



# Hot Topics

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## **LINK DISCOVERED BETWEEN SECONDHAND SMOKE AND TOOTH DECAY**

The Agency for Healthcare Research and Quality and Drs. Aligne, Moss, Auinger and Weitzman, have found that exposure to secondhand smoke leads to a higher rate of tooth decay for young children, as compared to those who do not grow up around smokers. This runs counter to the fact that overall caries in children have declined for children in the United States.

The study was based on 4,000 children aged 4 to 11 years, who had an increased risk of tooth decay if they had a byproduct of nicotine, called cotinine, in their systems. Specifically, 32% of children with high levels of cotinine had decayed baby tooth surfaces, as compared with 18% of children with lower cotinine levels. The association between secondhand smoke and caries was not found with permanent teeth.

Growth of bacteria that causes tooth decay is encouraged by nicotine use, and may be passed from parent to child. Other factors, including poverty, were controlled in this study.

Dr. C. Andrew Aligne, M.D., who worked on this study, commented that “the results provide further evidence that passive smoking is harmful and that all children should be allowed to grow up in a smoke-free environment.”

For more information, see the March 12, 2003 Journal of the American Medical Association 289 (10), pp. 1258-1264. Information for this article was found at <http://www.ahrq.gov/research/mar03/0303RA3.htm#head2>.

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