

## **Fluoridation: Where is the case for a significant reduction of tooth decay?**

Regarding the recent Health Canada review and update of the 1996 document for the Canadian Drinking Water Quality Guideline (CDWQG); in light of the following documentation, where exactly is fluoridation's case for a significant reduction in tooth decay?

The dental literature is clear that elementary school children with a history of BBTD are more prone to decay in their permanent teeth. Thus tooth decay surveys of elementary school children *must control or adjust for history of BBTD* before they can claim a need for water fluoridation.

### **Baby Teeth**

**Shiboski CH** et al. The Association of Early Childhood Caries and Race/Ethnicity Among California Preschool Children. *J Pub Health Dent*; Vol 63, No 1, Winter 2003.

Among 2,520 children, the largest proportion with a history of falling asleep sipping milk/sweet substance was among Latinos/Hispanics (72% among Head Start and 65% among non-HS) and HS Asians (56%). Regarding the 30% and 33% resultant decay rates respectively; **Our analysis did not appear to be affected by whether or not children lived in an area with fluoridated water.**

**Barnes GP** et al. Ethnicity, Location, Age, and Fluoridation Factors in Baby Bottle Tooth Decay and Caries Prevalence of Head Start Children. *Public Health Reports*; 107: 167-73, 1992.

By either of the two criterion i.e., two of the four maxillary incisors or three of the four maxillary incisors, the rate for 5-year-olds was significantly higher than for 3-year-olds. **Children attending centers showed no significant differences based on fluoride status for the total sample or other variables.**

**Kelly M** et al. The Prevalence of Baby Bottle Tooth Decay (BBTD) Among Two Native American Populations. *J Pub Health Dent*; 47:94-97, 1987.

The prevalence of BBTD in the 18 communities of Head Start children ranged from 17 to 85 percent with a mean of 53%. The surveyed communities had a mixture of fluoridated and non fluoridated drinking water sources. **Regardless of water fluoridation, the prevalence of BBTD remained high at all of the sites surveyed.**

**Auge, K.** Denver Post Medical Writer. Doctors donate services to restore little girl's smile. The Denver Post, April 13, 2004. (Note: Denver, CO has been **fluoridated since 1954.**)

**"Sippy cups are the worst invention in history.** The problem is parents' propensity to let toddlers bed down with the cups, filled with juice or milk. The result is a sort of **sleep-over party for mouth bacteria,**" said pediatric dentist Dr. Barbara Hymer as she applied \$5,000 worth of silver caps onto a 6-year-old with decayed upper teeth. Dr. Brad Smith, a Denver pediatric dentist estimates that **his practice treats up to 300**

**cases a year** of what dentists call Early Childhood Caries; "Last year, Children's Hospital did 2,100 dental surgeries, many of which stemmed from the condition."

### **Permanent Teeth**

A NEGLECTED EPIDEMIC: Selected Findings and Recommendations from the California Oral Health Needs Assessment of Children, 1993-94.

"Fluoride primarily protects the smooth surfaces of teeth, and **sealants protect the pits and fissures (grooves)**, mainly on the chewing surfaces of the back teeth. Pit and fissure tooth surfaces were the site of 83% of tooth decay in U.S. children in 1986-87."

Letter, August 8, 2000, from Jeffrey P. Koplan, M.D., M.P.H. Director Centers for Disease Control and Prevention (CDC) Atlanta GA to Congressman Kenneth Calvert.

" we learned that almost 90 percent of the remaining decay is found in the pits and fissures (chewing surfaces) of children's teeth; **those surfaces that are not as affected by the protective benefit of fluoride.**"

Facts From The National Institute of Dental Research. *Marshall Independent* Marshall, Minnesota. May 28, 1992.

"Nearly 90 percent of cavities in school children occur in the surfaces of teeth with vulnerable pits and grooves, **where fluoride is least effective.**"

Maureen Jones, Archivist - 15 years  
Citizens for Safe Drinking Water - [www.Keepers-of-the-Well.org](http://www.Keepers-of-the-Well.org)  
Fluoride Action Network - [www.FluorideAlert.org](http://www.FluorideAlert.org)  
1205 Sierra Ave.  
San Jose, CA 95126