The Oral Health of Ohio’s Schoolchildren: Findings from the 2009-10 Oral Health and BMI Survey of Ohio Third Graders

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Background:
During the 2009-10 school year, the Bureau of Community Health Services, Ohio Department of Health conducted an oral health and height/weight screening among third grade children. This marks the fifth such survey regarding the oral health of Ohio schoolchildren since 1987.

Research Question:
This study aims to determine the prevalence of oral disease at the county-level among Ohio’s third grade children.

Methods:
SAMPLE: Stratified, random sample of 377 public schools Third grade children with parent or guardian consent were screened Stratified, random sample of 377 public schools

Analysis:
Data were weighted and adjusted for non-response and against income and race data Differences among groups were calculated using the chi-square significance test at the p<.05 level.

Results:
• 19% of third grade children in Ohio had untreated caries which is a significant decrease from 26% in 2004-05. • Low income children and children in Appalachian counties were significantly more likely to have untreated caries. • Half of Ohio’s third grade children had one or more dental sealants. • Uninsured and third grade children in rural, non-Appalachian counties were significantly less likely to have dental sealants on their teeth.

Conclusions:
• The oral health of Ohio schoolchildren has improved statewide. • Ohio has reached three and made progress toward reaching a fourth of the Healthy People 2010 goals for oral health. • Despite this progress, disparities in oral health still exist and remain significant for low-income, uninsured, rural and Appalachian children.

FIGURE 1: Schools participating in the 2009-10 Oral Health and BMI Survey of Ohio Third Grade Schoolchildren

FIGURE 2: Percentage of Ohio Third Graders with Untreated Caries, 2009-10, by County Type and Income

TABLE 1: Comparison of Findings between the 1998-99, 2004-05, and 2009-10 Oral Health Surveys of Ohio Third Graders and Healthy People 2010 Targets

<table>
<thead>
<tr>
<th>County Type</th>
<th>1998-99 Targets</th>
<th>2004-05 Targets</th>
<th>2009-10 Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>80%</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Rural/Non-Appalachian</td>
<td>50%</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Appalachian*</td>
<td>55%</td>
<td>42%</td>
<td>43%</td>
</tr>
<tr>
<td>All 3rd Graders</td>
<td>17%</td>
<td>19%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Limits:
• Lower response rate than in previous surveys (96.7% versus 96.2% in 2004-05) • Lowest in Metropolitan counties (44.0%) and highest in Appalachian counties (48.4%) • 19% of third grade children in Ohio had untreated caries which is a significant decrease from 26% in 2004-05. • Half of Ohio’s third grade children had one or more dental sealants.

Public Health Implications:
• Data provided (or available) as part of an online, county-level oral health surveillance system • Results are leading to discussions of new projects and methods aimed to better characterize, serve, and reach vulnerable populations of Ohio’s children.

Acknowledgements:
• Support of the Ohio Department of Education. • Funding from The Osteopathic Heritage Foundations and Sisters of Charity Foundation of Canton. • Volunteers and Health screeners: Edyta Abramczyk, RDH, Frank Beck, DDS, Rosemary Duffy, DDS, MPH, and Gary Ensor, DDS. • Staff and students of Hamilton Elementary School (Columbus, Ohio) for their assistance with the training of dental screeners and facilitators. • Funding from The Osteopathic Heritage Foundations and Sisters of Charity Foundation of Canton. • Staff and students of Hamilton Elementary School (Columbus, Ohio) for their assistance with the training of dental screeners and facilitators.

FIGURE 4: Ohio Oral Health Surveillance System, Franklin County Profile, 2010