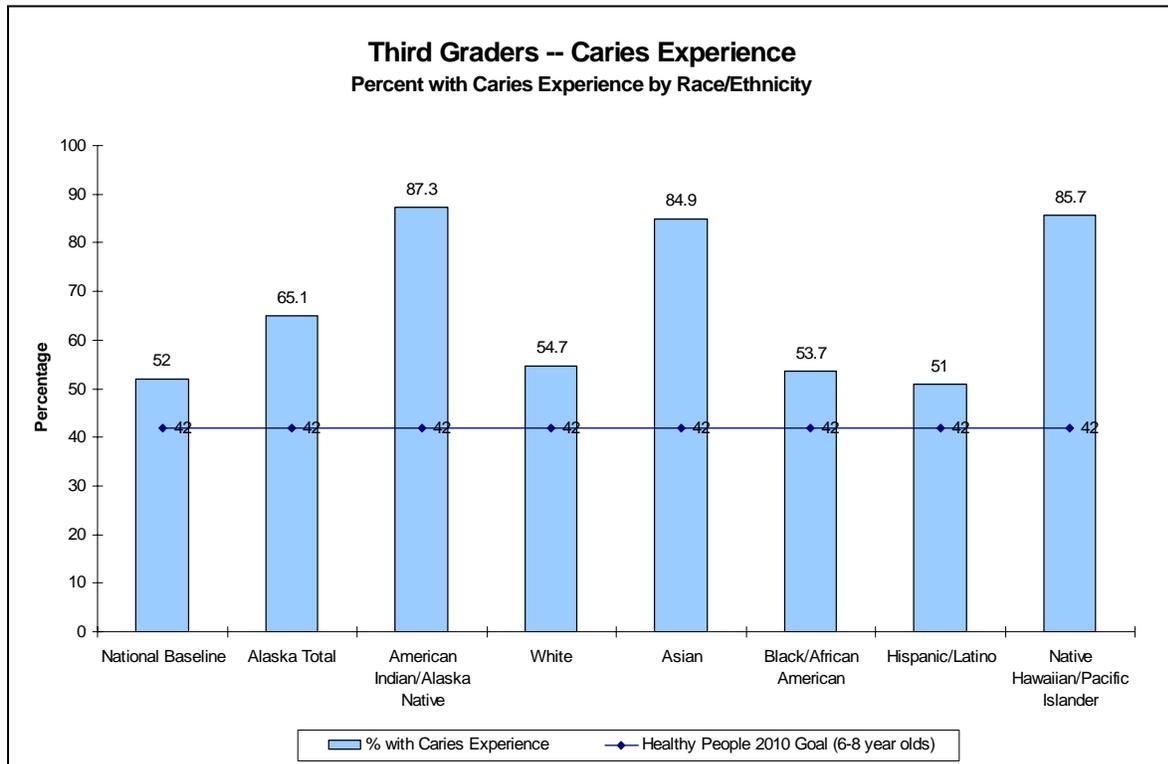
| | | <u>National (NHANES 1988-94)</u> |
|---|--------------------|----------------------------------|
| Total (n=1,206) | 52.4% (49.5, 55.3) | 23% |
| American Indian/Alaska Native (n=283) | 67.8% (62.1, 73.3) | 55% (1999 – IHS) |
| White (n=580) | 51.0% (46.9, 55.2) | 26% |
| Asian (n=93) | 39.8% (29.8, 50.5) | |
| Black/African American (n=54) | 29.6% (18.0, 43.6) | 11% |
| Hispanic/Latino (n=50) | 42.0% (28.2, 56.8) | |
| Native Hawaiian/Pacific Islander (n=21) | 33.3% (14.6, 57.0) | 20% (1999-Hawaii) |
| Medicaid/Denali KidCare (n=336) | 57.4% (52.0, 62.8) | |
| American Indian/Alaska Native (n=128) | 66.4% (57.5, 74.5) | |
| White (n=99) | 44.4% (45.2, 65.5) | |

Treatment Urgency – Early or Urgent Dental Care Needed:

| | |
|---|-------------------|
| Total (n=1,206) | 33.8 (31.2, 36.6) |
| American Indian/Alaska Native (n=283) | 48.4 (42.5, 54.4) |
| White (n=580) | 26.4 (22.9, 30.2) |
| Asian (n=93) | 50.5 (40.0, 61.1) |
| Black/African American (n=54) | 31.5 (19.5, 45.6) |
| Hispanic/Latino (n=50) | 35.3 (22.4, 49.9) |
| Native Hawaiian/Pacific Islander (n=21) | 57.1 (34.0, 78.2) |
| Medicaid/Denali KidCare (n=336) | 41.7 (36.4, 47.2) |
| American Indian/Alaska Native (n = 128) | 56.3 (47.2, 65.0) |
| White (n=99) | 30.3 (21.5, 40.4) |

Tooth decay is the single most common chronic childhood disease

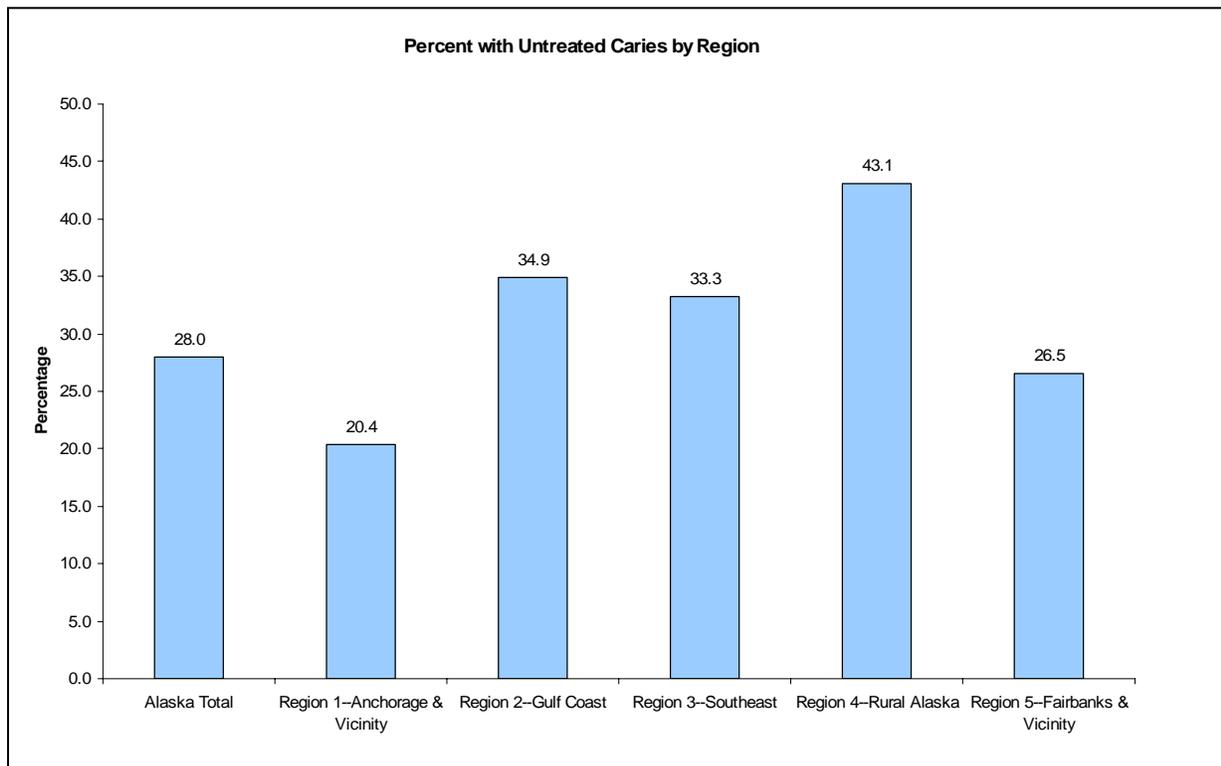
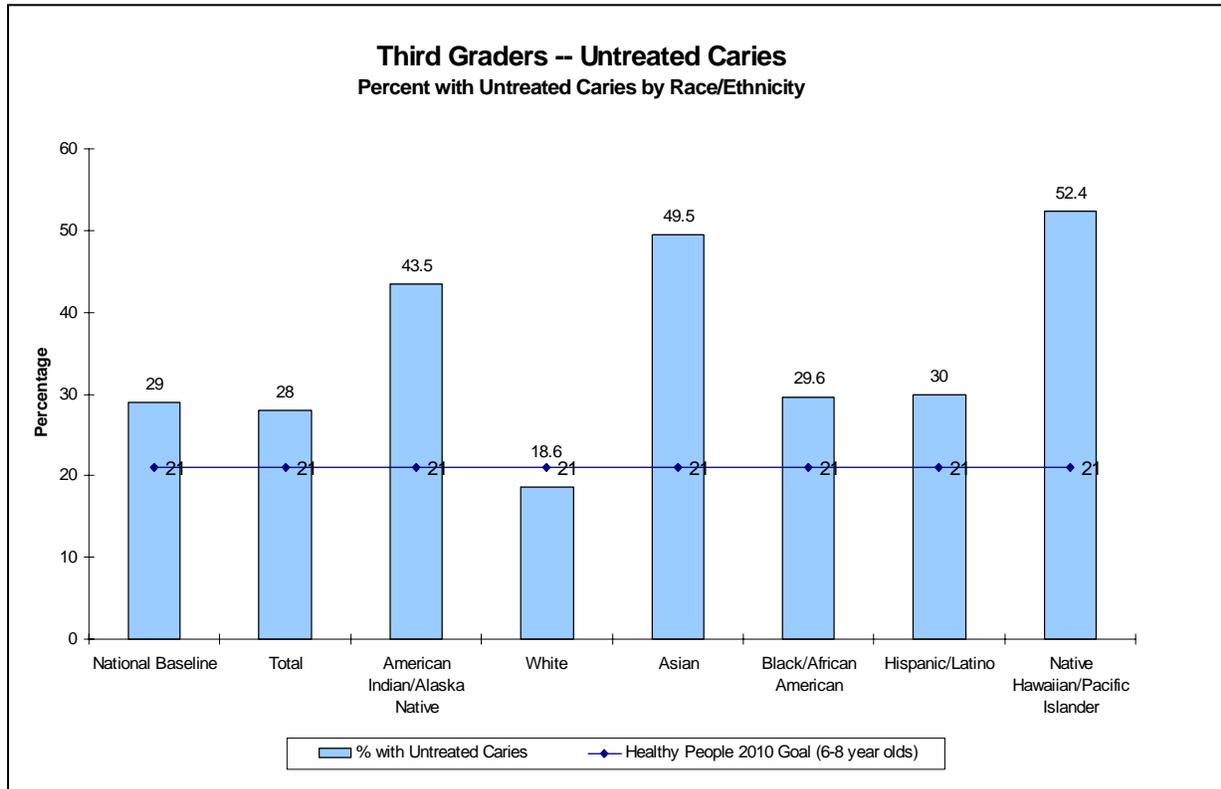
BASIC SCREENING SURVEY RESULTS Third Graders 2004 – Caries Experience



Tooth decay is the single most common chronic childhood disease

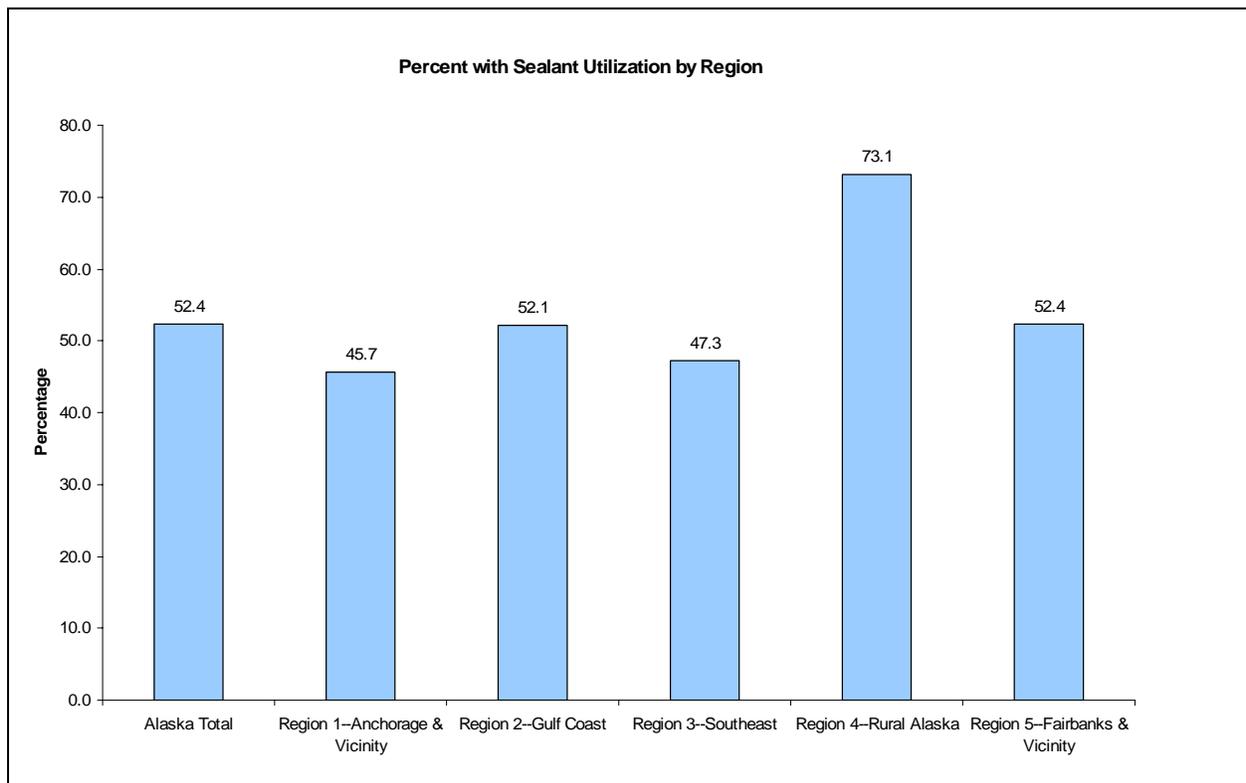
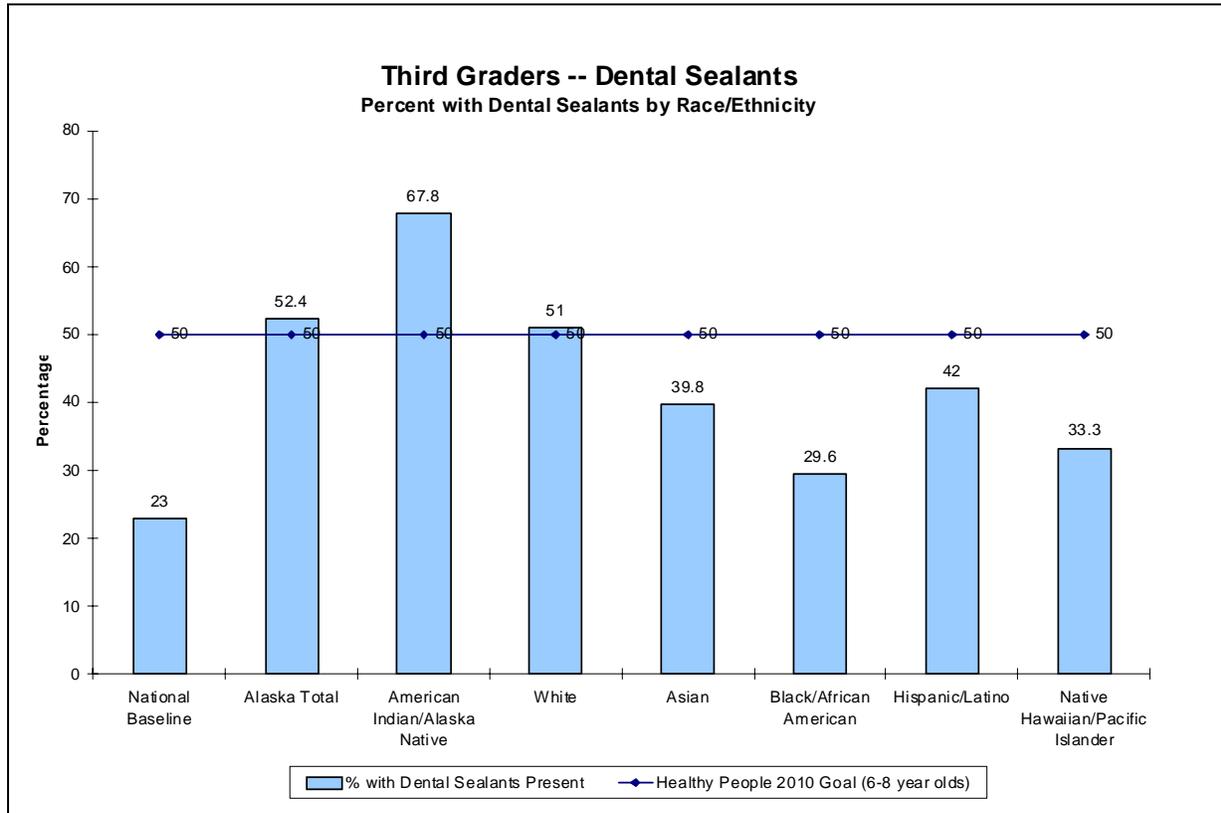
BASIC SCREENING SURVEY RESULTS

Third Graders 2004 – Untreated Caries Experience



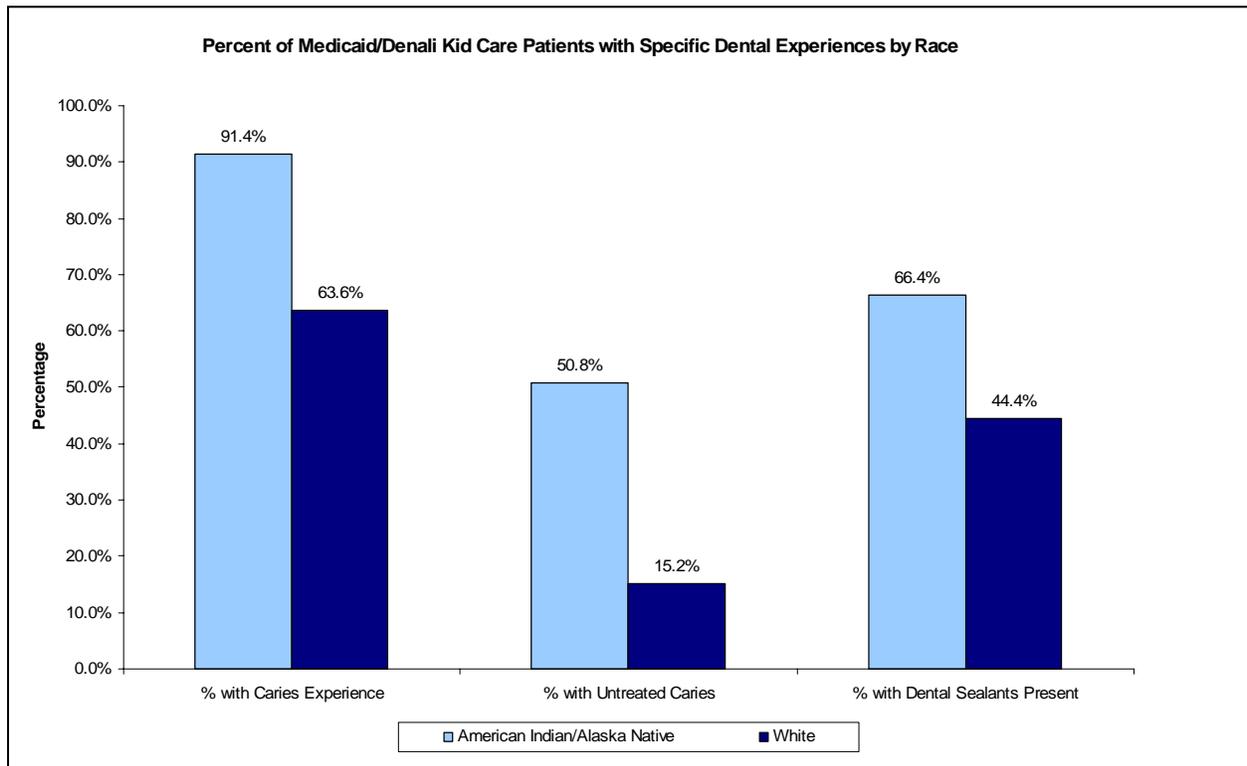
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BASIC SCREENING SURVEY RESULTS Third Graders 2004 – Dental Sealants



Tooth decay is the single most common chronic childhood disease

BASIC SCREENING SURVEY RESULTS Third Graders 2004 – Medicaid/Denali KidCare



Tooth decay is the single most common chronic childhood disease

ALASKA – Oral Health Assessment, 2005 (Kindergarten children)

Survey results listing the mean, confidence intervals and number of children in each category from the project for state totals, racial/ethnic groups and Medicaid enrolled children were as follows (2004/2005 school year – kindergarten):

Caries Experience:

| | |
|--------------------------------------|--------------------|
| Total (n=463) | 48.2% (43.5, 52.8) |
| American Indian/Alaska Native (n=70) | 75.7% (64.0, 85.2) |
| White (n=295) | 37.6% (32.1, 43.4) |
| Other (n=98) | 60.2% (49.8, 70.0) |
| Medicaid/Denali KidCare (n=140) | 59.3% (50.7, 67.5) |

Healthy People 2010 Goal
42%

Untreated Caries:

| | |
|--------------------------------------|--------------------|
| Total (n=463) | 24.6% (20.8, 28.9) |
| American Indian/Alaska Native (n=70) | 37.1% (25.9, 49.5) |
| White (n=295) | 20.0% (15.6, 25.0) |
| Other (n=98) | 29.6% (20.8, 39.7) |
| Medicaid/Denali KidCare (n=140) | 32.1% (24.5, 40.6) |

Healthy People 2010 Goal
21%

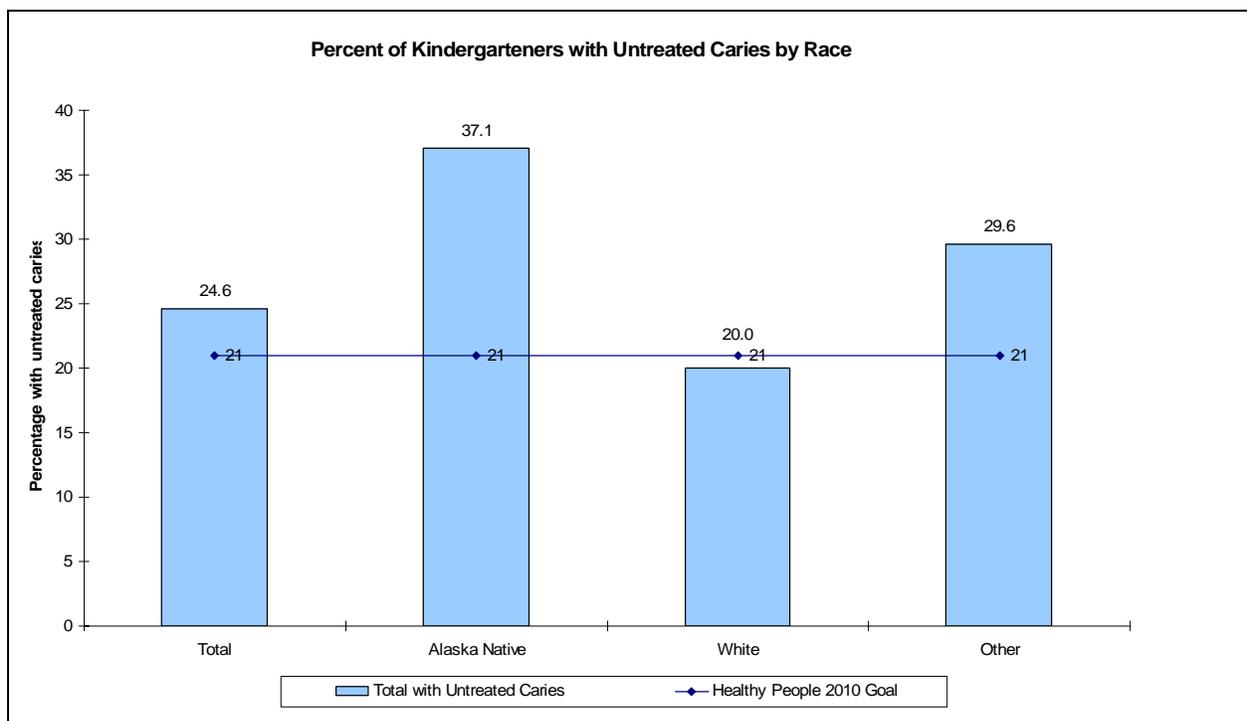
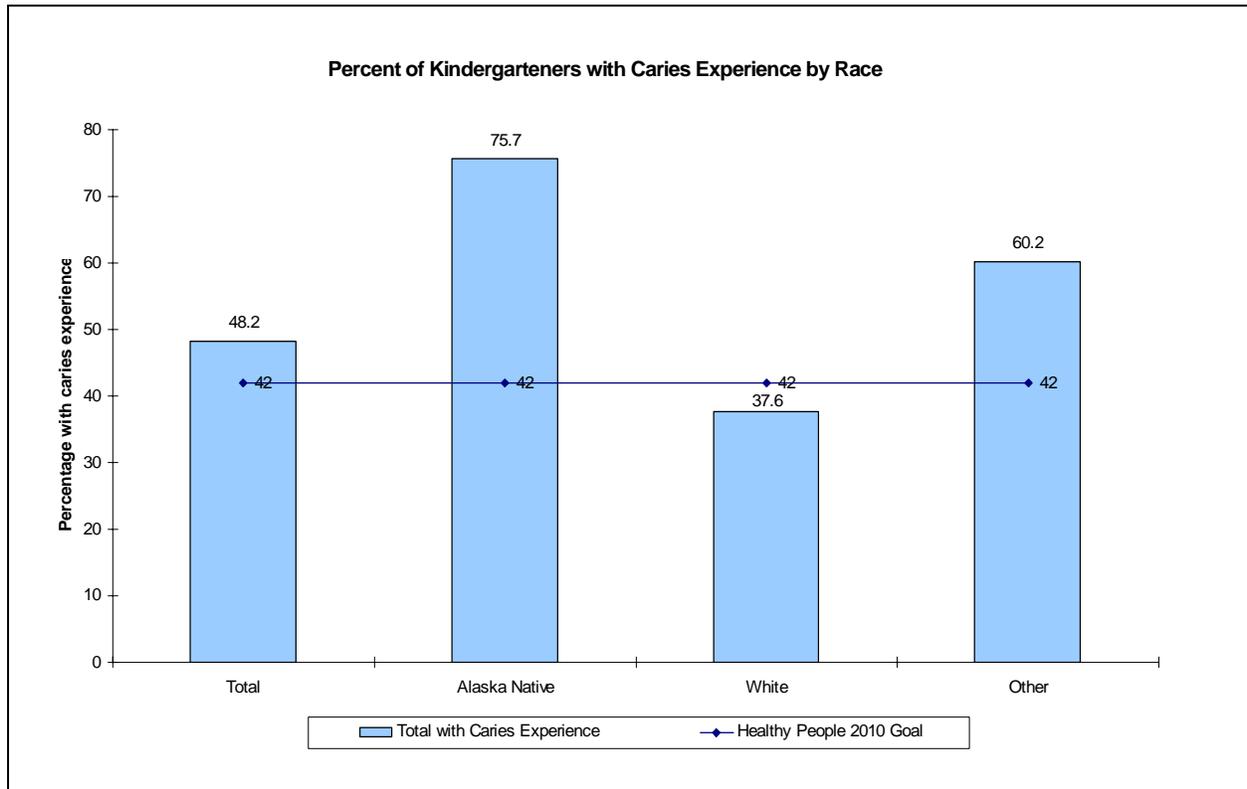
Caries Experience on Primary Anterior Teeth:

| | |
|--------------------------------------|--------------------|
| Total (n=457) | 14.2% (11.2, 17.8) |
| American Indian/Alaska Native (n=64) | 28.1% (17.6, 40.8) |
| White (n=295) | 10.2% (7.0, 14.2) |
| Other (n=98) | 17.3% (10.4, 26.3) |
| Medicaid/Denali KidCare (n=136) | 19.1 (12.9, 26.7) |

Treatment Urgency – Early or Urgent Dental Care Needed:

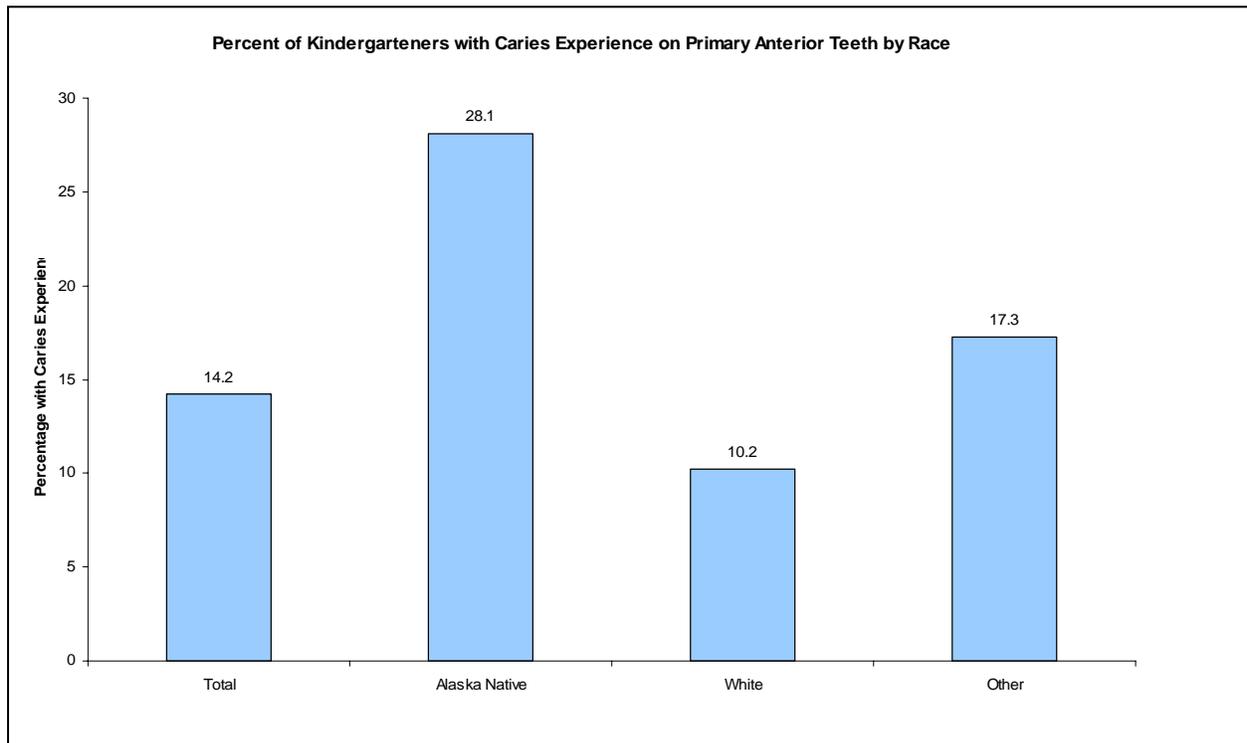
| | |
|--------------------------------------|--------------------|
| Total (n=463) | 25.5% |
| American Indian/Alaska Native (n=64) | 41.4% |
| White (n=295) | 20.0% |
| Other (n=98) | 30.6% |
| Medicaid/Denali KidCare (n=140) | 32.9% (25.2, 41.3) |

BASIC SCREENING SURVEY RESULTS Kindergarten 2005 – Caries Experience

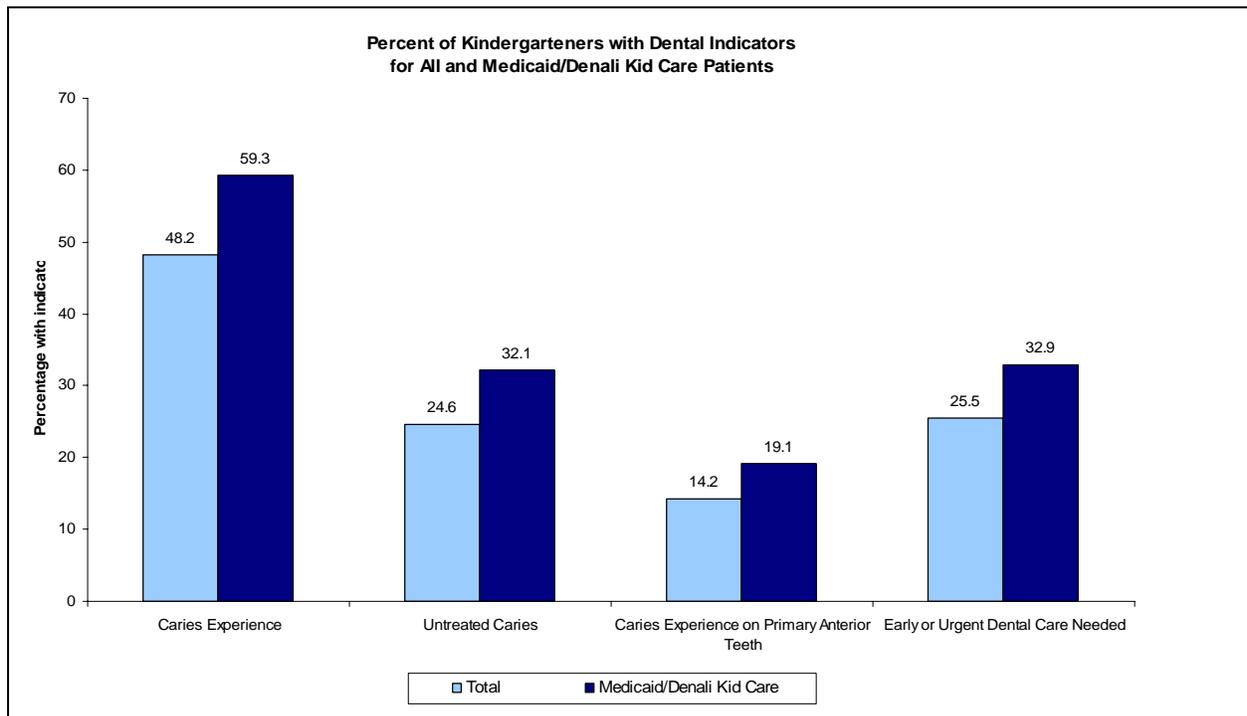


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BASIC SCREENING SURVEY RESULTS Kindergarten 2005 – Caries Experience



Kindergarten 2005 – Medicaid/Denali KidCare



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ALASKA – Oral Health Assessment, 2005 (Children Enrolled in Head Start)

Survey results listing the mean, confidence intervals and number of children in each category from the project for state totals, racial/ethnic groups and Medicaid enrolled children were as follows (2005 Head Start):

Caries Experience:

| | | | <u>NHANES (1988-94)</u> *** |
|---------------------------------------|-------|----------------|-----------------------------|
| Total (n=571) | 68.8% | (63.9, 73.2)* | 18% |
| American Indian/Alaska Native (n=423) | 84.2% | (80.2, 87.4)** | 76% (IHS 1999) |
| White (n=54) | 48.1% | (34.3, 62.2)** | 15% |
| Other (n=94) | 45.7% | (35.4, 56.3)** | |
| Medicaid/Denali KidCare (n=351) | 73.4% | (67.2, 78.9)* | |

Untreated Caries:

| | | | <u>NHANES (1988-94)</u> *** |
|---------------------------------------|-------|----------------|-----------------------------|
| Total (n=571) | 40.5% | (35.7, 45.5)* | 16% |
| American Indian/Alaska Native (n=423) | 50.8% | (46.0, 55.7)** | 67% (IHS 1999) |
| White (n= 54) | 24.1% | (13.5, 37.6)** | 11% |
| Other (n= 94) | 27.7% | (18.9, 37.8)** | |
| Medicaid/Denali KidCare (n=351) | 42.5% | (36.0, 49.0)* | |

Caries Experience on Primary Anterior Teeth:

| | | | |
|---------------------------------------|-------|----------------|--|
| Total (n=570) | 42.5% | (37.6, 47.7)* | |
| American Indian/Alaska Native (n=422) | 60.9% | (56.0, 65.6)** | |
| White (n=54) | 18.5% | (9.3, 31.4)** | |
| Other (n=94) | 19.1% | (11.8, 28.6)** | |
| Medicaid/Denali KidCare (n=351) | 49.8% | (43.2, 56.3)** | |

Treatment Urgency – Early or Urgent Dental Care Needed:

| | | | |
|---------------------------------------|-------|----------------|--|
| Total (n=571) | 41.2% | (36.3, 46.2)* | |
| American Indian/Alaska Native (n=423) | 52.0% | (47.1, 56.8)** | |
| White (n=54) | 24.1% | (13.5, 37.6)** | |
| Other (n=94) | 27.7% | (18.9, 37.8)** | |
| Medicaid/Denali KidCare (n=351) | 43.6% | (37.2, 50.2)* | |

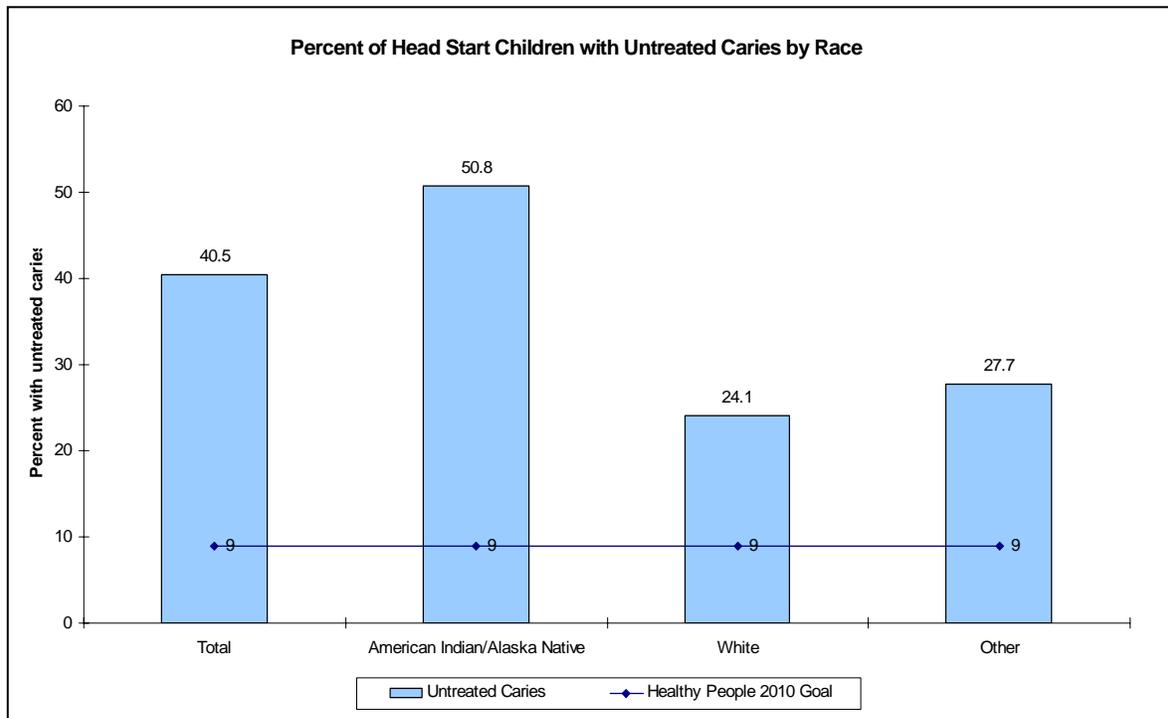
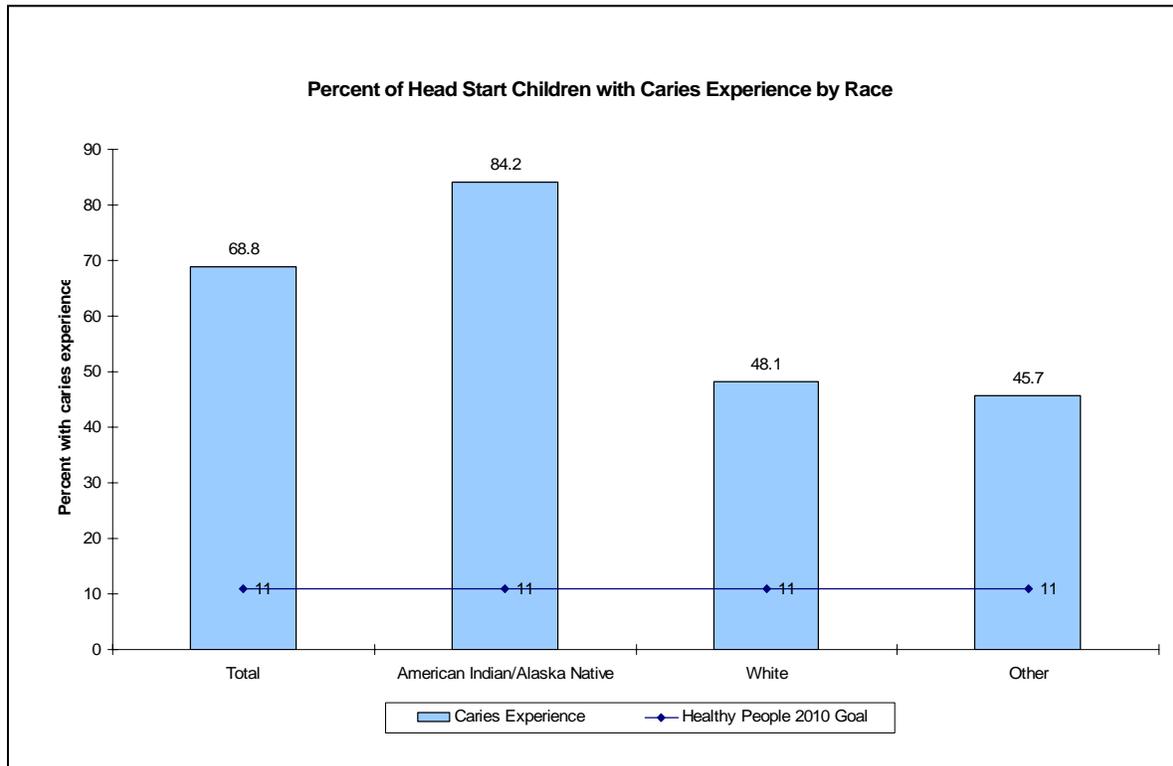
* weighted data

** unweighted data

*** NHANES data is aged 2-4 years so not identical to this age group 3-5 years

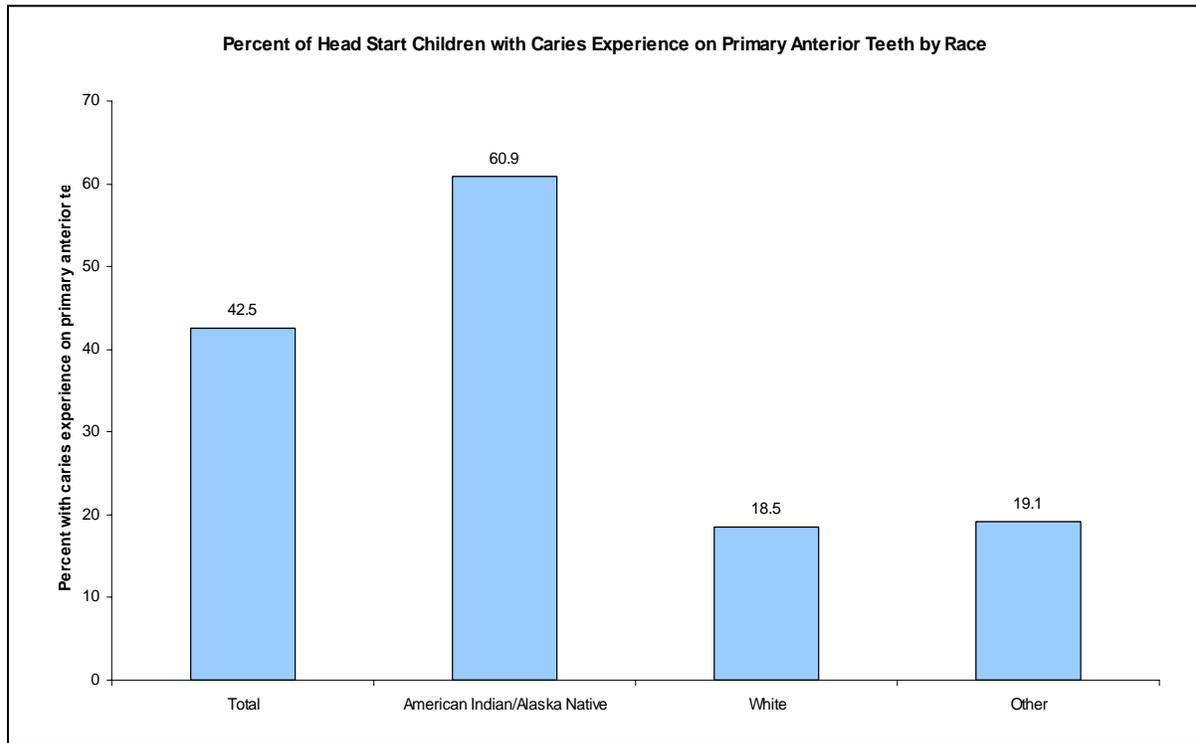
BASIC SCREENING SURVEY RESULTS

Head Start 2005 – Caries Experience



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BASIC SCREENING SURVEY RESULTS Head Start 2005 – Early Childhood Caries



Tooth decay is the single most common chronic childhood disease

For further information about the Alaska Basic Screening Survey, please contact:

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