Children's Oral Health

- Dental disease is more common in U.S. children than any other chronic disease.
- Oral health problems can have negative effects on a child's general health and development.
- School absences from dental disease result in school funding losses.

In 2007, 74.6% of school-age children (5–17 years) in Contra Costa had seen a dentist in the previous six months. This percentage is similar to the percentage for California (70.0%). A higher percentage of children in the greater Bay Area (78.0%) had seen a dentist in the previous six months compared to the state.

Table 1 ■ Children visiting dentist in previous six months

Children ages 5–17 years, 2007

	Number	Prevalence
Contra Costa	140,000	74.6%
Greater Bay Area	929,000	78.0%*
California	5,065,000	70.0%

Estimates are not age-adjusted.
* Significantly higher rate than California.

In 2007, 7.7% of children ages 5–17 in the greater Bay Area (an estimated 93,000 children) missed at least one day of school due to dental problems. This was similar to the percentage (7.0%, an estimated 504,000 children) that missed at least one day of school due to dental problems in the same year in California.

Editor's note: Analyses of missed school days was not possible for Contra Costa due to small sample size, but data from the greater Bay Area and California illustrate how dental problems affect school attendance.

Table 2 ■ Missed school days due to dental problem

Children ages 5–17 years, 2007

	Greater Bay Area		California	
	Students	Percentage	Students	Percentage
No days missed	1,099,000	92.2%	6,736,000	93.0%
One day missed	57,000	4.7%	273,000	3.8%
Two or more days missed	36,000	3.0%	231,000	3.2%

Estimates are not age-adjusted.

School-Based Oral Health Services

Contra Costa Health Services' Children's Oral Health Program is a primary source of free oral health preventive services in Contra Costa. This program provides school-based services to children pre-kindergarten through sixth-grade in schools that are located in ZIP codes that have been prioritized based on multiple poor health outcomes, high rates of poverty and low educational attainment and have at least 75% of the student population eligible for the Free and Reduced Lunch Program. In the 2009-2010 school year, the Children's Oral Health Program provided:[1]

- Classroom education to 10,608 school children on oral hygiene and nutrition.
- Oral health assessments and dental resources to 6,607 children in the county.
- Compilation of data collected during the oral health assessments revealed that:
- 78.5% needed routine dental care every six months
- 14.8% needed to see a dentist within two weeks for early dental problems
- 6.7% needed to see a dentist within 24 hours for urgent or chronic visible dental problems (with pain or infection)
- 4,089 sealants were placed on 1,079 children's teeth
- Fluoride varnish was applied to 1,784 children's teeth

Twice the number of children received free fluoride and sealants from Contra Costa Health Services' Children's Oral Health Program in the 2009–2010 school year compared to the 2008–2009 school year.[1] This was accomplished by using limited resources to offer these services to new schools rather than those who have been served in recent years.

What is oral health?

The World Health Organization defines oral health as "a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity".[2] The two leading dental diseases are caries (tooth decay) and the periodontal diseases (gum disease).[3]

Why is it important?

Dental disease, including untreated cavities, is more common in U.S. children than any other chronic disease. It is five times more common than asthma and seven times more common than hay fever.[4]

Maintaining good oral health is important because untreated problems can result in painful infections and eventually become serious threats to general health.[5] Healthy teeth in childhood are vital for proper nutrition and speech development and children who suffer from dental pain may have difficulty concentrating in school. Promotion of good oral health is also a cost effective use of scarce resources. Every dollar spent on preventive care may save as much as $50 on emergency and restorative treatments.[6]

Between 2009 and 2018, annual spending for dental services in the United States is expected to increase 58%, from $101.9 billion to $161.4 billion. Approximately one-third of this money is expected to be spent on dental services for children.[7]

Missed school days due to dental disease have implications for California school children, their schools, their parents and the economy. Children who are absent from class miss the opportunity to learn and may fall behind academically. Schools receive funding from the state based on attendance, so when a child misses school as a result of dental disease, the school district suffers financial consequences. Statewide, these absences cost local school districts approximately $28.8 million.[8] Often, missed school days mean missed workdays for parents who take children for treatment or care for them at home. These missed workdays may result in financial loss for the family and lost productivity for the economy as a whole.

Who does it impact most?

National data indicates that Mexican-American and non-Hispanic Black children ages 2–11 have more untreated decay and more dental caries in primary teeth compared to their non-Hispanic white counterparts.[9] Similarly, the rate of untreated decay and dental caries in primary teeth is higher for children ages 2–11 living below 100% or between 100% and 200% of the federal poverty level than for their counterparts living above 200% of federal poverty level.[9]

What can we do about it?

Placement of dental sealants and application of fluoride varnish have been found to be effective in preventing dental decay and caries.[10,11] School-based oral health services can target these services to populations of greatest need and provide them at no cost to the child. One policy benchmark listed the placement of sealants and fluoride in high-risk schools as a cost effective way to help prevent problems from occurring.[7]

School-based programs can help clients increase access to care and apply for benefits. They may also refer clients to community providers. In order for this referral system to be effective, however, there must be an adequate number of community providers willing and able to treat low-income children. Changes to Denti-Cal and Healthy Families that increase reimbursement rates and decrease administrative burdens would provide a needed incentive for more providers to offer services to this underserved population.

Data Sources: Children's Oral Health

TABLES

Tables 1–2: California Health Interview Survey (CHIS) 2007; retrieved 8/20/2010 from http://www.chis.ucla.edu. Greater Bay Area data includes the following counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma.

TEXT

1. Internal Program Data. Children's Oral Health Program, Contra Costa Health Services.
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3. National Institute of Dental and Craniofacial Research (NIDCR), National Institute of Health. Improving the Nation's Oral Health, retrieved 8/20/2010 from http://www.nidcr.nih.gov/DataStatistics/SurgeonGeneral/sgr/chap1.htm

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