



CALIFORNIA SOCIETY OF PEDIATRIC DENTISTRY

May 11, 2010

Ms. Cynthia Oshita
Office of Environmental Health Hazard Assessment
P.O. Box 4010, MS 19B
Sacramento, CA 95812-4010

Re: Office of Environmental Health Hazard Assessment request for public comments concerning whether Bisphenol A (BPA) meets the authoritative bodies listing criteria set forth in the Proposition 65 regulations in Title 27, California Code of Regulations, Section 25306.

Dear Ms. Oshita:

The California Society of Pediatric Dentistry, the professional organization representing California's nearly 600 pediatric dental practitioners, educators and researchers, appreciates the opportunity to provide comment on the proposed consideration of listing of bisphenol-A under the posting requirements of Proposition 65 in conjunction with the placement of dental sealants.

A review of the pertinent literature provides ample evidence that bisphenol-A is not an ingredient in the materials used as dental sealants to prevent enamel demineralization by bacterial plaque formation in the pits and fissures of posterior teeth. What intraoral exposure to BPA that occurs in the sealant process is a byproduct of the degradation of other components of sealant materials, which fall below the *no observable effects level* (NOEL). In fact, the estimated one time exposure (upon sealant placement) to BPA is approximately 5.5 micrograms¹, which is two to five times lower than the estimated daily exposure from foods and environmental sources².

As an additional consideration, irrigation of the placed and cured sealant, now a recommended best practice, further reduces levels of any uncured resin and byproducts on the chewing surface.

Of equal weight is the importance of dental sealants in the prevention of dental caries (tooth decay), especially in high-risk populations. According to the 2006 *California Smile Survey*³, an oral health assessment of over 20,000 California kindergarten and first grade children, approximately two-thirds, or 6.3 million, experience tooth decay by the time they reach third grade. Placement of dental sealants can dramatically reduce this number. Reduction of caries incidence in children and adolescents after placement of resin-based sealants ranges from 86

percent at one year to 78.6 percent at two years and 58.6 percent at four years^{4,5}. Reapplication of sealants as indicated by periodic observation can produce even better oral health outcomes.

We believe the posting of a Proposition 65 warning in association with the placement of dental sealants is unnecessary. The products used by dental professionals in sealant placement do not contain BPA and the brief exposure to BPA as a byproduct of degradation is a singular (acute) event that poses no known or demonstrated threat to health. The posting of such a notice, however, could lead to public confusion about sealant safety and subsequent decreasing utilization of sealants in schools, public health settings, and private offices. This would have a devastating effect on public health, especially among those children and adolescents most at risk for the effects of dental disease.



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c: Dr. Ray Stewart, Executive Director, California Society of Pediatric Dentistry
Officers and Directors, California Society of Pediatric Dentistry

1 Joskow R, Boyd Barr D, Barr JR, Calafat AM, Needham LL, Rubin C. Exposure to bisphenol A from bis-glycidyl dimethacrylate-based dental sealants. *J Am Dent Assoc.* 2006;137:353-62.

2 Center for the Evaluation of Risks to Human Reproduction. National Toxicology Program U.S. Department of Health and Human Services. NTP-CERHR Expert Panel Report on the Reproductive and Developmental Toxicity of Bisphenol A. November 26, 2007. (<http://cerhr.niehs.nih.gov/chemicals/bisphenol/BPAFinalEPVF112607.pdf>).

3 Dental Health Foundation. *Mommy, It Hurts to Chew* The California Smile Survey. An Oral Health Assessment of California's Kindergarten and 3rd Grade Children, 2006 (www.DHF.org/images/lib_PDF/dhf_2006_report.pdf).

4 Llodra JC, Bravo M, Delgado-Rodriguez M, Baca P, Galvez R. Factors influencing the effectiveness of sealants: a meta-analysis. *Community Dent Oral Epidemiol* 1993;21(5):261-268.[Medline].

5 Ahovuo-Saloranta A, Hiiri A, Nordblad A, Worthington H, Mäkelä M. Pit and fissure sealants for preventing dental decay in the permanent teeth of children and adolescents. *Cochrane Database Syst Rev* 2004(3):CD001830.

The California Society of Pediatric Dentistry is the professional membership organization representing California's nearly 600 pediatric dental providers, educators and researchers. Our members provide primary and specialty care to infants, children, adolescents and patients with special medical and developmental needs. The mission of the California Society of Pediatric Dentistry is to serve its members and the public by advocating for the optimal oral health of infants, children, and adolescents.