

## **Abstract**

In August 2020, the U.S. Department of Health and Human Services, along with the Office of Disease Prevention and Health Promotion, unveiled [Healthy People 2030](#) (HP 2030), a national framework that establishes goals and objectives to improve the health and well-being of people in the United States. These objectives focus on the most high-impact public health issues and reflect an increased focus on the social determinants of health – how the conditions in which people live, work, and play affect their health and well-being. HP 2030 includes oral health objectives that focus on oral conditions, access to preventive services and quality dental care, oral health communication/health information technology, and dental public health infrastructure.

Achieving the HP 2030 oral health objectives requires coordinated action by individuals, groups and organizations. Stakeholders such as local, tribal, state and territorial health departments and programs can take action by working with health professions educational institutions and associations, public and private sector businesses, and cross-disciplinary leaders to identify areas of mutual interest and to align efforts. State and territorial oral health programs are key stakeholders and are well positioned to partner and offer technical assistance to their networks.

The Association of State and Territorial Dental Directors (ASTDD) endorses and supports the Healthy People 2030 oral health and oral health-related objectives and encourages state and territorial oral health program partnerships and collaborations to develop companion objectives and integrate oral health into overall health efforts including State Healthy People 2030 Plans.

## **Problem**

Great strides have been made over the past 50 years in improving the oral health of Americans; however, public health challenges remain and significant disparities persist. Oral health problems are widespread, especially in disadvantaged groups, sometimes painful, costly to treat, and largely preventable.

The likelihood of poor oral health is greater at every age for people who are low-income, uninsured, and/or members of racial/ethnic minority, immigrant, or rural populations than for populations with better access to quality oral health care.<sup>1</sup>

- One in five children (20 percent) ages 5–11 have at least one untreated decayed tooth.<sup>2</sup>
- One in seven adolescents (13 percent) ages 12–19 have at least one untreated decayed tooth.<sup>2</sup>
- Children and adolescents ages 5–19 from families with low incomes are more than twice as likely to have dental caries, compared with their peers from families with higher incomes (25 percent vs. 11 percent).<sup>2</sup>
- More than one in four adults (26 percent) have untreated tooth decay.<sup>3</sup>
- Nearly half (46 percent) of adults ages 30 or older show signs of periodontal disease; periodontitis (severe periodontal disease) affects about 9 percent of adults.<sup>4</sup>

- Oral cancer is more common in men than women, in those with a history of tobacco or heavy alcohol use, and in those infected with human papillomavirus.<sup>5</sup>
- Individuals with low oral health literacy had the highest risk for oral diseases and the problems related to those diseases.<sup>6</sup>
- Less than three quarters (73.0 percent) of the US population on community water systems has access to fluoridated water.<sup>7</sup>
- Over one-third of states do not have a comprehensive oral health surveillance system and publicly available oral health data.<sup>8</sup>

Regular oral health care can prevent oral diseases and identify problems early when they are usually less expensive and easier to treat.<sup>9,10</sup> But many people cannot afford dental care, do not have dental insurance, or cannot find a dentist who will accept their dental insurance. Untreated oral diseases can lead to a cycle of pain and disability, and impact overall health, which in turn can cause additional oral health problems. Oral diseases and chronic diseases such as diabetes and cardiovascular disease share common risk factors such as unhealthy diets and use of tobacco.<sup>11</sup>

Many children and adults do not have personal access to individual measures such as fluoride varnish and dental sealants, or population-level measures such as community water fluoridation, that have proven effective in preventing oral diseases and reducing oral health care costs. Providing oral health information to people in a culturally sensitive and understandable manner using appropriate communication channels can empower individual decision-making in how best to prevent and identify oral health problems and access care.

A review of the annual ASTDD Synopses of State Oral Health Programs, which tracks states' efforts to improve oral health and contributions to progress toward the national targets for the Healthy People oral health objectives, finds that many of these programs continue to experience challenges because of insufficient infrastructure, capacity, and funding.<sup>8</sup> Such challenges often hinder their ability to assure support for population-based programs such as community water fluoridation and school-based dental sealant programs and/or for developing oral health surveillance systems that track and evaluate oral health status, dental financing, and the availability or utilization of other services.

## **Method**

Since 1980, the Healthy People Initiative has set goals and measurable objectives to improve health and well-being in the United States. On August 18, 2020, the U.S. Department of Health and Human Services, along with the Office of Disease Prevention and Health Promotion, unveiled Healthy People 2030.<sup>12</sup> The fifth edition of Healthy People builds on the knowledge gained over the past four decades to address current and emerging public health priorities and challenges. Data from the HP 2020 Midcourse Review of the Oral Health Objectives note that 16 (48.5 percent) of the 33 oral health objectives improved or met/exceeded targets; three were improving, five had demonstrated little or no detectable change (those relating to oral cancer and periodontitis, FQHCs with an oral health care program, adolescents with dental caries in their permanent teeth, and children aged 6-9 with dental caries in their primary or permanent teeth); one was getting worse (persons aged two years and older who visited the dentist in the past year), and eight objectives had baseline data only.<sup>13</sup>

An interdisciplinary team of subject matter experts developed the national HP 2030 health objectives and targets after seeking wide input from professionals and the public. These objectives focus on the most

high-impact public health issues and reflect an increased focus on the social determinants of health – how the conditions in which people live, work, and play affect their health and well-being. The aim of Healthy People 2030’s Objectives for Oral Conditions is to identify, prioritize and monitor the impact of strategies and actions that can help people access the oral health care they need to help prevent or minimize the impact of many oral conditions, to improve oral and overall health.<sup>12</sup>

The HP 2030 oral health objectives are listed below grouped by topic area or population.

#### General

- Reduce consumption of added sugars by people aged 2 years and older [Nutrition and Weight Status-10]
- Increase the proportion of oral and pharyngeal cancers detected at the earliest stage [Oral Health-7]

#### Children, Adolescents, and Young Adults

- Reduce infections due to human papillomavirus (HPV) types prevented by the 9-valent vaccine in young adults [Immunization and Infectious Diseases-07]
- Reduce the proportion of children and adolescents with lifetime tooth decay [Oral Health-01]
- Reduce the proportion of children and adolescents with active and untreated tooth decay [Oral Health-02]
- Increase the proportion of low-income youth who have a preventive visit [Oral Health-9]
- Increase the proportion of children and adolescents who have dental sealants on 1 or more molars [Oral Health-10]

#### Adults and Older Adults

- Reduce the proportion of adults with active or untreated tooth decay [Oral Health-03]
- Reduce the proportion of older adults with untreated root surface decay [Oral Health-04]
- Reduce the proportion of older adults aged 45 and over who have lost all of their teeth [Oral Health-05]
- Reduce the proportion of adults aged 45 years and over with moderate and severe periodontitis [Oral Health-06]

#### Health Care Access and Quality

- Increase the proportion of people with dental insurance [Access to Health Services-02]
- Reduce the proportion of people who can’t get the dental care they need when they need it [Access to Health Services-05]
- Increase use of the oral health care system [Oral Health-08]

#### Health Communication/Health Information Technology

- Increase the proportion of adults whose health care provider checked their understanding [Health Communication/Health Information Technology-01]
- Increase the number of state health departments that use social marketing in health promotion programs [Health Communication/Health Information Technology-D01]
- Increase the health literacy of the population [Health Communication/Health Information Technology-R01]

## Public Health Infrastructure

- Increase the proportion of people whose water systems have the recommended amount of fluoride [Oral Health-11]
- Increase the number of states and DC that have an oral and craniofacial health surveillance system [Oral Health-D01]

## Actions to Achieve Healthy People 2030

Achieving the Healthy People 2030 oral health objectives requires coordinated action by individuals, groups and organizations. Local, tribal, state and territorial health departments and programs should work collaboratively and synergistically with health professions educational institutions and associations, public and private sector businesses, and cross-disciplinary leaders to identify areas of mutual interest and to align efforts. State and territorial oral health programs are key stakeholders and are well positioned to partner and offer technical assistance to their networks.

The following list provides examples of potential policy- and program-related actions:

### Local, Tribal, State, and Territorial/Jurisdiction Health Departments and Programs

- Decide internal oral health priorities, create a roadmap to achieve the goals and objectives and establish oral health benchmarks.
- Create key messages that public health department officials can use to communicate oral health priorities.
- Align health department oral health activities with national oral health priorities.
- Facilitate partnerships to foster a shared vision and build momentum across settings to meet Healthy People 2030 objectives.
- Engage/work collaboratively with health department program leaders to integrate oral health into other health activities.
- Provide training for non-oral health personnel on oral health concepts.
- Educate policymakers about evidence-based and cost-effective ways to prevent oral diseases, reduce oral health care expenses, and increase oral health equity.
- Post up-to-date, accurate and understandable information on tribal, state, and territorial health department and program websites pertaining to oral health and dental public health issues.
- Develop and distribute science-based messages about oral health in plain language for all relevant audiences.
- Support departmental and program efforts to show how oral health contributes to health equity.

### Health Professions Educational Institutions and Associations

- Align oral health accreditation standards and curricula with Healthy People 2030 goals and objectives.
- Align oral health education for students from all health professional disciplines with Healthy People 2030 goals and objectives.
- Use interprofessional approaches in curricula to educate students in other health-service-related fields in oral health care.

### Cross-Disciplinary Leaders

- Use Healthy People 2030 oral conditions and oral health-related objectives to align common goals and standards across disciplines.

- Raise awareness of Healthy People 2030 oral conditions and oral-health-related objectives among decision-makers in other sectors.
- Educate and train professionals in fields that influence social determinants of health, including oral health, to collaborate with the public health and health care sectors.

### Role of State and Territorial Oral Health Programs

State and territorial oral health programs can play a pivotal role in promoting activities to support achievement of the Healthy People 2030 oral health and oral health-related objectives by engaging stakeholders to identify areas of mutual interest to align efforts. For example, as states and territories update their state oral health plans with partners, they can encourage inclusion of oral health and oral health-related objectives and activities in state health plans. References to Healthy People 2030 oral health and oral health-related objectives can help frame and inform their efforts.

### **Policy Statement**

The Association of State and Territorial Dental Directors (ASTDD) endorses and supports the Healthy People 2030 oral health and oral health-related objectives to increase access to oral health care, in particular access to preventive oral health services, and to encourage partnerships and collaborations to integrate oral health into overall health.

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<sup>1</sup> Northridge ME, Kumar A, Kaur R. Disparities in Access to Oral Health Care. *Annu Rev Public Health*. 2020; 41:513-535. doi:10.1146/annurev-publhealth-040119-094318. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7125002/>

<sup>2</sup> Dye BA, Xianfen L, Beltrán-Aguilar ED. 2012. Selected Oral Health Indicators in the United States 2005–2008. Hyattsville, MD: National Center for Health Statistics.

<sup>3</sup> Centers for Disease Control and Prevention. 2019. Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016.

<sup>4</sup> Eke P, Thornton-Evans G, Wei L, et al. 2018. Periodontitis in US adults: National Health and Nutrition Examination Survey 2009–2014. *Journal of the American Dental Association* 149(7):576–586.e6.

<sup>5</sup> National Cancer Institute, Surveillance, Epidemiology, and End Results Program. N.d. Cancer Stat Fact: Oral Cavity and Pharynx Cancer [webpage]. Bethesda, MD: National Cancer Institute, Surveillance, Epidemiology, and End Results Program.

<sup>6</sup> Baskaradoss JK. Relationship between oral health literacy and oral health status. *BMC Oral Health*. 2018;18(1):172. Published 2018 Oct 24. doi:10.1186/s12903-018-0640-1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6201552/>

<sup>7</sup> U.S. Centers for Disease Control and Prevention, Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion. Community Water Fluoridation. <https://www.cdc.gov/fluoridation/statistics/index.htm>

<sup>8</sup> Association of State and Territorial Dental Directors, Reno NV. 2020 Synopses of State Dental Public Health Programs (Data for FY 2018-2019). <https://www.astdd.org/docs/2020-synopses-report.pdf>.

<sup>9</sup> US National Library of Medicine. February 2020. Medline Plus. Dental Exam, <https://medlineplus.gov/lab-tests/dental-exam/> Accessed 10/3/2020.

<sup>10</sup> World Health Organization. 2020. Oral Health. <https://www.who.int/news-room/fact-sheets/detail/oral-health>. Accessed 10/3/2020.

<sup>11</sup> Griffin SO, Jones JA, Brunson D, Griffin PM, Bailey WD. 2012. Burden of oral disease among older adults and implications for public health priorities. *American Journal of Public Health* 102(3):411–418.

<sup>12</sup> Office of Disease Prevention and Health Promotion. 2020. Healthy People 2030. Washington, DC: Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople>

<sup>13</sup> National Center for Health Statistics. Chapter 32: Oral Health. Healthy People 2020 Midcourse Review. Hyattsville, MD. 2016. <https://www.cdc.gov/nchs/data/hpdata2020/HP2020MCR-C32-OH.pdf>