

# Keeping Kids in Class: The Impact of School-Based Oral Health and the Need for Standardized Absence Tracking

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## Abstract:

The Center for Oral Health (COH) conducted this study to examine the impact of dental disease on school attendance and highlight the role of school-based oral health programs in addressing preventable absences. Dental disease is the most common chronic condition among children, and in California alone it contributes to more than 874,000 missed school days each year. In Sacramento County, Early Smiles Sacramento (ESS) has expanded preventive care to more than 100,000 students, providing screenings, fluoride varnish, and urgent care navigation that parents report reduces missed days and improves access to treatment.

Despite these successes, most school districts do not track absences due to dental reasons, leaving the true burden largely invisible. Using preschool absence records, parent surveys, and administrator insights, this report shows how untreated oral health disrupts learning and how school-based programs can reduce inequities. Findings point to two urgent actions: adopting standardized absence tracking across California and sustaining investment in programs like ESS. Together, these steps will ensure more children remain healthy, in school, and ready to learn.

## INTRODUCTION

### The Burden of Dental Absenteeism

Oral health is a critical but often overlooked component of a child's overall health and academic success. Dental disease is the most common chronic condition among children in the United States, despite being largely preventable (Centers for Disease Control and Prevention 2024). Its consequences extend beyond physical discomfort, affecting a child's ability to eat, sleep, concentrate, and participate fully in school. In California, untreated dental problems account for an estimated **874,000 missed school days each year**, costing schools between **\$29 and \$32 million annually** in lost average daily attendance funding (California Department of Public Health, 2023a).

National data confirm the scale of the problem. Ruff et al. (2023) estimate that over **30 million school hours annually** are lost due to acute or unplanned oral health care activities. Naavaal and Kelekar (2018), using National Health Interview Survey data, similarly estimate **34 million hours lost** among children aged 5–17 related to acute dental care. Earlier work by Jackson et al. (2011) found that, on average, U.S. children miss about **2.1 school days per year** because of dental problems. These findings illustrate how untreated oral health needs disrupt learning and disproportionately affect students from low-income families.

### Impact of School-Based Oral Health Programs

School-based oral health programs are an effective strategy to reduce barriers, improve access, and minimize disruptions caused by dental disease. National evidence shows these programs help children stay in school and improve oral health outcomes. Ruff et al. (2023) found that students in schools with caries prevention programs lost fewer hours of instruction, while Seirawan et al. (2012) reported that children with untreated dental pain—often in schools without such programs—were three times more likely to miss school. Other studies confirm high parental satisfaction with school-based services, citing convenience, affordability, and reduced need to miss class for dental visits (Weintraub et al., 2010; Friedman & Mathu-Muju, 2014; Mathu-Muju, Friedman, & Nash, 2017).

Locally, the **Early Smiles Sacramento (ESS)** program, implemented by the Center for Oral Health (COH), was established in 2016 to expand access to preventive services. In program year 2024–2025, ESS reached more than **113,000 students with oral health education, conducted 25,723 screenings, and provided 16,312 fluoride varnish applications across 420 school and community events**. ESS also addressed urgent needs: **592 children were identified with urgent treatment needs (Urgency 3 cases), of which 407 were successfully contacted, and 83% of those reached were navigated to care within 48 hours** (Center for Oral Health, 2025). Parent survey results in this study also show higher satisfaction, stronger demand for expanded services, and greater navigation support among ESS users compared to non-users. Together, these findings highlight the important role of school-based oral health programs in advancing both health and educational equity.

## Data Gaps in California Schools

Despite their impact, the benefits of school-based programs remain difficult to measure systematically because most school districts do not track dental-specific absenteeism. In Sacramento County, the *Sacramento Employment and Training Agency (SETA)* preschool system is the only district-level entity that codes student absences specifically attributed to dental reasons. As a result, the quantitative absenteeism findings in this report reflect preschoolers only. While this represents a critical data point, the absence of standardized coding across K–12 districts means the full scope of the problem remains largely invisible.

This study addresses these gaps by combining SETA absenteeism data with parent surveys and administrator discussions. Together, the findings demonstrate the promise of school-based oral health programs while underscoring the urgent need for standardized absenteeism coding policies to ensure that oral health is fully recognized as a determinant of educational success.

## Why dental is not a statewide code

Statewide absence data certified through CALPADS are reported using *broad “reason” categories*, and public “Absenteeism by Reason” files reflect those categories rather than medical subcauses like dental. As a result, dental-related absences appear only when districts adopt *local SIS or nurse-log codes*, which is why *standardized local coding*, such as that implemented by SETA, adds important context to the statewide chronic absenteeism indicator (California Department of Education [CDE], 2024).

## How CDE counts absences and why ADA matters

In California’s statewide accountability system, a student is considered *chronically absent* when they *miss 10% or more of instructional days for any reason*. The chronic absenteeism indicator includes excused absences, unexcused absences, and out-of-school suspensions; in-school suspensions are excluded. Because California funds districts primarily based on *Average Daily Attendance (ADA)*—the number of days students are actually present—reducing preventable absences directly preserves district revenue (CDE, 2024).

## PURPOSE OF THIS REPORT

The purpose of this report is to present findings from the study *The Impact of School-Based Dental Programs on School Absenteeism*, conducted by the Center for Oral Health with support from the Dental Trade Alliance Foundation.

Specifically, the report seeks to:

- Quantify the *relationship between dental disease and school attendance* in Sacramento County.

- Evaluate how access to school-based oral health services through *Early Smiles Sacramento* influences absenteeism outcomes.
- Compare outcomes between *families reporting receipt of ESS services and those reporting no services*.
- Provide policymakers, educators, and health leaders with data-driven *insights to guide decisions about funding, program development, and system-level interventions*.

## METHODS

### Study Design

This study was designed to examine the relationship between school-based oral health programs and student absenteeism in Sacramento County. A mixed-methods approach was used, integrating quantitative analysis of absenteeism data with qualitative insights from a structured discussion with school administrators and surveys of parents.

### Quantitative Data

The quantitative component of the study included:

- *Absenteeism records* from the Sacramento Employment and Training Agency preschool system, the only district in Sacramento County that codes absences specifically due to dental reasons. SETA provided records for the 2024–2025 school year, which included the total number of absences attributed to dental issues.
- *Closed-ended parent survey responses*, which captured measurable outcomes such as whether children missed school due to dental pain, overall satisfaction with Early Smiles Sacramento, whether ESS helped families find care, and interest in expanded services (e.g., exams, cleanings, and sealants).

### Qualitative Data

Qualitative insights were gathered through:

- *Structured discussion with school administrators*, to assess perceptions of absenteeism trends, barriers to tracking dental absences, and the value of school-based dental services.
- *Open-ended parent survey responses*, which provided context on family experiences, perceived program benefits, and barriers to accessing dental care. Responses were thematically coded to capture recurring themes related to access, satisfaction, and the perceived impact of ESS.

## Parent Survey Comparison (ESS Users vs. Non-ESS Users)

For analysis, parent survey responses were segmented into two groups based on the item, “Which services has your child received from the Early Smiles program? (check all that apply).” Respondents who selected one or more services (e.g., screening, fluoride, referral) were classified as **ESS users**; respondents who indicated “none/no” (in English or Spanish) or left the item blank were classified as **non-ESS users**. Spanish responses were translated into English for analysis consistency.

Closed-ended responses were analyzed descriptively, with between-group differences tested using chi-square or Fisher’s exact tests where appropriate. Open-ended responses were thematically coded to enrich the interpretation of quantitative results.

## Analysis

Quantitative absenteeism data were summarized using descriptive statistics, including counts, averages, and percentages. Comparative analysis was conducted against state and national benchmarks. Qualitative responses from administrators and parents were analyzed thematically. Recurring themes were grouped into categories related to access to care, satisfaction, and perceived impacts on absenteeism.

## Return on investment estimate (ADA)

To illustrate fiscal impact using familiar school finance terms, we present a simple ADA-based estimate that districts can localize: ***Estimated savings ≈ (district ADA rate per student per day) × (absences avoided)***.

This aligns with California’s attendance accounting framework and allows districts to plug in their ADA rate and the observed change in dental-related absences.

**Note on scope.** We present this ADA calculation framework for district use, but we did not compute dollar estimates for SETA because **preschool/Head Start programs are not funded via LCFF/ADA**. For K–12 districts, the same approach can translate **absences avoided** into ADA-based estimates using local rates. (CDE, 2024).

## KEY FINDINGS

### Dental Absenteeism: Rates, Equity, and Replication

SETA was the only district in Sacramento County that coded dental-related absences, exposing a major gap in current attendance systems. In 2024–2025, SETA recorded **444 dental-related absences** among 2,322 students, **averaging 0.19 absences per student** — about **one in five preschoolers** missing school due to dental problems. This represents nearly **nine weeks of lost instruction** across the system.

## Impact of ESS on Absenteeism and Access

SETA data confirm the impact of dental disease on learning, while parent survey comparisons demonstrate the difference ESS makes. Families who used ESS were **more than twice as likely** to say the program reduced absences (**55% vs. 24%**), reported **far higher satisfaction** with care (**75% vs. 20%**), and were **more likely to receive help** navigating to treatment.

ESS users also expressed stronger demand for expanded preventive services, such as **comprehensive care (92% vs. 79%)** and **sealants (82% vs. 64%)**. These findings show that ESS not only reduces barriers to care but also helps keep children **healthy, present, and ready to learn** — even as the true scale of the problem remains hidden in districts that do not code dental-related absences.

Compared to state and national estimates, SETA’s rate appears lower. The California Department of Public Health (2023a) estimates that untreated dental problems contribute to **more than 874,000 missed school days annually statewide** (about 0.15 days per student). Nationally, children miss an average of **2.1 school days per year** due to dental problems (Jackson et al., 2011). Preschool-specific data, though limited, show a clear global concern: Neves et al. (2016) found that **8.4% of preschool children in Brazil** missed school due to oral health issues, and Watt et al. (2024) concluded in a rapid review that poor oral health is consistently linked to absenteeism in early childhood populations.

Taken together, these findings demonstrate two critical points. First, the impact of dental disease on school attendance is real and measurable, including among preschool populations. Second, Sacramento’s reliance on SETA as the only district coding dental absences highlights a systems gap: without standardized coding across K–12 schools, the true scope of the problem remains largely invisible, limiting policymakers’ ability to address inequities and evaluate program impact.

## Stakeholder Perspectives: Value, Barriers, and Impact

The qualitative findings reinforced the importance of school-based oral health programs as both a health and education strategy.

- **Value of School-Based Care:** Administrators emphasized that on-site screenings and fluoride treatments reduce classroom disruptions compared to outside appointments. Parents reported that without ESS, many of their children’s preventive needs would have gone unmet or required missing a full day of school.
- **Barriers to Care:** Parents cited challenges with scheduling timely appointments, finding Medi-Cal providers, and navigating insurance paperwork, in addition to transportation and language barriers. Administrators noted the lack of standardized systems for coding dental absences.

- **Impact on Urgent Needs:** Parents highlighted ESS’s role in connecting children to urgent care, with 592 urgent cases identified, 407 reached for follow-up, and 83% of those navigated to care within 48 hours.
- **Satisfaction:** Parent surveys reflected high satisfaction with ESS (68% very satisfied, 21% satisfied). Families highlighted the convenience and quality of services, noting that school-based care reduced stress, saved money, and improved comfort in seeking care.

### ESS Participation and Parent-Reported Outcomes

To complement district absenteeism data, we compared parent-reported outcomes for families *reporting receipt of ESS services* (ESS users ) versus those *reporting no services* (non-ESS users).

**Table 1. Impact of ESS on Parent-Reported Outcomes**

Outcome	ESS users (%)	Non-ESS users (%)	p-value
Missed school due to dental pain	18.9	21.2	0.731
Trouble eating due to dental pain	15.7	13.8	<0.001
Want sealants provided	82.1	63.7	<0.001
Want comprehensive care provided	91.5	78.8	<0.001
Insurance barrier to care	6.5	7.5	0.928
Transportation barrier to care	12.9	18.8	0.211
Believes program helps reduce dental related absences	55.3	23.8	<0.001

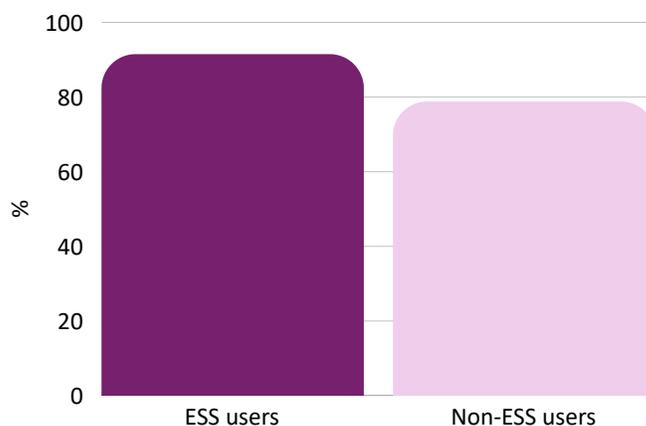
Parent survey results show clear differences between families who used Early Smiles Sacramento (ESS) services and those who did not. Across multiple outcomes, *ESS users consistently reported greater benefits and fewer barriers*, underscoring the program’s role in advancing both access and equity.

- **High demand for expanded services:** ESS users were significantly more likely to want school-based comprehensive care (92% vs. 79%) and sealants (82% vs. 64%). This reflects strong parental support for expanding ESS’s preventive services.
- **Program impact on absenteeism:** More than half of ESS families (55%) believe that ESS helps reduce dental-related school absences, compared to only 24% of non-users. This significant difference demonstrates the perceived effectiveness of ESS in keeping children healthy and in school.
- **Satisfaction and navigation:** ESS users reported far greater satisfaction with dental services (75% vs. 20%) and were more likely to say the program helped them find care. These findings highlight ESS’s role in breaking down barriers to access and connecting families to care.

- **Barriers to care:** While some families in both groups faced challenges, insurance barriers were similar (7% overall), and transportation barriers were somewhat more common among non-users (19% vs. 13%). These differences suggest that ESS may help alleviate access barriers that disproportionately affect families outside the program.

Taken together, these findings reinforce the *added value of ESS* in improving access, satisfaction, and absenteeism outcomes. The strong parental demand for expanded services provides further evidence that school-based oral health programs are not only effective but also responsive to community needs.

### Parent Demand for Comprehensive School-Based Dental Care



### Systems Gap in Absenteeism Tracking

*A critical finding of this study is the lack of standardized coding for dental-related absences* across school districts in Sacramento County. While every district tracks student absences broadly, only the Sacramento Employment and Training Agency (SETA) preschool system records whether an absence is due to dental problems. This makes SETA the sole source of reliable quantitative absenteeism data.

The absence of standardized coding prevents policymakers, educators, and health leaders from fully recognizing the scope of the problem. Without accurate data, the educational impact of oral health issues remains hidden within broad illness categories, masking the burden of untreated dental disease on student attendance.

By contrast, *SETA demonstrates that dental absenteeism tracking is both feasible and valuable. Their data show that dental problems accounted for 444 absences in the 2024–2025 school year, nearly nine full instructional weeks lost across their system.*

If all districts tracked absences in the same way, Sacramento would gain a far more accurate picture of the educational impact of oral health, enabling targeted resource allocation and stronger justification for expanding school-based dental programs.

This systems gap is not unique to Sacramento. *Statewide, no standardized code exists for dental absences. Implementing standardized coding policies across California schools would be a transformative step* toward addressing these barriers.

### Why these findings matter for schools

Because California’s chronic absenteeism indicator counts absences *for any reason*, reductions in preventable, health-related absences (like dental) can preserve *Average Daily Attendance (ADA) revenue*. Pairing locally coded dental-related absences with the statewide indicator helps districts quantify absences avoided and translate that into an ADA-based estimate of fiscal impact (CDE, 2024).

### LIMITATIONS

Several limitations should be considered when interpreting the findings of this study:

- *Single-source absenteeism data* – Only the Sacramento Employment and Training Agency preschool system provided absenteeism records specifically coded for dental-related reasons. Findings therefore reflect a preschool population and may not generalize to older students or other districts.
- *Differences in coding practices* – Most districts do not record whether absences are due to dental reasons. This limits comparability across systems and likely underestimates the true burden of dental-related absenteeism in Sacramento County and statewide.
- *Preschool population focus* – State and national benchmarks are primarily based on K–12 students, whose dental care needs and absenteeism patterns may differ from preschool children.
- *Parent survey limitations* – Survey results are based on self-reported experiences and perceptions. ESS vs. non-ESS classification relied on parent-reported service use, not independent verification. Responses to multiple-response items (e.g., barriers, daily life impacts) may also reflect varying interpretation across families.
- *Potential bias in survey recruitment* – Parents who responded to the survey may differ systematically from those who did not (e.g., being more engaged with their child’s oral health or with ESS). This may limit representativeness.

- *Cross-sectional design* – Data reflect a single school year (2024–2025) and cannot assess long-term impacts or trends over time.

Despite these limitations, the study provides valuable new evidence on how oral health affects absenteeism, highlights the role of school-based programs in reducing barriers, and demonstrates the urgent need for standardized absenteeism coding in California schools.

### RECOMMENDATIONS

#### *Implement Standardized Absenteeism Coding*

The most urgent step is to require all California school districts to adopt a standardized code for dental-related absences. SETA’s experience demonstrates that such coding is both feasible and valuable, allowing education leaders to quantify the impact of oral health on attendance. Without this practice, the true burden and cost of dental disease remains hidden, limiting policymakers’ ability to allocate resources and evaluate program effectiveness.

### CONCLUSION

This study demonstrates that oral health is directly linked to educational outcomes. While national and state data show that millions of school hours are lost each year due to dental problems, local findings from Sacramento highlight both the progress made through Early Smiles Sacramento and the gaps that remain.

SETA’s tracking of dental-related absences confirmed that oral health is a measurable cause of missed instruction, accounting for 444 absences in 2024–2025, or nearly nine weeks of lost classroom time. Parent survey results further showed that families who used ESS were significantly more satisfied with services, more likely to report navigation support, and more likely to believe the program helped reduce absences. Parents also expressed overwhelming demand for expanded preventive services in schools. These findings align with national evidence that school-based programs improve access, reduce barriers, and help children stay in school.

Yet the study also underscores a major systems gap: SETA is the only district in Sacramento County coding dental-related absences. Without standardized coding across all districts, the true burden of dental disease on attendance remains hidden, limiting the ability of policymakers and educators to design effective solutions.

To move forward, California must both *sustain and expand programs like ESS and implement standardized absenteeism coding statewide*. Doing so would provide the data needed to fully capture the scope of the problem, while ensuring that more children receive the preventive services that keep them healthy, present, and ready to learn.

## ABOUT THE AUTHORS

**Robert Milam, MPH** serves as the Research and Evaluation Director at the Center for Oral Health, where he leads initiatives focused on advancing oral health equity through research, program evaluation, and policy development. He holds a Master of Public Health and has extensive experience designing and implementing data-driven strategies to improve health outcomes, particularly for underserved communities. Robert's work bridges research and practice, informing innovative approaches to care delivery, access, and system-level change. He has co-authored white papers and presented findings at national conferences. Through his leadership, he strengthens collaborations between healthcare providers, community organizations, and policymakers to promote sustainable and equitable health solutions.

**Tiffany Turner, MBA, MPH** brings a wealth of experience and leadership to the Center for Oral Health. Currently serving as the Interim Chief Executive Officer at The Center for Oral Health, she oversees a wide array of responsibilities, including HR, IT/Facilities, Compliance, Quality Improvement, Development, Research/Data Evaluation, and the management of both a standalone clinic and a school-based program. With a distinguished career marked by strategic vision and operational excellence, Ms. Turner has consistently demonstrated a commitment to driving organizational success and achieving impactful outcomes. Tiffany Turner is a dynamic and results-driven leader, embodying the values and vision of the Center for Oral Health. Her strategic acumen, collaborative approach, and passion for healthcare make her an invaluable asset to the organization's executive leadership team.

*The views expressed in this guide are those of the authors and do not necessarily reflect the official positions of the Center for Oral Health. This document is a working draft and may be part of ongoing or related publications. Feedback and comments are welcome and may be directed to Tiffany Turner at [tturner@tc4oh.org](mailto:tturner@tc4oh.org).*

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