Fresno County Smile Survey

An Oral Health Assessment of Elementary School Children

February 2006

Department of Community Health
Education and Prevention Services
Children’s Dental Programs
www.fresnohumanservices.org
ACKNOWLEDGEMENTS

The Fresno County Smile Survey is the result of the collaboration between the Fresno County Department of Community Health and the Dental Health Foundation.

Conducted from February 2005 through April 2005, the Fresno County Smile Survey is part of the statewide California Smile Survey in which 21,000 Kindergarten and 3rd grade students received dental screenings at 186 elementary schools throughout California. The Fresno County Smile Survey report includes an additional data subset drawn from dental screenings of 1,473 Kindergarten and 3rd grade students from 18 elementary schools to provide a local "snapshot" of the oral health status of children in Fresno County. The Dental Health Foundation received support from Health Resources and Services Administrations (HRSA), the California Dental Association, and The California Endowment for the statewide survey. Additional support from the Fresno County Department of Community Health was received for the Fresno County Smile Survey.

The Fresno County Department of Community Health would like to thank the following volunteers who assisted in conducting dental screenings throughout Fresno County: Luisa Goodwin, RDH, Liz Koch, RDH, Carol McGuire, RDH, Mimi Myers, RDH, Judy Mann, RDH, and William Noblett, DDS.

The Dental Health Foundation works through community partnerships to promote oral health for all through advocacy, education, and public policy development. The Foundation works to bring the latest findings in dental research to the general public, educators, and health practitioners, thereby bridging the gap between scientific knowledge and its application at the community level.

The Fresno County Department of Community Health established the Children’s Dental Programs in 1999. The Programs include: 1) dental assessment and treatment for low-income children provided by the Children’s Mobile Dental Program; 2) local implementation of the California Dental Disease Prevention Program to provide training and support for elementary school teachers to incorporate daily oral health practices in the classroom; and 3) the Early Childhood Caries Prevention Project that promotes appropriate oral health practices for pregnant women, infants, and young children, through parent education, provider training, and public awareness campaigns.

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**EXECUTIVE SUMMARY**

Dental disease is a preventable infectious disease process affecting both children and adults. By the age of 18, about 80% of children in the United States have experienced dental disease in the form of tooth decay.¹

While the prevalence of dental disease in the U.S. has declined over the last 30 years, some populations suffer disproportionately from dental disease – particularly low-income children. Two major factors affect an individual’s overall oral health status: the dental disease rate and the 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.

The public perception is that dental disease is a natural and minor occurrence that deserves little attention. However, if left untreated, dental disease can lead to difficulty in speaking, chewing, and swallowing; needless pain and suffering; loss of self-esteem; lost school days; and an increase in the cost of dental care. In 1996, children ages 5 to 17 missed 1,611,000 school days due to acute dental problems – an average of 3.1 days per 100 students.² The good news is that most dental disease is preventable. Some of the methods to prevent dental disease include receiving dental sealants, drinking fluoridated water, using toothpaste that contains fluoride, limiting sugar intake, and having access to dental care.

A landmark report, California Smile Survey, released in February 2006 by the Dental Health Foundation found that by 3rd grade, almost two-thirds of the children in California are affected by dental disease, making it the number one children’s health problem in the state. From February through April 2005, more than 21,000 children received dental screenings at 186 elementary schools throughout California.

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² 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.
The Fresno County Department of Community Health participated in the statewide screening and produced an additional data subset drawn from dental screenings of 1,473 Kindergarten and 3rd grade students from 18 elementary schools throughout Fresno County during the 2004-2005 school year to provide a “snapshot” of the oral health status of local children.

**KEY FINDINGS**

- Sixty-five percent of Kindergarten and almost 80% of 3rd grade students have experienced dental disease.
- Four out of ten children have untreated dental disease.
- Three percent of children screened needed urgent care because of abscesses, inflammation, and/or pain.
- Poor children and non-white children are much more likely to have dental disease and suffer the consequences of untreated disease.
- Eighteen percent of Kindergarten and seven percent of 3rd grade students screened have never seen a dentist.
- Insurance availability and type are factors in children receiving dental care.
- Fresno County’s oral health status for children is well above the national Healthy People 2010 oral health objectives of no more than 40% of children with dental disease and 21% of untreated dental disease.
- Fresno County children had a substantially higher prevalence of dental disease, untreated disease, and rampant dental disease compared to children throughout the state.

**KEY RECOMMENDATIONS**

As a result of the findings from the Fresno County Smile Survey, the Fresno County Department of Community Health, in collaboration with the Fresno County Metropolitan Oral Health Advisory Council, proposes the following recommendations to improve the oral health status of Fresno County’s children.

1. **Insurance Coverage**

   1a. Expand outreach programs to low income Fresno County residents for Medi-Cal/Denti-Cal, Healthy Families, and Children’s Health Initiative (Healthy Kids) to increase the number of children with access to health and dental care.

   1b. Increase reimbursement rates for dental providers participating in California’s public dental insurance programs.
According to the UCLA Center for Health Policy Research California’s Growing uninsured Population and Options to Expand Coverage (May 2000), approximately two-thirds of the uninsured children in California should be eligible for Medi-Cal/Denti-Cal or Healthy Families. In 2002, the Fresno County Department of Community Health identified over two-thirds of families, who reported having no dental insurance during registration for children’s dental services, actually had Denti-Cal insurance through the Medi-Cal program but did not know it. In addition, reimbursement rates for providers through California’s public dental insurance programs are significantly lower than most states and insufficient to attract participation by many private Fresno County dental providers.

2. Fluoridation of Wells in the City of Fresno

Consider fluoridation to all 250 points of entry in the Fresno Water System.

Numerous studies have documented that water fluoridation can reduce dental disease in the primary (“baby”) teeth of children under five years of age by 60%. Currently, two rural communities in Fresno County, Riverdale and Coalinga, have sufficient fluoride through either natural or additive means and 23 wells serving approximately 10% of the City of Fresno include fluoride additives.

3. Increase Number of Available Pediatric Dentists

3a. Establish incentives to increase retention of pediatric dentists practicing in rural areas of Fresno County.

3b. Increase the number of general dentists trained on the management of young children during routine dental care.

Of the 866,722 Fresno County residents, half live within the smaller incorporated cities and unincorporated rural areas of the County. There are only six pediatric dentists practicing in the County, all located within the Fresno/Clovis metropolitan area.

4. Access to Sedation Services

4a. Increase the reimbursement rate for dental treatment services requiring sedation by State insurance programs.

4b. Support and encourage local hospitals to enhance their capacity to provide dental treatment services requiring sedation.

Fresno County dentists are experiencing a shortage of hospital operating rooms with the capacity to provide dental treatment services requiring sedation. Successful dental treatment for young children often requires sedation. Dentists are competing
for sedation space in overcrowded operating rooms. The reimbursement rate for providing dental treatment services, requiring sedation, has been reduced as well.

5. **Treatment is good. Prevention is better.**

Increase State funding for prevention programs that support local oral health prevention and education in preschool and elementary school programs.

Expand efforts for prevention services for children including sealants and oral health instruction in preschools and elementary schools to stem dental disease early in a child’s life. Include education for parents that promotes appropriate oral health practices for the whole family.

*Healthy Smiles San Joaquin* – a countywide 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. Data from this survey is the only available data in California on the oral health of very young high-risk children. More than 20% of 2 year olds in San Joaquin County have dental disease and the percentage with a history of dental disease rises with age. In order to prevent dental disease, efforts must be made before the onset of dental 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. General anticipatory guidance for the mother should focus on fluoride use, proper oral hygiene, diet, treatment of decay, reducing transmission of cavity-causing bacteria, and xylitol chewing gums. Additionally, general anticipatory guidance for the infant should focus on prevention strategies to include fluoride exposure, proper oral hygiene, and limiting exposure to sugars in all forms.

For high-risk children, dental disease 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.

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Fresno County Smile Survey

An Oral Health Assessment of Elementary School Children
INTRODUCTION

Tooth decay, also referred to as dental disease, 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.¹

Although preventable, dental disease affects more than half of all children by the 3rd grade; about 80 percent have decay by the time students finish high school.² If left untreated, dental disease can lead to difficulty in speaking, chewing, and swallowing; needless pain and suffering; loss of self-esteem; lost school days; and an increase in the cost of dental care. In 1996, students, ages 5 to 17, missed 1,611,000 school days due to acute dental problems – an average of 3.1 days per 100 students.³

While the prevalence and severity of dental disease have declined dramatically among school-aged children in the United States, it remains a significant problem for some populations – particularly for poor children.⁴ National data indicate that 80% of dental disease in children is concentrated in 25% of the child population. Poor people and racial/ethnic minority groups have more untreated dental 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 dental disease compared to a higher income non-Hispanic white child.⁵

Fresno County is home to an ethnically diverse population, where Mexican-American children make up 47% of the population under 18 years of age.⁶ Poverty is also a problem for a significant portion of Fresno County residents. According to the U.S. Census Bureau, 32% of families in Fresno County with children less than 18 years of age live below the federal poverty level.

³ 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.
Fresno County, the fifth largest County in California, extends over 6,000 square miles. The Cities of Fresno and Clovis make up the largest metropolitan area within the County and approximately half of the 866,722 county residents reside there\textsuperscript{7}. The other half of the population is located within the smaller incorporated cities and throughout the unincorporated rural areas of the County. The majority of dental service providers are located within the metropolitan Fresno/Clovis area. Of the more than 540 dentists in practice in Fresno County, only 45 are located in the rural communities where many of the poor children reside. Fifty-six dentists are listed with the County’s Child Health and Disability Prevention Program as Denti-Cal providers; of those, 20 are located in the rural areas of Fresno County.\textsuperscript{8}

Fresno County is represented in the results of the statewide sample of children screened as reported in the California Smile Survey. The Fresno County Department of Community Health additionally invested in a larger Fresno County sample size to increase the overall “snapshot” of oral health status among local elementary school children. This report includes the aggregated results from all Fresno County screening sites.

\section*{METHODS}

During the 2004-2005 school year, oral health screenings were completed at 18 randomly selected elementary schools throughout Fresno County. Trained dental examiners completed all of the screenings utilizing the diagnostic criteria developed and published by the Association of State and Territorial Dental Directors, \textit{Basic Screening Surveys: An Approach to Monitoring Community Oral Health}. Five oral health indicators were collected for each child screened: 1) presence of decayed teeth, 2) presence of filled teeth, 3) presence of dental sealants, 4) history of rampant decay (defined as decay experience on seven or more teeth), and 5) treatment urgency. In addition to the oral health indicators, parents were asked to complete an optional questionnaire that obtained information regarding dental insurance, last dental visit, trouble accessing dental care, participation in the free or reduced price lunch program, 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.

A combination of passive and positive consent was used. Thirteen schools used positive consent, which means only those students that returned a consent form were screened. The other five schools used passive consent, where all students were screened unless their parent specifically stated that they did not want their child screened.

Epi Info Version 3.3.2 was utilized 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. The results were confirmed using the state’s dental screening results.

\footnotesize{\textsuperscript{7} United States Census Bureau; State and County QuickFacts: Population, 2004 Estimate. September 2005. \textsuperscript{8} Fresno County Child Health and Disability Prevention Program; Medi-Cal Dentist Referral List. October 2004.}
for Disease Control and Prevention. Data obtained through the oral health screening have been adjusted to account for both the sampling scheme and non-response.

**RESULTS**

In Fresno County, 729 Kindergarten and 744 3rd grade students received a dental screening. About half of the children screened were male (47%), 51% were Hispanic, 29% were White, 11% were Asian, and 5% were African-American. More than 45% 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 seven key findings.

**KEY FINDING #1:**
- Sixty-five percent of Kindergarten and almost 80% of 3rd grade students have experienced dental disease.
- Four out of ten children have untreated dental disease.

<table>
<thead>
<tr>
<th>Percent of Fresno County Students with a History of Dental Disease and Untreated Dental Disease in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten 3rd Grade Both Grades</td>
</tr>
<tr>
<td>N=729 N=744 N=1,473</td>
</tr>
<tr>
<td>History of Dental Disease Untreated Dental Disease</td>
</tr>
<tr>
<td>64.6 39.8</td>
</tr>
<tr>
<td>79.6 42.7</td>
</tr>
<tr>
<td>72.2 41.2</td>
</tr>
</tbody>
</table>

Sixty-five percent of Kindergarten and almost 80% of 3rd grade students screened had a history of dental disease, which means students had at least one tooth that was either decayed or had been filled because of dental disease.

The proportion of children with untreated dental disease was fairly consistent across grades with about four out of every ten children having untreated dental disease.

See Appendix B, Table 1.
KEY FINDING #2: Three percent of children screened needed urgent care because of abscesses, inflammation, and/or pain.

Forty-one percent of the children screened had a need for dental care, 38% needed non-urgent or early dental care, and an additional three percent needed urgent dental care because of pain or infection. In 2004-2005 there were more than 29,000 Kindergarten and 3rd grade students in Fresno County. If three percent are in urgent need of dental care, this means that more than 725 Kindergarten and 3rd grade students experience pain or infection related to dental disease.

Given that the Fresno County Smile Survey results were obtained through a dental screening and not a complete diagnostic dental examination, which includes dental radiographs (x-rays), it is assumed that the proportion of children needing dental care is actually an underestimation.

See Appendix B, Table 1.
Eligibility for the Free or Reduced Price Meal (FRM) Program is often used as an indicator of overall socioeconomic status. To be eligible for the FRM Program during the 2004-2005 school year, annual family income for a family of four could not exceed $34,873.9 Parents were asked to provide information on their child’s participation in the FRM program. Children who participate in the FRM Program, compared to those who do not participate, had a higher prevalence of dental disease experience (82% vs. 55%), untreated dental disease (48% vs. 28%), and urgent dental care needs (3% vs. 1%).

Children who participate in the FRM Program, compared to those who do not participate, were less likely to have private dental insurance (16% vs. 38%), less likely to have visited the dentist in the last year (66% vs. 72%), and less likely to have parents that speak English at home (42% vs. 65%).

See Appendix B, Table 2.

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Comment [dhk8]: Rounding of percentages compared to graphs

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KEY FINDING #3: Poor children and non-white children are much more likely to have dental disease and suffer the consequences of untreated disease.

Latino and other non-white children screened had more dental disease experience and untreated dental disease than non-Latino white children. In addition to having more dental disease, Latino children were less likely to have private dental insurance. Fifteen percent of the Latino children had private dental insurance compared to 25% of other racial/ethnic groups and 46% of white children. Oral health disparities between racial/ethnic groups in Fresno County are further affected by socioeconomic status. Sixty-six percent of the Latino children participated in the FRM Program compared to 49% of other minority and 23% of white children.

See Appendix B, Table 3.
KEY FINDING #4: Eighteen percent of Kindergarten and seven percent of 3rd grade students screened have never seen a dentist.

Fifteen percent of Kindergarten and 22% of 3rd grade students screened had not seen a dentist in more than one year.

Eighteen percent of the Fresno County Kindergarten and seven percent of 3rd grade students screened had never been to a dentist.

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.10 This is important because a dental home provides comprehensive oral health care, individualized preventive programs, plus anticipatory guidance about growth and development issues.

Children who have not been to the dentist in the last year were more likely to have untreated dental disease and less likely to have dental sealants. Among the Kindergarten and 3rd grade students, 55% of those who had not been to the dentist in the last year had untreated dental disease, compared to 30% of those who had been to the dentist. The prevalence of sealants was more than twice as high among those 3rd grade students who had been to the dentist in the last year, compared to those who had not been to the dentist (40% vs. 19%).

See Appendix B, Table 4.

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KEY FINDING #5: Insurance availability and type are factors in children receiving dental care.

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, 24% reported having private insurance, 50% reported some type of government-funded insurance, including Medi-Cal and Healthy Families, and 26% reported having no dental insurance coverage for their child.

Children with no dental insurance or different types of insurance have different oral health statuses. Of the Kindergarten and 3rd grade students without dental insurance, 51% had untreated dental disease, compared to 50% of those with government insurance and 34% of those with private insurance. Twenty-eight percent of children who had no insurance had never been to the dentist, compared to 11% of children with private insurance and 12% of children with government-funded insurance.

On the Fresno County Smile Survey, parents were asked “During the past year, was there a time when you wanted dental care for your child but could not get it?” Of the parents that responded, 19% indicated 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 were most likely to report that they were unable to obtain needed dental care. Sixty-two percent of those without insurance reported having trouble accessing dental care compared to 31% of those with government and 22% of those with private insurance coverages.

In terms of dental sealants, 3rd grade students with private insurance had the highest prevalence of dental sealants (38%), while 35% and 19% of students with government-funded insurance and students with no insurance, respectively, had dental sealants.

See Appendix B, Table 5.
KEY FINDING #6: Fresno County’s oral health status for children is well above the national Healthy People 2010 oral health objectives of no more than 40% of children with dental disease and 21% of untreated dental disease.

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.11

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 3rd 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 above graph, if the Healthy People 2010 goals are to be met in Fresno County, significant improvements in oral health must be accomplished in the next 5 years. When comparing the above Healthy People 2010 oral health objectives, Fresno County has not met the objectives. Seventy-two percent of the Fresno County Kindergarten and 3rd grade students had dental disease experience, 41% had untreated dental disease, and 64% of the 3rd grade students had no dental sealants. In addition, 32% of the children had not been to the dentist in the last year compared to the national objective of 17%.

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11 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, http://www.healthypeople.gov.
**KEY FINDING #7:** Fresno County children had a substantially higher prevalence of dental disease, untreated disease, and rampant dental disease compared to children throughout the state.

Compared to all California children, Fresno County children had a substantially higher prevalence of dental disease history, untreated dental disease, and rampant dental disease. In contrast, Fresno County children had a higher prevalence of protective dental sealants.

Some of the differences between California and Fresno County may be partially explained by demographics. A slightly higher proportion of Fresno County children were eligible for the FRM Program (49% vs. 47%) and a slightly lower proportion were from homes where the parents speak English (55% vs. 57%).

![Oral Health of Kindergarten & 3rd Grade Students in California and Fresno County in 2005](image-url)
KEY RECOMMENDATIONS

As a result of the findings of the Fresno County Smile Survey, the Fresno County Department of Community Health, in collaboration with the Fresno County Metropolitan Oral Health Advisory Council, propose the following recommendations to improve the oral health status of Fresno County’s children.

1. **Insurance Coverage**

   1a. Expand outreach programs to low income Fresno County residents for Medi-Cal/Denti-Cal, Healthy Families, and Children’s Health Initiative (Healthy Kids) to increase the number of children with access to health and dental care.

   1b. Increase reimbursement rates for dental providers participating in California’s public dental insurance programs.

   According to the UCLA Center for Health Policy Research *California’s Growing Uninsured Population and Options to Expand Coverage* (May 2000), approximately two-thirds of the uninsured children in California should be eligible for Medi-Cal/Denti-Cal or Healthy Families. In 2002, the Fresno County Department of Community Health identified over two-thirds of families who reported having no dental insurance during registration for children’s dental services actually had Denti-Cal insurance through the Medi-Cal program but did not know it. In addition, reimbursement rates for providers through California’s public dental insurance programs are significantly lower than most states and insufficient to attract participation by many private Fresno County dental providers.

2. **Fluoridation of Wells in the City of Fresno**

   Consider fluoridation to all 250 points of entry in the Fresno Water System.

   Numerous studies have documented that water fluoridation can reduce dental disease in the primary (“baby”) teeth of children under five years of age by 60%. Currently, two rural communities in Fresno County, Riverdale and Coalinga, have sufficient fluoride through either natural or additive means and 23 wells serving approximately 10% of the City of Fresno include fluoride additives.

3. **Increase Number of Available Pediatric Dentists**

   3a. Establish incentives to increase retention of pediatric dentists practicing in rural areas of Fresno County.

   3b. Increase the number of general dentists trained on the management of young children during routine dental care.
Of the 866,722 Fresno County residents, half live within the smaller incorporated cities and unincorporated rural areas of the County. There are only six pediatric dentists practicing in the County, all located within the Fresno/Clovis metropolitan area.

4. Access to Sedation Services

4a. Increase the reimbursement rate for dental treatment services requiring sedation by State insurance programs.

4b. Support and encourage local hospitals to enhance their capacity to provide dental treatment services requiring sedation.

Fresno County dentists are experiencing a shortage of hospital operating rooms with the capacity to provide dental treatment services requiring sedation. Successful dental treatment for young children often requires sedation. Dentists are competing for sedation space in overcrowded operating rooms. The reimbursement rate for providing dental treatment services, requiring sedation, has been reduced as well.

5. Treatment is good. Prevention is better.

Increase State funding for prevention programs that support local oral health prevention and education in preschool and elementary school programs.

Expand efforts for prevention services for children including sealants and oral health instruction in preschools and elementary schools to stem dental disease early in a child’s life. Include education for parents that promotes appropriate oral health practices for the whole family.

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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. General anticipatory guidance for the mother should focus on fluoride use, proper oral hygiene, diet, treatment of decay, reducing transmission of cavity-causing bacteria, and xylitol chewing gums. Additionally, general anticipatory guidance for the infant should focus on prevention strategies to include fluoride exposure, proper oral hygiene, and limiting exposure to sugars in all forms.

For high-risk children, dental disease 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.

# APPENDIX A

## CALIFORNIA SMILE SURVEY

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

<table>
<thead>
<tr>
<th>Child’s Name: _______________________________</th>
<th>Child’s Teacher: ____________________________</th>
</tr>
</thead>
</table>

___ 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 ____ No dentist available
   4 ____ Dental problems not serious enough 5 ____ Didn’t know where to go
   6 ____ Wait too long in clinic/office 7 ____ Don’t know how to get there
   8 ____ Dental staff doesn’t speak my language 9 ____ Health of another family member
   10 ____ No way to get there 11 ____ 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!
Table 1: Percent of Fresno County’s Kindergarten and 3rd Grade Students with a History of Tooth Decay, Untreated Decay, Rampant Decay, Dental Sealants, and Treatment Need Stratified by Grade

<table>
<thead>
<tr>
<th></th>
<th>Kindergarten (n=729)</th>
<th>Third Grade (n=744)</th>
<th>Both Grades (n=1,473)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with a history of tooth decay</td>
<td>64.6</td>
<td>79.6</td>
<td>72.2</td>
</tr>
<tr>
<td>% with untreated decay</td>
<td>39.8</td>
<td>42.7</td>
<td>41.2</td>
</tr>
<tr>
<td>% with rampant decay+</td>
<td>35.4</td>
<td>36.6</td>
<td>36.0</td>
</tr>
<tr>
<td>% with dental sealants</td>
<td>NA*</td>
<td>34.8</td>
<td>NA*</td>
</tr>
<tr>
<td>% needing treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early dental care needed</td>
<td>36.2</td>
<td>38.9</td>
<td>37.6</td>
</tr>
<tr>
<td>Urgent dental care needed</td>
<td>2.9</td>
<td>2.1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

+ 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 first molars. Since the majority of Kindergarten students do not yet have first molars, this indicator is only calculated for 3rd grade students.
Table 2: Oral Health Status of Fresno County’s Kindergarten and 3rd Grade Students Stratified by Participation in the Free or Reduced Price Meal (FRM) Program

<table>
<thead>
<tr>
<th>Variable</th>
<th>Does not Participate (n=508)</th>
<th>Participates (n=490)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with decay experience</td>
<td>55.1</td>
<td>81.6</td>
</tr>
<tr>
<td>% with untreated decay</td>
<td>27.6</td>
<td>48.4</td>
</tr>
<tr>
<td>% with rampant decay</td>
<td>22.1</td>
<td>45.3</td>
</tr>
<tr>
<td>% with dental sealants*</td>
<td>33.8</td>
<td>47.9</td>
</tr>
<tr>
<td>% needing treatment</td>
<td>26.6</td>
<td>35.8</td>
</tr>
<tr>
<td>% needing urgent treatment</td>
<td>1.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>48.0</td>
<td>14.9</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>34.4</td>
<td>65.5</td>
</tr>
<tr>
<td>% Other minority</td>
<td>17.6</td>
<td>19.6</td>
</tr>
<tr>
<td>Dental insurance coverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with private insurance</td>
<td>38.1</td>
<td>15.8</td>
</tr>
<tr>
<td>% with government insurance</td>
<td>33.2</td>
<td>58.7</td>
</tr>
<tr>
<td>% with no insurance</td>
<td>28.8</td>
<td>25.5</td>
</tr>
<tr>
<td>Dental visit in last year (% yes)</td>
<td>71.7</td>
<td>65.7</td>
</tr>
<tr>
<td>English spoken at home (% yes)</td>
<td>65.1</td>
<td>42.1</td>
</tr>
</tbody>
</table>

* Information on dental sealants is limited to 3rd grade students only.
### Table 3: Oral Health Status of Fresno County’s Kindergarten and 3rd Grade Students Stratified by Race/Ethnicity

<table>
<thead>
<tr>
<th>Variable</th>
<th>White (n=432)</th>
<th>Latino (n=743)</th>
<th>Other (n=294)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with decay experience</td>
<td>50.4</td>
<td>80.3</td>
<td>78.6</td>
</tr>
<tr>
<td>% with untreated decay</td>
<td>23.6</td>
<td>45.3</td>
<td>53.7</td>
</tr>
<tr>
<td>% with rampant decay</td>
<td>13.4</td>
<td>44.8</td>
<td>41.3</td>
</tr>
<tr>
<td>% with dental sealants*</td>
<td>38.1</td>
<td>35.5</td>
<td>28.1</td>
</tr>
<tr>
<td>% needing treatment</td>
<td>22.5</td>
<td>45.3</td>
<td>49.4</td>
</tr>
<tr>
<td>% needing urgent treatment</td>
<td>1.7</td>
<td>1.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Dental insurance coverage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with private insurance</td>
<td>45.8</td>
<td>14.9</td>
<td>25.0</td>
</tr>
<tr>
<td>% with government insurance</td>
<td>25.8</td>
<td>58.6</td>
<td>52.4</td>
</tr>
<tr>
<td>% with no insurance</td>
<td>28.3</td>
<td>26.5</td>
<td>22.6</td>
</tr>
<tr>
<td>Dental visit in last year (% yes)</td>
<td>75.4</td>
<td>64.3</td>
<td>66.1</td>
</tr>
<tr>
<td>English spoken at home (% yes)</td>
<td>99.1</td>
<td>30.8</td>
<td>50.0</td>
</tr>
<tr>
<td>FRL participation (% yes)</td>
<td>23.1</td>
<td>65.5</td>
<td>48.9</td>
</tr>
</tbody>
</table>

* Information on dental sealants is limited to 3rd grade students only.
Table 4: Oral Health Status of Fresno County’s Kindergarten and 3rd Grade Students Stratified by Last Dental Visit

<table>
<thead>
<tr>
<th>Variable</th>
<th>Within Last Year (n=704)</th>
<th>More Than 1 Year Ago (n=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with decay experience</td>
<td>68.9</td>
<td>66.6</td>
</tr>
<tr>
<td>% with untreated decay</td>
<td>30.4</td>
<td>54.7</td>
</tr>
<tr>
<td>% with rampant decay</td>
<td>32.0</td>
<td>37.6</td>
</tr>
<tr>
<td>% with dental sealants*</td>
<td>40.4</td>
<td>18.7</td>
</tr>
<tr>
<td>% needing any treatment</td>
<td>29.7</td>
<td>53.5</td>
</tr>
<tr>
<td>% needing urgent treatment</td>
<td>1.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>34.5</td>
<td>24.0</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>48.6</td>
<td>57.4</td>
</tr>
<tr>
<td>% Other minority</td>
<td>16.9</td>
<td>18.6</td>
</tr>
<tr>
<td>Dental insurance coverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with private insurance</td>
<td>29.3</td>
<td>17.0</td>
</tr>
<tr>
<td>% with government insurance</td>
<td>55.2</td>
<td>41.3</td>
</tr>
<tr>
<td>% with no insurance</td>
<td>15.5</td>
<td>41.7</td>
</tr>
<tr>
<td>English spoken at home (% yes)</td>
<td>54.6</td>
<td>49.7</td>
</tr>
<tr>
<td>FRM participation (% yes)</td>
<td>46.2</td>
<td>53.2</td>
</tr>
</tbody>
</table>

* Information on dental sealants is limited to 3rd grade students only.
<table>
<thead>
<tr>
<th></th>
<th>Private Insurance (n=127)</th>
<th>Government Insurance (n=275)</th>
<th>No Insurance (n=145)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with decay experience</td>
<td>66.9</td>
<td>82.5</td>
<td>75.9</td>
</tr>
<tr>
<td>% with untreated decay</td>
<td>33.9</td>
<td>49.8</td>
<td>51.0</td>
</tr>
<tr>
<td>% with rampant decay</td>
<td>28.3</td>
<td>47.1</td>
<td>38.6</td>
</tr>
<tr>
<td>% with dental sealants*</td>
<td>38.2</td>
<td>35.2</td>
<td>19.0</td>
</tr>
<tr>
<td>% needing treatment</td>
<td>34.6</td>
<td>49.6</td>
<td>49.0</td>
</tr>
<tr>
<td>% needing urgent treatment</td>
<td>1.6</td>
<td>4.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>43.3</td>
<td>11.2</td>
<td>23.6</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>40.2</td>
<td>72.8</td>
<td>63.2</td>
</tr>
<tr>
<td>% Other minority</td>
<td>16.5</td>
<td>16.0</td>
<td>13.2</td>
</tr>
<tr>
<td>Dental visit in last year (% yes)</td>
<td>70.5</td>
<td>64.8</td>
<td>33.8</td>
</tr>
<tr>
<td>Never been to dentist (% yes)</td>
<td>10.6</td>
<td>11.9</td>
<td>28.3</td>
</tr>
<tr>
<td>English spoken at home (% yes)</td>
<td>65.4</td>
<td>31.5</td>
<td>40.4</td>
</tr>
<tr>
<td>FRM participation (% yes)</td>
<td>35.3</td>
<td>70.0</td>
<td>53.9</td>
</tr>
</tbody>
</table>

* Information on dental sealants is limited to 3rd grade students only.
Fresno County Board of Supervisors

District 1 • Phil Larson, Chairman
District 2 • Susan Anderson
District 3 • Henry Perea
District 4 • Judy Case
District 5 • Bob Waterston, Vice Chairman

Fresno County Department of Community Health

Edward L. Moreno, M.D., M.P.H. • Director-Health Officer
Kathleen Grassi, R.D., M.P.H. • Assistant Director

The mission of Fresno County Department of Community Health is the promotion, preservation and protection of the community’s health.

We accomplish this through identifying community health needs, assuring the availability of quality health services and providing effective leadership in developing public health policies.

We are committed to working in partnership with our communities to eliminate health disparities.

Fresno County Children’s Dental Programs

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