

Appendix
Smile Survey 2005 – King County and Seattle Surveys

King County Sample for 2nd and 3rd Graders

| SCHOOL | 2nd | 3rd | Total Enrollment | Number Screened | Response Rate | FRL% |
|---------------------------------|-----|-----|------------------|-----------------|---------------|------|
| Lowell Elementary School | 50 | 121 | 171 | 155 | 90.6% | 10.0 |
| North Beach Elementary School | 26 | 36 | 62 | 58 | 93.5% | 12.2 |
| Sunset Elementary | 70 | 54 | 124 | 107 | 86.3% | 14.7 |
| West Woodland Elementary | 63 | 60 | 123 | 115 | 93.5% | 24.4 |
| East Ridge Elementary | 72 | 76 | 148 | 119 | 80.4% | 3.3 |
| Kokanee Elementary | 61 | 65 | 126 | 87 | 69.0% | 9.3 |
| John Rogers Elementary School | 39 | 44 | 83 | 63 | 75.9% | 17.7 |
| Meridian Park Elementary | 80 | 55 | 135 | 132 | 97.8% | 20.7 |
| Pathfinder K-8 | 35 | 41 | 76 | 70 | 92.1% | 27.6 |
| Arbor Heights Elementary School | 74 | 71 | 145 | 102 | 70.3% | 31.4 |
| Brigadoon Elementary School | 68 | 62 | 130 | 123 | 94.6% | 31.9 |
| Renton Park Elementary School | 69 | 85 | 154 | 122 | 79.2% | 33.7 |
| Stevens Elementary School | 47 | 46 | 93 | 66 | 71.0% | 35.4 |
| Mirror Lake Elementary School | 74 | 73 | 147 | 111 | 75.5% | 50.3 |
| Panther Lake Elementary School | 70 | 70 | 140 | 99 | 70.7% | 53.6 |
| Wing Luke Elementary School | 46 | 40 | 86 | 64 | 74.4% | 58.5 |
| Graham Hill Elementary School | 61 | 62 | 123 | 83 | 67.5% | 59.7 |
| Martin Luther King Elementary | 17 | 25 | 42 | 36 | 85.7% | 73.5 |
| Rainier View Elementary School | 44 | 36 | 80 | 46 | 57.5% | 75.7 |
| TOTAL | | | 2188 | 1758 | 80.3% | |

Seattle Sample for 2nd and 3rd Graders

| SCHOOL | 2nd | 3rd | Total Enrollment | Number Screened | Response Rate | FRL % |
|---------------------------------|-----|-----|------------------|-----------------|---------------|-------|
| Lowell Elementary School | 50 | 121 | 171 | 155 | 90.6% | 10.0 |
| North Beach Elementary School | 26 | 36 | 62 | 58 | 93.5% | 12.2 |
| John Rogers Elementary School | 39 | 44 | 83 | 63 | 75.9% | 17.7 |
| West Woodland Elementary | 63 | 60 | 123 | 115 | 93.5% | 24.4 |
| Pathfinder K-8 | 35 | 41 | 76 | 70 | 92.1% | 27.6 |
| Arbor Heights Elementary School | 74 | 71 | 145 | 102 | 70.3% | 31.4 |
| Stevens Elementary School | 47 | 46 | 93 | 66 | 71.0% | 35.4 |
| Wing Luke Elementary School | 46 | 40 | 86 | 64 | 74.4% | 58.5 |
| Graham Hill Elementary School | 61 | 62 | 123 | 83 | 67.5% | 59.7 |
| Martin Luther King Elementary | 17 | 25 | 42 | 36 | 85.7% | 73.5 |
| Rainier View Elementary School | 44 | 36 | 80 | 46 | 57.5% | 75.7 |
| Dunlap Elementary School | 61 | 67 | 128 | 80 | 62.5% | 82.7 |
| Gatzert Elementary School | 60 | 51 | 111 | 84 | 75.7% | 89.3 |
| Total | | | 1323 | 1022 | 77.2% | |

Demographics for 2nd and 3rd Graders

| Variable | WA State | Mean, Percent Or Std. Dev. | King County | Mean, Percent Or Std. Dev. | Seattle | Mean, Percent Or Std. Dev. |
|--------------------------------|----------|----------------------------|-------------|----------------------------|---------|----------------------------|
| Age | | | | | | |
| Mean | 8.14 | 0.75 | 8.0813 | 0.73 | 8.002 | 0.52 |
| Range | 6 - 10 | | 6 - 10 | | 6 - 10 | |
| Grade | | | | | | |
| 2nd | 3660 | 50.20% | 819 | 46.60% | 445 | 43.50% |
| 3rd | 3631 | 49.80% | 939 | 53.40% | 577 | 56.50% |
| Gender | | | | | | |
| Male | 3677 | 50.20% | 917 | 52.00% | 544 | 53.20% |
| Female | 3604 | 49.50% | 841 | 47.90% | 478 | 46.80% |
| Free/Reduced Lunch | | | | | | |
| Not Eligible | 3422 | 57.40% | 1151 | 65.50% | 588 | 57.53% |
| Eligible | 2540 | 42.60% | 597 | 34.00% | 433 | 42.37% |
| Unknown | | | 9 | 0.50% | 1 | 0.1% |
| Language Spoken at Home | | | | | | |
| English | 6286 | 86.40% | 1442 | 82.00% | 753 | 72.70% |
| Spanish | 655 | 9.00% | 90 | 5.10% | 58 | 5.70% |
| Other | 335 | 4.60% | 224 | 12.70% | 211 | 20.60% |
| Unknown | | | 2 | 0.10% | | |
| Race/Ethnicity | | | | | | |
| White | 5134 | 70.80% | 1033 | 58.80% | 496 | 48.50% |
| African American | 464 | 6.40% | 266 | 15.10% | 244 | 23.90% |
| Hispanic | 979 | 13.50% | 165 | 9.40% | 79 | 7.70% |
| Asian | 450 | 6.20% | 253 | 14.40% | 174 | 17.00% |
| American Indian/ Alaska Native | 131 | 1.80% | 5 | 0.30% | 3 | 0.30% |
| Other | 87 | 1.20% | 28 | 1.60% | 14 | 1.40% |
| Unknown | | | 7 | 0.40% | 12 | 1.20% |

Demographics for Head Start/ECEAP

| Variable | WA State | Mean, Percent Or Std. Dev. | King County | Mean, Percent Or Std. Dev. |
|--------------------------------|----------|-------------------------------------|----------------|--|
| Age | | | | |
| Mean | 4.13 | 0.65 | 4.05 | 0.54 |
| Range | 1 – 6 | | 3 - 5 | |
| Gender | | | | |
| Male | 593 | 50.2% | 313 | 51.7% |
| Female | 588 | 49.8% | 841 | 48.3% |
| Language Spoken at Home | | | | |
| English | 782 | 66.3% | 308 | 50.9% |
| Spanish | 322 | 27.3% | 150 | 24.8% |
| Other | 76 | 6.4% | 147 | 24.3% |
| Race/Ethnicity | | | | |
| White | 499 | 42.5% | 153 | 25.3% |
| African American | | | 151 | 25.0% |
| Hispanic | 128 | 10.9% | | |
| Asian | 364 | 31.0% | 148 | 24.5% |
| American Indian/ Alaska Native | 51 | 4.3% | 86 | 14.2% |
| Other | | | 5 | 0.1% |
| Unknown | 74 | 6.3% | | |
| Other | 59 | 5.0% | 54 | 8.9% |
| Unknown | | | 8 | 1.3% |

Oral Health Status of 2nd and 3rd Grade Students

State Sample includes a portion of King County and Seattle Samples

Adjusted for Non-Response

| Oral Health Measure | WA State (n=7289) | King County (n= 1758) | Seattle (n=1022) |
|--|-----------------------------|-----------------------------|-----------------------------|
| % caries free (no treated or untreated) | 41.0% (37.9-44.2) | 52.9% (44.5-61.3) | 54.1% (42.1-66.1) |
| % with caries experience | 59.0% (55.8-62.1) | 47.1% (38.7-55.5) | 45.9% (33.9-57.9) |
| % with treated decay | 50.4% (47.7-53.1) | 38.6% (32.4-44.8) | 36.3% (28.2-44.4) |
| % with untreated decay | 19.7% (17.6-21.9) | 17.0% (12.0-21.9) | 18.6% (10.6-26.6) |
| % with rampant decay | 21.2% (18.2-24.2) | 18.8% (10.3-27.4) | 12.9% (5.3-20.5) |
| % with dental sealants | 44.8% (41.6-48.1) | 40.9% (35.2-46.6) | 43.1% (37.1-49.2) |
| % needing urgent treatment | 3.2% (2.3-4.2) | 3.7% (.9-6.4) | 2.1% (.4-3.8) |

Oral Health Status of 2nd and 3rd Grade Students
State Sample Without King County or Seattle Samples
Adjusted for Non-Response

| Oral Health Measure | WA State (n=5531) | King County (n= 1758) | Seattle (n=1022) |
|---|----------------------|--------------------------|----------------------|
| % caries free (no treated or untreated) | 40.1% (36.6-43.6) | 52.9% (44.5-61.3) | 54.1% (42.1-66.1) |
| % with caries experience | 59.5% (56.4-63.4) | 47.1% (38.7-55.5) | 45.9% (33.9-57.9) |
| % with treated decay | 51.7% (48.7-54.7) | 38.6% (32.4-44.8) | 36.3% (28.2-44.4) |
| % with untreated decay | 19.5% (17.0-22.0) | 17.0% (12.0-21.9) | 18.6% (10.6-26.6) |
| % with rampant decay | 20.5% (17.5-23.6) | 18.8% (10.3-27.4) | 12.9% (5.3-20.5) |
| % with dental sealants | 46.0% (42.4-49.6) | 40.9% (35.2-46.6) | 43.1% (37.1-49.2) |
| % needing urgent treatment | 2.9% (2.0-3.7) | 3.7% (.9-6.4) | 2.1% (.4-3.8) |

Oral Health Measures Stratified by Free/Reduced Lunch Eligibility

Adjusted for Non-Response

| Variable | WA State | WA State | King County | King County | Seattle | Seattle |
|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | Not Eligible (N=4118) | Eligible (n=2538) | Not Eligible (N=1151) | Eligible (n=597) | Not Eligible (N=588) | Eligible (n=433) |
| % with caries experience | 50.8% (47.3-54.3) | 70.5% (67.9-73.2) | 37.3% (29.7-44.8) | 64.4% (59.4-69.4) | 30.9% (21.8-40.3) | 63.3% (58.2-68.4) |
| % with untreated decay | 14.6% (12.4-16.8) | 26.6% (23.1-30.0) | 11.0% (6.6-15.4) | 26.9% (23.4-30.3) | 9.6% (3.4-15.9) | 28.9% (23.5-34.4) |
| % with rampant caries | 15.8% (13.1-18.5) | 29.1% (24.5-33.7) | 13.2% (6.2-20.2) | 28.8% (18.3-39.2) | 9.3% (1.3-17.2) | 17.2% (8.9-25.6) |
| % with dental sealants | 47.8% (43.7-52.0) | 42.8% (38.8-46.8) | 43.6% (37.8-49.4) | 36.0% (28.7-43.3) | 41.8% (33.9-49.6) | 44.8% (37.6-52.0) |

Oral Health Measures Stratified by Race/Ethnicity for 2nd and 3rd Graders

State Table

Adjusted for Non-Response

("Other or "Unknown" categories not included n=127)

| Variable | White (n=5135) | African American (n=462) | Hispanic (n=981) | Asian / Pacific Islander (n=451) | Native American (n=133) |
|---------------------------------|------------------------------------|---|------------------------------------|---|--|
| % with caries experience | 55.0% (51.3-58.6) | 59.5% (53.5-65.4) | 72.2% (38.1-76.2) | 67.9% (63.3-72.4) | 77.3% (68.9-85.7) |
| % with untreated decay | 16.3% (14.1-18.5) | 24.5% (20.1-28.9) | 29.5% (25.7-33.2) | 27.3% (23.0-31.5) | 37.0% (23.6-50.5) |
| % with rampant caries | 17.9% (15.4-20.5) | 18.4% (13.2-23.6) | 33.5% (28.2-38.9) | 25.9% (19.3-32.5) | 41.8% (16.8-66.9) |
| % with dental sealants | 47.1% (43.6-50.5) | 40.5% (34.8-46.2) | 38.7% (32.9-44.5) | 38.8% (32.5-45.2) | 47.6% (36.3-59.0) |

Oral Health Measures Stratified by Race/Ethnicity for 2nd and 3rd Graders

King County Table

Adjusted for Non-Response

("Unknown" category not included n=8)

| Variable | White (n=1032) | African American (n=266) | Hispanic (n=165) | Asian / Pacific Islander (n=253) | Other (n=34) |
|---------------------------------|------------------------------------|---|------------------------------------|---|------------------------------------|
| % with caries experience | 36.9% (28.6-45.3) | 55.3% (47.7-62.9) | 57.9% (48.0-67.8) | 67.1% (59.2-75.0) | 61.8% (45.7-76.4) |
| % with untreated decay | 10.6% (6.0-15.1) | 22.3% (15.4-29.2) | 30.0% (21.0-35.0) | 27.0% (20.6-33.4) | 29.4% (9.7-39.9) |
| % with rampant caries | 14.5% (5.8-23.1) | 17.5% (9.1-25.9) | 28.3% (14.5-42.2) | 27.3% (18.3-36.4) | 44.1% (26.4-66.5) |
| % with dental sealants | 44.9% (38.3-51.4) | 37.9% (30.2-45.6) | 31.4% (21.9-40.9) | 34.8% (27.3-42.5) | 38.2% (16.0-67.0) |

Oral Health Measures Stratified by Race/Ethnicity for 2nd and 3rd Graders

Seattle Table

Adjusted for Non-Response

("Unknown" category not included n=13)

| Variable | White (n=495) | African American (n=244) | Hispanic (n=79) | Asian / Pacific Islander (n=174) | Other (n=17) |
|---------------------------------|------------------------------------|---|------------------------------------|---|------------------------------------|
| % with caries experience | 28.7% (18.3-39.1) | 55.3% (48.1-62.5) | 57.1% (47.0-67.2) | 66.3% (55.2-77.4) | 58.8% (32.1-82.4) |
| % with untreated decay | 8.0% (1.6-14.5) | 25.8% (18.2-33.8) | 25.4% (18.3-32.5) | 29.7% (19.8-39.5) | 29.4% (-3.4-58.9) |
| % with rampant caries | 10.3% (.4-20.2) | 11.8% (5.6-18.0) | 16.3% (-0.7-33.2) | 19.1% (12.3-26.0) | 23.5% (4.1-54.1) |
| % with dental sealants | 44.2% (35.4-53.0) | 45.1% (39.9-50.4) | 38.4% (17.8-59.0) | 39.9% (30.0-49.8) | 47.0% (18.4-88.5) |

Oral Health Measures Stratified by Language for 2nd and 3rd Graders

Adjusted for Non-Response

| Variable | WA State | WA State | King County | King County | Seattle | Seattle |
|--------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|
| | English (n=6290) | Other Language (n=986) | English (n=1441) | Other Language (n=314) | English (n=752) | Other Language (n=269) |
| % with caries experience | 56.7% (53.3-60.0) | 73.6% (70.0-77.2) | 42.7% (48.9-65.7) | 65.8% (56.3-75.4) | 37.6% (27.2-48.1) | 66.0% (56.3-75.7) |
| % with untreated decay | 18.0% (15.9-20.1) | 30.8% (26.8-34.7) | 14.5% (9.3-19.7) | 27.6% (19.5-35.7) | 14.4% (6.4-22.4) | 28.7% (20.5-36.9) |
| % with rampant caries | 19.4% (16.5-22.3) | 33.0% (26.7-39.2) | 16.6% (8.3-24.9) | 28.5% (11.6-45.5) | 11.3% (1.8-20.9) | 16.8% (10.8-22.8) |
| % with dental sealants | 46.0% (42.7-49.3) | 37.8% (32.6-43.0) | 41.6% (35.7-47.5) | 37.9% (27.7-48.2) | 41.9% (34.8-48.9) | 46.2% (37.0-55.4) |

**Sealant Comparison for School Based Programs
(Not Adjusted for Non-Response)**

| Variable | King County with School Based Sealant Programs | King County without School Based Sealant Programs | Seattle with School Based Sealant Programs | Seattle without School Based Sealant Programs |
|-------------------------------|---|--|---|--|
| % with dental sealants | 68.5% (60.8-75.5) | 42.4% (38.9-46.0) | 66.4% (60.2-72.2) | 40.4% (35.1-46.0) |

**Oral Health Measures Comparison of 2000 and 2005 Surveys
(Differing survey strategies used)**

| Oral Health Measure | WA State 2000 (n=2699) | WA State 2005 (n=7291) | King County 2000 (n= 1337) | King County 2005 (n= 1758) |
|--|-----------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|
| % caries free (no treated or untreated) | 44% (40.4-47.8) | 41% (38.8-43.2) | 56% | 53% (44.5-61.3) |
| % with caries experience | 56% (53.7-57.4) | 59% (57.9-60.1) | 44% | 47% (38.7-55.5) |
| % with untreated decay | 21% (19.4-22.5) | 20% (18.9-20.8) | 15% | 17% (12.0-21.9) |
| % with rampant decay | 15% (13.9-16.7) | 22% (20.6-22.5) | 8% | 19% (10.3-27.4) |
| % with dental sealants | 47% (45.3-49.1) | 45% (43.4-45.7) | 44% | 43% (37.1-49.2) |

Oral Health Measures Comparison of 2000 and 2005 Surveys

King County Samples Stratified by Race

(Differing survey strategies used)

| Variable | 2000 | 2005 | 2000 | 2005 | 2000 | 2005 | 2000 | 2005 | 2000 | 2005 |
|---------------------------------|------------------|--------------------|--------------------------------|--------------------------------|---------------------|---------------------|---------------------|---------------------|------------------|--------------------|
| | White (n=633) | White (n=1033) | African American (n=166) | African American (n=266) | Hispanic (n=106) | Hispanic (n=165) | Asian/PI (n=290) | Asian/PI (n=253) | Other (n=112) | Other (n=34) |
| % with caries experience | 36% | 37% (28.6-45.3) | 58% | 55% (47.7-62.9) | 64% | 58% (48.0-67.8) | 72% | 67% (59.2-75.0) | 40% | 62% (45.7-76.4) |
| % with untreated decay | 18% | 11% (6.0-15.1) | 23% | 22% (15.4-29.2) | 29% | 30% (21.0-35.0) | 34% | 27% (20.6-33.4) | 15% | 29% (9.7-39.9) |
| % with rampant caries | 6% | 15% (5.8-23.1) | 4% | 18% (9.1-25.9) | 18% | 28% (14.5-42.2) | 21% | 27% (18.3-36.4) | 10% | 44% (26.4-66.5) |
| % with dental sealants | 46% | 45% (38.3-51.4) | 39% | 38% (30.2-45.6) | 48% | 31% (21.9-40.9) | 41% | 35% (27.3-42.5) | 38% | 38% (16.0-67.0) |

Oral Health Status of Head Start/ECEAP Children

| Oral Health Measure | WA State Percent (n=1172) | King County Percent (n=605) |
|-------------------------------------|------------------------------|--------------------------------|
| % with caries experience | 45.1% (42.3-48.0) | 26.6% (23.2-30.4) |
| % with treated decay | 26.2% (24.1-29.3) | 15.2% (12.5-18.4) |
| % with untreated decay | 25.0% (22.6-27.6) | 14.2% (11.6-17.3) |
| % with rampant decay | 15.3% (13.4-17.6) | 6.1% (4.4-8.4) |
| % with Early Childhood Caries (ECC) | 17.7% (15.6-20.1) | 9.6% (7.4-12.3) |
| % needing dental care | 21.5% (19.2-24.0) | 14.2% (11.6-17.3) |
| % needing urgent dental care | 4.5% (3.4-5.9) | 0 |

Oral Health Measures Stratified by Race for Head Start/ECEAP Children

| Oral Health Measure | WA State (n=499) | WA State (n=676) | King County (n=153) | King County (n=144) | P Value |
|--------------------------|----------------------|----------------------|------------------------|------------------------|---------|
| | White Non-Hispanic | Minority | White Non-Hispanic | Minority | |
| % with caries experience | 38.7% (34.4-43.1) | 49.5% (45.6-53.3) | 21.6% | 28.6% | 0.1121 |
| % with untreated decay | 20.8% (17.4-24.7) | 27.9% (24.6-31.5) | 11.8% | 15.3% | 0.3445 |
| % with rampant caries | 13.6% (10.8-17.0) | 16.4% (13.8-19.5) | 4.6% | 6.5% | 0.4966 |
| % with ECC | 13.1% (10.3-16.6) | 20.8% (17.8-24.2) | 5.2% | 11.0% | 0.0513 |
| % needing treatment | 18.2% (15.0-22.0) | 23.8% (20.7-27.2) | 11.8% | 15.1% | 0.3783 |