



ORAL HEALTH SURVEY

Arizona Preschool Children

DATA SHEET

SUPPORTING DOCUMENTATION

METHODS:

Preschool children received oral health screenings at 100 randomly selected licensed child care centers with classroom sizes of ten pupils or more. The screenings of 984 children were completed during the fall of 2008 through the spring of 2009. The survey involved a standardized cross-sectional, open-mouth screening developed by the Association of State and Territorial Dental Directors and conducted by trained dental staff.

STATISTICAL ANALYSIS:

All estimates in this report were weighted to reflect the children in the Arizona population ages 0-5. Estimates and confidence intervals for this report were produced by the Complex Samples module of SPSS, Version 20. For most tables, weighted cross-tabulations took into account the complex sampling design of the survey in calculating estimates of standard errors. Chi-square tests were used to test for statistically significant differences between subgroup prevalence; t-tests and Analysis of Variance (ANOVA) were used for severity comparisons.

In the fact sheets, terms such as “similar” or “no significant differences” are used to indicate that the estimates being compared were not significantly different. The difference between any two estimates is mentioned only if it is statistically significant at the 95% confidence interval.

Percentages are rounded to the nearest whole percentage. Readers should pay close attention to the sampling errors for small subgroups. The results presented in this report are descriptive and do not attempt to demonstrate cause-and-effect relationships.

The children sampled for this study came from the sub-population of those attending child-care centers, nursery schools, and preschools. It is possible that the socio-economic status of these children may be somewhat higher than that of the total population of children under age 5. For Arizona children who are enrolled in nursery school or preschool (ages 3 and up), the poverty rate is 17%, according to the American Community Survey (ACS) for 2006-2010. The poverty rate for older children, enrolled in grades 1 through 12, is somewhat higher: 20%. Because dental health is generally better for higher socio-economic status, the estimates of dental health problems reported here may slightly underestimate the rates in the population of all Arizona children under age 5.

Table 1: Un-weighted Number of Children for Whom Data are Available

Age Category	Un-weighted Sample Size
Under 2 years	283
Ages 2-4	701
Total	984

Table 2: Oral Health Status by Age Group (95% Confidence Interval)

Oral Health Indicator	Under 2	2 to 4	4 and Under
Percent with Decay Experience	3% (1% to 10%)	37% (29% to 45%)	34% (28% to 42%)
Percent with Untreated Tooth Decay	3% (1% to 10%)	30% (23% to 38%)	28% (22% to 36%)
Percent with Treated Tooth Decay	0% (0% to 1%)	9% (6% to 13%)	9% (6% to 12%)
Percent with Non-cavitated white spots	7% (3% to 16%)	16% (11% to 24%)	16% (11% to 23%)
Percent with Early Childhood Caries (ECC)	2% (0% to 9%)	10% (7% to 15%)	9% (6% to 14%)
Percent with Early Treatment Needs	4% (1% to 10%)	29% (22% to 37%)	27% (21% to 35%)
Percent with Urgent Treatment Needs	0% (0% to 1%)	2% (1% to 4%)	2% (1% to 4%)

Table 3a: Oral Health Status by Age (95% Confidence Interval)

Oral Health Indicator	Under 1	Age 1	Age 2	Age 3	Age 4
Percent with Decay Experience	2% (1% to 7%)	4% (1% to 15%)	16% (10% to 26%)	32% (22% to 42%)	52% (42% to 61%)
Percent with Untreated Tooth Decay	2% (1% to 7%)	4% (1% to 15%)	15% (9% to 25%)	28% (19% to 40%)	40% (30% to 51%)
Percent with Treated Tooth Decay	1% (0% to 5%)	0% (0% to 0%)	2% (1% to 4%)	5% (3% to 9%)	16% (10% to 24%)
Percent with Non-cavitated white spots	3% (1% to 11%)	9% (4% to 19%)	12% (7% to 21%)	17% (9% to 28%)	19% (10% to 33%)
Percent with Early Childhood Caries (ECC)	2% (0% to 12%)	2% (0% to 8%)	5% (3% to 8%)	7% (3% to 17%)	14% (9% to 22%)
Percent with Early Treatment Needs	2% (0% to 7%)	5% (1% to 14%)	16% (9% to 27%)	28% (19% to 40%)	37% (27% to 49%)
Percent with Urgent Treatment Needs	1% (0% to 5%)	0% (0% to 0%)	1% (0% to 4%)	0% (0% to 0%)	3% (1% to 10%)

Table 3b: Dental Insurance Coverage (95% Confidence Interval)

Oral Health Indicator (2 to 4 years old)	Private	Public	No Insurance	p-value
Percent with Decay Experience	32% (18% to 51%)	40% (30% to 51%)	33% (24% to 45%)	0.59
Percent with Untreated Tooth Decay	27% (14% to 45%)	32% (23% to 43%)	30% (20% to 41%)	0.73
Percent with Treated Tooth Decay	7% (4% to 12%)	12% (6% to 22%)	4% (1% to 10%)	0.11
Percent with Non-cavitated white spots	14% (8% to 22%)	20% (11% to 34%)	16% (9% to 29%)	0.43
Percent with Early Childhood Caries (ECC)	7% (3% to 13%)	13% (8% to 22%)	8% (3% to 20%)	0.21
Percent with Early Treatment Needs	26% (13% to 45%)	32% (23% to 42%)	30% (20% to 41%)	0.77
Percent with Urgent Treatment Needs	1% (0% to 7%)	1% (0% to 4%)	0% (0% to 0%)	0.77
DENTAL INSURANCE COVERAGE				

Table 4: Oral Health Status by Race and Ethnicity (95% Confidence Interval)

Oral Health Indicator (2 to 4 years old)	White (not-Hispanic)	Black (not-Hispanic)	Hispanic	Native American	Asian or Pacific Islander	p-value
Percent with Decay Experience	31% (19% to 46%)	38% (26% to 53%)	47% (36% to 58%)	43% (22% to 67%)	43% (17% to 73%)	0.20
Percent with Untreated Tooth Decay	29% (18% to 43%)	32% (20% to 47%)	34% (23% to 47%)	31% (12% to 59%)	43% (17% to 73%)	0.80
Percent with Treated Tooth Decay	3% (2% to 6%)	7% (2% to 18%)	19% (12% to 28%)	21% (7% to 51%)	0% (0% to 0%)	0.00
Percent with Non-cavitated white spots	9% (5% to 16%)	24% (15% to 35%)	26% (13% to 44%)	25% (7% to 60%)	22% (6% to 55%)	0.03
Percent with Early Childhood Caries (ECC)	4% (2% to 8%)	12% (5% to 24%)	17% (10% to 28%)	10% (2% to 40%)	19% (4% to 55%)	0.00
Percent with Early Treatment Needs	29% (17% to 43%)	33% (21% to 49%)	31% (20% to 45%)	23% (6% to 60%)	37% (13% to 70%)	0.65
Percent with Urgent Treatment Needs	1% (0% to 2%)	2% (0% to 10%)	3% (1% to 16%)	7% (1% to 43%)	6% (1% to 32%)	0.65
RACE OR ETHNICITY						

Table 5: Percent of Arizona Children Who Have Ever Visited a Dentist by Age

Age	Dental Visit	No Dental Visit
Age birth to 12 months	6%	94%
1 year olds	9%	91%
2 year olds	24%	76%
3 year olds	46%	54%
4 year olds	71%	29%
Total	49%	51%

Table 6-7: Oral Health Status by Parent Education Level

Oral Health Indicator (2 to 4 years old)	Less than high school	High school graduate	Some college or tech school	College, 4 years or more	p-value
Percent with Decay Experience	60% (40% to 77%)	46% (36% to 55%)	28% (22% to 36%)	32% (15% to 55%)	0.04
Percent with Untreated Tooth Decay	53% (32% to 73%)	36% (26% to 47%)	22% (15% to 30%)	28% (12% to 51%)	0.08
Percent with Treated Tooth Decay	24% (14% to 39%)	11% (6% to 20%)	7% (5% to 12%)	4% (2% to 8%)	0.00
Percent with Non-cavitated white spots	35% (14% to 64%)	19% (11% to 32%)	17% (10% to 27%)	7% (3% to 15%)	0.01
Percent with Early Childhood Caries (ECC)	24% (9% to 50%)	15% (9% to 22%)	8% (5% to 14%)	2% (0% to 8%)	0.00
Percent with Early Treatment Needs	48% (28% to 69%)	33% (24% to 44%)	22% (16% to 29%)	28% (13% to 51%)	0.13
Percent with Urgent Treatment Needs	5% (1% to 25%)	3% (1% to 11%)	1% (0% to 5%)	0% (0% to 0%)	0.13
PARENT EDUCATION					

Oral Health Indicator (2 to 4 years old)	High school graduate or less	More than high school education	p-value
Percent with Decay Experience	50% (40% to 61%)	30% (21% to 41%)	0.00
Percent with Untreated Tooth Decay	42% (30% to 54%)	24% (16% to 35%)	0.02
Percent with Treated Tooth Decay	16% (10% to 23%)	6% (4% to 9%)	0.00
Percent with Non-cavitated white spots	24% (13% to 40%)	13% (8% to 20%)	0.03
Percent with Early Childhood Caries (ECC)	17% (10% to 28%)	5% (3% to 10%)	0.01
Percent with Early Treatment Needs	38% (27% to 50%)	25% (16% to 35%)	0.02
Percent with Urgent Treatment Needs	3% (1% to 14%)	1% (0% to 3%)	0.02
PARENT EDUCATION			