# Issue At A Glance:

#### Children's Oral Health in San Bernardino County

*This brief covers the state of oral health among children in San Bernardino County, the causes of poor oral health, the short- and long-term effects, and the county's new five-year strategic plan to address the issue.* 

## The Status of Children's Oral Health in the County

Tooth decay, also known as dental caries, is the most common chronic health condition among children.<sup>1</sup> The California Department of Public Health found that roughly one out of every three children in California suffered from untreated tooth decay.<sup>2</sup> In San Bernardino County, over 30 percent of children that are between the ages of 0 and 5 years and from low-income households have untreated tooth decay.<sup>3</sup> Moreover, San Bernardino County was among the five counties with the greatest number of emergency department visits for preventable oral health problems.<sup>4</sup>

The utilization rates for children's dental services increased by 1.8 percentage points in the county between 2015 and 2017.<sup>3.</sup> Still, more than half of the Denti-Cal eligible children did not have a dental visit according to the latest data.<sup>5</sup> Race and socioeconomic status have disproportionate effects on oral health conditions and outcomes in the county, leading to health disparities as well.

#### Dental coverage for children

Low-income children in California receive dental coverage through the statebased Medi-Cal program and the federal Children's Health Insurance Program (CHIP).

Half of all children in California receive coverage through the Medi-Cal Dental Program known as Denti-Cal.

In San Bernardino County, 57.7 percent of youth (0-20 years) have Denti-Cal coverage, and two-thirds of children under the age of one are covered by Denti-Cal.<sup>14</sup>





#### Causes of Poor Oral Health in Children

Tooth decay is the most common oral health condition in children in the United States. Other oral health conditions for children include missing or extra teeth in addition to gum or tissue infections. The most common cause of tooth decay is exposure to sugary diets. According to a study by the University of California Los Angeles, approximately 33 percent of children in California between the ages of 2 and 11 consume at least one sugary beverage every day including sodas, sports drinks, energy drinks, and juices with added sugars. In San Bernardino County, this figure is closer to 40 percent.<sup>6</sup>

Other risk factors for oral health problems include poor oral hygiene, inappropriate bottle feeding, low salivary flow rate, exposure to injury or violence, exposure to tobacco, poor oral health of the mother, low socioeconomic status, lack of access to adequate levels of fluoridated water or toothpaste, lack of knowledge of oral health, lack of dental coverage, inability to afford dental care, and lack of access to dental care.<sup>7</sup> For instance, the dentist to population ratio in San Bernardino County is 1:1,440 while the state average is 1:1,200.<sup>8</sup> Furthermore, less than 1 in 10 dentists in the county accept Denti-Cal.<sup>5</sup>



## What is tooth decay?

Tooth decay, or dental caries, is a condition in which a bacterium takes over a tooth surface and begins to break down sugars on the tooth while releasing acids that result in the breakdown of the tooth itself.

#### The Importance of Oral Health During Pregnancy

During pregnancy, women experience hormonal fluctuations and changes in behavior such as eating habits and morning sickness that can make them more prone to oral health problems. Mothers can pass down tooth decay to their children. Children whose mothers have had tooth decay are three times more likely to suffer tooth decay.<sup>9</sup> Compared to the rest of the state (43 percent), only 33 percent of pregnant women in San Bernardino County had a dental visit between 2015 and 2016. Proper oral health care during pregnancy translates to positive health outcomes for the mother and the baby.



#### Consequences of Poor Oral Health

Poor oral health in children can result in adverse short- and long-term effects. Tooth decay can lead to immediate effects such as pain, infection, problems with chewing or swallowing, tooth loss, and sleep deprivation.

These issues can then translate to problems in other parts of the child's life.<sup>10</sup> For instance, poor oral health can lead to missed school days. In California, children miss roughly 874,000 school days every year because of oral health conditions. This costs school districts \$29.7 million annually.<sup>5</sup>

Due to the school days missed, poor oral health affects school performance. According to the San Bernardino County Local Oral Health, students who had toothaches were four times more likely to have lower grade point averages than their counterparts who did not have toothaches in the last six months.<sup>5</sup>

Poor oral health can also interfere with a child's social development. Children who are missing teeth or those who have difficulty in speaking may have lower self-esteem and self-efficacy, leading to decreased social interactions and increased social isolation. Children with aesthetic-related teeth problems are more likely to be bullied.<sup>11</sup>

Finally, in the case of long-term effects, studies indicate that poor oral health is associated with diabetes, heart disease, oral cancer, and stroke later in life.<sup>12</sup>



## Addressing Oral Health Concerns

In 2018, the San Bernardino County Department of Public Health established the Local Oral Health Program to conduct a health needs assessment and oral health plan for the county. The *Strategic Plan for Oral Health 2019-*2024 report was released in June 2019. Among the strategies, the report highlights the following action steps to address children's oral health:

- Expand initiatives for school-based/schoollinked dental programs to improve data collection of caries risk assessments and increase fluoride varnish and sealant applications
- Increase the number of pediatric Denti-Cal providers in the region
- Provide oral health prevention, education and care at all Head Start and State Preschools

For more details, visit wp.sbcounty.gov/dph/programs/communityoutreach-education/local-oral-health

#### Future Outlook

Oral health is a crucial determinant of the overall health of a child. With tooth decay as the main chronic disease among children, poor oral health remains a large problem. Through its new strategic plan, San Bernardino County will be focusing on prevention and intervention by improving data collection at the K-12 levels, integrating the provision of key services such as fluoride varnishes through dental and pediatric clinics, and improving access through education and increased dental care providers. The Loma Linda University School of Dentistry continues to be a key player in the region by providing free dental care services for low-income residents through the annual Clinic With a Heart celebration.<sup>14</sup> With a new state dental director and a new vision for achieving oral health equity in California, San Bernardino County is now looking towards evidence-based, collaborative approaches to solving some of the region's toughest healthcare challenges for children in the next four years.

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#### Did you know?

Families with children with special needs often struggle to find appropriate dental care due to issues such as language barriers, sensory impairments, psychosocial issues (dental anxiety), and physical issues such as dental offices that are not wheelchair accessible.<sup>13</sup>



LOMA LINDA UNIVERSITY HEALTH

Institute for Health Policy and Leadership

11209 Anderson Street Loma Linda, CA 92354 Phone: 909-558-7022 Fax: 909-558-5638 www.IHPL.llu.edu

#### Questions?

Please contact Priya Vedula, MPH at the Institute for Health Policy & Leadership (<u>pvedula@llu.edu)</u>