



# Oral Health Among Texas Children

## National Survey of Children's Health, 2016-2017

### Background

Healthy teeth are a vital component in maintaining general health. Without proper oral care, bacteria can reach levels that might lead to oral infections, such as tooth decay and gum disease.<sup>1</sup> Poor oral health contributes to various diseases and conditions such as heart disease and diabetes.<sup>2,3</sup> Additionally, poor oral health, dental disease, and tooth pain can put children at a serious disadvantage in school.<sup>4</sup> Despite improvements in oral health interventions, such as community water fluoridation and placement of dental sealants, inequities still persist in oral health among children. Recent research on oral health disparities for children suggests a need to expand the potential role of dentists in socioeconomic, ethnic, and racial differences in pediatric oral health.<sup>5</sup> This report presents oral health indicators (condition of the child's teeth, oral health problems, preventive dental visits, and tooth decay or cavities) by select subpopulations in Texas children, ages 1 to 17.

### Methods

The National Survey of Children's Health (NSCH) is designed to provide national and state-level estimates on key indicators of the health and well-being of children, their families and communities, as well as information about the prevalence and impact of special health care needs.<sup>6</sup> Additionally, the NSCH provides estimates for each state's Title V needs assessment and several federal and state Title V Maternal and Child Health Services Block Grant National Outcome and Performance Measures. Primary funding and direction for the NSCH is provided by the Health Resources and Services Administration's Maternal and Child Health Bureau (HRSA MCHB). Households are randomly sampled and contacted by mail to identify those with one or more children under 18 years of age. Within each household, one child is randomly selected to be the subject of the survey. Results from the survey are generalizable to the population of non-institutionalized children ages 0-17



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who live in housing units nationally and in each state.<sup>6</sup> All data are self-reported and therefore, may be subject to recall bias.

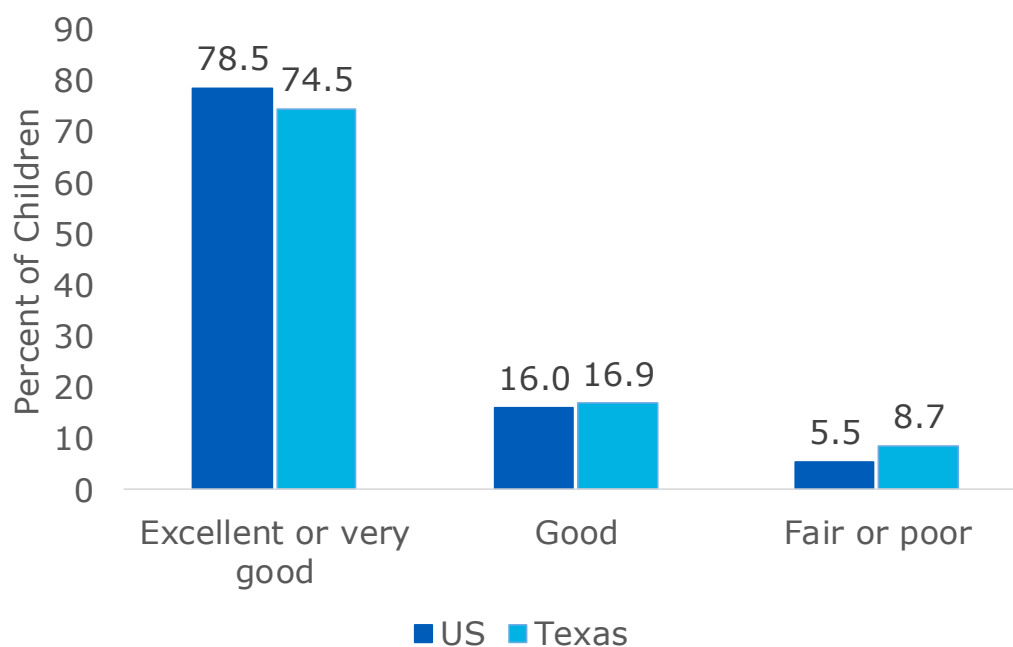
Data were analyzed from the NSCH for combined years 2016 and 2017 using SAS (v. 9.4) to account for the sampling design. State results were compared to national level data for several oral health indicators. Some estimates need to be interpreted with caution because the estimate has a 95% confidence interval width exceeding 20 percentage points or 1.2 times the estimate and may not be reliable. These unstable estimates are notated throughout the results section.

## Results

### Condition of Teeth

- Overall, 78.5% of children nationwide and 74.5% of children in Texas have excellent or very good teeth; whereas 5.5% nationwide and 8.7% in Texas have fair or poor teeth (Figure 1).

Figure 1: Prevalence of the Condition of Children's Teeth in Texas Children, ages 1 to 17, NSCH 2016-2017



US - United States

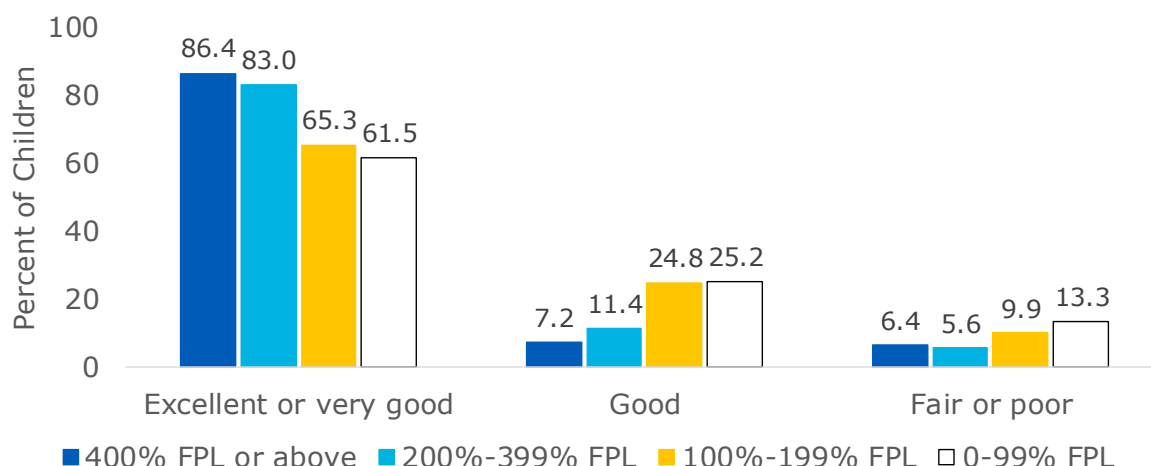
Data Source: National Survey of Children's Health, 2016-2017.

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- In Texas, 66.7% of children, ages 6-11 have excellent or very good teeth compared to 74.2% of children, ages 12-17.
- White, non-Hispanic children in Texas, ages 1-17 have a higher prevalence of excellent or very good teeth (83.2%) compared to Hispanic (69.7%) and Black, non-Hispanic children (67.7%). The latter prevalence may not be stable and should be interpreted with caution.
- In Texas, children in homes with a household income level at or above 400% of the Federal Poverty Level (FPL) have a higher prevalence of excellent or very good teeth (86.4%) compared to all other household income levels (Figure 2).

Figure 2: Prevalence of the Condition of Children's Teeth in Texas Children, ages 1 to 17, by Federal Poverty Level\*, NSCH 2016-2017



FPL - Federal Poverty Level  
Data Source: National Survey of Children's Health, 2016-2017.  
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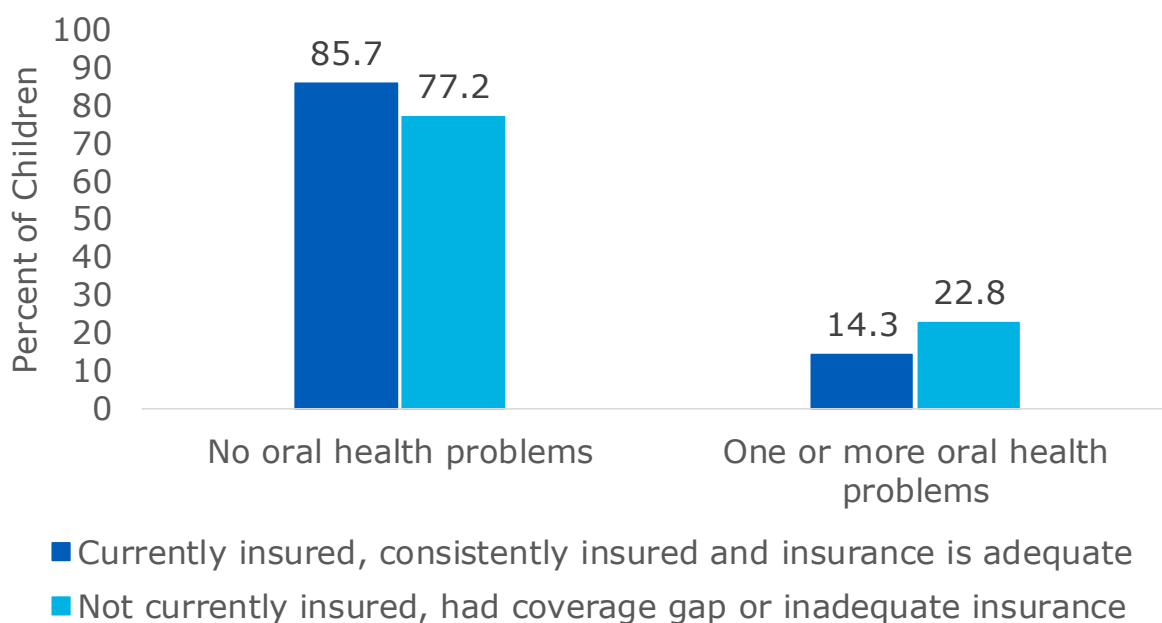
- Texas children with adequate health insurance, or continuous coverage that met the child's health care needs in the past 12 months, have a higher prevalence of excellent or good teeth (77.9%) compared to children with inadequate health insurance (69.6%).
- Children in Texas with consistent health insurance coverage throughout the past year have a higher prevalence of excellent or good teeth (75.9%) compared to children without consistent health coverage throughout the past year (67.1%). The latter prevalence may not be stable and should be interpreted with caution.



## Oral Health Problems

- Overall, 13.8% of children nationwide and 17.7% of children in Texas have one or more oral health problems. An oral health problem is defined as a toothache, bleeding gum, or decayed tooth or cavity.
- Texas children, ages 6-11 have the highest prevalence of oral health problems (21.6%) compared to children ages 1-5 (16.0%) or ages 12-17 (15.2%).
- In Texas, children in households where the primary language spoken is English have a lower prevalence of oral health problems (15.9%) than children in non-English speaking households (24.4%).
- As shown in Figure 3, Texas children with adequate health insurance have a lower prevalence of oral health problems (14.3%) compared to children with inadequate health insurance (22.8%).

Figure 3: Percent of Texas Children, ages 1-17, with Oral Health Problems by Insurance Adequacy, NSCH 2016-2017



Adequate insurance is defined as having continuous insurance coverage in the past 12 months that met the child's health care needs.

Oral health problems is defined as toothaches, bleeding gums, or decayed teeth or cavities.

Data Source: National Survey of Children's Health, 2016-2017.

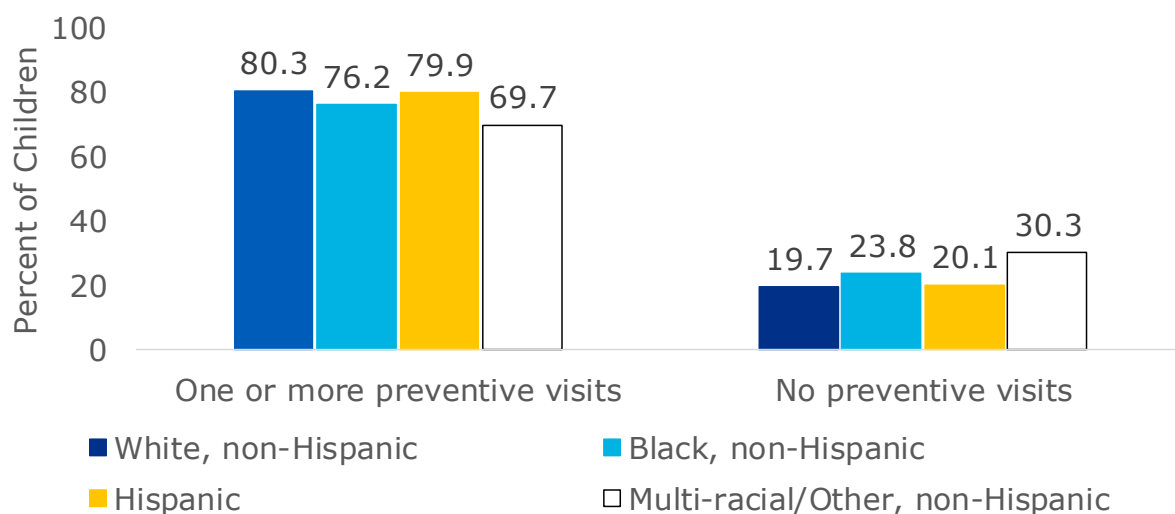
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## Preventive Dental Visits

- Overall, 79.5% of children nationwide and 79.0% of children in Texas have one or more preventive dental visits in the past year. Preventive dental visits for children, age 1 to 17 years, is a Title V Block Grant National Performance Measure (NPM) 13B.
- White, non-Hispanic children in Texas, ages 1-17 have a higher prevalence of at least one preventive dental visit in the past year (80.3%) compared to any other race ethnic group in the survey (Figure 4).

Figure 4: Percent of Texas Children, ages 1-17, with Preventive Dental Visits by Race Ethnicity\*, NSCH 2016-2017



Data Source: National Survey of Children's Health, 2016-2017.  
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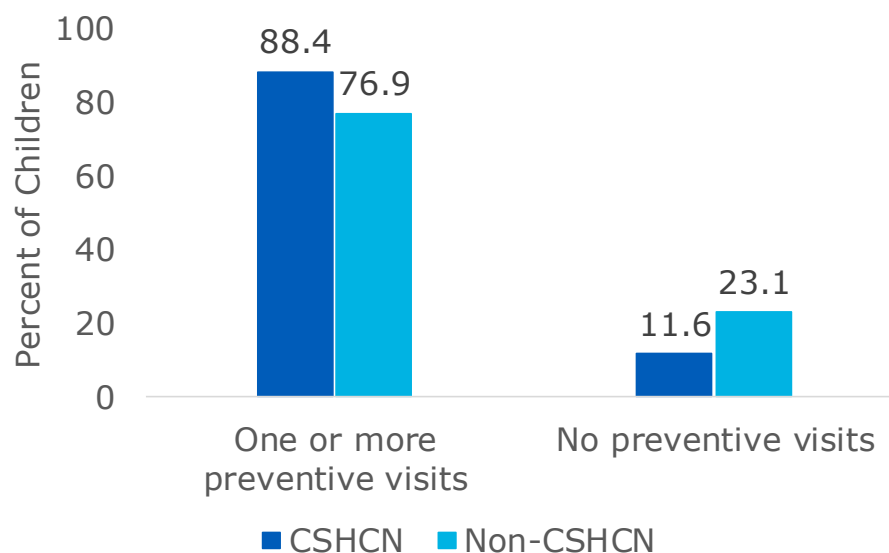
- In Texas, children whose parents were born outside the US have a prevalence of having one or more preventative dental visits of 80.0% compared to 78.8% for children whose parents were born in the US.
- As shown in Figure 5, Texas children with special health care needs (CSHCN) have a higher prevalence of preventive dental visits (88.4%) in the past year compared to children without special health care needs (76.9%).



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Figure 5: Percent of Texas Children, ages 1-17, with Preventive Dental Visits by CSHCN Status, NSCH 2016-2017



Preventive Dental Visits for children ages 1 to 17 is a Title V National Performance Measure.

CSHCN - Children with Special Health Care Needs.

Data Source: National Survey of Children's Health, 2016-2017.

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## Tooth Decay or Cavities

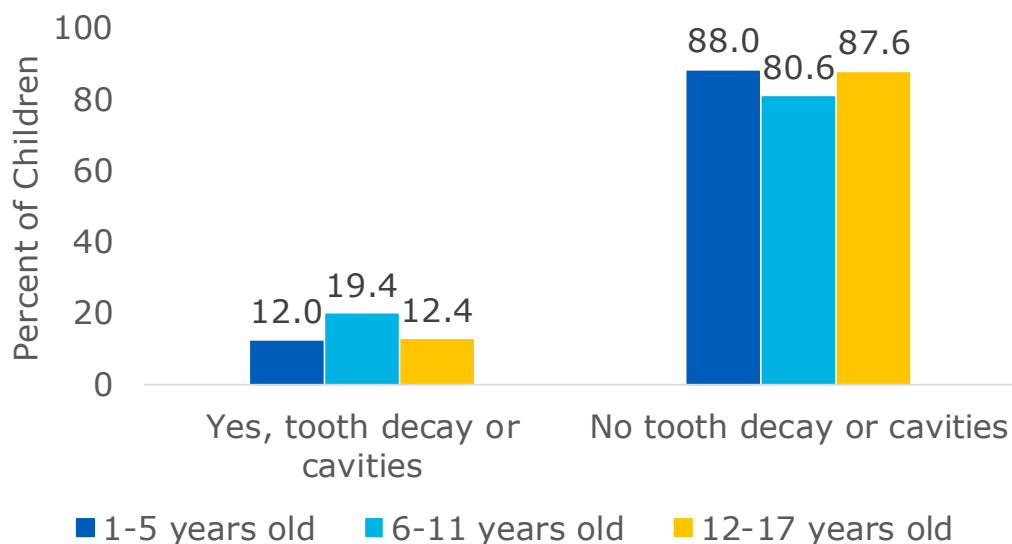
- Overall, 88.3% of children nationwide and 85.2% of in Texas have decayed teeth or cavities in the past year. Tooth decay or cavities for children, age 1 to 17 years, is a Title V Block Grant National Outcome Measure (NOM) 14.
- Figure 6 presents the prevalence of tooth decay or cavities in Texas children by age group. Children, ages 6-11 have the highest prevalence of tooth decay or cavities (19.4%) compared to children ages 1-5 (12.0%) or ages 12-17 (12.4%).



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Figure 6: Percent of Tooth Decay or Cavities in Texas Children, ages 1 to 17, by Age Group, NSCH 2016-2017



Tooth Decay or Cavities for children ages 1 to 17 is a Title V National Outcome Measure.  
Data Source: National Survey of Children's Health, 2016-2017.  
Prepared by DSHS/MCH Epidemiology Unit, Apr 2019.

- Other, non-Hispanic children in Texas, ages 1-17 have a lower prevalence of tooth decay or cavities (8.4%) compared to Hispanic (16.5%), Black, non-Hispanic (21.6%), and White, non-Hispanic children (11.2%). The Black, non-Hispanic prevalence may not be stable and should be interpreted with caution.
- Texas children with adequate health insurance have a lower prevalence of tooth decay or cavities (12.2%) compared to children with inadequate health insurance (18.7%).
- Children in Texas with consistent health insurance coverage throughout the past year have a lower prevalence of tooth decay or cavities (13.2%) compared to children without consistent health coverage throughout the past year (23.7%). The latter prevalence may not be stable and should be interpreted with caution.



## References

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