

Results of the 2005 Oral Health Survey of Alaskan Head Start Children

Alaska Oral Health Basic Screening Survey

– a visual, oral health assessment of Head Start children from a sample of Alaska sites for oral health disease surveillance



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Alaska State Oral Health Assessment, Head Start Children, 2005

This assessment consisted of two parts: a consent form/questionnaire for parents/guardians to complete and a site-based clinical assessment using standardized ASTDD survey guidelines.

The results of this survey are based on a "quota" sampling method of Alaskan children enrolled in the Head Start Program. The sample design was based on the number of communities (locations or Grantees) with Head Start Programs, the number of children enrolled with each Grantee and the number of sites in each location. A target number (quota) of children was specified for each Grantee. Grantees and Sites are listed in Table 4. Due to particular methodologies used in selecting sites for each Grantee, some were inadvertently over sampled, leading to an imbalance in the final selection. Rather than discard data, the sample was weighted to achieve the intended sample size and distribution prior to most analyses. This survey is a non-probability (convenience) sample and is intended to be representative of children enrolled in Head Start. The survey data is not representative of Alaskan children in the age group that is typically enrolled in Head Start (typically 3-5 year olds). The results under this sampling method should be used with great caution in drawing conclusions about this age-group in general, since socioeconomic status, one of the primary qualifiers for Head Start participation, also influences oral health status. Issues related to sample selection and subsequent weighting of the sample are discussed in Appendix A.

Surveys and assessments were done at individual Head Start program locations or at "Roundups". Consents were distributed according to individual center preferences: some centers placed the consents in registration packets, and some sent them home as individual paperwork or as a part of student's packets. Response rates are reported separately for questionnaire results (all children who returned questionnaires), and for children who participated in both components (questionnaire and clinical screening) of the assessment. There were a small percentage of Respondents who completed questionnaires but did not want their children to have the clinical assessment (2.6%) and an additional small percentage of children who had consents returned with permission to examine but who were absent on the day of the exam (5.7%).

All analyses were performed using EpiInfo2000 software; confidence intervals for means were computed by hand using software tabulated variances. Since this survey group was not randomly selected, statistical analyses lose some of their meaning but are included for informational purposes.

Response Tables:

Response rates were averaged at the site level and the percentage of the Grantee goal achieved are presented in Table 1 and Table 2.

Table 1.

Ratio of returned completed questionnaires to enrolled Head Start children at selected centers by Grantee, 2005

Grantee & goal	School	Number of children enrolled	Number of returned completed questionnaires	% participation for center % of Grantee goal reached (bold)
Aleutian/Pribolof Island Association (10)				
	Unalaska Elementary	20	3	15
	King Cove	9	6	67
	Total:		9	90
Association of Village Council Presidents (30)				
	Kuinerramiut Elitnaurviat	30	30	100
	Scammon Bay School	16	16	100
	Akiachak School	20	17	85
	Akula Elitnaurvik School	15	8	53
	Tuluksak School	17	15	88
	Bethel	37	22	59
	Total:		108	360
Bristol Bay Native Association (15)				
	Chief Ivan Blunka School	17	5	29
	Togiak School	18	15	83
	Total:		20	133
Central Council of Tlingit & Haida Tribes (40)				
	Tlingit & Haida Tribes Council	49	44	90
	Total:		44	110
CCS Early Learning (35)				
	CCS – Meadow Lakes Head Start	59	34	58
	Total:		34	97

Grantee & goal	School	Number of children enrolled	Number of returned completed questionnaires	%participation for center % of Grantee goal reached (bold)
Fairbanks Native Association (40)				
	FNA Head Start	65	62	95
	Total:		62	155
Kawerak (30)				
	Gambell School	28	26	93
	Shaktoolik School	14	11	79
	Koyuk-Malemute School	14	12	86
	White Mountain School	10	9	90
	Total:		58	193
RurAL CAP (85)				
	Nelson Island Area School	17	17	100
	Ignatius Beans School	15	10	67
	Emmonak School	22	1	5
	Hooper Bay School	53	51	96
	Alakanuk School	22	1	5
	Ket'Achik/Aapalluk Mern School	24	22	83
	Marshall School	11	11	100
	Chevak School	19	2	11
	Tukumgailinguq School	20	10	50
	Total		125	147
South Central Foundation (30)				
	South Central Foundation	181	48	27
	Total:		48	160
Tanana Chiefs Conference (15)				
	McGrath School	8	8	100
	Kaltag School	8	8	100
	Total:		16	106
Kids' Corps (55)				
	Kids' Corps Headstart	117	53	45
	Total		53	96

Grantee & goal	School	Number of children enrolled	Number of returned completed questionnaires	%participation for center % of Grantee goal reached (bold)
Play N Learn (15)				
	Play N Learn Head Start	20	16	80
			16	107
	Sample Total		593	

Response rates for the questionnaire portion of the assessment ranged from 5 to 100 percent participation at individual Head Start programs. For some Grantees, the quota was greatly exceeded. (In the Association of Village Council Presidents, for example, the sample was 360% of the goal).

Table 2.

Ratio of children who returned completed questionnaires and had a clinical assessment to enrolled Alaskan Head Start children at selected centers by Grantee, 2005

Grantee & goal	School	Number of children enrolled	Number of clinical assessments	%participation for center % of Grantee goal reached (bold)
Aleutian/Pribolof Island Association (10)				
	Unalaska Elementary	20	3	15
	King Cove	9	6	67
	Total:		9	90
Association of Village Council Presidents (30)				
	Kuinerramiut Elitnaurviat	30	30	100
	Scammon Bay School	16	14	88
	Akiachak School	20	17	85
	Akula Elitnaurvik School	15	8	53
	Tuluksak School	17	15	88
	Bethel	37	22	59
	Total:		106	353
Bristol Bay Native Association (15)				
	Chief Ivan Blunka School	17	5	29
	Togiak School	18	15	83
	Total:		20	133
Central Council of Tlingit & Haida Tribes (40)				
	Tlingit & Haida Tribes Council	49	40	82
	Total:		40	100
CCS Early Learning (35)				
	CCS – Meadow Lakes Head Start	59	34	58
	Total:		34	97
Fairbanks Native Association (40)				
	FNA Head Start	65	58	89
	Total:		58	145

Grantee & goal	School	Number of children enrolled	Number of clinical assessments	% participation for center % of Grantee goal reached (bold)
Kawerak (30)				
	Gambell School	28	26	93
	Shaktoolik School	14	11	79
	Koyuk-Malemute School	14	8	57
	White Mountain School	10	9	90
	Total:		54	167
RurAL CAP (85)				
	Nelson Island Area School	17	15	88
	Ignatius Beans School	15	10	67
	Emmonak School	22	1	5
	Hooper Bay School	53	51	96
	Alakanak School	22	1	5
	Ket'Achik/Aapalluk Mern School	24	22	83
	Marshall School	11	11	100
	Chevak School	19	2	11
	Tukumgailnguq School	20	10	50
	Total		123	145
South Central Foundation (30)				
	South Central Foundation	181	48	27
	Total:		48	160
Tanana Chiefs Conference (15)				
	McGrath School	8	8	100
	Kaltag School	8	5	63
	Total:		13	87
Kids' Corps (55)				
	Kids' Corps Headstart	117	53	45
	Total		53	96

Grantee & goal	School	Number of children enrolled	Number of clinical assessments	%participation for center % of Grantee goal reached (bold)
Play N Learn (15)				
	Play N Learn Head Start	20	13	65
			13	87
	Sample Total		571	

Response rates for the clinical portion of the assessment ranged from 5 to 100 percent participation at selected programs. Rates for participation at this level were lower than at the questionnaire only level due to non-consent for this portion and absenteeism on the date of assessment.

Table 3.**Distribution of participants by screener, Alaskan Head Start children, 2005**

Screener	Number of participants	Percent of participants
AL	8	1.4
BLL	5	0.9
CAR	37	6.5
CH	13	2.3
DW	15	2.6
GM	8	1.4
JDH	117	20.5
JE	49	8.6
JM	6	1.1
JTB	10	1.8
KL	63	11.0
MEW	44	7.7
MS	81	14.2
N/A	58	10.2
OSH	54	9.5
RB	3	0.5
TB	48	8.4
WW	10	1.8
Total	571	100.0

Seventeen screeners collected data for this survey, providing between 3 and 117 exams each.

Table 4.

Grantees, sample goal, and actual sample (questionnaire and assessment sections), Alaskan Head Start children, 2005.

Grantee	Status	Goal	Number of participants	% of goal
Aleutian/Pribolof Island Association	Native	10	9	90
Association of Village Council Presidents	Native	30	106	353
Bristol Bay Native Association	Native	15	20	133
Central Council of Tlingit & Haida Tribes	Split 19 Native 25 Non-native	40	40	100
CSS Early Learning	Non Native	35	34	97
Fairbanks Native Association	Split 45 Native 17 Non-native	40	58	145
Kawerak	Native	30	54	167
RurAL CAP	Native	85	123	145
South Central Foundation	Split 36 Native 12 Non-native	30	48	160
Tanana Chiefs Conference	Native	15	13	87
Kid's Corps	Non Native	55	53	96
Play N Learn	Non Native	15	13	87
		400	571	143

One grantee achieved over 350% of their intended sample size; some smaller programs achieved less than 90% of their intended sample. Over sampled Grantees were primarily those that served predominately Native children.

Demographic Variables:

Tabular information presented in demographic tables and in basic assessment frequencies is presented in both its “raw” state and with weighted values. In every other analysis except those delineating differences by race/ethnicity, weighted values were used. For discussion of issues related to sampling and weighting, see Appendix A.

Table 5.

Mean age (in months) of respondents participating in the clinical assessment by gender, Alaskan Head Start children, 2005

Gender	Age in months (range)	Std. Deviation	Weighted age (in months)	Wtd. Std. Deviation
Male (n=233)	53.6 (35-70)	7.59	54.2	7.79
Female (n=230)	53.6 (36-71)	7.81	54.1	7.79
Both (n=463)	53.6 (35-71)	7.70	54.1	7.78

There was not a significant difference in age according to gender (P-Value=0.9412). Birthdates ranged from 5/1/1999 to 9/16/2002; screening dates ranged from 1/11/2005 to 11/9/2005. Age here was computed only for children who participated in the clinical assessment.

Table 6.

Distribution of respondents by gender, Alaskan Head Start children, 2005

Gender	Number of respondents	Percent	95% CI	Weighted Percent	Wtd. 95% CI
Male	298	50.3	(46.2, 54.3)	51.2	(46.2, 56.2)
Female	295	49.7	(45.7, 53.8)	48.8	(43.8, 53.8)
Total	593	100.0			

Respondents were evenly divided by gender.

Table 7.

Distribution of respondents by race/ethnicity as reported by parent/guardian, Alaskan Head Start children, 2005

Race/Ethnicity	Code	Number of respondents	Percent of respondents
White	1	48	8.1
Black/African American	2	11	1.9
Hispanic/Latino	3	3	0.5
Asian	4	6	1.0
American Indian/Alaskan Native	5	421	71.0
Native Hawaiian/Pacific Islander	6	6	1.0
Multi-Racial	7	50	8.4
Unknown	9	1	0.2
Blank		47	7.9
Total		593	100.0

The vast majority of children screened were “American Indian/Alaskan Native”.

Of the 47 children for whom Race/Ethnicity was not scored by their parent/guardian, 46 were present on the assessment day and had consent for a clinical exam. In these cases, the examining dentist classified eight as “White”, six as “Black/African American”, four as “Hispanic/Latino”, three as “Asian”, 15 as “American Indian/Alaskan Native”, and ten as “Multiracial”.

The child scored as “unknown” by their parent/guardian was absent on the day of assessment, and could not be classified; nor could the other child not scored by their parent/guardian who was absent on the day of exam.

Table 8.**Revised distribution of respondents by race/ethnicity, Alaskan Head Start children, 2005**

Race/Ethnicity	Code	Number of respondents	Percent of respondents	95% CI	Weighted Percent	Wtd 95% CI
White	1	56	9.4	(7.3, 12.2)	13.2	(10.1, 17.0)
Black/African American	2	17	2.9	(1.7, 4.6)	4.2	(2.5, 6.8)
Hispanic/Latino	3	7	1.2	(0.5, 2.5)	1.8	(0.8, 3.8)
Asian	4	9	1.5	(0.7, 3.0)	2.3	(1.1, 4.4)
American Indian/Alaskan Native	5	436	73.5	(69.7, 77.0)	64.4	(59.5, 69.1)
Native Hawaiian/Pacific Islander	6	6	1.0	(0.4, 2.3)	1.4	(0.5, 3.2)
Multi-Racial	7	60	10.1	(7.9, 12.9)	12.2	(9.3, 15.9)
Unknown	9 or 99	2	0.3		0.5	
Total		593	100.0			

This table shows the composite determination of Race/Ethnicity of respondents. If the parent/guardian coded “unknown” or left the coding response blank, the screener was asked to make a Race/Ethnicity judgment by observation or in conjunction with school personnel. This observation was coded separately from that coded by the parent/guardian. When the parental response was “unknown” or blank, the screener’s response, when available, was used to revise the categorization of the child. This table shows these recodes, which were used for subsequent analyses.

Although examiners were instructed to honor a valid “Race/Ethnicity” code when provided by a parent/guardian, in 19 records the examining dentist coded a different “Race/Ethnicity” code than the parent/guardian. In seven cases the field was left blank, one was scored as “unknown” and the others were coded into another group. Eight examiners contributed to this pool. In all these cases, the final re-code honored the parent/guardian classification.

Table 9.**Distribution of respondents sampled by race/ethnicity and actual enrollment by child ethnicity, Alaskan Head Start children, 2005**

Race/Ethnicity	Weighted Percent	Wtd. 95% CI	Percent of Actual Enrollment
White	13.2	(10.1, 17.0)	18.3
Black/African American	4.2	(2.5, 6.8)	3.5
Hispanic/Latino	1.8	(0.8, 3.8)	3.6
Asian	2.3	(1.1, 4.4)	3.3
American Indian/Alaskan Native	64.4	(59.5, 69.1)	60.0
Native Hawaiian/Pacific Islander	1.4	(0.5, 3.2)	1.2
Multi-Racial	12.2	(9.3, 15.9)	8.1
Unknown	0.5		1.9

Race/ethnicity reported in this sample reasonably matched the actual distribution of enrolled Head Start children. In this sample, Whites were slightly under-represented, and those classified as “Multi-Racial” were slightly over-represented.

Table 10a.**“Collapsed” three-group distribution of respondents by race/ethnicity, Alaskan Head Start children, 2005**

Race/Ethnicity	Code	Number of respondents	Percent of respondents	Weighted Percent
White	1	56	9.5	13.2
American Indian/Alaskan Native	5	436	73.5	64.4
All others:		101	17.0	22.3
Black/African American	2	(17)		
Hispanic/Latino	3	(7)		
Asian	4	(9)		
Native Hawaiian/Pacific Islander	6	(6)		
Multi-Racial	7	(60)		
Unknown	9,99	(2)		
Total		593	100	100

For some analyses, the sample size across the listed choices for Race/Ethnicity was small or non-existent, precluding valid analysis. For these analyses, the groupings were collapsed per the table above, leaving Race/Ethnicity categories of “White”, “American Indian/Alaskan Native”, and “All Others”.

Table 10b.

“Collapsed” two-group distribution of respondents by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity	Code	Number of respondents	Percent of respondents	Weighted Percent
American Indian/Alaskan Native	5	436	73.5	64.4
All others:		157	26.5	35.6
White	1	(56)		
Black/African American	2	(17)		
Hispanic/Latino	3	(7)		
Asian	4	(9)		
Native Hawaiian/Pacific Islander	6	(6)		
Multi-Racial	7	(60)		
Unknown	9,99	(2)		
Total		593	100	100

Although it would have been desirable to have the same “collapsed” categories of race/ethnicity as we had in other surveys (“White”, “Native American/Alaskan Native”, and “All others”), for all analyses, the sample was too small to do this with the sample size and differential distribution of Race/Ethnicity in Head Start Children. For some variables, Race/Ethnicity had to be collapsed even further, into the groupings in this Table.

Alaska State Oral Health Assessment Preliminary Data, Head Start 2005

Basic Frequency Tables

Questionnaire Variables:

Table 11.

Survey respondents reporting tooth pain, Alaskan Head Start children, 2005

Question 1: During the past 6 months did your child have a toothache more than once when biting or chewing?

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Yes	86	14.5	(11.8, 17.7)	12.5	(9.5, 16.3)
No	443	74.7	(71.0, 78.1)	75.7	(71.2, 79.8)
Don't Know	33	5.6		5.1	
(Blank)	31	5.2		6.7	
Total	593	100.0		100	

Over 10% of respondents reported that their child had a toothache more than once in the past 6 months.

Table 12.**Length of time since last reported dental visit, Alaskan Head Start children, 2005**

Question 2: About how long has it been since your child last visited a dentist? (Include all types of dentists such as orthodontists and oral surgeons as well as dental hygienists.) (Please check only one.)

Response	Number responding	Percent responding	95% CI	Wtd. Percent	Wtd. 95% CI
6 months or less	208	35.1	(31.3, 39.1)	38.3	(33.6, 43.3)
More than 6 months, but not more than 1 year	123	20.7	(17.6, 24.3)	19.7	(16.0, 24.0)
More than 1 year, but not more than 3 years ago	111	18.7	(15.7, 22.1)	15.1	(11.8, 19.1)
More than 3 years ago	6	1.0	(0.4, 2.3)	1.0	(0.3, 2.7)
Never has been to the dentist	75	12.6	(10.1, 15.7)	13.0	(10.0, 16.8)
Don't know/don't remember	35	5.9		5.5	
(Blank)	35	5.9		7.3	
Total	593	100.0		100.0	

More than 50% of respondents reported that their child's last dental visit was within the past year, with most of these children visiting a dentist within the past 6 months. Over ten percent of parents responded that their child had never been to a dentist.

Table 13.**Main reason for last dental visit, Alaskan Head Start children, 2005**

Question 3. What was the main reason that your child last visited a dentist? (Please check only one.)

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Something was wrong, bothering or hurting	82	13.8	(11.2, 16.9)	11.4	(8.5, 15.0)
Went for treatment of a condition that dentist discovered at earlier check-up or examination	84	14.2	(11.5, 17.3)	12.5	(9.5, 16.3)
Went in on own for check-up, exam or cleaning	214	36.1	(32.2, 40.1)	38.5	(33.7, 43.5)
Was called in by dentist for check-up, exam or cleaning	71	12.0	(9.5, 14.9)	12.4	(9.4, 16.2)
Other	6	1.0		0.9	
Don't know	24	4.0		3.4	
(Blank)	112	18.9		20.9	
Total	593	100.0		100	

Over 10% of respondents reported that their child's last dental visit was due to pain or discomfort. About 50% went in for examination or cleaning, and about 12% went in for some type of dental treatment that was previously noted by their dentist. "Other" responses were re-coded as a listed response if comments indicated a logical choice was available (i.e. "abscess" was recoded as "Something was wrong, bothering, or hurting."). Four responses were recoded.

Table 14.**Respondents with medical insurance, Alaskan Head Start children, 2005**

Question 4. Do you have any kind of insurance that pays for some or all of your child's Medical or surgical care? Include health insurance obtained through employment or purchased directly as well as government programs like Denali Kid Care/Medicaid. (Please check only one.)

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Yes	445	75.0	(71.3, 78.4)	72.8	(68.1, 77.0)
No	87	14.7	(12.0, 17.8)	15.5	(12.2, 19.6)
Don't Know	21	3.5		3.5	
(Blank)	40	6.7		8.2	
Total	593	100.0		100	

Over 70% of respondents reported that they had some type of medical/surgical insurance.

Table 15.**Inability to obtain dental care in past 12 months, Alaskan Head Start children, 2005**

Question 5. During the past 12 months, was there a time when your child needed dental care but could not get it at that time?

Response	Number Responding	Percent Responding	95% CI	Weighted Percent	Wtd. 95% CI
Yes	102	17.2	(14.3, 20.5)	14.7	(11.4, 18.6)
No	435	73.4	(69.6, 76.8)	74.5	(69.9, 78.7)
Don't Know	18	3.0		3.0	
(Blank)	38	6.4		7.8	
Total	593	100.0			

One hundred and two parents (over 17%) reported having difficulty in obtaining needed dental care for their child in the past 12 months.

Table 16.**Main reason for parent’s inability to get dental care for their child, Alaskan Head Start children, 2005 (among those who could not get care)**

Question 5 subset: What was the main reason the child couldn’t get care? (Please check only one.)

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Dentist did not accept Denali Kid Care/Medicaid Insurance	7	6.9	(2.8, 13.8)	8.6	(2.9, 19.1)
No dentist available	18	17.8	(10.9, 26.7)	19.9	(10.0, 31.8)
No way to get there	10	9.9	(4.9, 17.5)	8.4	(2.9, 19.1)
Difficulty in getting appointment	41	40.6	(30.9, 50.8)	36.4	(24.1, 50.1)
Did not know where to go	2	2.0	(0.2, 7.0)	2.9	(0.4, 11.9)
Not serious enough	4	4.0	(1.1, 9.8)	3.7	(0.4, 12.0)
Don’t like/trust/believe in dentists	1	1.0	(0.0, 5.4)	0.9	(0.0, 9.2)
Could not afford	7	6.9	(2.8, 13.8)	7.4	(1.9, 16.9)
Other reason	7	6.9	(2.8, 13.8)	8.2	(2.9, 19.0)
Don’t know	0	0			
Did not answer (left blank)	4	4.0		3.7	
Total	101	100.0			

Of those parent’s whose children needed care but could not get it, the most frequent reasons given were that they had difficulty in getting an appointment (40%) or there was no dentist available (18%). “Other” reasons iterated included “Haven’t had time to make an appointment”, and “Waiting to get an appointment”.

Table 17.

Respondents with dental insurance, Alaskan Head Start children, 2005

Question 6. Do you have any kind of insurance that pays for some or all of your child's dental care? (Check only one.)

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Yes	459	77.4	(73.8, 80.7)	74.6	(70.0, 78.7)
No	69	11.6	(9.2, 14.6)	12.8	(9.8, 16.6)
Don't Know	13	2.2		2.2	
(Blank)	52	8.8		10.3	
Total	593	100.0		100.0	

About 75% of respondents reported having some type of dental insurance.

Table 18.**Type of dental insurance coverage carried by respondents, Alaskan Head Start children, 2005**

Question 6 subset. What kind of dental insurance? (Check all that apply)

Response	Number responding	Percent responding	95% CI	Weighted Percent	Wtd. 95% CI
Commercial (provided by employer)	48	10.5	(7.9, 13.7)	11.0	(7.7, 15.2)
Private (you bought yourself)	3	0.7	(0.2, 2.1)	0.5	(0.1, 2.4)
Denali Kid Care/Medicaid	365	79.5	(75.5, 83.1)	79.6	(74.5, 84.0)
IHS/Native health corporation	83	18.1	(14.7, 22.0)	16.3	(12.4, 21.1)
Military/Tricare (Champus)	8	1.7	(0.8, 3.5)	2.1	(0.7, 4.3)
Don't Know	20	4.4		5.0	(2.8, 8.2)
Multiple types of insurance selected	66	14.4	(11.4, 18.0)	13.7	(10.0, 18.2)
At least one type of insurance selected	437	95.2	(92.7, 96.9)	94.7	(91.4, 96.9)

Of those covered by some type of dental insurance, most (80%) reported having insurance through Denali Kid Care/Medicaid. About 14 percent of children seemed to be covered by more than one type of policy.

Screening Variables:

Parental consent was obtained to examine all of the 593 children who returned surveys. Of these, 22 children were absent on the day of exam. 571(96.3%) of children with returned surveys were examined by a dentist at their school/center, using a mouth mirror and flashlight. Children were scored for the presence of untreated dental carious lesions, dental caries experience, dental caries experience on primary maxillary anterior teeth, treatment urgency, and the number of quadrants needing treatment for dental caries. Only children who had parental consent, were present, and gave consent for an exam (n=571) were included in clinical response tabulations.

Assessments were performed between 1/11/2005 and 11/9/2005.

Frequencies of Screening Variables:

Table 19.

Untreated dental caries, Alaskan Head Start children, 2005

Untreated Dental Caries	Number of participants	Percent of participants	95% CI	Weighted Percent	Wtd. 95% CI
Yes	254	44.5	(40.4, 48.7)	40.5	(35.7, 45.5)
No	317	55.5	(51.3, 59.6)	59.5	(54.5, 64.3)
Total	571	100.0		100.0	

Almost 45% of children examined had cavitated carious lesions.

Table 20.

Dental caries experience, Alaskan Head Start children, 2005

Dental Caries Experience	Number of participants	Percent of participants	95% CI	Weighted Percent	Wtd. 95% CI
Yes	425	74.4	(70.6, 77.9)	68.8	(63.9, 73.2)
No	146	25.6	(22.1, 29.4)	31.2	(26.8, 36.1)
Total	571	100.0		100.0	

Of children examined, almost 75% had dental caries experience; when weighted, this percentage fell to 69%, indicating that over sampled programs had higher disease experience.

Table 21.**Dental caries experience on primary anterior teeth, Alaskan Head Start children, 2005**

Dental Caries Experience on Primary Anterior Teeth	Number of participants	Percent of participants	95% CI	Weighted Percent	Wtd. 95% CI
Yes	285	49.9	(45.7, 54.1)	42.5	(37.6, 47.7)
No	285	49.9	(45.7, 54.1)	57.3	(52.1, 62.3)
Not scored	1				
Total	571				

Fifty percent of children had a history of dental caries on their primary anterior teeth. One child was not scored for this variable by their examiner.

Table 22.**Urgency of dental treatment needs, Alaskan Head Start children, 2005**

Urgency of Treatment Need	Number of participants	Percent of participants	95% CI	Weighted Percent	Wtd. 95% CI
No obvious problem	312	54.6	(50.5, 58.8)	58.8	(53.8, 63.7)
Early dental care (within weeks)	249	43.6	(39.5, 47.8)	40.0	(35.2, 45.0)
Urgent care (within 24 hours)	10	1.8	(0.9, 3.3)	1.2	(0.4, 3.0)
Total	571	100.0		100.0	

Fifty-five percent of children had no obvious treatment needs, about 44% needed routine care, and 2% needed urgent care.

Table 23.

Number of quadrants needing treatment, Alaskan Head Start children, 2005

Number of Quadrants Needing Treatment	Number of participants	Percent of participants	95% CI	Weighted Percent	Wtd. 95% CI
0	312	54.6	(50.5, 58.8)	58.8	(53.8, 63.7)
1	89	15.6	(12.8, 18.9)	16.2	(12.8, 20.3)
2	63	11.0	(8.6, 14.0)	10.5	(7.7, 14.0)
3	34	6.0	(4.2, 8.3)	4.9	(3.1, 7.6)
4	73	12.8	(10.2, 15.9)	9.6	(7.0, 13.0)
Total	571	100.0		100.0	

About 10% of children assessed needed care in all quadrants. Most who needed quadrant-level care had two or less quadrants in need (26%). Fifty-five percent of those children examined needed no treatment for dental caries.

Alaska State Oral Health Assessment, Head Start Preliminary Data, 2005

Differences by Gender

Variables that revealed no statistical differences in results when stratified by gender are listed in the table below. Weighted data was used. For both questionnaire and clinical variables, only records with meaningful responses were tabulated (all “unknown” and “blank” responses were ignored when appropriate). This yields varying numbers of records for different variables, as respondents were not required to answer all questions. Males occupied the default table position. P-values (Chi-square) are presented for multi-level variables and Odds Ratios (OR) with 95% Confidence Intervals for two-level variables. ANOVA tests for population means were used for continuous variables.

Table 24.

Variables with insignificant differences between results when compared by gender, Alaskan Head Start children, 2005

Variable	P-Value	OR (95% CI)
Age (mean age in months)	0.8877	
Race/Ethnicity	0.2860 ¹	
Race/Ethnicity (grouped)		1.48 (0.98, 2.23)
Tooth pain		0.63 (0.34, 1.15)
Length of time since last reported dental visit ²	0.4300	
Main reason for last dental visit	0.2115	
Respondents with medical insurance		0.61 (0.35, 1.06)
Inability to get dental care in past 12 months		0.83 (0.47, 1.46)
Respondents with dental insurance		0.59 (0.32, 1.08)
Respondents with “Commercial” dental insurance ³		1.97 (0.93, 4.18)
Respondents with IHS/Native Health Corporation coverage ³		1.24 (0.67, 2.29)
Untreated dental caries		0.95 (0.64, 1.42)
Dental caries experience		0.69, (0.45, 1.06)
Dental caries experience on primary anterior teeth		1.02 (0.69, 1.52)
Treatment urgency ⁴		0.95 (0.64, 1.41)
Number of quadrants needing treatment (categorically analyzed)	0.3879	

¹ Due to very small cell sizes in many Race/Ethnicity groupings, this statistic is not reliable.

² Due to small sample size, responses of “more than three years ago” and “Never has been to the dentist” were combined.

³ Among those with dental insurance

⁴ Due to small sample size, responses of “Early dental care” and “Urgent care” were combined.

The following variables could not be assessed with validity due to small sample size:

Main reason for parent’s inability to get care for child (nine categories of responses)

Proportion of children with “Private” dental insurance. Too few children reported this type of insurance.

Proportion of children with “Military/Tricare (Champus) dental insurance. Too few children reported this type of insurance.

Table 25.

Gender and “Denali Kid Care/Medicaid” dental coverage*, Alaskan Head Start children, 2005

Gender		“Denali Kid Care/Medicaid” dental coverage		Total
		“Yes”	“No”	
Male	row%	74.7	25.5	100.0
	col%	46.3	61.3	49.4
Female	row%	84.4	15.6	100.0
	col%	53.7	38.7	50.6
Total	row%	79.6	20.4	100.0
	col%	100.0	100.0	100.0

* Of those with dental insurance

Boys were less likely (OR 0.551 95% CI 0.31, 0.97) to have “Denali Kid Care/Medicaid” dental coverage than girls.

Alaska State Oral Health Assessment Preliminary Data, Head Start, 2005

Response Differences by Race/Ethnicity

Response Differences by Race/Ethnicity are presented unweighted.

Cell sizes were too small to evaluate variables with the revised Race/Ethnicity variable (Table 8). Although it would have been desirable to use the same collapsed groupings used in other surveys of Alaskan children (“White”, Native American/Alaskan Native”, and “All Others” (Table 10a), the sample size and distribution did not support those divisions for all variables. The collapsed groupings of “Native American/Alaskan Native” and “All Others” (Table 10b) were used when this occurred.

Individual tables are not reported for variables that revealed no statistical differences in results when compared by Race/Ethnicity. These variables are listed in Table 26. In 2x2 tables listed below, “All Others” occupied the default table position; this positioning was sometimes modified for tables identifying significant differences later in the text.

For both questionnaire and clinical variables, only records with meaningful responses were tabulated (all “unknown” and “blank” responses were ignored). This yields varying numbers of records for different variables, as respondents were not required to answer all questions.

Differences by gender have already been reported in Table 24, and are not re-presented here.

Table 26.

Variables with insignificant differences between results when compared by race/ethnicity, Alaskan Head Start children, 2005

Variable*	P-Value	OR (95% CI)
Respondents with medical insurance		0.82 (0.49, 1.37)
Inability to get dental care in past 12 months		0.67 (0.39, 1.14)
Proportion of Respondents with dental insurance		0.65 (0.37, 1.11)

Very few respondents (3) reported having private dental insurance, precluding valid assumptions.

Only respondents who indicated that they had dental insurance were assessed.

There were too few respondents (90) reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by Race/Ethnicity meaningful, even when using the grouped Race/Ethnicity variable.

Table 27.

Mean age (in months) of respondents participating in the clinical assessment by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity	Age in months (range)	Std. Deviation
“Native American/Alaskan Native” (n=423)	52.9 (35-71)	7.62
“All others” (n=148)	55.6 (37-70)	7.58
Both (n=571)	53.6 (35-71)	7.70

Children classified as “Native American/Alaskan Native” were, on average, a few months younger than others (P=0.0002).

Table 28.

Respondents reporting tooth pain by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity		Reported toothache more than once in previous 6 months		Total
		“Yes”	“No”	
“Native American/Alaskan Native”	n	76	316	392
	row%	19.4	80.6	100.0
	col%	88.4	71.3	74.1
“All Others”	n	10	127	137
	row%	7.3	92.7	100.0
	col%	11.6	28.7	25.9
Total	n	86	443	529
	row%	16.3	83.7	100.0
	col%	100.0	100.0	100.0

Children classified as “Native American/Alaskan Native” were three times more likely (OR 3.05 95% CI 1.53, 6.09) to have reported a toothache “more than once when biting or chewing” in the previous six months than others.

Table 29.

Length of time since last dental visit by race/ethnicity, Alaskan Head Start children 2005

Race/Ethnicity		Length of Time since last dental visit				Total
		6 months or less	6 months to 1 year	1-3 years	> 3years or never has been to dentist	
“Native American/ Alaskan Native”	n	129	100	101	57	387
	row%	33.3	25.8	26.1	14.7	100.0
	col%	62.0	81.3	91.0	70.4	74.0
“All Others”	n	79	23	10	24	136
	row%	58.1	16.9	7.4	17.6	100.0
	col%	38.0	18.7	9.0	29.6	26.0
All	n	208	123	111	81	523
	row%	39.8	23.5	21.2	15.5	100.0
	col%	100.0	100.0	100.0	100.0	100.0

Due to small cell sizes, responses for “More than 3 years ago” and “Never has been to the dentist” were combined.

There were significant differences in the length of time since the last dental visit by race/ethnicity (Chi-squared = 36.1319, 3 df, P=0.000). Children classified as “Native American/Alaskan Native” were less apt to have had a dental visit within the past 6 months than other Head Start children.

Table 30.

Reason for last dental visit by race/ethnicity, Alaskan Head Start children, 2005

Race		Reason for last dental visit				
		Something was wrong	Went for treatment	Went on own for exam	Was called in for exam	Total
American Indian/Alaskan Native	n	75	75	133	56	339
	row%	22.1	22.1	39.2	16.5	100.0
	col%	91.5	89.3	62.1	78.9	75.2
All others	n	7	9	81	15	112
	row%	6.3	8.0	72.3	13.4	100.0
	col%	8.5	10.7	37.9	21.1	24.8
All Races	n	82	84	214	71	451
	row%	18.2	18.6	47.5	15.7	100.0
	col%	100.0	100.0	100	100.0	100.0

There were significant differences in the reason reported for the last dental visit between Race/Ethnicity groupings (Chi-squared = 40.5859, 3 df, P=0.0000). Children classified as “Native American/Alaskan Native” were more likely to report that their last visit was because “Something was wrong, bothering or hurting” (22%) or for some type of treatment (22%) than other children (6% and 8% respectively). They were also less likely to have gone in on their own for a dental exam than others.

Table 31.

Respondents reporting “Commercial” dental insurance by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity		“Commercial” Dental Insurance		Total
		“Yes”	“No”	
“American Indian/Alaskan Native”	n	30	317	347
	row%	8.6	91.4	100.0
	col%	62.5	77.1	75.6
“All others”	n	18	94	112
	row%	16.1	83.9	100.0
	col%	37.5	22.9	24.4
Total	n	48	411	459
	row%	10.5	89.5	100.0
	col%	100.0	100.0	100.0

Of those with dental insurance, children classified as “American Indian/Alaskan Native” were less likely (OR 0.49 95% CI 0.26, 0.93) to report having “Commercial” dental insurance than others.

Table 32.

Proportion of respondents* with Denali Kid Care/Medicaid dental coverage by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity	N	Proportion of respondents who have “Denali Kid Care/Medicaid” dental coverage	95% CI
White	44	.841	(.699, .934)
American Indian/Alaskan Native	347	.818	(.774, .858)
All Others	68	.647	(.522, .759)
All respondents	459	.795	(.755, .831)

* Of those children with some type of dental insurance

A lower proportion of respondents classified as “All Others” had Denali Kid Care/Medicaid coverage than children classified as “American Indian/Alaskan Native”. With a larger sample size, this difference would probably have been significant between “All Others” and “Whites” as well.

Table 33.

Respondents reporting “IHS/Native Health Corporation” dental coverage by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity		“IHS/Native Health Corporation” Dental Coverage		Total
		“Yes”	“No”	
“American Indian/Alaskan Native”	n	72	275	347
	row%	20.7	79.3	100.0
	col%	86.7	73.1	75.6
“All others”	n	11	101	112
	row%	9.8	90.2	100.0
	col%	13.3	26.9	24.4
Total	n	83	376	459
	row%	18.1	81.9	100.0
	col%	100.0	100.0	100.0

Of those with dental insurance, children classified as “American Indian/Alaskan Native” were more likely (OR 2.40 95% CI 1.22, 4.72) to report having “IHS/Native Health Corporation” dental coverage than others. 79% of those classified as “American Indian/Alaskan Native”, however, reported that they did not, although they are all eligible. This may have occurred because they did not consider this benefit to be “dental insurance”.

Table 34.

Respondents reporting “Military/Tricare (Champus)” dental coverage by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity		“Military/Tricare (Champus)” Dental Coverage		Total
		“Yes”	“No”	
“American Indian/Alaskan Native”	n	3	344	347
	row%	0.9	99.1	100.0
	col%	37.5	76.3	75.6
“All others”	n	5	107	112
	row%	4.5	95.5	100.0
	col%	62.5	23.7	24.4
Total	n	8	457	459
	row%	1.7	98.3	100.0
	col%	100.0	100.0	100.0

Of those with dental insurance, children classified as “American Indian/Alaskan Native” were less likely (OR 0.19 95% CI 0.04, 0.79) to report having “Military/Tricare (Champus)” dental coverage than others. This table and results should be used very cautiously, however, due to marginal cell sizes and the small number of children reporting this coverage.

Table 35.

Proportion of Participants with untreated dental caries by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity	n	Proportion of participants who have untreated dental caries	95% CI
White	54	.241	(.135, .376)
American Indian/Alaskan Native	423	.508	(.460, .557)
All others	94	.277	(.189, .378)
All respondents	571	.445	(.404, .487)

A higher proportion of “American Indian/Alaska Native” Head Start children had untreated dental caries than those classified as either “White” or “All Others”.

Table 36.

Proportion of participants with dental caries experience on any teeth by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity	n	Proportion of participants who have dental caries experience	95% CI
White	54	.481	(.343, .622)
American Indian/Alaskan Native	423	.842	(.802, .874)
All Others	94	.457	(.354, .563)
All respondents	571	.744	(.706, .779)

A lower proportion of “Whites” (48%) and “All Others” (46%) had dental caries experience than those classified as “American Indian/Alaskan Natives” (84%).

Table 37.

Proportion of participants with dental caries experience on primary maxillary anterior teeth by race/ethnicity, Alaskan Head Start Children 2005

Race/Ethnicity	N	Proportion of participants who have dental caries experience on primary maxillary anterior teeth	95% CI
White	54	.185	(.093, .314)
American Indian/Alaskan Native	422	.609	(.560, .656)
All Others	94	.191	(.118, .286)
All respondents	570	.500	(.458, .542)

A higher proportion of “American Indian/Alaskan Native” children (61%) had dental caries experience on primary anterior teeth than those classified as “White” (19%) or “All Others” (19%).

Table 38.

Treatment urgency by race/ethnicity, Alaskan Head Start children, 2005

Race		Treatment Urgency		
		No obvious problem	Early dental care or urgent care	Total
White	n	41	13	54
	row%	75.9	24.1	100.0
	col%	13.1	5.0	9.5
American Indian/Alaskan Native	n	203	220	423
	row%	48.0	52.0	100.0
	col%	65.1	84.9	74.1
All others	n	68	26	94
	row%	72.3	27.7	100.0
	col%	21.8	10.0	16.5
All Races	n	312	259	571
	row%	54.6	45.9	100.0
	col%	100.0	100.0	100.0

There was insufficient cell size to assess even the combined race/ethnicity groupings in all categories of treatment urgency; those needing urgent care were combined with those needing early dental care.

That done, there were significant differences in treatment urgency between Race/Ethnicity groupings (Chi-squared = 29.3007, 2 df, P=0.0000). Children classified as “American Indian/Alaskan Native” were more likely to have treatment needs than others.

Table 39.

Proportion of participants needing treatment by race/ethnicity, Alaskan Head Start Children 2005

Race/Ethnicity	n	Proportion of participants needing treatment	95% CI
American Indian/Alaskan Native	423	.520	(.471, .568)
All Others	148	.264	(.195, .342)
All respondents	571	.454	(.412, .495)

This is an alternative presentation to the data presented in Table 38, since with the collapse of the “urgency” groupings this can be presented as the proportion of participants needing treatment.

A significantly larger proportion of “American Indian/Alaskan Native” children needed some type of dental treatment than those classified as “All Others”.

Table 40.

Number of quadrants needing treatment by race/ethnicity, Alaskan Head Start children, 2005

Race/Ethnicity		0	1	2	3	4	Total
American Indian/Alaskan Native	n	203	63	57	28	72	423
	row%	48.0	14.9	13.5	6.6	17.0	100.0
	col%	65.1	70.8	90.5	82.4	98.6	74.1
All others	n	109	26	6	6	1	148
	row%	73.6	17.6	4.1	4.1	0.7	100.0
	col%	34.9	29.2	9.5	17.6	1.4	25.9
All participants	n	312	89	63	34	73	571
	row%	54.6	15.6	11.0	6.0	12.8	100.0
	col%	100.0	100.0	100.0	100.0	100.0	100.0

The “grouped” Race/Ethnicity variable was again used because there was insufficient cell size in the more distributed variable; and, in fact, some cell sizes are still small; they are presented anyway since none were non-existent.

There were significant differences in the number of quadrants requiring treatment by Race/Ethnicity (Chi-squared = 46.6574, 4 df, P=0.0000). More than half of children classified as “American Indian/Alaskan Native” required treatment (compared to about 25% of “All Others”), and a higher proportion required treatment of 2, 3 and 4 quadrants than children in the “All Others” race/ethnicity classification. A relatively large proportion of Native children (17%) required 4 quadrants of treatment.

Alaska State Oral Health Assessment, 2005 Head Start Preliminary Data

Response Differences by Dental Insurance Status

Weighted data was used for these tables. Individual tables are not reported for variables that revealed no statistical differences in results when compared by dental insurance status. These variables are listed in Table 41. For both questionnaire and clinical variables, only records with meaningful responses were tabulated (all “unknown” and “blank” responses were ignored). This yields varying numbers of records for different variables, as respondents were not required to answer all questions. P-values (Chi-square) are presented for multi-level variables and Odds Ratios (OR) with 95% Confidence Intervals for two-level variables. Insurance = “Yes” was placed in the default table position.

Table 41.

Variables with insignificant differences between results when compared by dental insurance status, Alaskan Head Start children, 2005

Variable	P-Value	OR (95% CI)
Age (in months)	0.1945	
Gender		0.59 (0.32, 1.08)
Race/Ethnicity ¹		0.82 (0.45, 1.52)
Tooth pain		3.12 (0.86, 11.31)
Length of time since last reported dental visit ²	0.1708	
Main reason for last dental visit	0.4678	
Inability to obtain needed care in past 12 months		0.99 (0.44, 2.22)
Untreated Dental Caries		0.90 (0.50, 1.62)
Dental Caries Experience on maxillary primary anterior teeth		1.77 (0.96, 3.26)
Treatment Urgency ³		0.94 (0.52, 1.68)
Number of quadrants needing treatment ⁴	0.1587	

¹ Grouped Race/Ethnicity variable used due to small cell sizes

² Responses of “More than 3 years ago” and “Never has been to the dentist” were grouped due to small cell size.

³ Due to small cell size, “Early dental care” and “Urgent dental care” were grouped.

⁴ Responses of “2”, “3”, and “4” quadrants were grouped to obtain adequate cell size.

There were too few respondents reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by dental insurance status meaningful.

Table 42.

Medical/surgical insurance by dental insurance status, Alaskan Head Start children, 2005

Dental Insurance Status		Medical Insurance Status		Total
		“Yes”	“No”	
“Yes”	row%	92.9	7.1	100.0
	col%	95.9	34.5	85.2
“No”	row%	23.1	76.9	100.0
	col%	4.1	65.5	14.8
Total	row%	82.6	17.4	100.0
	col%	100.0	100.0	100.0

Children who had dental insurance were much more likely to have medical/surgical insurance coverage (OR=43.8, (19.8, 96.8) than children without dental insurance.

Table 43.

Dental caries experience by dental insurance status, Alaskan Head Start children, 2005

Dental Insurance Status		Dental Caries Experience		Total
		“Yes”	“No”	
“Yes”	row%	72.2	27.8	100.0
	col%	87.7	77.7	84.6
“No”	row%	56.0	44.0	100.0
	col%	12.3	22.3	15.4
Total	row%	69.7	30.3	100.0
	col%	100.0	100.0	100.0

Children who had dental insurance were about twice as likely to have dental caries experience (OR=2.04, (1.12, 3.70)) as children without dental insurance.

Alaska State Oral Health Assessment, 2005 Head Start Data Differences by Clinical Variables:

Untreated Dental Caries

The relationship between untreated dental caries and race/ethnicity (unweighted) was reported in Table 35, and is not duplicated here. Weights were used for all other data tables. Individual tables are not reported for variables that revealed no statistical differences in results when compared by untreated dental caries status. These variables are listed in Table 44. For both questionnaire and clinical variables, only records with meaningful responses were tabulated (all “unknown” and “blank” responses were ignored). This yields varying numbers of records for different variables, as respondents were not required to answer all questions. P-values (Chi-square) are presented for multi-level variables and Odds Ratios (OR) with 95% Confidence Intervals for two-level variables. ANOVA tests for population means were used for continuous variables.

Table 44.

Variables with insignificant differences between results when compared by the presence/absence of untreated dental caries, Alaskan Head Start children, 2005

Variable	P-Value	OR (95% CI)
Age (mean age in months)	0.0583	
Gender		0.95 (0.64, 1.42)
Length of time since last reported dental visit ¹	0.3321	
Respondents with medical insurance		0.72 (0.42, 1.23)
Respondents with dental insurance		0.90 (0.50, 1.62)
Respondents with commercial dental insurance ²		1.31 (0.63, 2.73)
Respondents with Denali Kid Care/Medicaid ²		1.23 (0.82, 1.85)
Proportion of Respondents with IHS/Native Health Corporation coverage ²		0.80 (0.43, 1.48)

¹ Due to small cell sizes, responses for “More than 3 years ago” and “Never has been to the dentist” were combined.

² Of those children with dental insurance

There were too few respondents reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by Untreated Dental Caries status meaningful.

Too few respondents reported having “Private” or “Military/Tricare (Champus) dental insurance to make assessments meaningful.

Table 45.

Respondents reporting tooth pain and untreated dental caries status, Alaskan Head Start children, 2005

Untreated Dental Caries Status		Child reported toothache >1 time in past 6 months		Total
		“Yes”	“No”	
Untreated Dental Caries	row%	19.4	80.6	100.0
	col%	55.2	37.7	40.2
No Untreated Dental Caries	row%	10.6	89.4	100.0
	col%	44.8	62.3	59.8
Total	row%	14.1	85.9	100.0
	col%	100.0	100.0	100.0

Children who had untreated dental caries were twice as likely to have reported tooth pain more than once in the past 6 months as children with no untreated dental caries (OR=2.03, 95% confidence interval 1.11, 3.72).

Table 46.

Reason for last dental visit and untreated dental caries status, Alaskan Head Start children, 2005

Untreated Dental Caries Status		Reason for Last Dental Visit				Total
		Something was wrong	Went for routine treatment	Went on own for exam	Called in for exam	
Untreated Dental Caries	row%	23.4	17.0	47.6	12.0	100.0
	col%	59.9	39.4	36.7	28.3	39.3
No Untreated Dental Caries	row%	10.2	17.0	53.1	19.7	100.0
	col%	40.1	60.6	63.3	71.7	60.7
Total	row%	15.4	17.0	51.0	16.7	100.0
	col%	100.0	100.0	100.0	100.0	100.0

There were significant differences in the reason for the last reported dental visit and untreated dental caries status (Chi-squared = 11.1689, 3 df, P=0.0108). A greater proportion of children with no untreated caries had their last visit for an exam that they (or their parent/guardian) had initiated or were called in for than children who had untreated caries. A greater proportion of children with untreated dental caries had their last visit because “Something was wrong”.

Table 47.

Inability to obtain needed dental care in the past 12 months and untreated dental caries status, Alaskan Head Start children, 2005

Untreated Dental Caries Status		Unable to obtain needed dental care in the past 12 months		Total
		“Yes”	“No”	
Untreated Dental Caries	row%	21.6	78.4	100.0
	col%	55.5	38.1	40.9
No Untreated Dental Caries	row%	12.0	88.0	100.0
	col%	44.5	61.9	59.1
Total	row%	15.9	84.1	100.0
	col%	100.0	100.0	100.0

Parents/guardians of children who had untreated dental caries were twice as likely to have reported difficulty in obtaining dental care when their child needed it in the past 12 months as those of children with no untreated dental caries (OR=2.02, 95% confidence interval 1.14, 3.59).

Table 48.

Caries experience of participants with no untreated dental caries, Alaskan Head Start children, 2005

	Percent	95% CI
Caries Experience	47.5	(41.0, 54.0)
Caries Free	52.5	(46.0, 59.0)
Total	100.0	

This table is presented for informational purposes. About half of Head Start children currently without caries also had no history of dental caries. Only 30% of Head Start children were caries free.

Table 49.

Untreated dental caries status and caries experience on primary maxillary anterior teeth, Alaskan Head Start children, 2005

Untreated Dental Caries Status		Caries Experience on Primary Maxillary Anterior Teeth		Total
		Yes	No	
Untreated Dental Caries	row%	67.1	32.9	100.0
	col%	63.6	23.2	40.4
No Untreated Dental Caries	row%	26.0	74.0	100.0
	col%	36.4	76.8	59.6
Total	row%	42.6	57.4	100.0
	col%	100.0	100.0	100.0

Participants who had untreated dental caries were almost six times more likely to have caries experience on maxillary anterior teeth than those with no untreated dental caries (OR 5.78 95% CI 3.73, 8.96).

Table 50.

Treatment urgency among children with untreated dental caries, Alaskan Head Start children, 2005

Treatment Urgency	Percent	95% CI
No obvious problem	0	
Early dental care (within weeks)	97.0	(92.9, 99.0)
Urgent care (within 24 hours)	3.0	(1.0, 7.1)
Total	100.0	

Of children with untreated dental caries, the vast majority (97%) required routine care.

Table 51.

Treatment urgency among children with no untreated dental caries, Alaskan Head Start children, 2005

Treatment Urgency	Percent	95% CI
No obvious problem	98.8	(96.4, 99.7)
Early dental care (within weeks)	1.2	(0.3, 3.6)
Urgent care (within 24 hours)	0	
Total	100.0	

Among children with no untreated dental caries, four (one percent) required “Early dental care”. Since they had no untreated decay and needed no urgent care, these children probably required some type of preventive treatment or treatment of a low-level non-caries related issue, such as space management.

Table 52.

Untreated dental caries and number of quadrants needing treatment, Alaskan Head Start children, 2005

Number of quadrants needing treatment	Percent	95% CI
0	0	
1	38.8	(31.3, 46.8)
2	25.5	(18.9, 32.8)
3	12.1	(7.7, 18.4)
4	23.7	(17.2, 30.8)
Total	100.0	

Less than 40% of children that had untreated dental caries needed only one quadrant of treatment. The remaining 60% reflect a significant needs burden in this population.

1.2% of children that had no untreated dental caries needed quadrant level care.

Dental Caries Experience

Dental Caries Experience and Race/Ethnicity (unweighted) has already been presented in Table 36, and is not duplicated here. Weighted data was used for all other tables. Additionally, dental caries experience by definition includes untreated dental caries and dental caries experience on primary maxillary anterior teeth, so no tables are presented for these cross tabulations.

When reviewing these tables, it is important to remember that this variable is inclusive of children with untreated dental caries, which may mask findings for the subset of children who have dental caries experience but no untreated dental caries. Future analyses may choose to focus on this group of children compared to children who are caries free (“Dental Caries Experience” = No)

Table 53.

Variables with insignificant differences between results when compared by the presence/absence of dental caries experience, Alaskan Head Start children, 2005

Variable*	P-Value	OR (95% CI)
Gender		0.69 (0.45, 1.06)
Age (in months)	0.6843	
Respondents with medical insurance		1.64 (0.93, 2.89)
Respondents with “Commercial” dental insurance ²		1.29 (0.54, 3.07)
Proportion of respondents with “Denali Kid Care/Medicaid” dental insurance ²		1.34 (0.73, 2.49)
Proportion of respondents with IHS/Native Health Corporation coverage ²		0.85 (0.44, 1.66)

¹ Cell sizes were too small to assess all response categories; children who reported their last visit “More than 3 years ago” and “Never has been to the dentist” were grouped together for analysis.

² Of those children with dental insurance

There were too few respondents reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by dental caries experience meaningful.

Too few respondents reported having “Private” or “Military/Tricare (Champus) dental insurance to make assessments meaningful.

All children who were caries-free were coded with an urgency score of “0” and were all also coded as needing no quadrant-level care. No tables were generated for these variables.

Table 54.

Dental caries experience and tooth pain, Alaskan Head Start children, 2005

Dental Caries Experience		Child reported toothache >1 time in past 6 months		Total
		“Yes”	“No”	
Yes	row%	18.4	81.6	100.0
	col%	90.6	65.8	69.3
No	row%	4.3	95.7	100.0
	col%	9.4	34.2	30.7
Total	row%	14.1	85.9	100.0
	col%	100.0	100.0	100.0

Children who had dental caries experience were five times as likely to have reported tooth pain more than once in the past 6 months as children that were caries-free (OR=4.98, 95% confidence interval 1.87, 13.26). It is important to remember that dental caries experience=“yes” category is inclusive of children with untreated caries, which may influence conclusions based upon this finding.

Table 55.

Length of time since last dental visit by dental caries experience, Alaskan Head Start children, 2005

Dental Caries Experience		Length of Time since last dental visit				Total
		6 months or less	6 months to 1 year	1-3 years	> 3years or never has been to dentist	
"Yes"	row%	43.4	23.6	20.1	12.9	100.0
	col%	68.7	73.2	80.5	56.3	69.8
"No"	row%	45.6	19.9	11.3	23.2	100.0
	col%	31.3	26.8	19.5	43.7	30.2
All	row%	44.0	22.5	17.4	16.0	100.0
	col%	100.0	100.0	100.0	100.0	100.0

Due to small cell sizes, responses for "More than 3 years ago" and "Never has been to the dentist" were combined.

There were significant differences in the length of time since the last dental visit by race/ethnicity (Chi-squared = 8.6349, 3 df, P=0.0346). Children who had dental caries experience were more likely to have had their last visit between 6 months and 3 years ago than children who were "caries-free". Since no difference in this variable was apparent among those children with untreated dental caries, the use difference is probably among those with treated disease. Table 56 illustrates this group. The group of children who were infrequent or "never" users had a higher proportion of caries-free individuals. Parents of this group, perhaps, did not perceive a need for dental visits.

Table 56.

Length of time since last dental visit by dental caries experience among children with no untreated dental caries, Alaskan Head Start children, 2005

Dental Caries Experience (among children with no untreated dental caries)		Length of Time since last dental visit				Total
		6 months or less	6 months to 1 year	1-3 years	> 3years or never has been to dentist	
“Yes”	row%	48.3	26.8	21.4	3.5	100.0
	col%	50.3	56.2	64.5	12.8	48.9
“No”	row%	45.6	19.9	11.3	23.2	100.0
	col%	49.7	43.8	35.5	87.2	51.1
All	row%	46.9	23.3	16.2	13.6	100.0
	col%	100.0	100.0	100.0	100.0	100.0

Due to small cell sizes, responses for “More than 3 years ago” and “Never has been to the dentist” were combined.

Among children with no untreated caries, the same pattern noted in Table 55 exists, with increased significance (Chi-squared = 19.0195, 3 df, P=0.0003).

Table 57.

Dental caries experience and reason for last dental visit, Alaskan Head Start children, 2005

Dental Caries Experience		Reason for Last Dental Visit			Total
		Something was wrong /Went for routine treatment	Went on own for exam	Called in for exam	
Yes	row%	43.5	40.1	16.3	100.0
	col%	96.9	56.7	70.3	72.0
No	row%	3.6	78.7	17.7	100.0
	col%	3.1	43.3	29.7	28.0
Total	row%	32.3	51.0	16.7	100.0
	col%	100.0	100.0	100.0	100.0

Very few children who had no dental caries experience went to the dentist because of a problem or for some type of treatment (other than perhaps “cleaning”, which was grouped with exams: “Went in on own for check-up, exam or cleaning”). Due to small cell sizes, responses for “Something was wrong, bothering or hurting” and “Went for routine treatment” were combined; the cell size for those with no dental caries experience was still marginal, but is reported here. There are significant differences in reasons for the last dental visit between children with and without dental caries experience (Chi-squared = 47.5176, 2 df, P=0.0000). Children with dental caries experience were far more likely to have been called in for an exam than their peers with no dental caries experience, which may indicate that they are, at least, “in the system”, and to have gone in (as might be expected) for some type of treatment.

Table 58.

Dental caries experience and inability to obtain needed dental care in last 12 months, Alaskan Head Start children, 2005

Dental Caries Experience		Unable to Obtain Needed Dental Care in Last 12 months		Total
		“Yes”	“No”	
Yes	row%	20.0	80.0	100.0
	col%	87.0	65.8	69.2
No	row%	6.7	93.3	100.0
	col%	13.0	34.2	30.8
Total	row%	15.9	84.1	100.0
	col%	100.0	100.0	100.0

Children who had dental caries experience were about three and a half times as likely to have reported an inability to obtain needed care in the past 12 months as children with no dental caries experience (OR=3.48, 95% confidence interval 1.55, 7.83). It is again important to remember that this category is inclusive of children with untreated caries, which may influence conclusions based upon this finding.

Table 59.

Dental caries experience and dental insurance, Alaskan Head Start children, 2005

Dental Caries Experience		Dental Insurance		Total
		“Yes”	“No”	
Yes	row%	87.7	12.3	100.0
	col%	72.2	56.0	69.7
No	row%	77.7	22.3	100.0
	col%	27.8	44.0	30.3
Total	row%	84.6	15.4	100.0
	col%	100.0	100.0	100.0

Children who had dental caries experience were twice as likely (OR= 2.04 95% confidence interval 1.12, 3.70) to have dental insurance than those who were caries-free. Dental caries experience may drive parents of these children to seek coverage for care, and that coverage is available to them.

Dental Caries Experience on Primary Maxillary Anterior Teeth

Dental caries experience on primary maxillary anterior teeth and race/ethnicity (unweighted), and untreated dental caries (weighted) have already been presented in Tables 37 and 49, and are not duplicated here.

Weighted data was used for all other tables. Additionally, dental caries experience on primary maxillary teeth by definition includes dental caries experience, so no table is presented for this cross tabulation.

Table 60.

Variables with insignificant differences between results when compared by the presence/absence of dental caries experience on primary maxillary anterior teeth, Alaskan Head Start children, 2005

Variable	P-Value	OR (95% CI)
Gender		1.02 (0.69, 1.52)
Tooth pain		1.54 (0.84, 2.80)
Length of time since last reported dental visit ¹	0.3352	
Respondents with medical insurance		1.11 (0.65, 1.92)
Respondents with dental insurance		1.77 (0.96, 3.26)
Respondents with "Commercial" dental insurance ²		0.85 (0.40, 1.80)
Respondents with "Denali Kid Care/Medicaid" dental insurance ²		1.73 (0.96, 3.11)
Respondents with IHS/Native Health Corporation coverage ²		1.29 (0.70, 2.39)

¹ Cell sizes were too small to assess all response categories; children who reported their last visit "More than 3 years ago" and "Never has been to the dentist" were grouped together for analysis.

² Of those children with dental insurance

There were too few respondents reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by dental caries experience meaningful.

Too few respondents reported having "Private" or "Military/Tricare (Champus) dental insurance to make assessments meaningful.

Table 61.

Mean age (in months) of respondents participating in the clinical assessment by caries experience on maxillary anterior teeth, Alaskan Head Start children, 2005

Dental Caries Experience on Primary Maxillary Anterior Teeth	Age in months (range)	Std. Deviation
"Yes"	52.6 (35-71)	7.85
"No"	55.3 (37-70)	7.55
Total	54.1 (35-71)	7.78

Children with dental caries experience on primary maxillary teeth tended to be a few months younger than those without this experience (P=0.0005). Previous tables have also shown that race/ethnicity is related to both age and dental caries experience on these teeth.

Stratified analysis of age and caries experience on maxillary anterior teeth:

Table 62.

Mean age (in months) of respondents participating in the clinical assessment by caries experience on maxillary anterior teeth, Alaskan Head Start children, 2005, “American Indian/Alaskan Native”

Dental Caries Experience on Primary Maxillary Anterior Teeth	Age in months (range)	Std. Deviation
“Yes”	52.6 (35-71)	7.98
“No”	53.7 (38-68)	7.48
Total	53.1 (35-71)	7.77

When controlling for race/ethnicity = “American Indian/Alaskan Native”, age seemingly loses its impact on dental caries experience on primary maxillary anterior teeth (P=0.2645), but this group was also young compared to “Others”.

Table 63.

Mean age (in months) of respondents participating in the clinical assessment by caries experience on maxillary anterior teeth, Alaskan Head Start children, 2005 “All Others”

Dental Caries Experience on Primary Maxillary Anterior Teeth	Age in months (range)	Std. Deviation
“Yes”	52.5 (37-65)	7.15
“No”	56.9 (37-70)	7.29
Total	56.1 (35-71)	7.43

In the “All Others” race/ethnicity category, age was associated with maxillary anterior caries history (P=0.0071).

Table 64.

Dental caries experience on primary maxillary anterior teeth and reason for last dental visit, Alaskan Head Start children, 2005

Dental Caries Experience on Primary Maxillary Anterior Teeth		Reason for Last Dental Visit				Total
		Something was wrong	Went for routine treatment	Went on own for exam	Called in for exam	
Yes	row%	19.2	22.3	44.6	13.9	100.0
	col%	56.7	60.4	39.7	37.7	54.6
No	row%	12.2	12.2	56.5	19.1	100.0
	col%	43.3	39.6	60.3	62.3	54.6
Total	row%	15.4	16.8	51.1	16.7	100.0
	col%	100.0	100.0	100.0	100.0	100.0

Children who had dental caries experience on primary maxillary anterior teeth were more apt to have had their last dental visit because “Something was wrong, bothering or hurting” or went for treatment than others (Chi-squared = 10.1258, 3 df, P=0.0175).

Table 65.

Dental caries experience on primary maxillary anterior teeth and inability to obtain needed dental care in last 12 months, Alaskan Head Start children, 2005

Dental Caries Experience on Primary Maxillary Anterior Teeth		Unable to Obtain Needed Dental Care in Last 12 months		Total
		“Yes”	“No”	
Yes	row%	21.0	79.0	100.0
	col%	57.2	40.9	43.6
No	row%	12.1	87.9	100.0
	col%	42.8	59.1	56.5
Total	row%	16.0	84.0	100.0
	col%	100.0	100.0	100.0

Children who had dental caries experience were almost twice as likely to have reported an inability to obtain needed care in the past 12 months as children with no such dental caries experience (OR=1.93, 95% confidence interval 1.09, 3.42).

Table 66.

Dental caries experience on primary maxillary anterior teeth and treatment urgency, Alaskan Head Start children, 2005

Dental caries experience on primary maxillary anterior teeth		Treatment Urgency		
		Early dental care or urgent care	No obvious problem	Total
“Yes”	64.9	64.9	35.1	100.0
	67.3	67.3	25.4	42.6
“No”	23.4	23.4	76.6	100.0
	32.7	32.7	74.6	57.4
Total	41.1	41.1	58.9	100.0
	100.0	100.0	100.0	100.0

Few children needed urgent care; treatment urgency scores of “early dental care” and “urgent care” were combined to obtain adequate cell size and create this table.

That done, children with dental caries experience on primary anterior maxillary teeth were six times as likely to need some type of care as children without this history (OR 6.03 95% CI 3.89, 9.35).

Table 67.

Dental caries experience on primary maxillary anterior teeth and number of quadrants needing treatment, Alaskan Head Start children, 2005

Dental caries experience on primary maxillary anterior teeth		0	1	2	3	4	Total
"Yes"	row%	35.1	22.9	16.5	10.1	15.3	100.0
	col%	25.4	59.9	68.3	88.0	68.0	42.6
"No"	row%	76.6	11.4	5.7	1.0	5.3	100.0
	col%	74.6	40.1	31.7	12.0	32.0	57.4
Total	row%	58.9	16.3	10.3	4.9	9.6	100.0
	col%	100.0	100.0	100.0	100.0	100.0	100.0

Some cell sizes in this table are small (few children without primary maxillary anterior caries history happened to need three quadrants of care), but the table is presented anyway.

There were differences in the number of quadrants requiring treatment by primary maxillary anterior caries experience (Chi-squared = 74.1184, 4 df, P=0.0000). A larger proportion of children with this history needed care at every quadrant level (except zero).

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Response Differences by Denali Kid Care/Medicaid Status

In previous tables, differences by Denali Kid Care/Medicaid status were based upon responses from the subset of participants that indicated that they had some type of dental insurance. For this group of analyses, the entire sample was used for comparisons: children who reported that they had Denali Kid Care/Medicaid were compared to all others, regardless of reported status for “insurance”. Since the analytical sample was slightly different, results may be slightly skewed as well.

Individual tables are not reported for variables that revealed no statistical differences in results when compared by dental insurance status. These variables are listed in Table 68. For both questionnaire and clinical variables, only records with meaningful responses were tabulated (all “unknown” and “blank” responses were ignored). This yields varying numbers of records for different variables, as respondents were not required to answer all questions. P-values (Chi-square) are presented for multi-level variables and Odds Ratios (OR) with 95% Confidence Intervals for two-level variables. Insurance = “Yes” was placed in the default table position.

Table 68.

Variables with insignificant differences between results when compared by Denali Kid Care/Medicaid status, Alaskan Head Start children, 2005

Variable*	P-Value	OR (95% CI)
Mean Age (in months)	0.5067	
Respondents reporting tooth pain		1.23 (0.66, 2.31)
Length of time since last reported dental visit ¹	0.2397	
Reason for last dental visit	0.4895	
Inability to get dental care in past 12 months		1.07 (0.60, 1.92)
IHS/Native Health Corporation Dental Insurance		0.64 (0.35, 1.18)
Untreated dental caries		1.23 (0.82, 1.85)
Treatment urgency ²		1.28 (0.85, 1.92)
Number of Quadrants needing treatment	0.4220	

¹ Due to small sample size, responses of “more than three years ago” and “Never has been to the dentist” were combined. Cell size in this category was still quite small.

² Due to small sample size, responses of “Early dental care” and “Urgent dental care” were combined.

Too few respondents reported on question 5b, reason for parent’s inability to obtain dental care (eight categories of responses) to make a valid assessment.

Too few respondents reported having “Private” and “Military/Tricare (Champus) dental coverage to assess this relationship.

There were too few respondents (47) reporting on Question 5b, reasons for the inability to obtain care (eight choices), to make assessments by Dental Caries Experience meaningful.

There were too few respondents reporting on private dental insurance and military/Tricare (Champus) dental insurance to make assessments meaningful.

Table 69.

Denali Kid Care/Medicaid status and gender, Alaskan Head Start children, 2005

		Gender		Total
		Female	Male	
“Denali Kid Care/Medicaid” dental coverage	row%			
	col%			
Yes	row%	53.7	46.3	100.0
	col%	65.3	53.7	59.3
No	row%	41.6	58.4	100.0
	col%	34.7	46.3	40.7
Total	row%	48.8	51.2	100.0
	col%	100.0	100.0	100.0

Children with “Denali Kid Care/Medicaid” coverage were more likely (OR 1.61 95% CI1.09, 2.44) to be girls.

Table 70.

**Denali Kid Care/Medicaid Status and race/ethnicity (all respondents),
Alaskan Head Start children, 2005**

Race/Ethnicity	N	Proportion of respondents who have “Denali Kid Care/Medicaid” dental coverage (95% CI)	Weighted Proportion (95% CI)
White	56	.661 (.522, .782)	.667 (.520, .786)
American Indian/Alaskan Native	436	.651 (.604, .696)	.636 (.574, .695)
All Others	101	.436 (.337, .538)	.426 (.322, .535)
All respondents	593	.616 (.575, .655)	.593 (.543, .642)

A lower proportion of respondents classified as “All Others” had Denali Kid Care/Medicaid coverage than children classified as “American Indian/Alaskan Native”. With a larger sample size, this difference would probably have been significant between “All Others” and “Whites” as well.

Table 71.

Denali KidCare/Medicaid status by medical/surgical insurance status, Alaskan Head Start children, 2005

Denali Kid Care/ Medicaid Status		Medical Insurance Status		Total
		“Yes”	“No”	
Yes	row%	95.2	4.8	100.0
	col%	75.6	17.8	65.4
No	row%	58.2	41.8	100.0
	col%	24.4	82.2	34.6
Total	row%	82.4	17.6	100.0
	col%	100.0	100.0	100.0

Respondents who had Denali KidCare dental coverage for their children were more likely to report having medical/surgical insurance coverage (OR=14.27, (7.07, 28.80)) than respondents that did not report this coverage, although eligibility rules are the same for medical/dental coverage. This may reflect a misunderstanding of the question or indicate use of dental coverage more than medical coverage by Denali Kid Care/Medicaid recipients.

Table 72.

Denali KidCare/Medicaid status and commercial dental insurance coverage, Alaskan Head Start children, 2005

Denali KidCare/ Medicaid Status		Commercial Dental Insurance		Total
		“Yes”	“No”	
Yes	row%	4.0	96.0	100.0
	col%	29.1	62.0	59.3
No	row%	14.3	85.7	100.0
	col%	70.9	38.0	40.7
Total	row%	8.2	91.8	100.0
	col%	100.0	100.0	100.0

Children who had Denali KidCare/Medicaid were less likely to have reported having “commercial” dental insurance than children without this benefit (OR=0.25, 95% confidence interval 0.11, 0.55), as might be expected.

Table 73.

Denali KidCare/Medicaid status and dental caries experience, Alaskan Head Start children, 2005

Denali KidCare/ Medicaid Status		Dental Caries Experience		Total
		“Yes”	“No”	
Yes	row%	73.4	26.6	100.0
	col%	63.1	50.3	40.9
No	row%	62.0	38.0	100.0
	col%	36.9	49.7	59.1
Total	row%	68.8	31.2	100.0
	col%	100.0	100.0	100.0

Children who had Denali KidCare/Medicaid were more likely to have dental caries experience than children without this benefit (OR=1.69, 95% confidence interval 1.10, 2.59). This table differs from results reported in Table 53: that table was generated by comparing Denali Kid Care status only among children with insurance. This table compares all children in the sample who were examined.

Table 74.

Denali Kid Care/Medicaid status and dental caries experience on primary maxillary anterior teeth, Alaskan Head Start children, 2005

Denali Kid Care/ Medicaid Status		Dental Caries Experience on primary maxillary anterior teeth		Total
		“Yes”	“No”	
Yes	row%	49.8	50.2	100.0
	col%	69.0	51.6	59.0
No	row%	32.2	67.8	100.0
	col%	31.0	48.4	41.0
Total	row%	42.6	57.4	100.0
	col%	100.0	100.0	100.0

Children who had Denali Kid Care/Medicaid were more likely to have dental caries experience on primary maxillary teeth than children without this benefit (OR=2.08, 95% confidence interval 1.38, 3.16).

Appendix A

Sample selection and weighting:

The results of this survey are based on a "quota" sampling method of Alaskan children enrolled in the Head Start Program. The sample design was based on the number of communities (locations or Grantees) with Head Start Programs, the number of children enrolled with each Grantee and the number of sites in each location. Each "quota" was proportional to the number of children enrolled with each Grantee.

As mentioned previously, surveys and assessments were done at individual Head Start program locations or at "Roundups". Working to reach the target number within a Grantee Agency was the primary factor in determining sites to be visited within a grantee's area. Access to the site was a secondary factor: some sites were geographically inaccessible, had very small numbers of children in Head Start programs, or were very expensive to reach because of transportation issues; this type of site is probably under-represented in the sample. Other sites had Head Start enrollees who participated in "Roundups", which are events that centralize enrollment and provide required health screenings; these sites were over-represented in the sample. For some grantees, there was only one program, and all Head Start children were included in the process. In some areas, there were multiple sites and/or programs and they were all involved. In other areas, e.g. RurAL CAP - most, but not all, of the sites were involved. However, some sites were never given the opportunity to be involved if the quota was reached with larger or easier to reach programs.

For a few Grantees a moderate to large over-sample was inadvertently collected (sites with better than average site response rates and sites where data was collected in conjunction with "Roundups"); these sites tended to be primarily those that served American Indian/Alaskan Natives. Because race/ethnicity has been a factor in oral/dental health status in surveys of Alaskan 3rd grade children and Alaskan kindergarten children, this over sampling was undesirable. Faced with the choice of discarding some data or weighting the data back to the intended sample distribution by Grantee, we chose to weight the sample back to the intended distribution/sample size for most analyses. Weighting was done to Head Start Grantee distribution to keep results as representative of the Head Start population distribution as possible, since in Alaska geography and community factors may also play a role in dental health and access to care. Grantees, quota goals, sites, and final participation rates are listed in Tables 1, 2 and 4.

Due to the second sampling phase (the quota within the Grantee Agency), this is a non-probability sample; the sample may be biased because not all Head Start children had the opportunity to participate. By weighting the sample back to the intended distribution, we hope to be able to reasonably compare these results to those of future surveys/assessments of Alaskan Head Start children, albeit with the understanding that sampling bias remains due to non-probability selection methods. The bias may remain consistent, however, if methodologies are similar and geographic access issues influence site selection in similar fashion. Results of this survey should be used with great caution in drawing conclusions about this age-group in general, since socioeconomic status is one of the primary qualifiers for Head Start participation.