Changes in Receipt of Preventive Dental Care among American Indian/Alaska Native Children: The National Survey of Children's Health 2003 and 2007

The National Survey of Children's Health 2003 and 2007

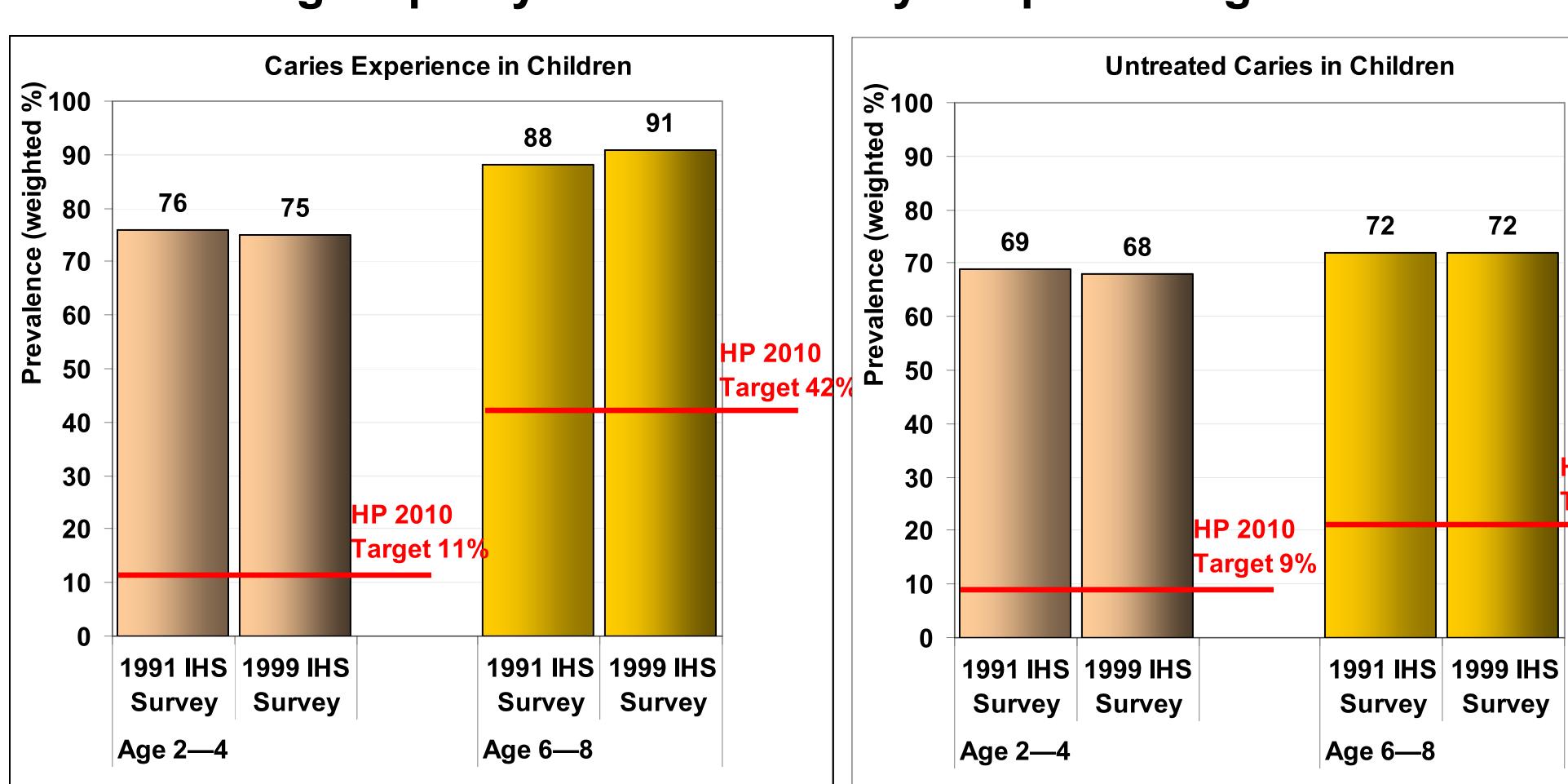
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Objectives

- To document the changes in preventive dental care utilization among American Indian/Alaska Native (Al/AN) children between the two survey years, and
- To evaluate the preventive dental care utilization changes by the subgroup of Al/AN children.

Background

- Al/AN children are at the highest risk of getting a rampant and severe type of dental caries.
- Few changes in Al/AN children's caries level for decades and the remaining disparity with the Healthy People 2010 goals.



- Disparities in access to dental care may explain the disparities in oral health outcomes.
- Subgroups of children who are less likely to be seen by a dentist or receive preventive dental care in previous studies:
 - ✓ Children younger than age five
 - ✓ Racial/ethnic minorities
 - ✓ Rural residents
 - ✓ Low socioeconomic status
 - ✓ No dental insurance

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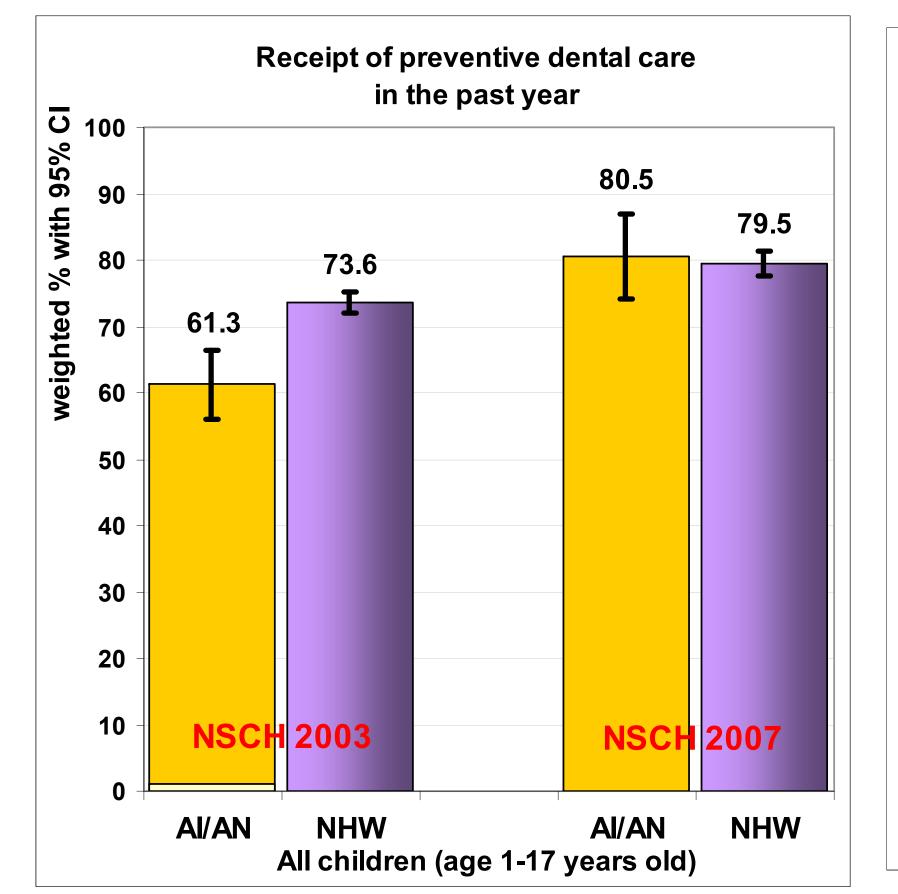
Methods

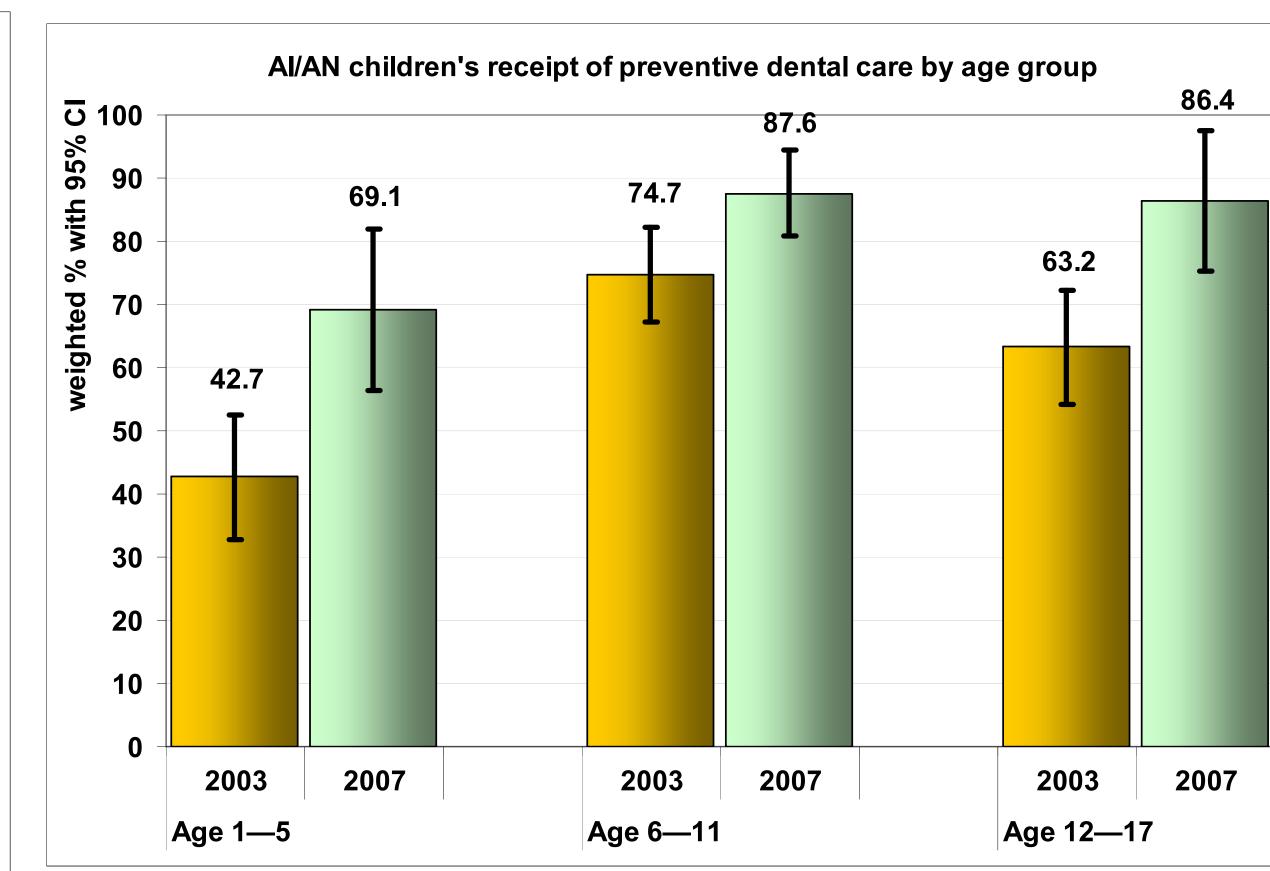
- Data source: 2003 and 2007 National Survey of Children's Health (NSCH)*
 - ✓ Survey by the Maternal and Child Health Bureau/HRSA and the National Center for Health Statistics/CDC
 - ✓ Data collection period: 2003 2004 and 2007 2008
 - ✓ Survey topics with over 100 indicators
 - child's health status (physical, emotional, behavioral, and dental)
 - child's health care utilization
 - child's school and activities
 - family and neighborhood context
 - ✓ Population: Non-institutionalized U.S. children ages 0—17 years
 - ✓ Telephone interview survey, one child randomly selected in each household
 - ✓ Sample size: 102,353 children nationally, 1,443—2,241 per state (2003) 91,642 children nationally, 1,725—1,932 per state (2007)
- ✓ Weighted data allow state-to-state comparisons and national estimates

- Al/AN children included in the analysis
 - √ 962 (2003) and 832 (2007) children ages 1—17 years from AK, AZ, MT, ND, NM, OK, and SD
 - ✓ Al/AN racial category was released from the 7 states where Al/AN was at least 5% of child population
- Primary Outcome Variables:
 - Preventive dental care visit in the past 12 months** (dental check-up, screening, cleaning, sealants)
 - ** Two tiered questions in the 2003 survey were simplified in the 2007 survey into one question asking whether or not child had a preventive dental care.
- Socio-demographic Variables:
 - ✓ Race, Age, Gender
 - ✓ Parent's employment status
 - ✓ Household poverty level
 - ✓ Health insurance status
- Data Analysis: SAS® version 9.1.3
 - ✓ Surveyfreq procedures
 - Bivariate analysis using the Wald chi-square test

Results

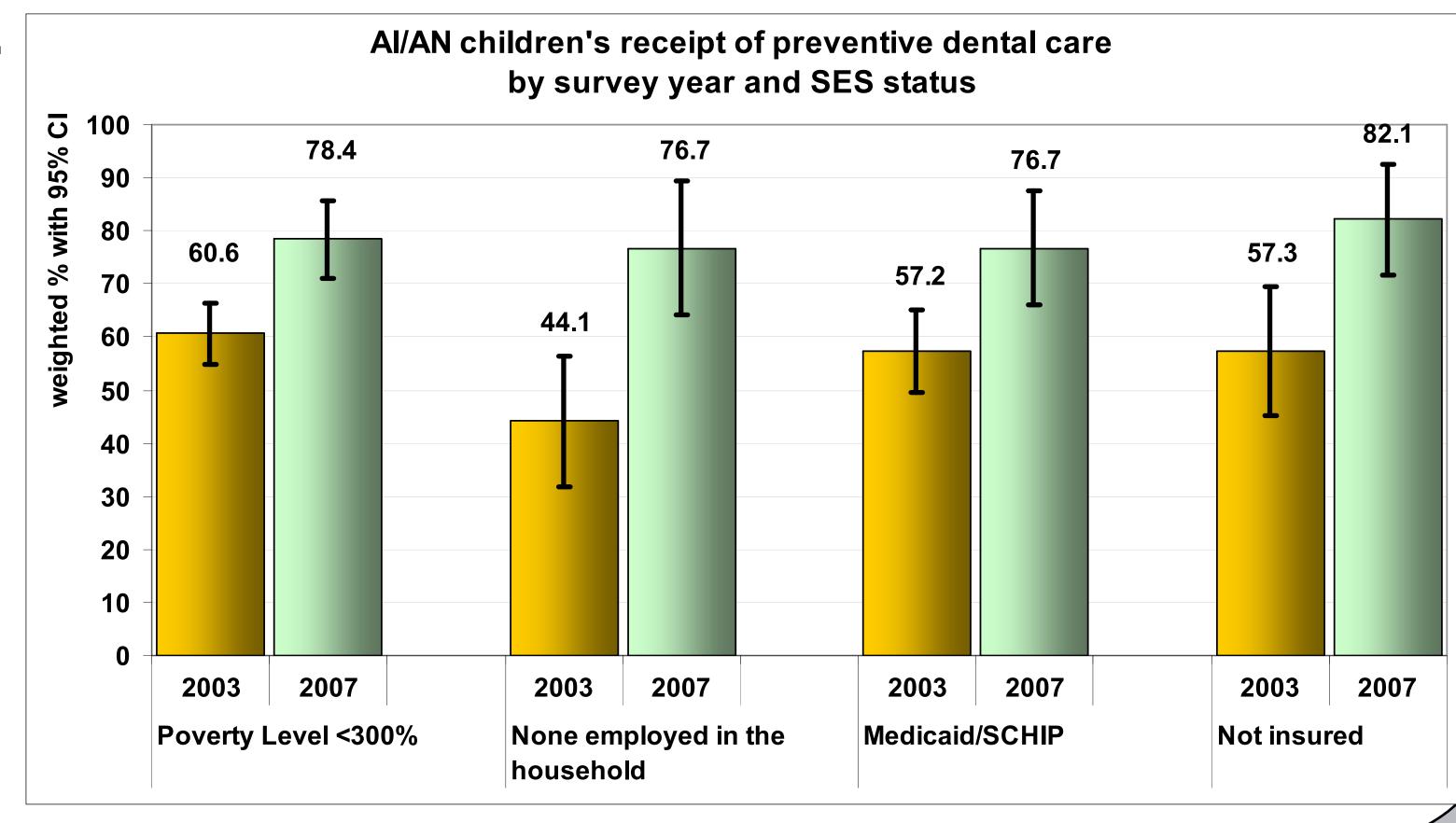
 Parental report of Al/AN children's preventive dental care visit was increased in 2007 and the improvement is particularly noticeable in children younger than age 5





The changes were also observed in the least advantageous subgroups of Al/AN children.

Al/AN children's receipt of preventive dental care



Discussion

- The gap in receipt of preventive dental care between Al/AN and other children appeared to be reduced over the period of 2003—2007 in the NSCH.
- To determine if the survey outcomes reflected the actual changes in Al/AN children, further research with other source of Al/AN children's dental utilization is required.
- Consistent and continuous inclusion of the oral health questions in the NSCH is valued to monitor the trends of the oral health components.