

The Dental Health Foundation  
520 3rd Street, Suite 205  
Oakland, CA 94607  
Tel: (510) 663-3727 ❖ Fax: (510) 663-3733  
Email: [tdhf@pacbell.net](mailto:tdhf@pacbell.net)

## Orange County Smile Survey



**AN ORAL HEALTH ASSESSMENT OF ORANGE COUNTY'S  
KINDERGARTEN AND 3<sup>RD</sup> GRADE CHILDREN**

December 2005

## Table of Contents

Executive Summary .....	1
Introduction .....	3
Methods .....	4
Results .....	5
Key Finding #1 .....	6
Key Finding #2 .....	7
Key Finding #3 .....	8
Key Finding #4 .....	10
Key Finding #5 .....	12
Key Finding #6 .....	13
Data Tables .....	14
Appendix .....	20

# Orange County Smile Survey

## AN ORAL HEALTH ASSESSMENT OF ORANGE COUNTY'S KINDERGARTEN AND 3<sup>RD</sup> GRADE CHILDREN

---

### EXECUTIVE SUMMARY

---

Tooth decay (dental caries) is an infectious disease process affecting both children and adults. It is probably the most prevalent – yet the most preventable – disease known to man. By the age of 18, about 80 percent of children in the United States have experienced dental disease in the form of tooth decay.<sup>1</sup>

While the prevalence of tooth decay in the U.S. has declined over the last 30 years, certain groups suffer disproportionately from dental disease – including both low-income and minority children. Two major factors affect an individual's overall oral health status: their disease rate and their ability to access and obtain dental treatment. Unfortunately, those individuals at highest risk of dental disease are also the least likely to have access to routine professional dental care.

#### Key Points:

- ⇒ Tooth decay is a significant problem for elementary school children in Orange County.
- ⇒ 34% have untreated tooth decay.
- ⇒ 4% need urgent dental care because of pain or infection.
- ⇒ The oral health of Orange County's children is substantially worse than national objectives.

The public perception – especially among those who can afford dental care or have dental insurance – is that tooth decay is a natural and minor occurrence that deserves little attention or dollars. However, if left untreated tooth decay can lead to needless pain and suffering; difficulty in speaking, chewing, and swallowing; lost school days; increased cost of care; and loss of self-esteem. In 1996, children ages 5 to 17 years missed 1,611,000 school days due to acute dental problems – an average of 3.1 days per 100 students.<sup>2</sup> The good news is that most oral diseases are preventable. Some of the methods to prevent tooth decay include dental sealants, drinking fluoridated water, using toothpaste that contains fluoride, limiting sugar intake, and having access to dental care.

In order to obtain information on the oral health of kindergarten and 3<sup>rd</sup> grade children in Orange County, a county wide oral health needs assessment was conducted during the 2004-2005 school year. Information from the *Orange County Smile Survey* will be used to develop policy recommendations designed to improve the oral health of elementary school children. To share what we learned through the *Orange County Smile Survey*,

---

<sup>1</sup> National Center for Health Statistics. National Health and Nutrition Examination Survey III, 1988-94. Hyattsville, MD: Centers for Disease Control and Prevention, unpublished data.

<sup>2</sup> National Center for Health Statistics. Current estimates from the National Health Interview Survey, 1996 (Vital and Health Statistics; Series 10, Data from the National Health Survey; no. 200). Hyattsville, MD: U.S. Department of Health and Human Services, National Center for Health Statistics, 1996.

we have organized this report into six key findings, and for each we present our data in terms of graphs and tables. We hope that you find this information both informative and useful.

### KEY FINDINGS

- ◆ A pandemic of dental disease is compromising the health and quality of life of Orange County's children. More than half of kindergarteners and more than 7 out of 10 3<sup>rd</sup> graders have experienced tooth decay, and almost 34% of them have *untreated* decay. Left untreated, tooth decay often has serious consequences, including needless pain and suffering, difficulty speaking and chewing and lost days in school.
- ◆ More than 2,850 kindergarteners and third graders in Orange County have serious problems from dental disease – abscesses, inflammation and pain. All of these can lead to reduced school performance, lack of concentration and absenteeism.
- ◆ Poor children and children of color are much more likely to have tooth decay and suffer the consequences of untreated disease.
- ◆ Many children in Orange County cannot get the dental care they need.
- ◆ Compared to national oral health objectives, Orange County does not fare well.
- ◆ Increasing resources for dental treatment are needed, but will not alone stem the tide of dental disease. More resources for early preventive activities are also needed.

---

## INTRODUCTION

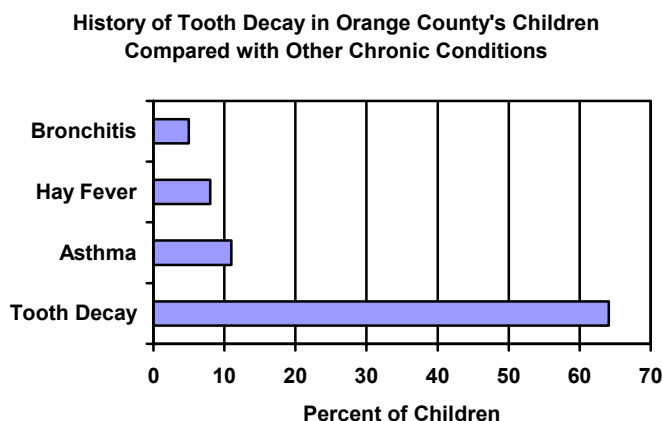
---

### **“The mouth reflects general health and well-being.”**

Former Surgeon General David Satcher, 2001

Tooth decay (dental caries) is the single most common chronic disease of childhood, occurring five to eight times more frequently than asthma, the second most common chronic disease in children.<sup>1</sup> Although preventable, tooth decay affects more than half of all children by the third grade and by the time students finish high school; about 80 percent have decay.<sup>2</sup> Tooth decay is not simply a hole in a tooth – if left untreated it can lead to needless pain and suffering;

difficulty in speaking, chewing, and swallowing; lost school days; increased costs of care; and loss of self-esteem. In 1996, students ages 5 to 17 years missed 1,611,000 school days due to acute dental problems – an average of 3.1 days per 100 students.<sup>3</sup>



While the prevalence and severity of tooth decay has declined dramatically among U.S. school-aged children, it remains a significant problem in some populations – particularly certain racial and ethnic groups and poor children.<sup>4</sup> National data indicate that 80 percent of tooth decay in children is concentrated in 25 percent of the child population.<sup>5</sup> Poor people and racial/ethnic minority groups have more untreated oral disease than does the population as a whole. According to national data, poor Mexican-American children are about three times more likely to have untreated decay compared to a higher income non-Hispanic white child.

Unfortunately, poverty is a problem for a significant portion of Orange County residents. According to the U.S. Census Bureau ([www.census.gov](http://www.census.gov)), 13 percent of families in Orange County with children less than 18 years live below the federal poverty level.

---

<sup>1</sup> Edelstein B, Douglass C. Dispelling the cavity free myth. Public Health Reports 1995, 110:522-30.

<sup>2</sup> National Center for Health Statistics. National Health and Nutrition Examination Survey III, 1988-94. Hyattsville, MD: Centers for Disease Control and Prevention, unpublished data.

<sup>3</sup> National Center for Health Statistics. Current estimates from the National Health Interview Survey, 1996 (Vital and Health Statistics; Series 10, Data from the National Health Survey; no. 200). Hyattsville, MD: U.S. Department of Health and Human Services, National Center for Health Statistics, 1996.

<sup>4</sup> Vargas CM, Crall JJ, Schneider DA. Sociodemographic distribution of pediatric dental caries, NHANES III, 1988-1994. J Am Dent Assoc 1998,129:1229-38.

<sup>5</sup> Kaste LS, Selwitz RH, Oldakowski RJ, Brunelle JA, Winn DM, Brown LJ. Coronal caries in the primary and permanent dentition of children and adolescents 1-17 years of age: United States 1988-91. J Dent Research 1996, 75:631-41.

Since low-income children are more likely to have untreated decay, the need for dental care could potentially overburden the County's oral health care system.

We hope that by recognizing and understanding the oral health needs of Orange County's children, we will be able to contribute to policies that will ensure all children receive the oral health care they need. The answers to effective policies to protect children's oral health lie in a few sound principles outlined in the 2000 *Oral Health in America: A Report of the Surgeon General*. Some of the approaches to promote oral health include:

- ◆ Change perceptions regarding oral health and disease so that oral health becomes an accepted component of general health.
- ◆ Build an effective health infrastructure that meets the oral health needs of all Americans and integrates oral health effectively into overall health.
- ◆ Remove known barriers between people and oral health services.
- ◆ Use public-private partnerships to improve the oral health of those who still suffer disproportionately from oral diseases.

This needs assessment demonstrates that we still face many barriers to improving the oral health of Orange County's children. We are seeing more dental disease among children, and we have fewer dentists in the County than we need to provide essential preventive and restorative services. In order to reverse these trends, we need to mobilize resources, including both public and private oral health care providers.

---

## METHODS

---

During the 2004-2005 school year, oral health screenings were completed at 25 randomly selected elementary schools throughout Orange County. Trained dental examiners completed all of the screenings using the diagnostic criteria developed and published by the Association of State and Territorial Dental Directors (*Basic Screening Surveys: An Approach to Monitoring Community Oral Health*, [www.astdd.org](http://www.astdd.org)). Five oral health indicators were collected for each child screened – presence of decayed teeth, presence of filled teeth, presence of dental sealants, history of rampant decay (defined as decay experience on 7 or more teeth), and treatment urgency. In addition to the oral health indicators, parents were asked to complete an optional questionnaire that obtained information on dental insurance, time since last dental visit, trouble accessing dental care, participation in the free or reduced price lunch program (FRL), and race. Since the questionnaire was optional, results may not be representative of the County as a whole. A copy of the questionnaire is located in the Appendix.

A combination of passive and positive consent was used. Thirteen schools used passive consent which means that all children were screened unless their parent specifically stated that they did not want their child screened. The other 12 schools used

positive consent and in these schools only those children that returned a positive consent form were screened.

Epi Info Version 3.3.2 was used for both data entry and data analysis. Epi Info is a public access software program developed, distributed and supported by the Centers for Disease Control and Prevention. Data obtained through the oral health screening has been adjusted to account for both the sampling scheme and non-response.

---

## RESULTS

---

The *Orange County Smile Survey* screened 1,175 kindergarten and 1,089 3<sup>rd</sup> grade children (42% of enrolled students). About half of the children screened were male (9%), 54% were Hispanic, 30% were white, and 12% were Asian. More than 41% of the children screened were from homes where parents speak a language other than English.

To make this complex information easier to understand, the results are being presented in terms of six key findings. The data to support each finding is presented both graphically as well as in text format. The six key findings from the *Orange County Smile Survey* are as follows:

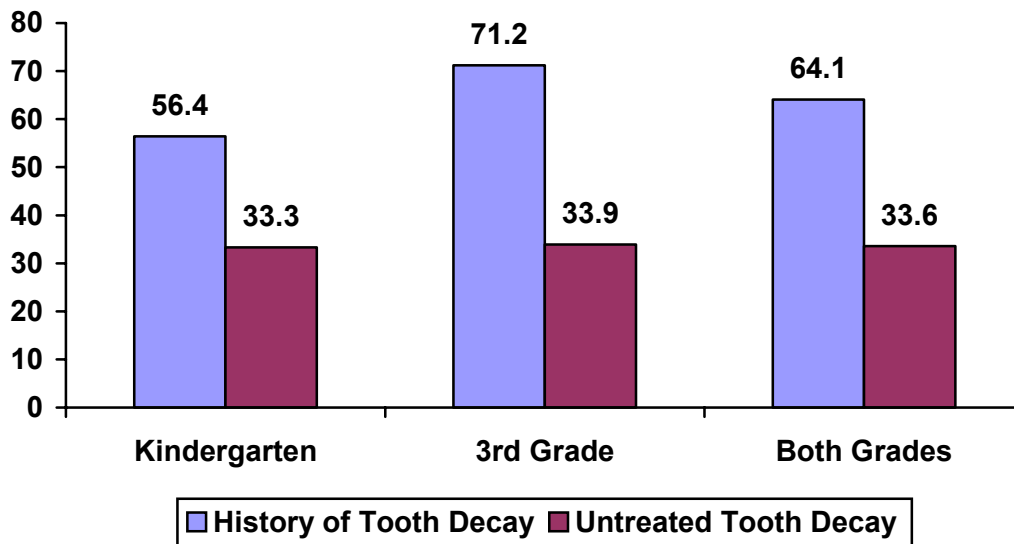
- #1: A pandemic of dental disease is compromising the health and quality of life of Orange County's children. More than half of kindergarteners and more than 7 out of 10 3<sup>rd</sup> graders have experienced tooth decay, and almost 34% of them have *untreated* decay. Left untreated, tooth decay often has serious consequences, including needless pain and suffering, difficulty speaking and chewing and lost days in school.
- #2: More than 2,850 kindergarteners and third graders in Orange County have serious problems from dental disease – abscesses, inflammation and pain. All of these can lead to reduced school performance, lack of concentration and absenteeism.
- #3: Poor children and children of color are much more likely to have tooth decay and suffer the consequences of untreated disease.
- #4: Many children in Orange County cannot get the dental care they need.
- #5: Compared to national oral health objectives, Orange County does not fare well.
- #6: Increasing resources for dental treatment are needed, but will not alone stem the tide of dental disease. More resources for early preventive activities are also needed.

---

**KEY FINDING #1: A PANDEMIC OF DENTAL DISEASE IS COMPROMISING THE HEALTH AND QUALITY OF LIFE OF ORANGE COUNTY’S CHILDREN. MORE THAN HALF OF KINDERGARTENERS AND MORE THAN 7 OUT OF 10 3RD GRADERS HAVE EXPERIENCED TOOTH DECAY, AND ALMOST 34% OF THEM HAVE UNTREATED DECAY. LEFT UNTREATED, TOOTH DECAY OFTEN HAS SERIOUS CONSEQUENCES, INCLUDING NEEDLESS PAIN AND SUFFERING, DIFFICULTY SPEAKING AND CHEWING AND LOST DAYS IN SCHOOL.**

---

**Percent of Children with a History of Tooth Decay and Untreated Tooth Decay**



Fifty-six percent of the kindergarten and 71% of the 3<sup>rd</sup> grade children screened had a history of tooth decay; which means that they had at least one tooth that was either decayed or had been filled because of tooth decay. This is more than **5 times higher** than the prevalence of the next most common chronic disease of childhood – asthma.

The proportion of children with untreated tooth decay was fairly consistent across grades with more than 3 out of every 10 children having untreated decay. It should be noted that the manifestations of tooth decay in children go beyond pain and infection. Left untreated, tooth decay often has serious consequences, including needless pain and suffering, difficulty speaking and chewing and lost days in school.<sup>1</sup>

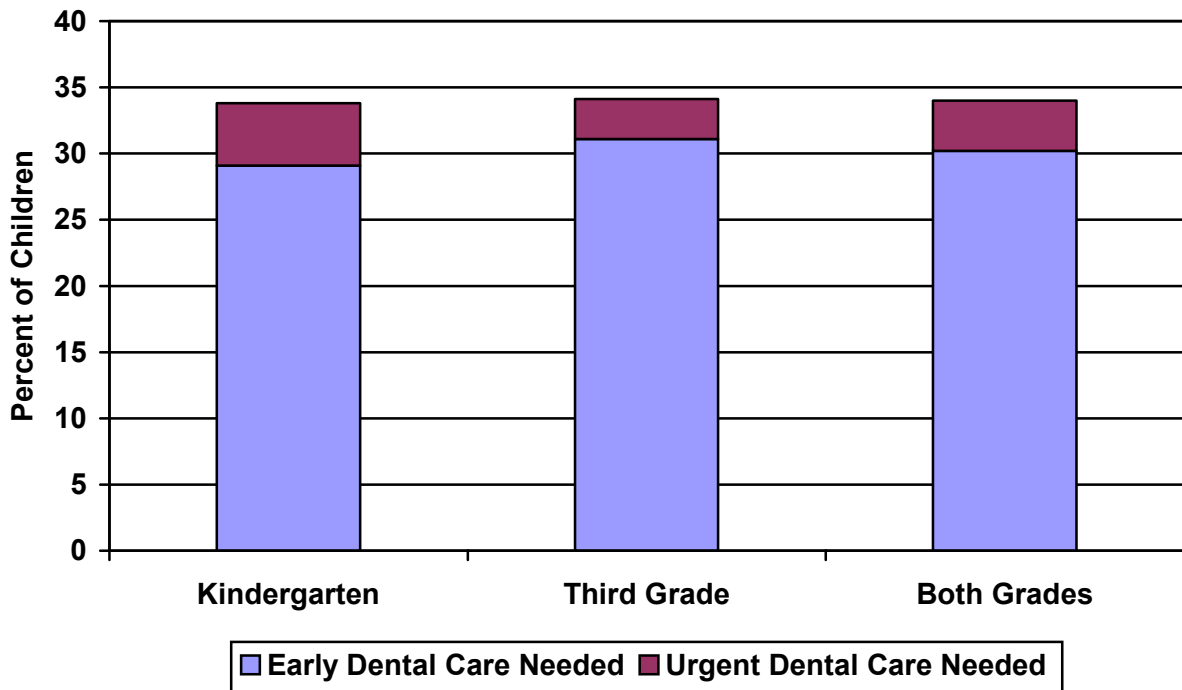
Refer to Table 1.

---

<sup>1</sup> National Center for Education in Maternal and Child Health. Oral health and learning: when children’s oral health suffers, so does their ability to learn, <http://www.mchoralhealth.org/PDFs/Learningfactsheet.pdf>.

**KEY FINDING #2: MORE THAN 2,850 KINDERGARTENERS AND THIRD GRADERS IN ORANGE COUNTY HAVE SERIOUS PROBLEMS FROM DENTAL DISEASE – ABSCESSSES, INFLAMMATION AND PAIN. ALL OF THESE CAN LEAD TO REDUCED SCHOOL PERFORMANCE, LACK OF CONCENTRATION AND ABSENTEEISM.**

**Need for Early and Urgent Dental Care**



Thirty-four percent of the children screened had a need for dental care; 30% needed non-urgent or early dental care while an additional **4% needed urgent dental care** because of pain or infection. In 2004-2005 there were more than 75,500 kindergarten and 3<sup>rd</sup> grade children in Orange County. If 4% are in urgent need of dental care, this means that more than 2,850 kindergarten and 3<sup>rd</sup> grade children are in the classroom in pain or with an oral infection.

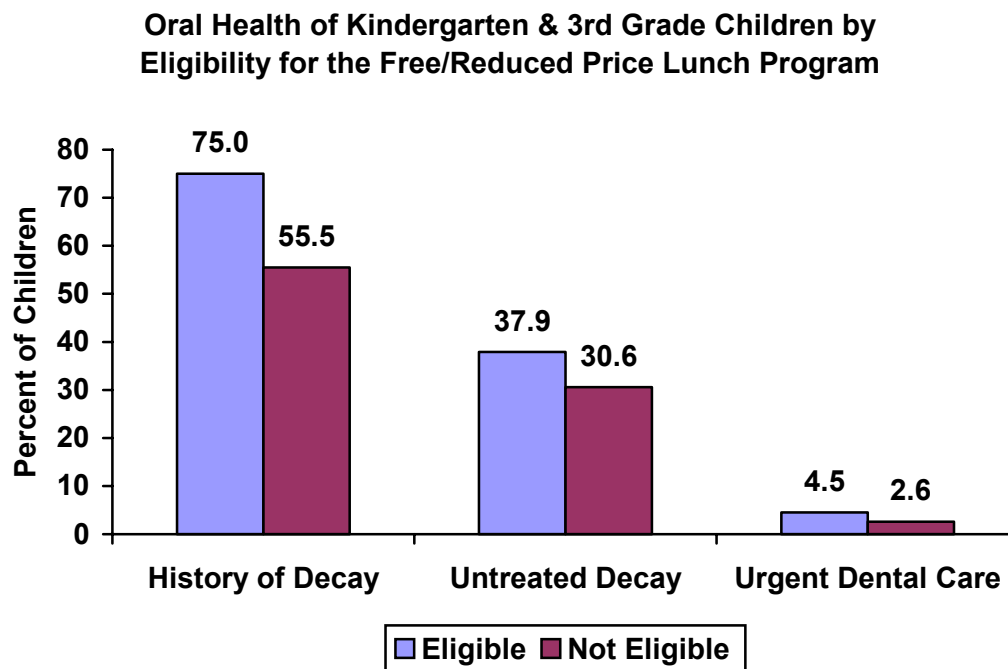
It should be noted that the information for the *Orange County Smile Survey* was obtained through a dental screening rather than a complete diagnostic dental examination. Dental radiographs (x-rays) were not taken and more advanced diagnostic tools were not used. For this reason, it is assumed that the **proportion of children needing dental care is actually an underestimation.**

Refer to Table 1.

---

**KEY FINDING #3: POOR CHILDREN AND CHILDREN OF COLOR ARE MUCH MORE LIKELY TO HAVE TOOTH DECAY AND SUFFER THE CONSEQUENCES OF UNTREATED DISEASE.**

---



Eligibility for the free and/or reduced price lunch (FRL) program is often used as an indicator of overall socioeconomic status. To be eligible for the FRL program during the 2004-2005 school year, annual family income for a family of four could not exceed \$34,873.<sup>1</sup> Parents were asked to provide information on their child’s participation in the FRL program. Children who participate in the FRL program, compared to those who do not participate had a higher prevalence of decay experience (75% vs. 56%), untreated decay (38% vs. 31%), and urgent dental care needs (5% vs. 3%).

Children who participate in the FRL program, compared to those who do not participate were less likely to have private dental insurance (13% vs. 44%) and less likely to have parents that speak English at home (38% vs. 69%).

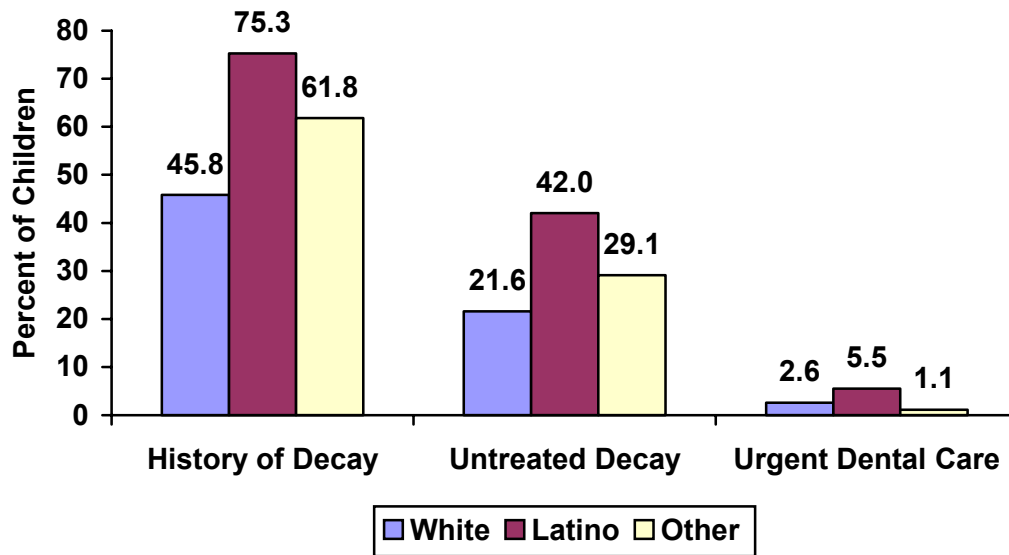
Refer to Table 2.

---

<sup>1</sup> U.S. Department of Agriculture, Child Nutrition Programs, School Lunch Program, Income Eligibility Guidelines SY 2004-2005, <http://www.fns.usda.gov/cnd/governance/notices/iegs/IEGs04-05.pdf>.

**KEY FINDING #3 (CONT.): POOR CHILDREN AND CHILDREN OF COLOR ARE MUCH MORE LIKELY TO HAVE TOOTH DECAY AND SUFFER THE CONSEQUENCES OF UNTREATED DISEASE.**

**Oral Health of Kindergarten & 3rd Grade Children by Race and Ethnicity**



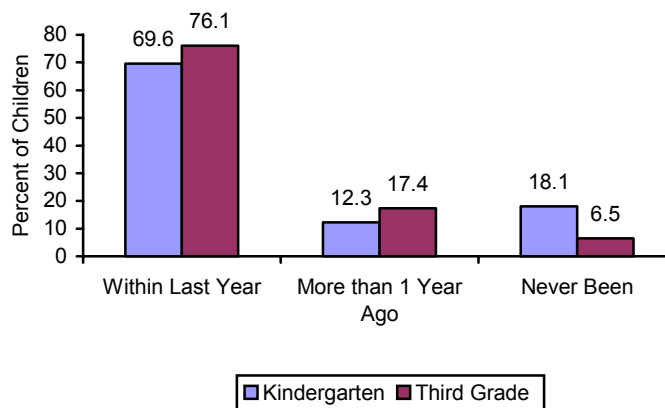
As depicted in the graph, the Latino and other minority children screened had more decay experience and untreated tooth decay than non-Latino white children. In addition to having more tooth decay, Latino children were less likely to have private dental insurance. Nineteen percent of the Latino children had private dental insurance compared to 38% of other minority and 55% of white children. Oral health disparities between racial/ethnic groups in Orange County are further affected by socioeconomic status. Sixty-three percent of the Latino children participated in the FRL program compared to 35% of other minority and 10% of white children.

Refer to Table 3.

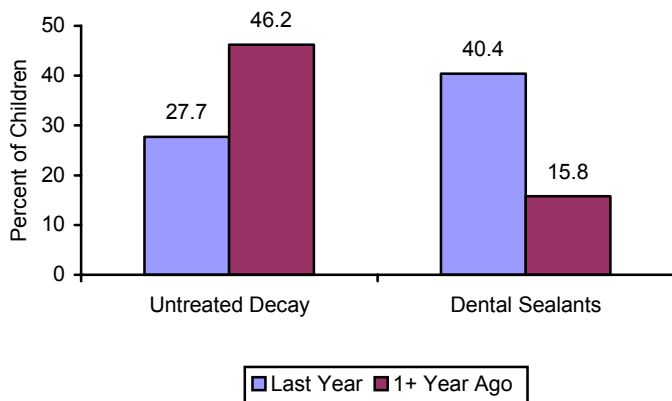
**KEY FINDING #4: MANY CHILDREN IN ORANGE COUNTY DO NOT GET THE DENTAL CARE THEY NEED.**

The American Academy of Pediatric Dentistry encourages parents and other care providers to help every child establish a dental home by 12 months of age.<sup>1</sup> This is important because a dental home provides comprehensive oral health care, individualized preventive programs, plus anticipatory guidance about growth and development issues. Unfortunately, a large proportion (18%) of the kindergarten children screened **had never been to a dentist**, and a surprising 7% of the third grade children had never been to the dentist.

**Time Since Last Dental Visit for Orange County's Children**



**Percent of Children with Untreated Decay and Dental Sealants by Dental Visit in Last Year**



As would be expected, children who have not been to the dentist in the last year were more likely to have untreated decay and less likely to have dental sealants. Among the kindergarten and 3rd grade children, 46% of those who had not been to the dentist in the last year had untreated decay compared to 28% of those who had been to the dentist. The prevalence of sealants was more than twice as high among those 3<sup>rd</sup> graders who had been

to the dentist in the last year, compared to those who had not been to the dentist (40% vs. 16%).

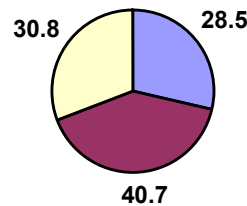
Refer to Table 4.

<sup>1</sup> American Academy of Pediatric Dentistry. Policy on the Dental Home. Accessed December 2004, [www.aapd.org/media/Policies\\_Guidelines/P\\_DentalHome.pdf](http://www.aapd.org/media/Policies_Guidelines/P_DentalHome.pdf).

**KEY FINDING #4 (CONT.): MANY CHILDREN IN ORANGE COUNTY DO NOT GET THE DENTAL CARE THEY NEED.**

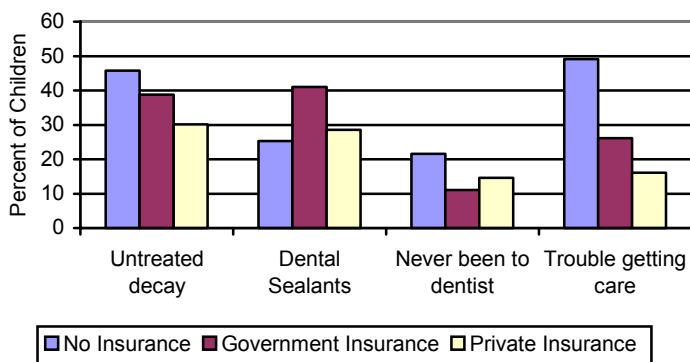
Having dental insurance coverage is an important factor in whether or not children are getting dental care. Of the parents that provided information on dental insurance coverage, 29% reported having private insurance, 41% reported some type of government funded insurance including Medicaid and Healthy Families while 31% reported having no dental insurance coverage for their child.

**Parent Reported Dental Insurance Coverage**



Children with no dental insurance or different types of insurance have different oral health status. Of the kindergarten and 3<sup>rd</sup> grade children without dental insurance, 46% had untreated decay compared to 39% of those with government insurance and 30% of those with private insurance. A higher percent of children with no insurance had never been to the dentist (22%) compared to children with either private or government funded insurance (15% and 11% respectively).

**Oral Health of Orange County's Children by Dental Insurance**



Parents were asked if there was a time in the past year that they wanted dental care for their child but could not get it. Of the parents that responded, 17% said they had trouble accessing care. The primary reasons listed by parents for not being able to access dental care were **“no insurance”** and **“could not afford it”**. Parents of children with no dental insurance coverage, or with government funded insurance,

were more likely to report that they were unable to obtain needed dental care. Forty-nine percent of those without insurance reported having trouble accessing dental care compared to 26% of those with government and 16% of those with private insurance.

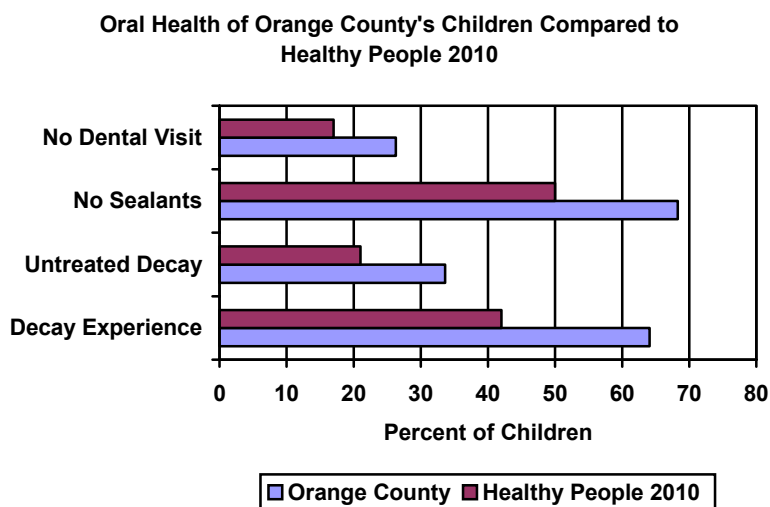
In terms of dental sealants, 3<sup>rd</sup> grade children with government funded insurance had the highest prevalence of dental sealants (41%) while 29% of children with private insurance and 25% of children with no insurance had dental sealants. Refer to Table 5.

---

**KEY FINDING #5: COMPARED TO NATIONAL ORAL HEALTH OBJECTIVES, ORANGE COUNTY DOES NOT FARE WELL.**

---

*Healthy People 2010* is a set of health objectives for the Nation to achieve over the first decade of this century. The objectives were developed through a broad consultation process, built on the best scientific knowledge and designed to measure programs over time. By using *Healthy People 2010* objectives, communities can measure how the health of their community compares to national objectives.<sup>1</sup>



*Healthy People 2010* includes the following oral health objectives for children aged 6-8 years.

- Reduce the proportion of children with tooth decay experience in either their primary or permanent teeth to 42 percent.
- Reduce the proportion of children with untreated tooth decay in primary or permanent teeth to 21 percent.
- Reduce the proportion of 3<sup>rd</sup> grade children who **do not** have dental sealants to 50%.
- Reduce the proportion of children aged 2 years and older who **do not** use the oral health care system each year to 17 percent.

As presented in the graph, if the Healthy People 2010 goals are to be met in Orange County, **significant improvements in oral health must be accomplished in the next 5 years**. Sixty-four percent of the Orange County kindergarten and 3<sup>rd</sup> grade children had decay experience, 34% had untreated decay, and 68% of the 3<sup>rd</sup> graders had no dental sealants; substantially higher than the Healthy People objectives of 42%, 21% and 50%. In addition, 26% of the children had not been to the dentist in the last year compared to the national objective of 17%.

---

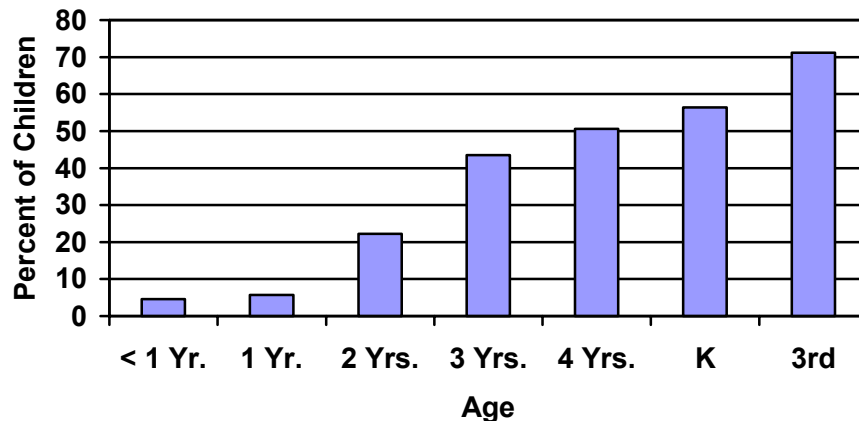
<sup>1</sup> *Healthy People* is managed by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. Additional information on *Healthy People 2010* can be obtained at the *Healthy People* website, [www.healthypeople.gov](http://www.healthypeople.gov).

---

**KEY FINDING #6: Increasing resources for dental treatment are needed, but will not alone stem the tide of dental disease. More resources for early prevention activities are also needed.**

---

**Prevalence of Decay Experience by Age  
San Joaquin (1-4 years) & Orange County (K & 3rd)**



*Healthy Smiles San Joaquin* – a county wide oral health program funded by the San Joaquin County First Five Commission – recently completed an oral health needs assessment of preschool children in San Joaquin County, CA. Data from this survey is the only available data in California on the oral health of very young high-risk children. As shown in the graph, more than 20% of 2 years olds in San Joaquin County had dental decay and the percentage with a history of decay rises with age. In order to prevent disease, efforts must be made before the onset of disease in a large portion of the population. For this reason, it is essential that the medical and dental professions focus dental disease prevention efforts on children less than 2 years of age because **“two is too late and five is way too late”**.

The American Academy of Pediatric Dentistry recommends several strategies for preventing decay in young children – some targeted toward the mother or primary caregiver and some targeted toward the infant.<sup>1</sup> For the mother, general anticipatory guidance should be given which focuses on use of fluoride, oral hygiene, diet, treatment of decay, transmission of cavity causing bacteria, and xylitol chewing gums. For the infant, prevention strategies include fluoride exposure, good oral hygiene, and limiting exposure to sugars in all forms.

For high-risk children, dental decay prevention strategies should be an integral part of health care messages given by pediatricians, nurses, health department staff, teachers, health educators, and day-care providers.

---

<sup>1</sup> American Academy of Pediatric Dentistry. Clinical Guideline on Infant Oral Health. Accessed December 2004, [www.aapd.org/media/Policies\\_Guidelines/G\\_InfantOralHealthCare.pdf](http://www.aapd.org/media/Policies_Guidelines/G_InfantOralHealthCare.pdf)

## DATA TABLES

**Table 1: Percent of Orange County's Kindergarten and 3<sup>rd</sup> Grade Children with a History of Tooth Decay, Untreated Decay, Rampant Decay, Dental Sealants, and Treatment Need Stratified by Grade**

	<b>Kindergarten (n=1,175)</b>	<b>Third Grade (n=1,089)</b>	<b>Both Grades (n=2,264)</b>
% with a history of tooth decay	56.4	71.2	64.1
% with untreated decay	33.3	33.9	33.6
% with rampant decay+	19.4	25.0	22.3
% with dental sealants	NA*	31.7	NA*
% needing treatment			
Early dental care needed	29.1	31.1	30.2
Urgent dental care needed	4.7	3.0	3.8

+ Rampant decay: Seven or more teeth with a history of tooth decay (treated and/or untreated decay)

\* Not applicable: This indicator measures the prevalence of sealants on permanent 1<sup>st</sup> molars. Since the majority of kindergarten children do not yet have 1<sup>st</sup> molars, this indicator is only calculated for 3<sup>rd</sup> grade children.

**Table 2: Oral Health Status of Orange County’s Kindergarten and 3<sup>rd</sup> Grade Children Stratified by Participation in the Free or Reduced Price Lunch Program**

<b>Variable</b>	<b>Does not Participate (n=1,041)</b>	<b>Participates (n=809)</b>
% with decay experience	55.5	75.0
% with untreated decay	30.6	37.9
% with rampant decay	16.4	28.4
% with dental sealants*	29.4	38.7
% needing treatment	30.6	39.4
% needing urgent treatment	2.6	4.5
Race/ethnicity		
% White	45.3	6.3
% Hispanic	37.6	81.9
% Other minority	17.1	11.8
Dental insurance coverage		
% with private insurance	43.8	13.3
% with government insurance	26.5	54.1
% with no insurance	29.8	32.7
Dental visit in last year (% yes)	72.9	73.4
English spoken at home (% yes)	68.9	38.2

\* Information on dental sealants is limited to 3<sup>rd</sup> grade children only.

**Table 3: Oral Health Status of Orange County's Kindergarten and 3<sup>rd</sup> Grade Children Stratified by Race/Ethnicity**

<b>Variable</b>	<b>White (n=684)</b>	<b>Latino (n=1,214)</b>	<b>Other (n=354)</b>
% with decay experience	45.8	75.3	61.8
% with untreated decay	21.6	42.0	29.1
% with rampant decay	14.4	28.0	20.5
% with dental sealants*	28.9	38.5	23.5
% needing treatment	20.8	45.6	30.6
% needing urgent treatment	2.6	5.5	1.1
Dental insurance coverage			
% with private insurance	55.1	18.6	37.6
% with government insurance	16.5	48.3	38.9
% with no insurance	28.4	33.1	23.5
Dental visit in last year (% yes)	77.6	69.7	75.7
English spoken at home (% yes)	98.7	35.2	60.2
FRL participation (% yes)	9.8	62.9	34.9

\* Information on dental sealants is limited to 3<sup>rd</sup> grade children only.

**Table 4: Oral Health Status of Orange County's Kindergarten and 3<sup>rd</sup> Grade Children Stratified by Time Since Last Dental Visit**

<b>Variable</b>	<b>Within Last Year (n=1,384)</b>	<b>More Than 1 Year Ago (n=520)</b>
% with decay experience	66.5	57.5
% with untreated decay	27.7	46.2
% with rampant decay	23.1	18.1
% with dental sealants*	40.4	15.8
% needing any treatment	28.7	46.1
% needing urgent treatment	2.8	7.1
Race/ethnicity		
% White	29.6	22.9
% Hispanic	55.0	64.0
% Other minority	15.4	13.1
Dental insurance coverage		
% with private insurance	30.3	26.1
% with government insurance	45.3	30.5
% with no insurance	24.4	43.3
English spoken at home (% yes)	57.4	49.4
FRL participation (% yes)	43.6	43.1

\* Information on dental sealants is limited to 3<sup>rd</sup> grade children only.

**Table 5: Oral Health Status of Orange County’s Kindergarten and 3rd Grade Children Stratified by Grade and Insurance Type**

	<b>Private Insurance (n=336)</b>	<b>Government Insurance (n=482)</b>	<b>No Insurance (n=365)</b>
% with decay experience	58.6	75.7	68.8
% with untreated decay	30.1	38.8	45.8
% with rampant decay	17.6	32.0	23.3
% with dental sealants*	28.6	41.0	25.3
% needing treatment	30.7	40.3	46.6
% needing urgent treatment	5.4	3.7	6.8
Race/ethnicity			
% White	39.0	8.1	18.4
% Hispanic	44.1	79.7	72.0
% Other minority	16.9	12.2	9.6
Dental visit in last year (% yes)	70.2	75.1	53.4
Never been to dentist (% yes)	14.6	11.1	21.6
English spoken at home (% yes)	75.2	34.5	37.8
FRL participation (% yes)	22.2	65.7	50.7

\* Information on dental sealants is limited to 3<sup>rd</sup> grade children only.

# APPENDIX

## CALIFORNIA SMILE SURVEY

Please complete this form and return it to your child's teacher tomorrow.

Child's Name: \_\_\_\_\_ Child's Teacher: \_\_\_\_\_

\_\_\_\_ Yes, I give permission for my child to have his/her teeth checked.

\_\_\_\_ No, I do not give permission for my child to have his/her teeth checked.

\_\_\_\_\_  
Signature of Parent or Guardian:

\_\_\_\_\_  
Date:

Please answer these optional questions to help us learn more about dental care in California. Your answers will remain private and will not be shared. If you do not want to answer the questions, you may still give permission for your child to have his or her teeth checked.

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

- 1 \_\_\_\_ We do not have any dental insurance
- 2 \_\_\_\_ We have private insurance that we either purchase directly or obtain through work
- 3 \_\_\_\_ We have Medi-Cal (Medicaid)
- 4 \_\_\_\_ We have Healthy Families Insurance
- 5 \_\_\_\_ We have another type of government dental insurance such as military, IHS, or county sponsored plan
- 6 \_\_\_\_ Other: \_\_\_\_\_

2. How long has it been since your child last visited a dentist or a dental clinic for any reason? (Check one)

- 1 \_\_\_\_ Within the past year
- 2 \_\_\_\_ Within the past 2 years
- 3 \_\_\_\_ Within the past 5 years
- 4 \_\_\_\_ My child has never been to the dentist

3. During the past year, was there a time when you wanted dental care for your child but could not get it?

- 1 \_\_\_\_ Yes (go to question 4)
- 2 \_\_\_\_ No (go to question 5)
- 3 \_\_\_\_ Don't know (go to question 5)

4. The last time your child could not get the dental care you wanted for him/her, what was the main reason he/she could not get care? (Check all that apply)

- 1 \_\_\_\_ Could not afford it
- 2 \_\_\_\_ No insurance
- 3 \_\_\_\_ Dentist did not accept Medi-Cal/Healthy Families
- 4 \_\_\_\_ Dental problems not serious enough
- 5 \_\_\_\_ Wait too long in clinic/office
- 6 \_\_\_\_ Difficulty in getting appointment
- 7 \_\_\_\_ Don't like/trust/believe in dentists
- 8 \_\_\_\_ No dentist available
- 9 \_\_\_\_ Didn't know where to go
- 10 \_\_\_\_ No way to get there
- 11 \_\_\_\_ Hours not convenient
- 12 \_\_\_\_ Dental staff doesn't speak my language
- 13 \_\_\_\_ Health of another family member
- 14 \_\_\_\_ Other reason \_\_\_\_\_

5. Does your child participate in the free or reduced price lunch program? (Check one)

- 1 \_\_\_\_ No
- 2 \_\_\_\_ Yes

6. Which of the following describes your child (Check all that apply):

- 1 \_\_\_\_ White
- 2 \_\_\_\_ Black or African American
- 3 \_\_\_\_ Hispanic or Latino
- 4 \_\_\_\_ Asian
- 5 \_\_\_\_ American Indian or Alaska Native
- 6 \_\_\_\_ Native Hawaiian or Pacific Islander

**THANK YOU FOR PARTICIPATING IN THE CALIFORNIA SMILE SURVEY!**