

Oral Health Status of Florida's Head Start Children, 2017-2018



Public Health Dental Program, January 2021

Background

Oral health is essential to general health and well-being. Poor oral health strongly correlates with other systematic diseases, such as diabetes, heart disease, stroke, and preterm and low-weight births.¹ Though the prevalence and severity of tooth decay (dental caries or cavities) declined among children, dental caries remains the most common preventable chronic infectious disease among young children and adolescents in the United States.² This disease significantly impacts certain racial and ethnic groups and low-income children.² If decay remains untreated, it may cause pain, dysfunction, poor appearance, loss of self-esteem, absence from school or work, and difficulty concentrating on daily tasks.¹

During the 2017-2018 school year, the Florida Department of Health's (FDOH) Public Health Dental Program (PHDP) completed its second statewide oral health surveillance of Florida's preschool aged population (3-6 years old) enrolled in Head Start (HS) centers. The HS Oral Health Screening Project was conducted in 50 HS centers across 29 Florida counties. A total of 2,400 HS children participated in the project. This data brief presents information about the oral health status, risk factors, and access to dental services among Florida's HS children.

Methodology

The HS Oral Health Screening Project based its method on the Basic Screening Survey (BSS) tool supported by the Association of State and Territorial Dental Directors.³ The BSS captures information on the following dental

Key Findings

- Among Head Start children aged 3-6 years, the prevalence of untreated decay was 24.0% and caries experience (treated and untreated) was 34.3%.
- Children aged 5-6 years had the highest prevalence of untreated decay and caries experience compared to children aged 3 and 4 years.
- Children from the Northwest region had the highest prevalence of untreated decay and caries experience.
- Non-Hispanic Black children had the highest percentage of untreated decay.
- Uninsured children had the highest prevalence of untreated decay and the lowest prevalence of treated decay.
- Approximately, 7.2% of Head Start children never visited the dentist.
- From 2014-2015 to 2017-2018, the prevalence of untreated decay and caries experience increased by 15.4% and 6.9% among HS children.

¹ U.S. HHS Department Oral Health Coordinating Committee, 2016

² Benjamin, R.M., 2010

³ ASTDD, 2008

FLORIDA HEAD START ORAL HEALTH SCREENING PROJECT DATA BRIEF, 2017-2018

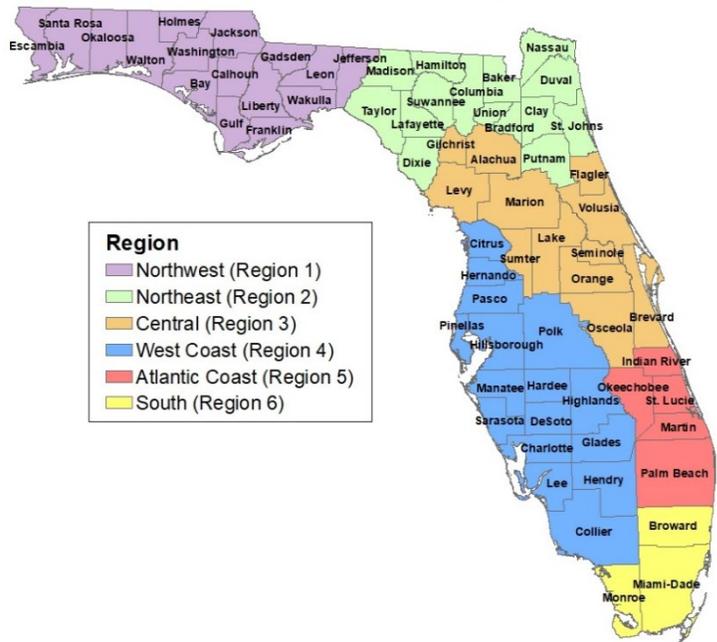
indicators that are directly related to the oral health status in children:

1. Untreated Decay: dental cavities or tooth decay that had not been treated appropriately.
2. Treated Decay: dental cavities or tooth decay that received treatment.
3. Caries Experience: prevalence of untreated or treated decay.
4. Treatment Urgency: early dental care (needs to see a dentist within the next several weeks because of untreated decay) or urgent care (needs dental care within 24 to 48 hours because of signs and symptoms that include pain, infection, or swelling).

The PHDP distributed consent form questionnaires to 50 participating HS centers. Using the BSS tool, licensed dental hygienists from the Florida Dental Hygienists' Association screened 2,400 children who returned a positive consent form. Outcome data were weighted to obtain a representative statewide sample of all HS children in Florida. The number of Head Start centers selected for each region are listed below:

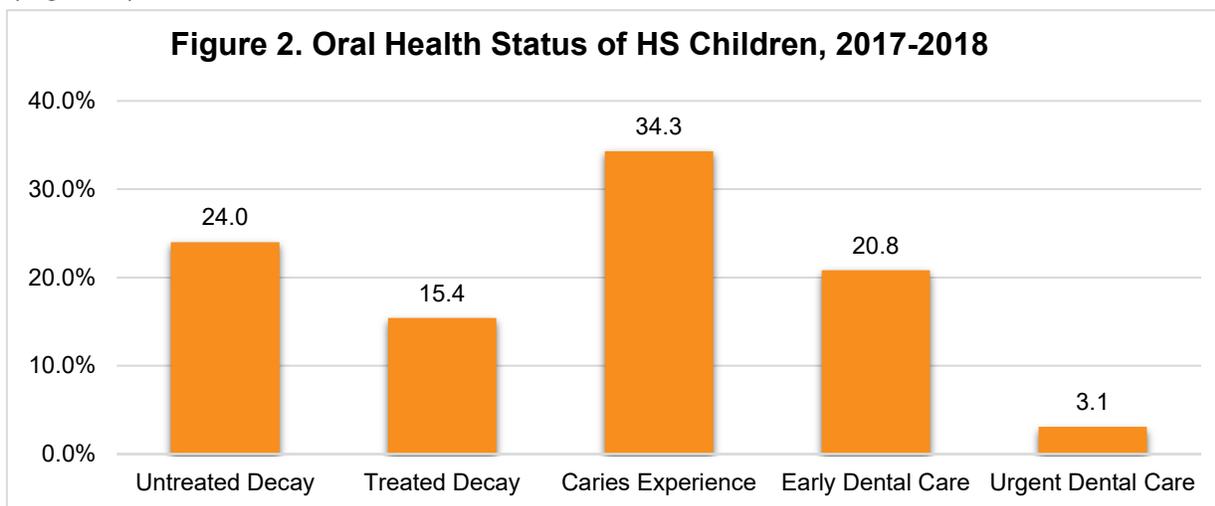
- Northwest: 6
- Northeast: 5
- Central: 8
- West Coast: 13
- Atlantic Coast: 6
- South: 12

Figure 1. Florida's PHDP Surveillance Region Map

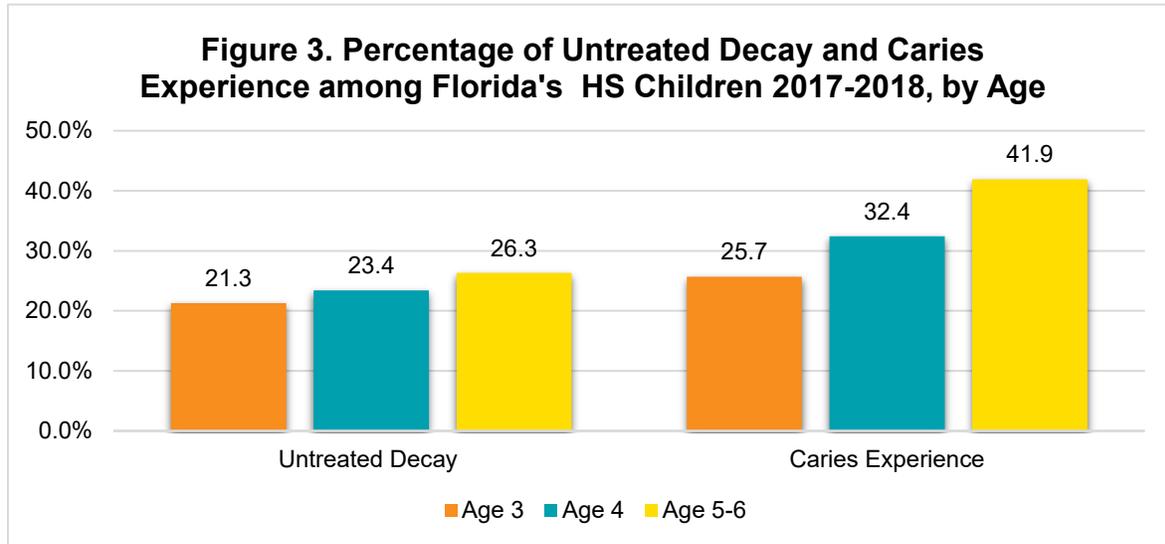


Findings

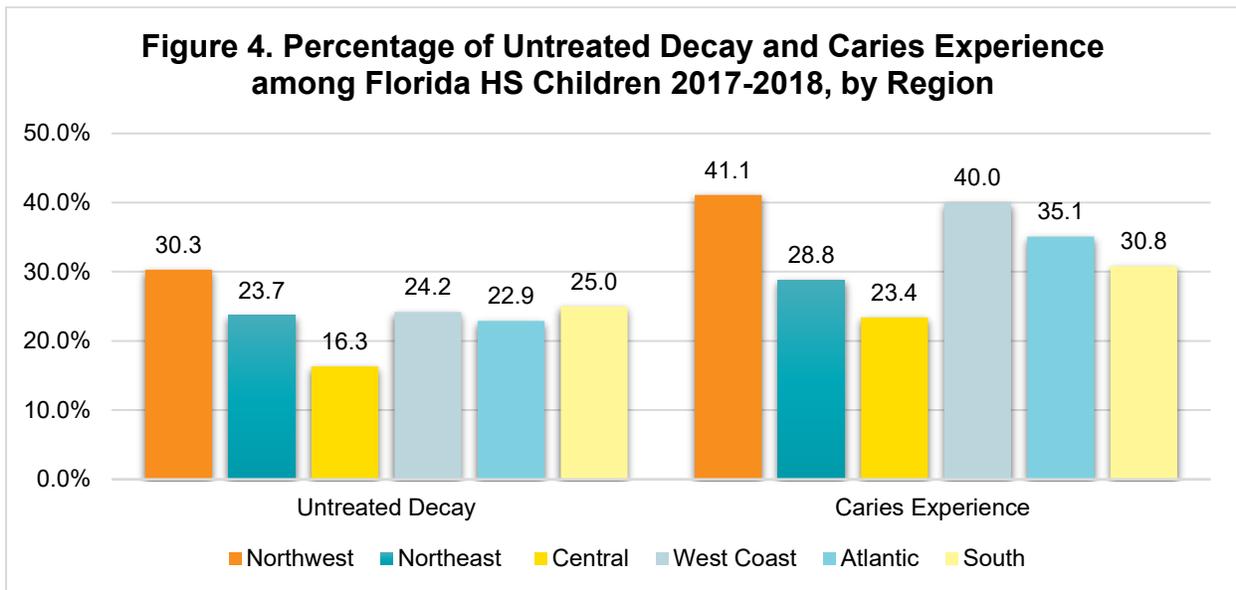
In Florida, 24.0% of HS children had untreated decay, 15.4% had treated decay, 34.3% had caries experience, 20.8% needed early dental care, and 3.1% needed urgent dental care (Figure 2).



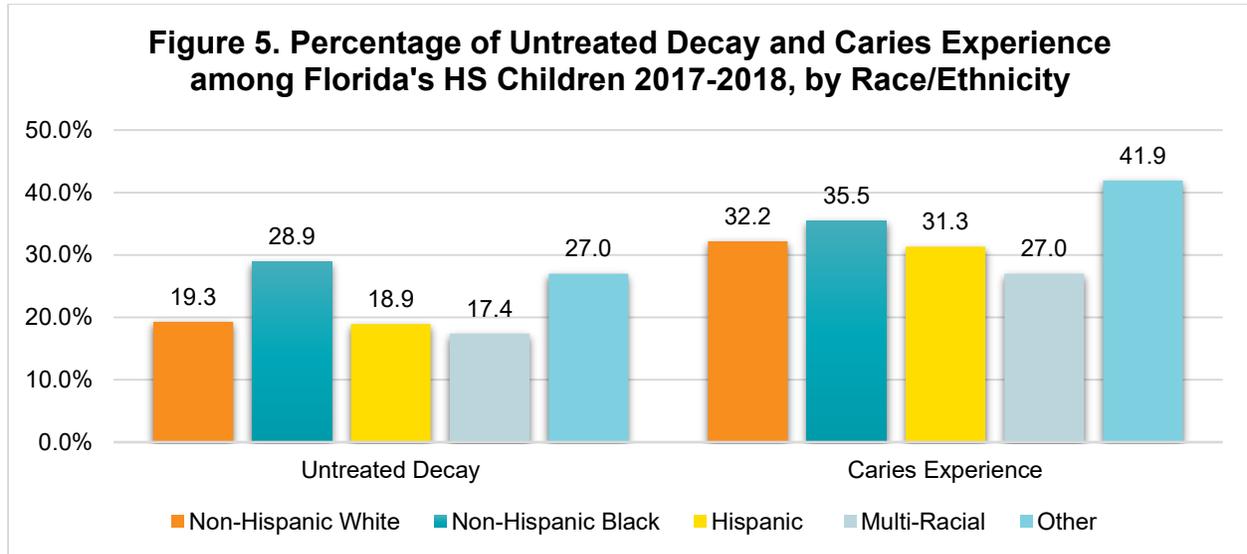
The prevalence of untreated decay and caries experience increased with age (Figure 3). Children aged 3 years experienced the lowest prevalence of untreated decay (21.3%) and caries experience (25.7%) while children aged 5-6 years experienced the highest prevalence of untreated decay (26.3%) and caries experience (41.9%).



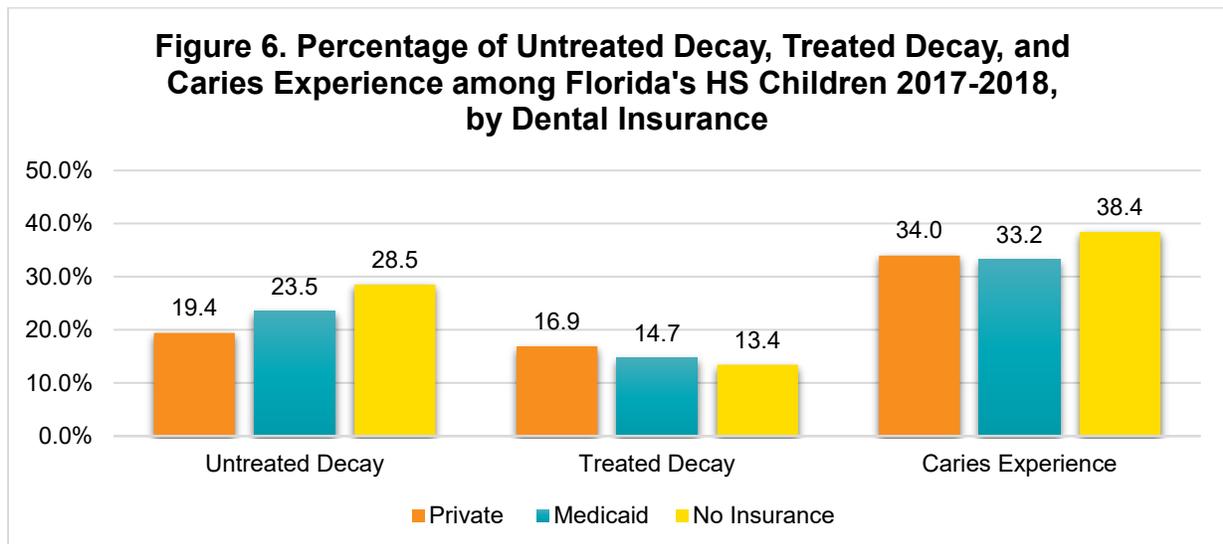
When stratified by region (Figure 4), HS children from the Northwest region (30.3%) had the highest prevalence of untreated decay followed by HS children from the South region (25.0%) and the West Coast region (24.2%). The Northwest (41.1%), West Coast (40.0%), and Atlantic (35.1%) regions experienced the highest prevalence of caries experience among HS children.



Non-Hispanic Black children (28.9%) had the highest prevalence of untreated decay when compared to children of other racial and ethnic groups (Figure 5). The Other group (41.9%), which includes children identifying as Asian, Native Hawaiian/Pacific Islander, American Indian/Alaska Native, and other unknown races, had the highest percentage of caries experience.



Dental insurance status can affect access to care and overall oral health. If dental decay is not treated by a health professional, it can cause pain and infection leading to problems with chewing, swallowing, speaking, and learning. Most Head Start children (86.1%) were covered by Medicaid, 4.9% had private dental insurance, and 6% did not have dental insurance (data not shown). Children whose dental services were covered by private dental insurance had the lowest percentage of untreated decay (19.4%) and the highest percentage of treated decay (16.9%) (Figure 6). Children who had no insurance experienced the highest prevalence of untreated decay (28.5%) and the lowest prevalence of treated decay (13.4%).



Overall, the majority of Head Start children (82.7%) visited the dentist within the past year, 5.5% visited the dentist more than a year ago, and 7.2% never visited the dentist (data not shown). In Figure 7, children whose last dental visit was more than a year ago had the highest percentage of untreated decay (28.2%). Children whose last dental visit was within the year have the highest prevalence of treated decay (16.4%). While children who never visited the dentist had the lowest percentage of untreated decay, 0% had treated decay.

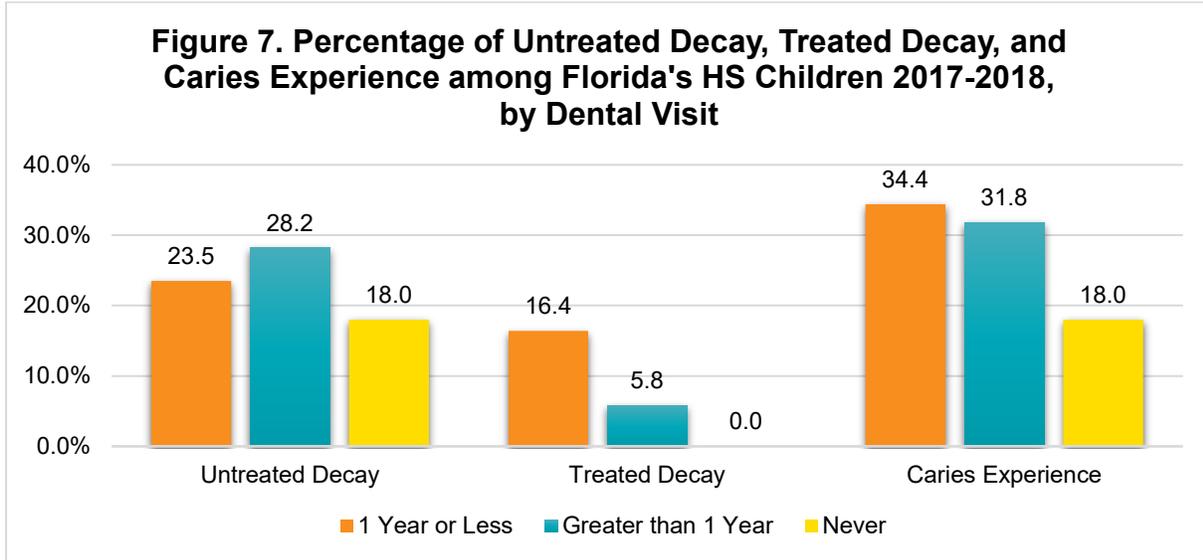
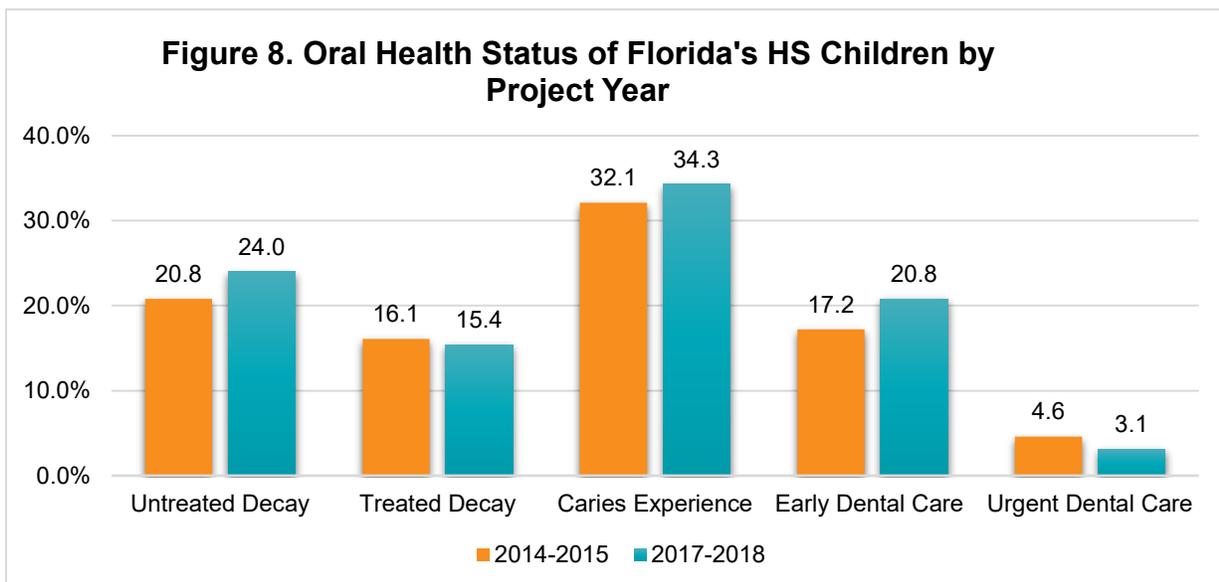


Figure 8 compares the oral health outcomes of the 2017-2018 HS screening project with the first HS screening project in 2014-2015. From 2014-2015 to 2017-2018, the prevalence of HS children who experienced untreated decay and caries experience increased by 15.4% and 6.9% respectively while the prevalence of treated decay decreased by 4.1%. Children who needed early dental care increased by 20.8%, however, the need for urgent dental care decreased by 32.6%.



Conclusion

Untreated decay and dental caries remain serious health issues among HS children as the prevalence of these conditions has increased by 15.4% and 6.9% respectively from 2014-2015 to 2017-2018. This data brief also revealed that disparities in oral health status exist among older children aged 5-6 years, Non-Hispanic Black and other minorities, and children from the Northwest region. Notably, uninsured children suffered from a higher prevalence of untreated and a lower prevalence of treated decay than children with private insurance, with 0% of treated decay among children who never visited a dentist.

Based on the results of this project, county health departments, School-Based Sealant Programs, Women, Infant and Children programs, Early Head Start and HS centers require stronger collaborative partnerships to address the rising prevalence of untreated decay and caries experience among HS children and the continued disparities among certain groups. These partnerships can share and implement evidence-based prevention and early intervention practices that will facilitate the reduction of oral health diseases among preschool-aged children. Additional strategies for improving the oral health status of Florida's HS children include:

- Evaluate and address barriers that exist in promoting and administering preventive dental services, specifically for minority racial and ethnic groups.
- Focus prevention efforts in high risk regions in Florida, particularly rural areas, dental health professional shortage areas, and regions with high rates of Medicaid and uninsured populations.
- Increase dental workforce to provide oral health education and proper dental health techniques to parents and children.
- Increase the promotion of water fluoridation and the negative oral health effects of sugar-sweetened beverages.
- Encourage teacher and parent involvement in developing a culturally appropriate oral health literacy campaign highlighting the importance of early oral health and prevention.
- Increase awareness of the oral health needs of this population among pediatricians and other health care practitioners.
- Continue oral health surveillance activities for HS children and monitor trends of oral health rates and disparities.

References

Association of State and Territorial Dental Directors (ASTDD). (2008). Basic Screening Surveys: An Approach to Monitoring Community Oral Health: Preschool and School Children.

Benjamin, R. M. (2010). Oral Health: The Silent Epidemic. *Public Health Reports*, 125(2): 158-159.

U.S. Department of Health and Human Services Oral Health Coordinating Committee. (2016). U.S. Department of Health and Human Services Oral Health Strategic Framework, 2014– 2017. *Public Health Reports*, 131(2), 242–257.