

## **Problem**

Chronic diseases are the leading cause of death and disability in the United States.<sup>1</sup> Great strides have been made to address chronic diseases over the past decade to improve the health of Americans. However, public health challenges remain and significant disparities persist in many areas, including oral health.<sup>2</sup> Oral diseases cause pain and disability for millions of Americans.<sup>3</sup>

Poor oral health affects Americans throughout the life span, from infancy through adulthood.<sup>4</sup> Tooth decay affects more than one in four U.S. children ages two through five years and one in two adolescents ages 12 to 15 years.<sup>5,6,7</sup> Nearly one in two U.S. adults age 30 and older have some form of periodontal disease.<sup>8</sup> Among adults age 65 and older, seven of ten have periodontal disease,<sup>8</sup> and one in four has lost all of their teeth.<sup>5,6,7</sup> More than 7,800 people, mostly older Americans, die from oral and pharyngeal cancer each year.<sup>5,9,10</sup> Poor oral health has been linked to several chronic diseases including diabetes, heart disease and stroke, and has been associated with premature births and low birth weight among pregnant women.<sup>11,12,13,14,15</sup> These conditions may be prevented in part with regular visits to the dentist; however, in 2007 less than one-half (44.5%) of people age two and older had a dental visit in the past 12 months. This rate has remained relatively unchanged over the past decade.<sup>3,16</sup>

The consequences of poor oral health include pain, lost time from work and school, costly treatment, reduced quality of life and the potential for disability. Access to oral health care is associated with gender, age, education level, income, race and ethnicity, access to medical insurance and geographic location.<sup>4</sup> These determinants of health are key to improving the health of all American and reducing disparities.

## **Methods**

Oral health is important to overall health. Most oral diseases are preventable in part through evidence-based preventive practices and regular dental care.<sup>3,5</sup> Healthy People 2020 provides a comprehensive set of national goals and objectives for improving the health of all Americans, a framework to measure progress for health issues in specific populations, and a foundation for prevention and wellness activities.<sup>17</sup> A smaller set of these objectives, called Leading Health Indicators, has been selected to communicate high priority health issues and to motivate actions at the national, state and community levels to improve the health of the U.S. population. The Leading Health Indicators place renewed emphasis on overcoming challenges as progress is tracked over the next decade. They were designed to draw attention to both individual and societal determinants that affect the health of the public and contribute to disparities and thus highlight strategic opportunities to promote health for all Americans.<sup>2</sup>

The Oral Health Leading Health Indicator is to Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.<sup>3</sup> States and communities can take specific actions to promote and improve health and reach this objective, such as:

- Include oral health in state health plans and use respective state data to monitor and track oral health indicators across the life span.
- Include an oral health component and the provision of oral health services in school-based health centers, local health departments, community health centers and other non-profit entities and non-traditional settings (e.g., schools, pre-schools, WIC programs, senior centers, long-term care facilities.)
- Integrate oral health with primary care and other family health and chronic disease programs.
- Promote medical dental collaboration for early disease screening and prevention efforts.
- Promote the first dental visit by one year of age.
- Establish a continuously accessible source of dental care for all infants, children and adolescents.
- Increase oral health literacy and awareness among health care providers and the general population.
- Increase third party payer coverage of oral health services.
- Support and implement state Medicaid Dental Action Plans for preventive visits and sealants.
- Implement policies to support expanding the oral health workforce in states through innovative models and scope of practice efforts.

The promotion of oral health as a Leading Health Indicator is an important facet of overall health care as oral diseases impact individuals, families, communities, and society as a whole.<sup>18</sup> State oral health programs should promote and implement interventions in support of the Leading Health Indicator to increase access to and utilization of the oral health care system. Dental visits and increased access to oral health care can have a positive impact and lead to improved oral health.<sup>19,20</sup> A study among adults showed those who had more dental visits and received significantly more dental services had improved oral health.<sup>21</sup> Recent studies indicate national and state-level improvements in children's use of preventive services and oral health status and some progress toward the Healthy People 2020 Oral Health Objectives.<sup>19,22</sup>

## Policy Statement

The Association of State and Territorial Dental Directors supports the HP2020 Oral Health Leading Health Indicator to [Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year](#). State oral health programs should implement appropriate interventions to address oral health disparities across the life span and increase access to and utilization of the oral health care system to improve oral health and meet the objective of the Healthy People 2020 Oral Health Leading Health Indicator.

<sup>1</sup> Heron MP, Hoyert DL, Murphy ST, et al. Deaths: Final data for 2006. *Natl Vital Stat Rep*. 2009;57(14):1-134.

<sup>2</sup> Healthy People 2020: Leading Health Indicators. <http://www.healthypeople.gov/2020/LHI/default.aspx>. Accessed September 6, 2013.

<sup>3</sup> Healthy People 2020: Leading Health Indicators, Oral Health.

<http://www.healthypeople.gov/2020/LHI/oralHealth.aspx?tab=overview>. Accessed October 3, 2013.

<sup>4</sup> Healthy People 2020: Leading Health Indicators, Oral Health, Life Stages and Determinants.

<http://www.healthypeople.gov/2020/LHI/oralHealth.aspx?tab=determinants>. Accessed September 6, 2013.

<sup>5</sup> National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC). Oral health: *Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers: At a Glance 2011*. Atlanta, GA:2011.

<sup>6</sup> Dye BA, Tan S, Smith V, et al. Trends in oral health status: United States, 1988-1994 and 1999-2004. *Vital Health Stat 11*. April 2007; (248):1-92.

<sup>7</sup> Beltrán-Aguilar ED, Barker LK, Canto MT, et al. Surveillance for dental caries, dental sealants, tooth retention, edentulism, and enamel fluorosis – United States, 1988 – 1994 and 1999 – 2002. *MMWR Surveill Summ*. 2005;54(No. SS-3):1-43.

<sup>8</sup> Eke PI, Dye BA, Wei L, et al. Prevalence of periodontitis in adults in the United States: 2009 and 2010. *J Dent Res*. 2012;91(10):914-920.

<sup>9</sup> Greenlee RT, Murray T, Bolden S, Wingo PA. Cancer statistics, 2000. *CA Cancer J Clin*. 2000;50(1):7-33. <http://www.tcsg.org/tobacco/CancerStat2000.pdf>. Accessed October 3, 2013.

<sup>10</sup> American Cancer Society. *Cancer Facts and Figures 2012*. Atlanta, GA: American Cancer Society; 2012.

<sup>11</sup> Bensley L, VenEenwyk J, Ossiander EM. Associations of self-reported periodontal disease with metabolic syndrome and number of self-reported chronic conditions. *Prev Chronic Dis*. 2011;8(3):A50.

[http://www.cdc.gov/pcd/issues/2011/may/10\\_0087.htm](http://www.cdc.gov/pcd/issues/2011/may/10_0087.htm). Accessed January 14, 2014.

<sup>12</sup> Barnett ML. The oral-systemic disease connection. *J Am Dent Assoc*. 2006;137(suppl 2):5S-6S.

[http://ada.ada.org/content/137/suppl\\_2/5S.full](http://ada.ada.org/content/137/suppl_2/5S.full). Accessed January 14, 2014.

<sup>13</sup> *J Am Dent Assoc*. 2006;137 (suppl 2). [http://jada.ada.org/content/137/suppl\\_2](http://jada.ada.org/content/137/suppl_2). Accessed January 14, 2014.

<sup>14</sup> Eke PI. Public health implications of periodontal infections in adults: conference proceedings. *J Publ Health Dent*. 2005;65(1):56–65.

<sup>15</sup> 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.

<sup>16</sup> United States Government Accountability Office. *Dental Services: Information on Coverage, Payments, and Fee Variation*. GAO-13-754. Washington, D.C.: September 2013. <http://www.gao.gov/assets/660/657454.pdf>. Accessed February 3, 2014.

<sup>17</sup> Healthy People 2020: Improving the Health of Americans, 2020 Topics and Objectives, Oral Health.

<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=32>. Accessed August 31, 2013.

<sup>18</sup> National Institute of Dental and Craniofacial Research, Centers for Disease Control and Prevention, Dental, Oral and Craniofacial Data Resource Center. Section 17: Social and economic impact of oral disease. *Oral Health, U.S. 2002 Annual Report*. 2002. [http://drc.hhs.gov/report/17\\_1.htm](http://drc.hhs.gov/report/17_1.htm). Accessed January 20, 2014.

<sup>19</sup> Sen B, Blackburn J, Morrisey MA, et al. Effectiveness of preventive dental visits in reducing nonpreventive dental visits and expenditures. *Pediatrics*. 2013;131(6):1107-1113.

<http://pediatrics.aappublications.org/content/early/2013/05/22/peds.2012-2586.full.pdf+html>. Accessed January 20, 2014.

<sup>20</sup> Delta Dental. *Americas Oral Health: The Role of Dental Benefits*; April 2010.

<http://www.deltadental.com/AmericaOralHealthRoleDentalBenefits.pdf>. Accessed January 20, 2014.

<sup>21</sup> Locker D. Does dental care improve the oral health of older adults? *Community Dent Health*. 2001;18(1):7-15.

<sup>22</sup> Mandal M, Edelstein BL, Ma S, Minkovitz CS. Changes in children’s oral health status and receipt of preventive dental visits, United States 2003-2011/2012. *Prev Chronic Dis*. 2013;10:130187. [http://www.cdc.gov/pcd/issues/2013/13\\_0187.htm](http://www.cdc.gov/pcd/issues/2013/13_0187.htm). Accessed January 27, 2014.