# Policy on Mandatory School-entrance Oral Health Examinations

### **Review Council**

Council on Clinical Affairs

## **Latest Revision**

2017

#### **Purpose**

The American Academy of Pediatric Dentistry (AAPD) encourages policy makers, public health and education officials, and medical and dental communities to recognize that unmet oral health needs can impact a child's ability to learn. An oral health examination prior to matriculation into school may improve school readiness by providing a timely opportunity for prevention, diagnosis, and treatment of oral conditions.

#### Methods

This policy was developed by the Council on Clinical Affairs and adopted in 2003. This document is an update of the previous version, revised in 2012. This revision included electronic database and hand searches of articles in the medical and dental literature using the terms: oral health examination, dental screening, dental examination, dental assessment, school oral health examinations, dental certificates AND school-entrance; fields: all; limits: within the last 10 years, humans, English, birth through age 18. Additionally, the U.S. Surgeon General's report *Oral Health in America*<sup>1</sup> and websites for the American Academy of Pediatrics and AAPD were referenced.

# Background

Professional care is necessary to maintain oral health.1 The AAPD "emphasizes the importance of initiating professional oral health intervention in infancy and continuing through adolescence and beyond. The periodicity of professional oral health intervention and services is based on a patient's individual needs and risk indicators."2 The American Academy of Pediatrics recommends that, beginning at age three, a child's comprehensive health assessment should include attention to problems that might influence school achievement.<sup>3</sup> General health examinations prior to school entrance are mandated by many states. However, integration of general health and oral health care programs remains deficient.<sup>4</sup> In the U.S., approximately 23 percent of children aged 2-5 have dental caries in the primary dentition.<sup>5</sup> Only 30 percent of schools conduct oral health screenings once the child has matriculated.<sup>6</sup> While regulations may not guarantee that every child will be examined by a dentist, they do increase the likelihood of this happening.

Caries is the most common chronic disease of childhood in the U.S.1 Early childhood caries (ECC) is a severe problem for young children, affecting 23 percent of children two to five years of age nationwide.<sup>5</sup> By six to eight years of age, the prevalence of dental caries increases to 56 percent.<sup>5</sup> Lowincome children are disproportionally affected, with 33 percent of low-income children experiencing 75 percent of dental caries.7 Dental care remains as one of the greatest unmet needs for children.8 Safe and effective measures exist to prevent caries and periodontal diseases; however, dissemination and awareness of such measures do not reach the population at large.1 More than one-third of the population of the United States does not benefit from community water fluoridation.9 Because the use of fluoride contributes to the prevention, inhibition, and reversal of caries, 10 early determination of a child's systemic and topical fluoride exposure is important. A dental home provides the necessary diagnostic, preventive, and therapeutic practices, as well as ongoing risk assessment and education, to improve and maintain the oral health of infants, children, and adolescents.11 To maximize effectiveness, the dental home should be established within six months of eruption of a child's first tooth and no later than his/her first birthday.2

The public's lack of awareness of the importance of oral health is a major barrier to dental care.¹ Oral health is integral to general health.¹ Oral conditions can interfere with eating and adequate nutritional intake, speaking, self-esteem, and daily activities.¹² Children with ECC may be severely underweight because of associated pain and the disinclination to eat. Nutritional deficiencies during childhood can impact cognitive development.¹².¹³ Rampant caries is one of the factors causing insufficient development in children who have no other medical problems.¹⁴ Unrecognized disease and postponed care result in exacerbated problems, which lead to more extensive and costly treatment needs. The World Health Organization has suggested that school dental screenings could enable

#### **ABBREVIATIONS**

**AAPD:** American Academy Pediatric Dentistry. **ECC:** Early childhood caries.

early recognition and timely interventions, leading to savings of health care dollars for individuals, community health care programs, and third-party payors.<sup>15</sup>

In 2000, the National Association of State Boards of Education recognized "health and success in school are interrelated. Schools cannot achieve their primary mission of education if students and staff are not healthy and fit physically, mentally, and socially." <sup>16</sup> Children with dental pain may be irritable, withdrawn, or unable to concentrate. Pain can affect test performance as well as school attendance. <sup>12,13</sup> Data from the North Carolina Child Health Assessment and Monitoring Program showed that children with poor oral health status were nearly three times more likely to miss school as a result of dental pain than were their counterparts. <sup>17</sup> In addition, absences caused by pain were associated with poorer school performance. <sup>17</sup> Further analysis demonstrated that oral health status was associated with performance independent of absence related to pain. <sup>17</sup>

Following a report by the U.S. Surgeon General,<sup>1</sup> the Centers for Disease Control and Prevention launched the Oral Health Program Strategic Plan for 2011-2014.<sup>18</sup> This campaign aimed to provide leadership to prevent and control oral diseases at national level. The program helped individual states strengthen their oral health promotion and disease prevention programs. However, requirements for oral health examinations, implementation/enforcement of regulations, and administrative disposition of collected data vary both among and within states.<sup>18</sup>

## **Policy statement**

Early detection and management of oral conditions can improve a child's oral health, general health and well-being, and school readiness. Recognizing the relationship between oral health and education, the AAPD:

- supports legislation mandating a comprehensive oral health examination by a qualified dentist for every student prior to matriculation into school. The examination should be performed in sufficient detail to provide meaningful information to a consulting dentist and/or public health officials. This would include documentation of oral health history, soft tissue health/pathologic conditions, oral hygiene level, variations from a normal eruption/exfoliation pattern, dental dysmorphology or discoloration, dental caries (including white-spot lesions), and existing restorations. The examination also should provide an educational experience for both the child and the parent. The child/parent dyad should be made aware of age-related caries-risk and caries-protective factors, as well as the benefits of a dental home.
- supports such legislation to include subsequent comprehensive oral examinations at periodic intervals throughout the educational process because a child's risk fordeveloping dental disease changes and oral diseases are cumulative and progressive.

- encourages state and local public health and education officials, along with other stake-holders such as health care providers and dental/medical organizations, to document oral health needs, work toward improved oral health and school readiness for all children, and address related issues such as barriers to oral health care.
- recognizes that without requiring, tracking, and funding appropriate follow-up care, requiring oral health examinations is insufficient to ensure school readiness.
- encourages local leaders to establish a referral system to help parents obtain needed oral health care for their children.
- opposes regulations that would prevent a child from attending school due to noncompliance with mandated examinations.
- encourages its members and the dental community at large to volunteer in programs for school-entry dental examinations to benefit the oral and general health of the pediatric community.

#### References

- U.S. Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, Md.: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
- 2. American Academy of Pediatric Dentistry. Periodicity of examination, preventive dental services, anticipatory guidance, and oral treatment for children. Pediatr Dent 2017;39(6):188-96.
- 3. American Academy of Pediatrics. School health assessment. Pediatrics 2000;105(4Pt1):8757. Reaffirmed October, 2011.
- 4. Institute of Medicine, National Research Council. Improving access to oral health care for vulnerable and underserved populations. Washington, D.C.: The National Academies Press; 2011. Available at: "https://www.hrsa.gov/publichealth/clinical/oralhealth/improvingaccess.pdf". Accessed June 30, 2017. (Archived by WebCite® at: "http://www.webcitation.org/6ta8K4f9D")
- 5. Dye BA, Thornton-Evans G, Li X, Iafolla TJ. Dental caries and sealant prevalence in children and adolescents in the United States, 2011–2012. NCHS data brief, no. 191. Hyattsville, Md.: National Center for Health Statistics. 2015. Available at: "https://www.cdc.gov/nchs/products/databriefs/db191.htm". Accessed June 11, 2017. (Archived by WebCite® at: "http://www.webcitation.org/6ta8Q47bZ")
- 6. Centers for Disease Control and Prevention. Results from the School Health Policies and Practices Study 2014. Available at: "http://www.cdc.gov/healthyyouth/data/shp ps/pdf/shpps-508-final\_101315.pdf". Accessed February 23, 2017. (Archived by WebCite® at: "http://www.web citation.org/6oVC70IDq")

- 7. Fisher-Owens SA, Barker JC, Adams S, et al. Giving policy some teeth: Routes to reducing disparities in oral health. Health Aff (Millwood) 2008;27(2):404-12.
- 8. Bloom B, Jones LI, Freeman G. Summary health statistics for U.S. children: National Health Interview Survey, 2012. National Center for Health Statistics. Vital Health Stat 2013;10(258):1-81.
- Centers for Disease Control and Prevention. Community Water Fluoridation. Fluoridation Statistics 2014. Available at: "http://www.cdc.gov/fluoridation/statistics/2014stats. htm". Accessed February 23, 2017. (Archived by WebCite® at: "http://www.webcitationorg/6oVCcAbUU")
- 10. Centers for Disease Control and Prevention. Recommendations for using fluoride to prevent and control dental caries in the United States. MMWR Recomm Rep 2001; 50(RR14):1-42.
- 11. American Academy of Pediatric Dentistry. Policy on the dental home. Pediatr Dent 2017;39(special issue):29-30.
- 12. Moynihan P, Petersen PE. Diet, nutrition and the prevention of dental diseases. Public Health Nutr 2004;7(1A): 201-26.
- 13. Nyaradi A, Li J, Hickling S, Foster J, Oddy WH. The role of nutrition in children's neurocognitive development, from pregnancy through childhood. Front Hum Neurosci 2013;7:97. Available at: "https://doi.org/10.3389/fnhum. 2013.00097". Accessed June 7, 2017. (Archived by Web-Cite® at: "http://www.webcitation.org/6siiqwGXO")

- 14. Acs G, Lodolini G, Kaminsky S, Cisneros GJ. Effect of nursing caries on body weight in a pediatric population. Pediatr Dent 1992;14(5):302-5.
- 15. Kwan S, Petersen PE. Oral health promotion: An essential element of a health-promoting school. In: World Health Organization Information Series on School Health. Geneva: WHO, 2003; Document 11. Available at: "www.who.int/oral\_health/publications/doc11/en/". Accessed August 7, 2017. (Archived by WebCite® at: "http://www.webcitation.org/6siiOfHyI")
- 16. Bogden JF, Vega-Matos CA. Fit, healthy, and ready to learn: A school health policy guide, part 1: Physical activity, healthy eating, and tobacco-use prevention. Alexandria, Va.: National Association of State Boards of Education; 2000.
- 17. Jackson SL, Vann WF, Kotch JB, Pahel BT, Lee JY. Impact of poor oral health on children's school attendance and performance. Am J Public Health 2011;101(10):1900-6.
- 18. Centers for Disease Control and Prevention. Oral Health Program. Strategic Plan 2011-2014. Available at: "https://www.cdc.gov/oralhealth/pdfs/oral\_health\_strategic\_plan.pdf". Accessed February 23, 2017. (Archived by WebCite® at: "http://www.webcitation.org/6oVCsiIKC")