

Early childhood caries is an infectious, transmittable, yet preventable disease. It is defined by the ADA and CDA as:

“the presence of one or more decayed (non-cavitated or cavitated lesions), missing (due to caries) or filled tooth surfaces in any primary tooth in a preschool-age child between birth and 71 months of age (6 years old).”

The 2005 California Oral Health Needs Assessment reported 54% of kindergarteners and 71% of third graders have a history of tooth decay and more than 25% of elementary school children have untreated decay. Furthermore, caries disproportionately affects children of migrants, and those in the lower socioeconomic strata, and certain racial/ethnic groups.

In April 2007, The Centers for Disease Control and Prevention released “Trends in Oral Health Status—United States, 1988–1994 and 1999–2004.” The report represents the most comprehensive assessment of oral health data available for the U.S. population to date. It showed that while the prevalence of tooth decay in permanent teeth decreased for children, teens, and adults, tooth decay in primary teeth of children aged 2 to 5 years increased from 24 percent to 28 percent between 1988-1994 and 1999-2004.

To change this trend, a strategy involving a vast array of stakeholders as well as the public, is needed. Professionals and parents need to know how to prevent ECC, the best and least invasive procedures to treat it, and what behaviors need to change to prevent recurrent decay. Timely delivery of educational information and preventive therapies to “at-risk” populations is essential. High-risk individuals must be identified at an early age, preferably prenatally, and strategies implemented to combat the risk factors.

To this end, The CDA Foundation in collaboration with the American College of Obstetricians and Gynecologists, District IX, published “*Oral Health During Pregnancy and Early Childhood: Evidence-Based Guidelines for Health Professionals*” to substantiate the relationship between overall health and oral health status and to promote the importance and safety of dental care during pregnancy.

The complete guidelines — for medical, dental, early childhood and public health providers can be downloaded at www.cdafoundation.org/guidelines. The guidelines were also printed in their entirety in the June 2010 issue of the *Journal of the California Dental Association*.

The caries risk status of an individual is determined by the balance or imbalance between the pathological factors and protective factors of that person. Pathological factors include cariogenic bacteria, frequent ingestion of fermentable carbohydrates, and salivary dysfunction. Protective factors include, but are not limited to, adequate saliva and

its caries preventive components, fluoride therapy and antibacterial therapy.

Additional risk indicators for ECC include:

- Mother or primary caregiver who has had active dental decay in the past 12 months
- Parent and/or caregiver with low socio-economic status and/or low health literacy
- Child has recent dental restorations
- Child has developmental problems
- Child does not have a dental home
- Child has frequent (greater than three times daily) between-meal snacks of sugars, cooked starch, and/or sugared beverages
- Child has saliva-reducing factors present, including:
 1. medications (e.g., for asthma or hyperactivity)
 2. medical (cancer treatment) or genetic factors
- Child continually uses bottle containing fluids other than water
- Child sleeps with a bottle, or nurses on demand
- Plaque is obvious on the child’s teeth and/or gums bleed easily

Successful strategies to prevent ECC include anticipatory guidance, caries management by risk assessment, modification of oral hygiene and feeding practices, reduction of cariogenic bacteria in the mouth of the primary caregiver, application of fluoride varnish, and restoration of infected teeth.

CDA has a long history of supporting efforts to improve the oral health of California’s children including the passage of numerous resolutions by the House of Delegates, legislation mandating an oral health assessment upon school entry, online fact sheets, live and web-based educational programs and more. In 2003, the CDA Foundation secured a \$7 million First 5 grant to provide education and training to dental, medical and early childhood education professionals on caries prevention and importance of establishing a dental home by age one for children under five years of age, and those with special health care needs. CDA Foundation collaborated with The Dental Health Foundation (now The Center for Oral Health) on the “First Smiles” program. A comprehensive website with online education (www.first5oralhealth.org) has hosted over 900,000 visitors since August, 2004. More than 16,000 dental professionals and over 4,500 medical professionals received training.

CDA Foundation also administers The Pediatric Oral Health Access Program (POHAP). POHAP is a free training program that provides a sustainable increase in access to dental care by strengthening the skills and raising the comfort level of general dentists to treat young children, including children with physical and/or developmental disabilities. POHAP enlists general dentists who practice in underserved areas, treat uninsured patients and/or currently accept



publicly-funded dental insurance programs. Prior to completing the intensive training course, participating dentists agree to routinely accept young children, including children with special needs, as well as provide free restorative treatment to a limited number children who have no ability to pay.

To date, 389 dentists have participated in eleven regional trainings throughout the state. These POHAP-trained dentists have treated over 70,700 pediatric and special needs patients, as well as provided free restorative dental treatment to more than 4,080 needy patients.

CDA recognizes that without adequate intervention, children with ECC can suffer long-range consequences affecting their health and quality of life. ECC can predispose individuals to a lifetime of dental, medical and social problems. Prevention of ECC requires a strategy of risk assessment, anticipatory guidance, preventive therapies, therapeutic intervention, and education. It is incumbent on dental professionals to take a leadership role in the collaboration with other health care providers and community agencies to reduce the burden of oral disease.

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References Position Paper on Prevention of Early Childhood Caries HOD (11RC-2001)