Dental Sealant Utilization among Rural and Urban Children
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Executive Summary

We examined the proportion of rural children who have received dental sealants, thin plastic materials applied to the surface of the teeth to prevent or delay the development of dental decay. Our principal source of information was the Survey of Income and Program Participation (SIPP) of the Census Bureau (2001-2004 panel, the most recent SIPP version available when the project was initiated), which asked parents about children’s teeth. To confirm findings based on parental report, we also examined dental results from the 2003-2004 National Health And Nutrition Examination Survey (NHANES), which are based on professional examination of children’s teeth.

Key findings:

• Similar proportions of rural (43.7%) and urban (43.0%) children had sealants.

• Within racial/ethnic groups, rural white children were significantly less likely to have parentally reported sealants than were urban white children; there were no significant differences based on residence for black or Hispanic children.

• Across racial/ethnic groups, white children (47.9%) were significantly more likely to have sealants than Hispanic children (35.3%) while black children were the least likely of all three racial/ethnic groups to report having sealants. Within rural children, 45.2% of white children, 35.6% of black children, and 39.3% of Hispanic children were reported to have sealants (not significantly different).

• Children at greatest risk of subsequent decay because they lack dental sealants include minority children, children receiving public insurance or without insurance, and those from low-income and low-education households.

Conclusions:

• While Healthy People 2020 goals for sealants have been met (goal: 28% of children aged 6 – 9), less than half of children have sealants. Future research should identify where rural children receive sealants, e.g. school-based sealant programs, community health center dental programs, and identify ways to maximize outreach in safety net settings to ensure at-risk children receive sealants.

• Coordinated efforts between the Oral Health Program at CDC and agencies tasked with rural and minority public health interests, such as the Office of Rural Health Policy, the Bureau of Primary Care, and the National Institute for Minority Health and Health Disparities, could ensure that availability of preventive oral care services for rural populations is monitored and assessed for future strategic planning.