Oral Health Status of Florida’s Early Head Start and Head Start Children
2014-2015
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The Public Health Dental Program: www.flhealth.gov/dental or 850-245-4333
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Executive Summary
During the 2014-2015 school year, the Florida Department of Health's (DOH) Public Health Dental Program (PHDP) completed the first statewide oral health surveillance of Florida’s preschool aged population enrolled in Early Head Start (EHS) and Head Start (HS) centers. The "2014-2015 EHS and HS Oral Health Screening Project" was conducted in 48 EHS and HS centers across 29 Florida counties.

There were 680 EHS children screened in 22 centers and 1,535 HS children screened in 26 centers to gain a representative sample of Florida’s low income early childhood population. Overall, 71.0% of consent forms were returned and of those, 84.6% were returned with positive consent. In total, 58.1% of the sampled population were screened. Dental screenings were provided by contracted Florida Dental Hygiene Association Registered Dental Hygienists following the Association of State and Territorial Dental Directors' Basic Screening Survey (BSS) protocols.

Key Findings:
- Approximately one in twenty EHS children aged birth to 3 years (5.4%) and one in five HS children aged 3-5 years (20.8%) presented with untreated decay.
  - Prevalence of untreated decay was highest among non-Hispanic Black children in both the EHS and HS populations.
  - There were 23.6% of non-Hispanic Black HS children with untreated decay compared with 17.0% of Hispanic children and 19.1% of non-Hispanic White children.
- One in twenty EHS children (6.1%) and one in five HS children (17.8%) presented with early childhood caries.
- Approximately one in twenty EHS children (6.0%) and one in three HS children (32.1%) had caries experience (the existence of treated or untreated decay).
- The early dental treatment need among Florida’s EHS population was 5.2% and among the HS population was 17.2%.
- The urgent dental treatment need among Florida’s EHS population was 0.4% and among the HS population was 4.6%.

Florida’s HS estimates compared to the Healthy People 2020 goals for children aged 3-5 years are shown below. Florida’s HS dental caries experience is slightly above the national target whereas Florida’s HS untreated decay prevalence has met the national target for 3-5 year olds (Table 1). The prevalence of dental sealants was not captured for Florida’s HS children.

<table>
<thead>
<tr>
<th>Oral Health Indicator</th>
<th>Florida’s Status of Children Enrolled in Head Start</th>
<th>National Target for 3-5 Year Olds based on Healthy People 2020 Goals¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Caries Experience</td>
<td>32.1%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Untreated Dental Decay</td>
<td>20.8%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Dental Sealants</td>
<td>--</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

¹ U.S. Department of Health and Human Services, 2015
It is important to note that Florida’s estimates shared in this report are among EHS and HS children and therefore may not be reflective of the entire public, private, or other preschool population in Florida.

**Introduction**

Oral health is essential to general health and well-being. There is a strong correlation between poor oral health status and other systemic diseases, such as diabetes, heart disease, stroke, and preterm and low-weight births.⁴ Though the prevalence and severity of tooth decay has declined among children, it remains a significant problem in some populations, particularly among certain racial and ethnic groups, as well as low-income children.⁵

Tooth decay (dental caries) is a transmissible, infectious oral disease resulting from an imbalance of multiple risk factors and protective factors over time.⁶ Dental caries remain the most prevalent chronic infectious disease among young children and adolescents.⁵ If dental decay is left untreated, it can cause pain and infection leading to problems with chewing, swallowing, speaking, and learning. These problems jeopardize children’s overall physical health, growth, self-esteem, and capacity to socialize.²

Poor oral health is also associated with school absenteeism and poor performance. It is estimated that U.S. children miss more than 51 million school hours annually due to dental problems.² Children with poor oral health also are three times more likely to miss school and four times more likely to perform poorly when compared to their healthy counterparts.⁶ Parents average 2.5 absent days from work per year due to their children’s dental problems.⁷

Oral health data are needed for ongoing surveillance, establishing the burden of oral health disease, and to inform programmatic planning efforts. To address the need for state-level oral health surveillance data, the Department’s PHDP has established a surveillance system for monitoring oral health status, risk factors, and access to dental services among various populations. Florida’s “2014-2015 EHS and HS Oral Health Screening Project” was the second in a series of three statewide oral health surveillance projects. The purpose of this project was to determine the dental needs of Florida’s youngest population (ages 0 to 6 years old) enrolled in an EHS or HS program. Head Start promotes the school readiness of young children from low-income families through funded local agencies.⁸ The Head Start program is authorized by the *Improving Head Start for School Readiness Act of 2007*.⁹ Both EHS and HS programs offer a variety of service models, depending on the needs of the local community. Florida programs that participated in the project were based in stand-alone centers or schools.⁸ EHS and HS programs include comprehensive education, health, nutrition, and parent involvement services to children from low-income families. EHS serves children from birth to age three and HS serves children aged 3-5 years at registration.⁸

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² U.S. Department of Health and Human Services, 2000
³ Benjamin, R.M., 2010
⁴ Heymann, H.O., 2014
⁵ Dye, B., 2012
⁶ Jackson, S., 2011
⁷ Seirawan, H., 2012
⁸ “Head Start-About Us”, 2016
⁹ Improving Head Start for School Readiness Act of 2007
Although not common practice nationally, Florida included the EHS centers alongside the HS Centers for a more comprehensive surveillance project. EHS Centers were included in the sample to evaluate early childhood caries for this population and identify specific and unique treatment needs of these very young children.

The following sections of this report detail project specifics including the methodology, results, limitations, and recommendations.

**Methodology**

**Basic Screening Survey**

The Florida 2014-2015 EHS and HS Oral Health Screening Project was based on the 2008 Basic Screening Survey (BSS) tool supported by the Association of State and Territorial Dental Directors (ASTDD). The primary purpose of the BSS tool is to provide state and local health jurisdictions with a consistent model for monitoring oral disease in a timely manner, at the lowest possible cost, with minimum burden on survey participants, and that will support comparisons within and between states. The goal of the BSS is to obtain regional and statewide estimates of the oral health status in children, and the current recommendation is for states to conduct a BSS in both HS and school age children. Using these selected populations and standardized methodology allows for comparability between states.

The BSS is designed to capture information on the following screening dental indicators that are directly related to oral health status in children.

1. Untreated Decay: screener can readily observe breakdown of the enamel surface
2. Treated Decay: screener can observe previous treatment of decay such as amalgam and/or composite restorations, temporary restorations, crowns, teeth missing due to decay
3. Caries Experience: prevalence of untreated or treated decay
4. Early Childhood Caries (ECC): the presence of untreated decay, treated decay, or absence of at least one primary anterior maxillary tooth
5. Urgency of Need for Dental Care: early dental care (needs to see a dentist within the next several weeks because of untreated decay or broken restorations) or urgent care (needs dental care within 24 to 48 hours because of signs and symptoms that include pain, infection, or swelling)

*Upon completion of the 2014-2015 Florida EHS and HS Oral Health Screening Project in June 2015, a new BSS manual was released by ASTDD which changed the definition of how the ECC indicator is collected and recorded. This project included the ECC indicator definition as decay on at least one maxillary anterior tooth. The updated definition to be used in future projects defines ECC as decay on any tooth. In order to accurately reflect the standard in the field at the time the survey was conducted, this report will use the original ECC definition, but does include the caries experience indicator per 2015 BSS guidelines.*

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10 ASTDD, 2011
11 ASTDD, 2008
12 ASTDD, 2015
Sampling Procedure
To gain a representative statewide sample of the low income early childhood and preschool aged population, children enrolled in Florida’s EHS or HS programs were used. Enrollment data for the 2014-2015 school year was utilized. These data were provided by the Office of Florida Head Start Program. The EHS and HS center list was sorted geographically by state region and by county within region. A probability proportional to size (PPS) sampling was drawn from the list using a cumulative enrollment from the centers with a calculated sampling interval to select 48 centers across six state regions into the sample. The Public Health Dental Program collaborated with the Florida Head Start State Collaboration Office to introduce the project to the selected centers. Centers consented to participate in the survey. Centers that refused to participate were replaced with a random PPS school selection from the same interval.

The regional designations used for the Florida EHS and HS Oral Health Screening Project and the number of EHS and HS centers per region are shown in Figure 1.

Below are the Florida counties that were selected and participated in the Florida EHS and HS Oral Health Screening Project:
- Region One: Bay, Gadsden, Gulf, Franklin, Liberty, Santa Rosa, Walton
- Region Two: Duval, Putnam, Suwannee
- Region Three: Flagler, Marion, Orange, Osceola
- Region Four: Charlotte, Citrus, Hardee, Hendry, Highlands, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk, Sarasota
- Region Five: Broward, Indian River, Palm Beach
- Region Six: Dade
Screening Methods

After obtaining permission from the selected centers, parents of children were given the opportunity for individual participation in the project. The Consent and Questionnaire Form for Parents (Appendix A), Oral Health Screening Form (Appendix B), and Screening Results Letter Sent to Parents (Appendix C) were created based on the BSS guidelines. Consent forms were sent to the participating centers and disseminated to the children. Parents were encouraged to complete and return the consent form questionnaire even if they did not want their child to participate in the screening. Only those children returning a positive parental consent form with a parental or guardian signature were screened.

The PHDP collaborated with the Florida Dental Hygiene Association to provide these oral health screenings. Florida registered dental hygienists were trained and calibrated in BSS guidelines and data collection. They provided screenings to participating children following procedures to prevent the spread of disease as set by the Centers for Disease Control and Prevention (CDC) for this type of oral health screening. Dental gloves and masks were worn, and the dental hygienists used a disposable mirror for each child, which was thrown away after each screening. The screening was not intended to take the place of a regular dental checkup or an exam by a dentist. There were 19 dental hygienists who collected information on the presence of untreated decay, early childhood caries, caries experience, dental sealants, and treatment urgency. The screenings and data were collected at the child level in accordance with the basic BSS indicator guidance, not the tooth level (tooth number) or tooth type (primary vs. permanent). Full mouth charting was not completed for each child at the tooth level. For example, this means that if a child had the presence of at least one tooth containing any breakdown of the enamel surface, they were recorded as having untreated decay.

Please note that these oral health screenings were provided separate of all annual EHS and HS federal dental health Performance Standards regarding a dental exam and comprehensive dental services provided in a dental home. These screenings were not intended to replace a dental home, dental services periodicity schedules, or any comprehensive dental care.

Data collection occurred in EHS and HS centers utilizing the Oral Health Screening Form (Appendix B). After data collection, screeners used Microsoft Surface Pro tablets pre-loaded with the CDC program, Epi Info, which was formatted to collect screening form data as well as consent form questionnaire (Appendix A) results. Epi Info is a free simple software tool from the CDC that allows the rapid creation of data collection instruments and data analysis, visualization, and reporting using epidemiologic methods. Utilizing this software along with the touch screen tablets allowed for faster, easier, and more portable data collection. Data were exported from Epi Info to a Microsoft Excel spreadsheet and then validated in the field by the dental hygienist screeners by comparing to the original documents. The PHDP then performed a second validation of screening data when paper documents and Excel spreadsheets were mailed to the DOH.

Maintaining screening and data collection consistency across calibrated screeners was the foundation of the project. The BSS provided a framework to collect data in a consistent manner. All data were collected in accordance with all the guidelines and policies defined in the BSS for the EHS and HS populations. This was a cross-sectional (looking at a population at a point in time) and descriptive (intended to determine estimates of oral health status for a defined population) survey.

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13 ASTDD, 2008
14 "Epi-Info", 2016
Data Analysis
Data analysis was completed utilizing Statistical Analysis Software (SAS) version 9.3, a high-level data analysis tool. Outcome data have been weighted and adjusted for non-response based upon the PPS sample design with a 95% confidence interval (CI).

Demographic indicators including age, race/ethnicity, gender, and dental insurance status of the participating children were obtained from the survey questions on the parental consent form. Due to low participation of children identifying as American Indian/Alaska Native, Native Hawaiian/Pacific Islander, or other race, these responses were combined into an “Other” category for analysis and reporting.

Results
There were a total of 2,929 children enrolled in the 48 selected EHS and HS centers. Of the 2,929 children, 2,079 children (71.0%) completed a consent form and of those, 84.6% returned with positive consent. Overall, 1,702 children were screened as a result of the project for an overall participation rate of 58.1% of the sampled children.

Demographic Characteristics of Participating Children
The breakdown of demographic characteristics counts of the participating children is shown in Table 2. Note: These data are not weighted.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Early Head Start N=519</th>
<th>Head Start N=1,183</th>
<th>Total N=1,702</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 Year</td>
<td>39 (7.5%)</td>
<td>0 (0.0%)</td>
<td>39 (2.3%)</td>
</tr>
<tr>
<td>1 Year</td>
<td>126 (24.3%)</td>
<td>0 (0.0%)</td>
<td>126 (7.4%)</td>
</tr>
<tr>
<td>2 Years</td>
<td>224 (43.2%)</td>
<td>0 (0.0%)</td>
<td>224 (13.2%)</td>
</tr>
<tr>
<td>3 Years</td>
<td>115 (22.2%)</td>
<td>170 (14.4%)</td>
<td>285 (16.8%)</td>
</tr>
<tr>
<td>4 Years</td>
<td>1 (0.2%)</td>
<td>616 (52.1%)</td>
<td>617 (36.3%)</td>
</tr>
<tr>
<td>5 Years</td>
<td>0 (0.0%)</td>
<td>389 (32.9%)</td>
<td>389 (22.9%)</td>
</tr>
<tr>
<td>6 Years</td>
<td>0 (0.0%)</td>
<td>5 (0.4%)</td>
<td>5 (0.3%)</td>
</tr>
<tr>
<td>Missing</td>
<td>14 (2.7%)</td>
<td>3 (0.3%)</td>
<td>17 (1.0%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>260 (50.1%)</td>
<td>621 (52.5%)</td>
<td>881 (51.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>248 (47.8%)</td>
<td>552 (46.7%)</td>
<td>800 (47.0%)</td>
</tr>
<tr>
<td>Missing</td>
<td>11 (2.1%)</td>
<td>10 (0.8%)</td>
<td>21 (1.2%)</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>95 (18.3%)</td>
<td>123 (10.4%)</td>
<td>218 (12.8%)</td>
</tr>
<tr>
<td>Black</td>
<td>239 (46.1%)</td>
<td>406 (34.3%)</td>
<td>645 (37.9%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>110 (21.2%)</td>
<td>422 (35.7%)</td>
<td>532 (31.3%)</td>
</tr>
<tr>
<td>Multi-Racial</td>
<td>53 (10.2%)</td>
<td>99 (8.4%)</td>
<td>152 (8.9%)</td>
</tr>
<tr>
<td>Other Race</td>
<td>6 (1.2%)</td>
<td>32 (2.7%)</td>
<td>38 (2.2%)</td>
</tr>
<tr>
<td>Race Unknown</td>
<td>16 (3.1%)</td>
<td>101 (8.5%)</td>
<td>117 (6.9%)</td>
</tr>
</tbody>
</table>
Children aged birth to five years from low income families, according to the Poverty Guidelines published by the Federal government, are eligible for EHS and HS services. \(^{15}\) Therefore, information about the family’s income was not collected through the consent form.

**Oral Health Indicators**

The BSS data were weighted to achieve regional and state-level estimates of the various indicators. Prevalence estimates are provided along with 95% CIs.

In Florida, 0.8% of EHS children had treated decay, 5.4% had untreated decay, 6.0% had caries experience, 6.1% had early childhood caries, 5.3% had an early dental care need, and 0.4% had an urgent dental care need. By comparison, 16.1% of HS children had treated decay, 20.8% had untreated decay, 32.1% had caries experience, 17.7% had early childhood caries, 17.2% had an early dental care need, and 4.6% had an urgent dental care need (Figure 2).

Prevalence estimates of the various indicators by population are provided along with 95% CIs in Table 3 below.

**Table 3. Prevalence (95% CI) of the Oral Health Indicators, by Population**

<table>
<thead>
<tr>
<th>Oral Health Indicator</th>
<th>Early Head Start</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated Decay</td>
<td>0.8% (0.0, 1.5)</td>
<td>16.1% (11.4, 20.9)</td>
</tr>
<tr>
<td>Untreated Decay</td>
<td>5.4% (2.3, 8.5)</td>
<td>20.8% (15.5, 26.1)</td>
</tr>
<tr>
<td>Caries Experience</td>
<td>6.0% (2.7, 9.2)</td>
<td>32.1% (26.2, 37.9)</td>
</tr>
<tr>
<td>Early Childhood Caries</td>
<td>6.1% (2.6, 9.6)</td>
<td>17.7% (12.8, 22.6)</td>
</tr>
<tr>
<td>Early Need for Dental Care</td>
<td>5.3% (1.4, 9.2)</td>
<td>17.2% (12.2, 22.2)</td>
</tr>
<tr>
<td>Urgent Need for Dental Care</td>
<td>0.4% (0.0, 0.9)</td>
<td>4.6% (1.4, 7.9)</td>
</tr>
</tbody>
</table>

\(^{15}\) “Florida Head Start Program”
Oral health status of this population varied by racial and/or ethnic group, especially for early childhood caries (Figure 3).

Prevalence estimates and 95% CIs are provided for all oral health indicators by race/ethnicity in Table 4 below.

**Table 4. Prevalence (95% CI) of the Oral Health Indicators, by Race/Ethnicity**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Early Head Start</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral Health Indicator, Prevalence (95% CI)</td>
<td>Oral Health Indicator, Prevalence (95% CI)</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>Treated Decay</td>
<td>Untreated Decay</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>2.6% (0.0, 5.7)</td>
<td>2.6% (0.0, 5.7)</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>0.5% (0.0, 1.3)</td>
<td>5.6% (2.0, 9.1)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.7% (0.0, 3.9)</td>
<td>6.1% (0.9, 11.3)</td>
</tr>
<tr>
<td>Multi-Race</td>
<td>1.1% (0.0, 3.5)</td>
<td>11.4% (0.0, 23.4)</td>
</tr>
</tbody>
</table>

*Note: Table 4 includes prevalence estimates and 95% CIs for all oral health indicators, including Treated Decay, Untreated Decay, Caries Experience, Early Childhood Caries, Early Need for Dental Care, and Urgent Need for Dental Care, for each racial/ethnic group within the Early Head Start (EHS) and Head Start (HS) programs.*
The oral health indicators also varied by region in Florida (Table 5). Among the EHS population, the Atlantic region had highest untreated decay prevalence and the West Coast region had the highest early need for dental care. The Central region had the lowest prevalence of untreated decay. Among the HS population, the Northeast region had the highest untreated decay rate as well as a high early need for dental care. Untreated decay rate was lowest in the South region.

<table>
<thead>
<tr>
<th>Region</th>
<th>Treated Decay</th>
<th>Untreated Decay</th>
<th>Caries Experience</th>
<th>Early Childhood Caries</th>
<th>Early Need for Dental Care</th>
<th>Urgent Need for Dental Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>0.9% (0.0, 2.7)</td>
<td>4.4% (0.3, 8.5)</td>
<td>5.3% (0.0, 10.7)</td>
<td>2.9% (0.1, 5.7)</td>
<td>3.2% (0.0, 7.4)</td>
<td>0.6% (0.0, 1.6)</td>
</tr>
<tr>
<td>Northeast</td>
<td>1.0% (0.0, 3.1)</td>
<td>9.4% (0.0, 20.1)</td>
<td>9.4% (0.0, 20.1)</td>
<td>5.7% (2.4, 8.9)</td>
<td>7.4% (0.0, 22.5)</td>
<td>1.0% (0.0, 3.1)</td>
</tr>
<tr>
<td>Central</td>
<td>1.0% (0.0, 3.4)</td>
<td>1.0% (0.0, 3.4)</td>
<td>2.0% (0.0, 6.8)</td>
<td>10.6% (0.0, 35.8)</td>
<td>0.5% (0.0, 1.7)</td>
<td>0.5% (0.0, 1.7)</td>
</tr>
<tr>
<td>West Coast</td>
<td>1.3% (0.0, 2.9)</td>
<td>7.0% (0.0, 15.4)</td>
<td>7.9% (0.0, 15.9)</td>
<td>8.7% (2.0, 15.4)</td>
<td>8.5% (0.0, 19.0)</td>
<td>0.4% (0.0, 1.3)</td>
</tr>
<tr>
<td>Atlantic</td>
<td>--</td>
<td>8.0% (3.7, 12.4)</td>
<td>8.0% (3.7, 12.4)</td>
<td>8.0% (3.7, 12.4)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>South</td>
<td>--</td>
<td>3.0% (0.0, 9.3)</td>
<td>3.0% (0.0, 9.3)</td>
<td>3.0% (0.0, 9.3)</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Treated Decay</th>
<th>Untreated Decay</th>
<th>Caries Experience</th>
<th>Early Childhood Caries</th>
<th>Early Need for Dental Care</th>
<th>Urgent Need for Dental Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>13.0% (4.6, 21.4)</td>
<td>22.6% (4.5, 40.7)</td>
<td>32.8% (24.9, 40.8)</td>
<td>16.0% (0.0, 32.4)</td>
<td>23.1% (0.0, 47.4)</td>
<td>1.4% (0.0, 4.0)</td>
</tr>
<tr>
<td>Northeast</td>
<td>21.4% (9.9, 32.9)</td>
<td>32.7% (27.7, 37.5)</td>
<td>40.1% (35.8, 44.5)</td>
<td>22.4% (20.9,24.1)</td>
<td>23.0% (8.0, 42.1)</td>
<td>7.6% (0.0, 19.8)</td>
</tr>
<tr>
<td>Central</td>
<td>8.3% (3.7, 12.9)</td>
<td>30.3% (8.7, 51.8)</td>
<td>34.8% (18.7, 50.8)</td>
<td>24.6% (7.5, 41.7)</td>
<td>18.8% (5.6, 31.9)</td>
<td>11.5% (0.0, 33.1)</td>
</tr>
<tr>
<td>West Coast</td>
<td>19.3% (8.7, 29.9)</td>
<td>24.7% (14.0,35.4)</td>
<td>37.5% (24.7, 50.3)</td>
<td>16.5% (8.9, 24.2)</td>
<td>22.0% (13.9, 30.1)</td>
<td>5.1% (1.4, 8.9)</td>
</tr>
<tr>
<td>Atlantic</td>
<td>26.6% (10.9, 42.4)</td>
<td>11.9% (7.0, 16.8)</td>
<td>33.0% (15.9, 50.2)</td>
<td>19.5% (8.6, 30.4)</td>
<td>9.7% (0.6, 18.8)</td>
<td>2.1% (0.0, 5.0)</td>
</tr>
<tr>
<td>South</td>
<td>6.5% (1.1,11.9)</td>
<td>9.6% (2.7, 16.4)</td>
<td>16.1% (9.5, 22.6)</td>
<td>12.6% (0.3, 25.0)</td>
<td>7.4% (0.3, 14.5)</td>
<td>2.1% (0.5, 3.8)</td>
</tr>
</tbody>
</table>
National Status of Head Start Children

Other states across the nation have utilized the BSS methodology to assess the oral health status of their preschool-aged children enrolled in HS centers. The Centers for Disease Control and Prevention (CDC) collect this information via the State Oral Health Survey (OHS).  

State-level estimates of various oral health status indicators are provided below. It is important to note that not all states have completed a BSS of their HS population and thus national estimates using the BSS methodology are not available. In order to enhance comparability between states, results from the individual state BSS were only included in the graphs below if they were conducted within the past seven years (from 2008 forward). There are currently nine states including Florida that have conducted oral health surveillance of their HS children, according to published data on the National Oral Health Surveillance System. Overall, Florida ranked third lowest for percent of HS children with caries experience among the participating states, with 32.1% of HS children having a caries experience (Figure 4).

However, Florida ranked third highest among participating states for percent of HS children with untreated decay (Figure 5).

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16 “Oral Health Data,” 2015
Limitations
It is important to understand the limitations of a screening survey. First, a dental screening is not a thorough clinical examination and does not involve making a clinical diagnosis resulting in a treatment plan. A screening is intended to identify gross dental or oral lesions and therefore underestimates the presence of dental disease. Second, this survey was conducted only for children enrolled in Florida EHS and HS centers. The survey did not include all preschool age children nor non-HS facilities, thus it is not representative of all preschool aged children in Florida.

Recommendations
The state of Florida works to make continued progress to improve access to preventive dental care for children in Florida.

By including the EHS population, Florida has enhanced its surveillance efforts and widened the understanding of specific and unique oral health needs of this population. In particular, the large increase in percentage of untreated decay from EHS (5.4%) to HS (20.8%) highlights the potential impact that preventive dental services, such as fluoride varnish, can have on this very young population.

Based on the results of this project, continued collaborative partnerships between county health departments and EHS/HS centers to share information on evidence-based prevention and early intervention practices facilitates promotion of oral disease prevention efforts for low income preschool-aged children.

Additional opportunities for improving the oral health status of Florida’s EHS and HS children include:

- Evaluate, address, and overcome barriers that exist in promoting preventive dental services, specifically for minority racial and ethnic groups.
- Increase dental workforce to provide oral health education and proper dental health techniques to parents.
- Encourage teacher and parent involvement in developing a culturally and linguistically appropriate oral health literacy campaign highlighting the importance of early oral health and prevention.
- Continue oral health surveillance activities for EHS/HS children and track progress in the reduction of oral health disparities.
- Increase awareness of the oral health needs of this population among pediatricians and other healthcare practitioners.
- Focus prevention efforts in high risk regions in Florida.
- Increase partnerships between dental public health programs (School-Based Sealant Programs) and Women, Infant and Children (WIC) programs.
References


Appendices
Appendix A: Consent and Questionnaire Form for Parents

Head Start Oral Health Screening Parent Consent Form and Questionnaire
Please complete this form and return it to your child's teacher tomorrow. Thank you.

| Child’s Name: __________________________ | Child’s Age: ________ |
| Child’s Gender: Male ______ Female ______ |
| □ Yes, I give permission for my child to have his/her teeth screened |
| □ No, I do not give permission for my child to have his/her teeth screened |

Signature of Parent or Guardian: __________________________ Date: ________

Please answer the following questions to help us learn more about your child’s dental care. Your answers will remain private and will not be shared. If you do not want to answer the questions, you may still give permission for your child to have his or her teeth screened.

1. During the past 6 months, did your child have a toothache more than once, when biting or chewing?
   □ No □ Yes □ Don’t know/don’t remember

2. How long has it been since your child last visited a dentist? Include all types of dentists, all other dental specialists, as well as dental hygienists. (Check one)
   □ 6 months or less □ More than 6 months, but not more than 1 year ago □ Never has been to the dentist □ More than 1 year ago □ Don’t know/don’t remember

3. Is the dentist that completed your child’s last examination also providing follow-up care for your child?
   □ No □ Yes □ Don’t know/don’t remember

4. What was the main reason that your child last visited a dentist? (Check all that apply)
   □ Went in for check-up, examination or cleaning □ Was called in by the dentist for check-up, examination or cleaning □ Something was wrong, bothering or hurting □ Went for treatment of a condition that dentist discovered at earlier check-up or examination □ Other □ Don’t know/don’t remember

5. Do you have any kind of insurance that pays for some or all of your child’s DENTAL CARE? Include health insurance obtained through employment or purchased directly, as well as government programs like Medicaid.
   □ No □ Private Insurance □ Medicaid □ Other □ Don’t know

6. Which of the following best describes your child? (Check all that apply)
   □ White □ Black/African American □ Hispanic/Latino □ Asian □ American Indian/Alaska Native □ Native Hawaiian/Pacific Islander □ Multi-racial □ Other ________

THANK YOU FOR PARTICIPATING IN THE “Head Start Oral Health Screening Project!”
# Appendix B: Oral Health Screening Form

## Head Start Oral Health Screening Form

<table>
<thead>
<tr>
<th>Screen Date:</th>
<th>School Code:</th>
<th>Screener's Name (printed):</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><strong>/</strong></em>/___</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID Number:</th>
<th>Grade:</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Race/Ethnicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Male</td>
<td>1=White</td>
</tr>
<tr>
<td>2=Female</td>
<td>2=Black/African American</td>
</tr>
<tr>
<td></td>
<td>3=Hispanic/Latino</td>
</tr>
<tr>
<td></td>
<td>4=Asian</td>
</tr>
<tr>
<td></td>
<td>5=American Indian/Alaska Native</td>
</tr>
<tr>
<td></td>
<td>6=Native Hawaiian/Pacific Islander</td>
</tr>
<tr>
<td></td>
<td>7=Multi-racial</td>
</tr>
<tr>
<td></td>
<td>8=Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Untreated Cavities:</th>
<th>Treated Decay:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=No apparent untreated cavities</td>
<td>0=No apparent treated decay</td>
</tr>
<tr>
<td>1=Apparent untreated cavities</td>
<td>1=Apparent treated decay</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Early Childhood Caries:</th>
<th>Treatment Urgency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=No ECC</td>
<td>0=No obvious problem</td>
</tr>
<tr>
<td>1=Yes ECC, caries history on 1+ maxillary anterior teeth</td>
<td>1=Early dental care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
</tr>
</tbody>
</table>
Appendix C: Screening Results Letter Sent to Parents

Head Start Oral Health Screening Results

FLORIDA DEPARTMENT OF HEALTH

Child’s Name: ____________________________________________________________

Dear Parent or Guardian,

As part of the Head Start Oral Health Screening Project, your child’s teeth and mouth were screened at school today. No x-rays were taken and the screening does not replace an in-office dental examination by your family dentist. The results of the screening indicate that:

_____ Your child appears to have no obvious dental problems but should continue to have routine examinations by your family dentist.

_____ Your child has a tooth, or teeth which should be evaluated by your family dentist to determine if treatment is needed.

_____ Your child has a tooth, or teeth which appear to need immediate care and contact your family dentist as soon as possible for a complete evaluation.

If you do not have a family dentist or you need help with arranging dental care for your child, please contact your county health department on the top of the attached list of providers for your area.
Appendix D: Other Indicators from Consent and Questionnaire for Parents

The following questions were asked on the parent questionnaire and consent form for the Florida EHS and HS Oral Health Screening Project (Appendix A). While supplemental to the BSS, these questions provide additional information about the current oral health status and history of the young child population.

Toothache

Question: During the past six months, did your child have a toothache more than once when biting or chewing?

![Percent of Toothache among Florida's EHS and HS Children, 2014-2015](chart)

- Yes: 6.3% (Early Head Start), 9.3% (Head Start), Don't Know: 10.3% (Early Head Start), 4.7% (Head Start)

Last Dental Visit

Question: About how long has it been since your child last visited a dentist?

![Time Since Last Dental Visit among Florida's EHS and HS Children, 2014-2015](chart)

- Within the Last 6 Months: 32.1% (Early Head Start), 60.1% (Head Start)
- 6 Months-1 Year: 17.9% (Early Head Start), 25.3% (Head Start)
- More than a Year: 6.0% (Early Head Start), 2.4% (Head Start)
- Never: 7.4% (Early Head Start), 6.7% (Head Start)
- Don't Know: 4.7% (Early Head Start), 4.7% (Head Start)
Follow-Up Care
Question: Is the dentist that completed your child’s last examination also providing follow-up care for your child?

![Graph showing percent receiving follow-up care among Florida’s EHS and HS children, 2014-2015]

Reason for Last Dental Visit
Question: What was the main reason that your child last visited a dentist?

![Graph showing main reason for last dental visit among Florida’s EHS and HS children, 2014-2015]
Dental Insurance

Question: Do you have any kind of insurance that pays for some or all of your child’s dental care?

Dental Insurance Type among Florida’s EHS and HS Children, 2014-2015

- Medicaid: 86.3%
- Private: 8.2%
- Other: 3.8%
- None: 6.4%
- Don’t Know: 2.1%

Early Head Start vs. Head Start