

THE ORAL HEALTH OF SOUTH DAKOTA'S HEAD START CHILDREN

BASIC SCREENING SURVEY

SOUTH DAKOTA DEPARTMENT OF HEALTH

2012

HEALTHY SMILES FOR A HEALTHY HEAD START

INTRODUCTION

Tooth decay (dental caries) is a bacterial disease process affecting both children and adults. According to *Oral Health in America: A Report of the Surgeon General*, tooth decay is the single most common chronic childhood disease. As with general health, oral health status tends to vary based on socio-demographic factors. Children enrolled in Head Start (HS) may experience more extensive tooth decay than children from families with greater access to dental care. In South Dakota there are 15 Head Start grantees including 7 tribal grantees. During the 2011-2012 program year these 15 grantees served 5,788 HS/EHS children of which 4,601 children were 3-5 years of age.

In 2012, the South Dakota Department of Health's Oral Health Program conducted the first oral health survey of preschool children in South Dakota. With the cooperation of the South Dakota Head Start Collaboration Office, the South Dakota Head Start Association, the individual Head Start grantees, and the Delta Dental Dakota Smile Program, preschool children across South Dakota received an oral health screening. The majority of the children screened (90%) were enrolled in Head Start.¹ The convenience sample screening collected information on the presence of early childhood decay, decay experience and untreated decay along with urgency of need for dental treatment. These data are important in that they estimate the extent of oral health needs in young, low-income children. Survey results will aid in the development of programs and interventions to prevent oral disease so that growth, development, and overall quality of life in South Dakota's children are enhanced. ***Because the majority of children screened were Head Start children 3-5 years of age the following fast facts focus on that population.***

FAST FACTS: DEMOGRAPHICS OF HEAD START CHILDREN SCREENED

- 1,343 Head Start children received an oral screening – 30% of all 3-5 year old Head Start children in South Dakota.
- The majority of the children screened (58%) were 4 years of age.
- American Indian children were underrepresented. Of the children screened 38% were American Indian; 52% of all Head Start children in South Dakota are American Indian.

FAST FACTS: ORAL HEALTH OF HEAD START CHILDREN

- 41% of the children had decay experience. Decay experience means that a child has had tooth decay in his or her lifetime. Decay experience can be past (fillings, crowns or teeth that have been extracted because of decay) or present (untreated tooth decay or cavities).
- 30% had untreated decay at the time of the screening.
- 26% were in need of dental care.

FAST FACTS: ORAL HEALTH DISPARITIES

- Compared to non-Hispanic white children, American Indian children are more likely to have decay experience, untreated decay and are more likely to need dental care.
- 68% of the American Indian children had decay experience compared to 21% of the white children.
- 50% of the American Indian children had untreated decay compared to 16% of the white children.
- 48% of the American Indian children were in need of dental care compared to 12% of the white children.

¹ All 15 Head Start grantees were invited to participate in the survey but only 9 submitted screening data; therefore the results may not be representative of all Head Start children in South Dakota.

SOUTH DAKOTA HEAD START ORAL HEALTH SURVEY

BACKGROUND INFORMATION:

A total of 2,171 records were entered. Of these, 29 did not have any oral health screening or parent survey data, 453 had parent survey data only, 753 had oral health screening data only and 936 had both oral health screening and parent survey data (Table 1). Information on both age and type of program (Head Start or Non-Head Start) was available for 2,158 records. Of the children identified as being enrolled in a Head Start program, 1,766 were between 3-5 years of age (Table 2). For the Head Start children between 3-5 years of age, oral health screening data is available for 1,343 and parent survey data is available for 1,234 (Table 3).

Table 1: Number of children in the original data file by program and type of data available

Program/Site	Type of Data Available				TOTAL
	No Data	Survey Only	Exam Only	Survey & Exam	
Badlands Head Start	7	40	6	55	108
NESD Head Start	0	3	0	353	356
OAHE Child Development	2	19	24	30	75
Rosebud Tribal Head Start	1	23	54	67	145
Sioux Falls Head Start	0	0	74	156	230
Sisseton Head Start	1	0	181	0	182
South Central Head Start	8	306	4	78	396
USD Head Start	3	57	8	135	203
Youth & Family Services	3	0	128	0	131
Non-Head Start Day Care Center	0	5	0	61	66
Mobile Van	4	0	274	1	279
TOTAL	29	453	753	936	2,171

Table 2: Number of children in the original data file by program type and age in years

Program Type	Age in Years							TOTAL
	< 1	1	2	3	4	5	6	
Head Start	14	56	118	585	1,012	169	1	1,955
Not Head Start	2	13	26	51	63	48	0	203
TOTAL	16	69	144	636	1,075	217	1	2,158

Note: Age is missing for 13 records

Table 3: Number of *3- to 5-year-old* children by program type and type of data available

Program Type	Type of Data Available				TOTAL
	No Data	Survey Only	Exam Only	Survey & Exam	
Head Start	23	400	509	834	1,766
Not Head Start	1	5	95	61	162
TOTAL	24	405	604	895	1,928

DEMOGRAPHIC CHARACTERISTICS OF 3- TO 5-YEAR-OLD CHILDREN:

The majority of the Head Start children were 4 years old and half were female. About 43% of the Head Start children were white while 40% were American Indian. For the non-Head Start children, there was an even distribution in terms of both age and sex. The majority of non-Head Start children (67%) were white while 25% were American Indian.

The demographic characteristics of the 3- to 5-year-old children that actually received an oral health screening (n=1,499) are presented in Table 4B.

Table 4A: Demographic characteristics of *all 3- to 5-year-old* children by program type (n=1,928)

Characteristic	Head Start N=1,766	Not Head Start N=162	TOTAL N=1,928
Age			
3 years	33.1%	31.5%	33.0%
4 years	57.3%	38.9%	55.8%
5 years	9.6%	29.6%	11.3%
Sex			
Female	49.2%	46.9%	49.0%
Male	50.1%	53.1%	50.3%
Unknown	0.7%	0.0%	0.7%
Race/Ethnicity			
White	43.3%	67.3%	45.3%
Black	6.5%	1.9%	6.1%
Hispanic	4.7%	3.1%	4.6%
Asian	1.9%	1.2%	1.9%
American Indian	39.6%	24.7%	38.3%
Other	0.2%	0.0%	0.2%
Multi-Racial	1.8%	0.6%	1.7%
Unknown	2.0%	1.2%	1.9%

Table 4B: Demographic characteristics of *3- to 5-year-old* children with *oral health screening* data by program type (n=1,499)

Characteristic	Head Start N=1,343	Not Head Start N=156	TOTAL N=1,499
Age			
3 years	30.5%	32.1%	30.6%
4 years	57.5%	38.5%	55.5%
5 years	12.1%	29.5%	13.9%
Sex			
Female	49.9%	46.2%	49.5%
Male	49.4%	53.8%	49.9%
Unknown	0.7%	0.0%	0.6%
Race/Ethnicity			
White	43.7%	67.3%	46.2%
Black	7.7%	1.9%	7.1%
Hispanic	5.1%	3.2%	4.9%
Asian	2.2%	1.3%	2.1%
American Indian	38.0%	25.0%	36.7%
Other	0.2%	0.0%	0.2%
Multi-Racial	1.5%	0.6%	1.4%
Unknown	1.4%	0.6%	1.3%

ORAL HEALTH STATUS OF 3- TO 5-YEAR-OLD CHILDREN:

Of the Head Start children that received a dental exam, 41% had a history of decay experience (treated or untreated decay) and 30% had untreated decay at the time of the examination (Table 5). American Indian children had the highest level of decay experience and untreated decay (Tables 6A and 6B).

Table 5: Percent of **3- to 5-year-old** children with decay experience, untreated decay and need for dental care by program type

Oral Health Variable	Head Start N=1,343	Not Head Start N=156	TOTAL N=1,499
Decay Experience	41.3%	41.0%	41.3%
Untreated Decay	30.2%	35.3%	30.8%
Need for Dental Care			
No Obvious Problems	73.9%	56.4%	72.0%
Early Care Needed	24.7%	43.6%	26.7%
Urgent Care Needed	1.4%	0.0%	1.3%

Table 6A: Percent of all **3- to 5-year-old** children (Head Start and Non-Head Start) with decay experience, untreated decay and need for dental care by race/ethnicity (n=1,499)

Oral Health Variable	White N=692	American Indian N=550	Other/Unknown N=257
Decay Experience	22.6%	68.4%	41.3%
Untreated Decay	17.3%	50.7%	30.8%
Need for Dental Care			
No Obvious Problems	84.4%	50.4%	72.0%
Early Care Needed	15.2%	47.1%	26.7%
Urgent Care Needed	0.4%	2.6%	1.3%

Table 6B: Percent of **Head Start 3- to 5-year-old** children with decay experience, untreated decay and need for dental care by race/ethnicity (n=1,343)

Oral Health Variable	White N=587	American Indian N=511	Other/Unknown N=245
Decay Experience	21.2%	67.7%	34.2%
Untreated Decay	15.7%	49.7%	24.5%
Need for Dental Care			
No Obvious Problems	87.8%	52.1%	86.0%
Early Care Needed	11.7%	45.2%	13.2%
Urgent Care Needed	0.5%	2.8%	0.8%

PARENT SURVEY INFORMATION:

Parent survey data was available for 1,389 children. The majority of the children had a dental visit in the last year and Medicaid was the primary payment source for dental care. The percent of children with a dental visit in the last year did not differ by race/ethnicity (Table 8).

A total of 351 children had not visited the dentist in the last year or did not answer that question. Of these, 323 answered the question regarding why their child had not visited the dentist in the last year. The primary reason for not visiting the dentist in the last year was “no reason to go/no dental problems” (Table 9).

Table 7: Most recent dental visit and payment source for dental care for children with a parent questionnaire

Survey Question	All Children N=1,389	3- to 5-Year-Old Children Only N=1,300	3- to 5-Year-Old Head Start Children Only N=1,234
Most recent dental visit			
Last year	74.7%	75.9%	76.3%
1-2 years ago	6.3%	6.7%	6.8%
3+ years ago	0.4%	0.5%	0.5%
Never been to dentist	16.8%	15.5%	14.9%
Unknown/Missing	1.8%	1.5%	1.5%
Payment source for dental care*			
Cash	7.3%	7.5%	7.1%
Medicaid/Medical Assistance	77.8%	77.9%	81.6%
Indian Health Service	6.6%	7.0%	7.4%
Private dental insurance	12.9%	12.9%	9.6%
Other	2.7%	2.8%	2.4%
Unknown/Missing	1.7%	1.2%	1.1%
Payment source for dental care**			
Cash only	6.0%	6.1%	6.0%
Medicaid only	70.1%	70.0%	73.3%
Indian Health Service only	2.7%	2.9%	3.0%
Private dental insurance only	8.6%	8.5%	5.4%
Other only	2.3%	2.4%	2.0%
Multiple sources	8.8%	9.0%	9.2%
Unknown/Missing	1.7%	1.2%	1.1%

* Parents could select more than one payment source therefore sum of percents exceeds 100%. The denominator for percent yes included all children with some survey data including those with unknown/missing payment source.

** Payment source was re-coded so that each child had only 1 source, children that had more than one payment source were classified as “multiple sources”. Percents equal 100%.

Table 8: Percent of *Head Start 3- to 5-year-old* children with dental visit in last year by race/ethnicity (n=1,343)

Survey Variable	White N=629	American Indian N=366	Other/Unknown N=220
Had dental visit in last year (% yes)	76.2%	74.0%	86.8%

Table 9: Most recent dental visit and payment source for dental care for children with a parent questionnaire

Survey Question	All Children N=323	3-5 Year Old Children Only N=289	3-5 Year Old Head Start Children Only N=268
Reasons for not visiting dentist			
Cost	7.1%	6.6%	6.3%
No reason to go	48.0%	50.9%	50.8%
Child is too young	16.7%	12.5%	10.5%
Do not have a dentist	8.4%	8.7%	8.2%
Difficulty in getting appointment	11.5%	12.5%	12.3%
Fear, apprehension, pain	6.8%	7.3%	7.8%
Cannot get to dental office	5.3%	5.9%	6.0%
Other reason	14.9%	14.9%	13.8%

* Parents could select more than one reason therefore sum of percents exceeds 100%.