

# Pain and Suffering Shouldn't Be an Option

## *School-Based and School-Linked Oral Health Services for Children and Adolescents*



**A**lthough it is no longer unusual to see children smiling with a full set of unmarred teeth, millions of other children have little to smile about. For them, the daily reality is persistent dental pain, endurance of dental abscesses, inability to eat comfortably or chew well, embarrassment at discolored and damaged teeth, and distraction from play and learning.<sup>1</sup>

## School-Based and School-Linked Services

One proven strategy for reaching children and adolescents at high risk for oral disease is through school-based programs supporting linkages with oral health professionals and other health partners in the community. These programs serve as models for improving access to oral health education, prevention, and treatment services for school-age children and adolescents who are at high risk for oral disease.<sup>2</sup>



School-based oral health services can help make preventive services such as application of fluoride and dental sealants accessible to children from families with low incomes. Services should include screening, referral, and case management to ensure the timely receipt of oral health care from professionals in the community.<sup>3</sup>

Programs exclusively preventive or screening in nature, without access to referrals through an anchor program, will not reach successful outcomes or achieve sustainability.<sup>4</sup>

## Compromised School Attendance and Achievement

Poor oral health can lead to decreased school performance, poor social relationships, and less success later in life. Children experiencing oral pain are distracted and unable to concentrate on schoolwork.<sup>5</sup>

An estimated 51 million school hours per year are lost because of dental visits and oral health problems.<sup>6</sup>

Children from families with low incomes have nearly 12 times as many restricted-activity days (e.g., days of missed school) because of oral health problems as do children from families with higher incomes.<sup>7</sup>

When children's acute oral health problems are treated and they are not experiencing pain, their learning and school-attendance records improve.<sup>6</sup>

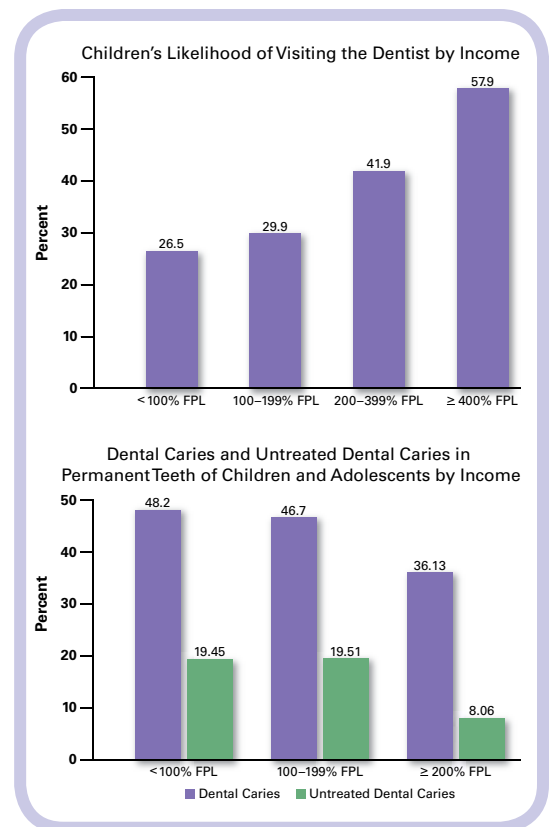
## Disparities in Access to Care

Children and adolescents from families living below 200 percent of the federal poverty level (FPL) are less likely to visit the dentist at least once a year, compared with those from families with incomes at or above 200 percent of the FPL.<sup>8</sup>

Children and adolescents from families living below 200 percent of the FPL are more likely to have dental caries and untreated dental caries in their permanent teeth, compared with those from families with incomes at or above 200 percent of the FPL.<sup>9</sup>

Approximately 80 percent of untreated dental caries is found in about 25 percent of children and adolescents ages 5–17, most from families with low incomes.<sup>5</sup>

Compared to all other health care services, oral health care is the greatest unmet need for most children and adolescents (from birth through age 17) with special health care needs. Unmet oral health care needs affect 78 percent more children and adolescents than unmet mental health care needs (mental health care being the second most common unmet need).<sup>10</sup>



## Oral Trauma

Oral trauma often occurs during childhood and adolescence, and the teeth most frequently injured are the front teeth. Nearly 3 percent of children ages 6–8, 11 percent of children and adolescents ages 9–11, 18 percent of adolescents ages 12–15, and 23 percent of adolescents ages 16–19 experience oral trauma.<sup>11</sup>

Trauma to the head, face, eyes, and mouth occurs frequently during school-sponsored physical activities. Schools with recreation and sports programs can reduce traumas by requiring students to use appropriate protective gear.<sup>3</sup> Training school nurses on how to manage common oral emergencies, including trauma, can help ensure that appropriate care is provided, along with a referral if needed.<sup>12</sup>

The displacement of a tooth from its socket is a dental trauma that often occurs in the school setting. It is important to assess the emergency and to implement the appropriate intervention.<sup>13</sup>

## Nutrition

Children and adolescents who frequently consume foods and beverages high in sugar are at increased risk for dental caries.<sup>14</sup>

Children and adolescents who are missing teeth may have chewing problems that limit their food choices and result in nutritionally inadequate diets.<sup>15</sup>

Inadequate nutrition during childhood can have detrimental effects on children's cognitive development and on productivity in adulthood. Nutritional deficiencies also negatively affect children's school performance, their ability to concentrate and perform complex tasks, and their behavior.<sup>16</sup>

Targeted marketing and easy access to foods and beverages high in sugar may increase children's and adolescents' risk for caries and negatively impact their overall health.<sup>17</sup>



## Dental Sealants

Placing dental sealants on the chewing surfaces of teeth with early signs of decay significantly lowers the probability, for as long as 5 years, that the decay will progress, compared with similar teeth that have not been sealed.<sup>18</sup>

Children from families with low incomes are almost 50 percent less likely to have received dental sealants than their higher-income counterparts.<sup>9</sup>

School-based dental sealant programs are an important and effective public health approach that complements clinical care systems in promoting the oral health of children and adolescents.<sup>19</sup>

Increasing Medicaid reimbursement for dental sealants and providing dental sealants in a school setting have been effective in increasing sealant prevalence.<sup>20</sup>

## Fluoride Varnish

Fluoride varnish is a highly concentrated form of fluoride that is applied to tooth surfaces by oral health professionals or other health professionals to prevent dental caries.

Fluoride varnish applied every 6 months is effective in preventing dental caries in the primary and permanent teeth of children and adolescent at moderate to high risk. For those at high risk, receiving fluoride varnish every 3 months may provide an additional caries prevention benefit.<sup>21</sup>

The use of fluoride varnish to assist in the prevention of dental caries in children is expanding in both public and private settings that incorporate oral health risk assessment and parental counseling. These settings include Head Start programs; Special Supplemental Nutrition Program for Women, Infants and Children (WIC) clinics; well-child clinics; medical offices; and other community programs.<sup>22</sup>

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