

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 schoolchildren.

Methods:

SAMPLE:

- Stratified, random sample of 377 public schools
- Third grade children with parent or guardian consent were screened
- 14,959 third graders participated in dental screening (46.7% response)

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



Analysis:

- Data were weighted and adjusted for non-response and against income and race data to reflect the underlying population
- 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.

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

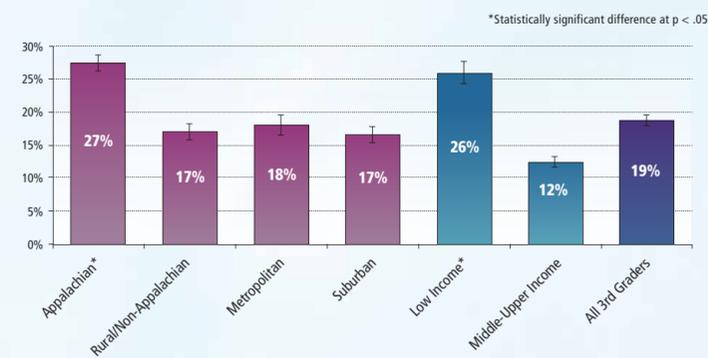
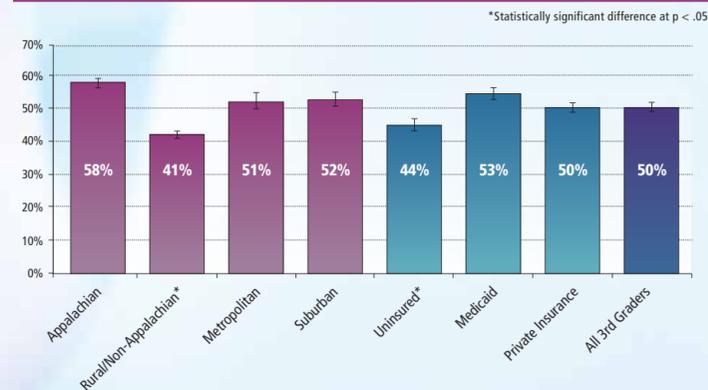


FIGURE 3: Percentage of Ohio Third Graders with One or More Dental Sealants, 2009-10, by County Type and Income



Conclusions:

- The oral health of Ohio's 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 that progress, disparities in oral health still exist and remain significant for low-income, uninsured, rural and Appalachian children.

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

| | 1998-99 Survey | 2004-05 Survey | 2009-10 Survey | Healthy People 2010 Targets | Healthy People 2010 Targets Met |
|-------------------------------------------------------------------------|----------------|----------------|----------------|-----------------------------|---------------------------------|
| Percentage of children with history of tooth decay | 51% | 55% | 51% | 42% | |
| Percentage of children with untreated cavities | 26% | 26% | 19% | 21% | |
| Percentage of children with one or more dental sealants | 34% | 43% | 50% | 50% | |
| Percentage of children who had visited the dentist within the past year | 74% | 78% | 80% | 56% | |

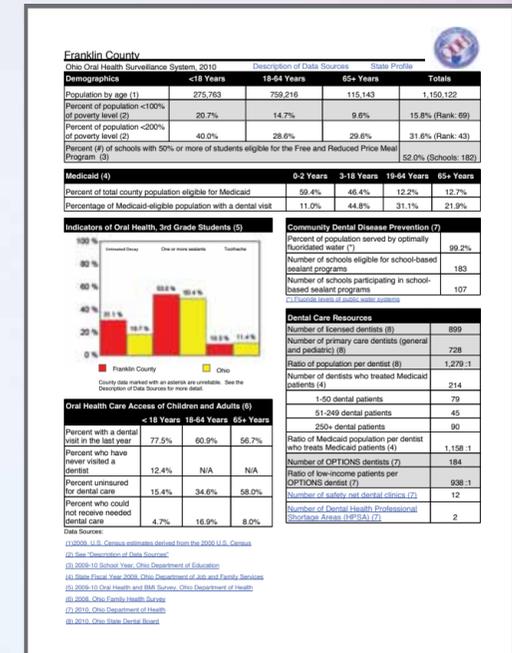
Limits:

- Lower response rate than in previous surveys (46.7% versus 56.2% in 2004-05) – Lowest in Metropolitan counties (44.0%) and highest in Appalachian counties (48.4%)

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

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



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