

Washington State Smile Survey 2005
March 2006



History of the Smile Survey in Washington State

The Smile Survey was born in Washington State in the mid-90s. By 1987, the state and local health districts started to recognize the need to obtain more information about the oral health needs of the population in our state. In 1989, the Dental BrainTrust was convened to make recommendations for developing an ongoing, effective, and accessible oral health system. This group concluded that there were not sufficient oral health data for policy makers to make informed decisions. The group recommended that the Office of Maternal and Child Health within the Department of Health (DOH) document the oral health status and create an ongoing method to collect and analyze the oral health needs of the population.



The Smile Survey was then created, and today is nationally known as the Basic Screening Survey for oral health and is recommended by the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Dental Directors (ASTDD) to all states. As a result, currently 33 states have followed the footsteps of the Washington State Smile Survey.

In our state, the first Smile Survey was administered in 1996, the second in 2000, and the third in 2005. In 2005, 20 counties conducted their own Smile Survey in addition to the state survey. It is our hope that all counties will be able to have their own survey in the future.

The 2005 Smile Survey

Participants

- ⇒ HeadStart and ECEAP
 - 39 sites and 1,182 low-income children
- ⇒ Elementary public schools
 - 66 schools and 7,291 2nd and 3rd grade students
- ⇒ Indian Health Service
 - 142 Native Americans enrolled in 6 HeadStart sites and 310 elementary school students in 9 elementary schools close to or inside tribes

Results

- ⇒ Dental decay experience¹ (i.e., have cavities and/or fillings) – a measure of the burden of dental disease affecting the population
 - Increased to 45% in low-income preschool children
 - Increased to 59% in elementary school children

- ⇒ Untreated decay² (i.e., decay that is found but not treated mostly due to lack of access to a dentist) – a measure of access to dental care
 - Decreased to 25% of low-income preschool children
 - Decreased to 20% of elementary school children, mostly for white non-Hispanics. (WA State met the Healthy People 2010 Objective of 21%)
 - However, 31% of elementary school children whose parents do not speak English at home still have untreated decay
 - 5% of low-income preschool children and 3% of elementary school children need urgent dental care because of pain or infection

- ⇒ Rampant dental decay³ – a measure of extensive tooth decay (i.e. having more than 7 decays)
 - Continued to increase among elementary school children

- ⇒ Dental sealants⁴ - a well-accepted, evidence-based clinical intervention to prevent tooth decay in molar teeth in elementary children
 - Decreased from 48% to 45% (although not statistically significant at this point)
 - We are the only state in the country to show this downward trend in a Healthy People 2010-related objective

- ⇒ Oral health disparities – a measure of health access and outcomes for diverse population groups
 - Minority, low-income, and non-English speaking children continue to have:
 - The highest levels of dental decay, rampant decay, and untreated decay
 - The lowest level of dental sealants
 - Only white non-Hispanic elementary school children had a significant decrease in the proportion needing dental care

Smile Survey results as compared to Healthy People 2010 Objectives

Low-income preschool children (3-5 year olds)	<i>Smile Survey 2000</i>	<i>Smile Survey 2005</i>	<i>Healthy People 2010 Objectives (for 2-4 year olds)</i>
Decay experience ¹	41.5%	45.1% (39% for whites; 50% for minorities)	11%
Untreated decay ²	26.7%	25% (21% for whites; 28% for minorities)	9%
Rampant decay ³ (+7 decays)	16%	15.3% (14% for whites; 16% for minorities)	NA
Urgent need for dental care	5.5%	4.5% (3% for whites; 5% for minorities)	NA

Elementary public school children (7-9 year olds)	<i>Smile Survey 2000</i>	<i>Smile Survey 2005</i>	<i>Healthy People 2010 Objectives (for 6-8 year olds)</i>
Decay experience ¹	55.6%	59% (55% for whites; 69% for minorities)	42%
Untreated decay ²	21%	19.7% (16% for whites; 28% for minorities)	21% (Washington State has met this target)
Rampant decay ³ (+7 decays)	15%	21.2% (18% for whites; 29% for minorities)	NA
Urgent need for dental care	3.5%	3.2% (2% for whites; 5% for minorities)	NA
Dental sealants ⁴	47.2%	44.8% (47% for whites; 40% for minorities)	50%

Implications for Oral Health Programs in Washington State

When comparing the 2005 and 2000 surveys, these results show that Washington State is doing better at treating dental disease but not at preventing it.

The decrease in untreated disease represents a step towards the right direction in terms of improved access to dental care, but it is also important to notice that this improvement in access refers mostly to White Non-Hispanic children, and not minority and low-income children. Therefore, it is important that oral health programs take this information into consideration and make an effort to reach more minority children. Partnerships among programs would create the opportunity to share and learn from others' experiences and build a forefront to address and solve this service gap.

The increase in dental decay indicates that more needs to be done in terms of preventive measures for tooth decay. This increase could be a consequence of many factors, such as higher consumption of sugar, lack of awareness about how to promote and maintain personal oral health, lack of access to effective public health preventive measures (sealants, water fluoridation, etc.), and lack of dental insurance. Work on these areas requires attention from existing oral health programs and would also benefit from mutual partnerships.

Given that tooth decay is a completely preventable disease, it is important that sincere efforts be combined in order to decrease, or even eliminate, tooth decay in our State. Our children deserve to live healthy and happy lives without the unnecessary pain and discomfort caused by dental disease.

For more information, please contact the Department of Health MCH Oral Health Program:

Dr. Joseli Alves-Dunkerson, DDS, MBA
Phone: (360) 236-3524
Joseli.Alves-Dunkerson@doh.wa.gov

Dr. Divesh Byrappagari, DDS, MSD
Phone: (360) 236-3507
Divesh.Byrappagari@doh.wa.gov