

Oral Health of Arizona Children Falls Below National Recommendations

Summary of Findings

The Arizona Department of Health Services, Office of Oral Health's (OOH) survey of third graders shows that the mouths of Arizona third graders fell far short of Healthy Arizona 2010 and Healthy People 2010 oral health objectives. Oral disease is nearly 100 percent preventable, and this new information will help the department determine what resources are needed and where best to place them to improve oral health statewide.

The percent of third graders whose teeth are protected by dental sealants is near the national recommendation with 47% of Arizona third grade children having at least one dental sealant. Dental sealants are thin plastic coatings applied to grooves on chewing surfaces of back teeth to protect the surfaces from tooth decay. Sealants keep germs and food particles out of the grooves, where most tooth decay in children and teens occurs. Sealants and fluoride work together to prevent tooth decay. While we are reaching Healthy People 2010 targets, 3 out of 4 children need initial or additional sealants.

Other oral health indicators are not doing as well. Arizona third graders have a significant burden of oral disease with 75% having tooth decay experience and 40% with untreated tooth decay; levels that are far above the U.S. Department of Health and Human Services' Healthy People target for 2010.

Data further show that race/ethnicity are factors in oral health. Over 80% of Hispanic and 93% of American Indian children have tooth decay experience compared to 66% of non-Hispanic White children. This is the same for untreated decay with 45% of Hispanic children and 62% of American Indian children having untreated tooth decay compared to 32% for non-Hispanic White children. The prevalence of dental sealants is statistically insignificant between different populations, non-Hispanic white students, American Indian children and Hispanic children have similar rates. This may demonstrate that school sealant programs are reaching the appropriate at-risk children.

Socioeconomic status is a factor in the oral health of children. Children without dental insurance suffer from more untreated tooth decay than those who have private or public dental insurance. In addition, the burden of oral disease in Arizona is disproportionately borne by children from schools with higher proportions of lower income families. Schools with higher proportions of pupils on or qualified for free or reduced-price lunch programs have higher rates of fillings and/or untreated tooth decay. In general, schools with 35 percent or less of students qualified for these lunch programs have better oral health than peers in schools with 75 percent or more qualified students.

These results indicate that opportunities exist to strengthen disease prevention efforts and to put into motion strategies that lead to treatment access for specific populations. The direction of OOH is to address this and other oral health issues by setting goals and providing specific, measurable and time-phased objectives and activities for accomplishing them.

The Healthy Bodies, Healthy Smiles Survey was implemented during the 2009-2010 school year. Third grade students received oral screenings at 100 randomly selected public schools. The survey involved a standardized cross sectional open-mouth survey developed by the Association of State and Territorial Dental Directors and conducted by trained dental staff.

Key Findings:

- 40% of Arizona's third graders have untreated tooth decay.
- 4% of third graders have urgent treatment needs. Urgent treatment needs are defined as pain and or infection requiring treatment within 24-48 hours.
- 47% have at least one dental sealant, 76% need initial or additional dental sealants.
- Oral health status varies among children with different types of dental insurance and among children with and without dental insurance.
- Arizona has substantial disparities in oral health. Low-income children, Hispanic and Asian and American Indian children have more dental treatment needs.

To view more information, please visit: <http://www.azdhs.gov/phs/owch/oooh/index.htm>