New Hampshire Third Grade Oral Health Survey

The New Hampshire Healthy Smiles-Healthy Growth Third Grade Survey was conducted during 2008-2009 school year. The goal was to collect uniform information on three oral health indicators in the National Oral Health Surveillance System as well as the height and weight status of third grade students enrolled in public schools and to establish a statewide and regional data baseline.

The NH Department of Health and Human Services (DHHS) Oral Health Program used a systematic sample stratified by region and percentage of students participating in each school in the free and reduced lunch program (FRL). The FRL participation in each school was chosen to approximate the socioeconomic status of its students. The statewide sample consisted of 81 schools and 4,725 third grade students. Six dental hygienists with experience working in school-based oral health programs were calibrated to conduct the screenings. All selected schools and 3,015 students from seven geographic regions participated in screenings.

The DHHS Division of Public Health Services’ Chronic Disease Epidemiologist analyzed collected data to estimate the prevalence of active decay, history of decay, presence of dental sealants and treatment urgency. Prevalence by gender, FRL participation and geographic region was calculated.

Overall, 43.6% of participating students had experienced dental decay, and 12.0% had at least one untreated, decayed tooth at the time of the screening. Approximately 60.4% of students had dental sealants, 12.0% were in need of dental care and 1% needed urgent care because of pain or swelling. There were no differences in prevalence by gender. Children attending schools with ≥ 50% of students participating in the FRL experienced significantly more dental decay and were less likely to have dental sealants than those attending schools with < 25% of students participating in the FRL. We detected significant regional differences, especially in our northernmost county, Coos County, where 64.0% of students had a history of decay, 30.7% had untreated decay, and only 23.7% had dental sealants. An estimated 13.7% of Coos County students were in need of dental treatment.

Results of the survey revealed that, compared to the previous New Hampshire oral health third grade survey results in 2001 and 2004, the overall oral health status of the New Hampshire third grade students had improved. However, significant differences exist between New Hampshire regions and by FRL status. Targeted interventions are warranted. Sub-state level data available by geographic region greatly enhanced the oral health surveillance capabilities in our state.

Lessons Learned:

NH DHHS Oral Health Program utilized the ASTDD’s Basic Screening Surveys protocol and collaborated with the ASTDD consultant on survey design and analysis.

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