

## ORAL HEALTH

**Note to readers and users of the *Healthiest Wisconsin 2020* Profiles:** This *Healthiest Wisconsin 2020* Profile is designed to provide background information leading to collective action and results. This profile is a product of the discussions of the Focus Area Strategic Team that was convened by the Wisconsin Department of Health Services during September 2009 through November 2010. The objectives from this Focus Area have been recognized as objectives of *Healthiest Wisconsin 2020*. (Refer to Section 5 of the *Healthiest Wisconsin 2020* plan.) A complete list of *Healthiest Wisconsin 2020* Focus Area Strategic Team Members can be found in Appendix A of the plan.

### Definition

*Oral health* is basic to general overall health throughout the life span. It means being free of mouth pain, tooth decay, tooth loss, oral and throat cancer, oral sores, birth defects, gum (periodontal) disease, and other diseases that affect the mouth and surrounding structures.

- Achieving good oral health requires access to a dental home, which is not a building, but rather a team approach to providing comprehensive oral health care services in a high-quality and cost-effective manner.
- Early intervention with primary preventive measures (tooth brushing, flossing, good nutritional and infant feeding practices) begins during the preconceptional and prenatal periods. It includes care provided from both primary health care providers and oral health providers and continues through the life span.
- Early intervention with preventive measures, such as fluoride varnish and dental sealants, includes children and adults with developmental disabilities who experience significant problems of access to dental services.
- Older adults with poor oral health are at risk for malnutrition.

### Importance of the Focus Area

Oral health is essential to the general health and well-being of all Wisconsin people and can be achieved by everyone. Oral health means much more than having healthy teeth. It means being free of chronic oral-facial pain, oral and pharyngeal (throat) cancers, oral soft-tissue lesions, birth defects such as cleft lip and palate, and scores of other diseases and disorders. Good oral health also includes the ability to carry on the most basic human functions such as chewing, swallowing, speaking, smiling, kissing, and singing. Oral health is integral to general health, and people cannot be healthy without good oral health. Oral health and general health should not be interpreted as separate entities. Many systemic diseases may initially start with and be identified through oral symptoms. People who have conditions that affect their immune system, including people with HIV/AIDS, are more likely to experience oral infections. Also, research suggests an association between gum and tissue disease and diabetes, heart disease, stroke and adverse pregnancy outcomes.

Modifiable risk factors such as tobacco use, heavy alcohol consumption, and poor dietary practices also affect health, not only of the mouth but also the health of the face and the head. Tobacco use is a risk factor for oral and throat cancers, gum disease, oral yeast infections, and dental decay. People who use tobacco and who also drink heavily are at a much greater risk for oral and throat cancers.

There are profound and far-reaching oral health disparities within the population. Disparities in various oral conditions may relate to age, sex, race/ethnicity, geography, income, education, or medical status. Children from low-income families suffer dental decay twice as much as children from higher-income families and are more likely to let disease go untreated because they lack resources.

Access to oral health care is a major issue in Wisconsin and throughout the United States. Lack of dental insurance (public or private) is one of the major barriers to obtaining care. In addition, the level of reimbursement for services, particularly for state-funded insurance programs, is also a barrier for providers to participate in these programs because of insufficient financial incentives and reimbursements.

Safe and effective disease prevention measures need to be readily available so that everyone can adopt prevention measures to improve oral health and prevent disease. These measures include daily oral hygiene procedures and other lifestyle behaviors; community-based programs such as community water fluoridation and tobacco cessation programs; and provider-based interventions such as the placement of dental sealants, fluoride varnish applications, and examinations for common oral and throat cancers. Wisconsin Seal-A-Smile is a statewide sealant program that offers grants to local school-based programs. Wisconsin Seal-A-Smile targets low-income, uninsured children who attend schools with high rates of free and reduced-price school meals eligibility. In addition to sealants, these children also receive oral health education and fluoride varnish applications. Community water fluoridation is a cost-effective, safe, broad-based approach that helps people of all ages and income levels and is considered one of the great public health achievements of the 20th century (U.S. Department of Health and Human Services, 2000).

### **Wisconsin Data Highlights**

- Results from screenings of Wisconsin children conducted among a sample of Head Start children in the 2008-09 school year, and a sample of third-grade students in the 2007-08 school year, revealed that 26 percent of Head Start children had untreated decay and 20 percent of third-grade children had untreated decay (Wisconsin Department of Health Services, Healthy Smile for a Healthy Head Start Survey, 2010; Make Your Smile Count Survey, 2009).
- Racial and ethnic disparities were found among children screened, particularly among the third-grade children. African American and Hispanic third-graders were twice as likely to have untreated decay and were less likely to have the benefit of sealants compared to White

children (Wisconsin Department of Health Services, Healthy Smile for a Healthy Head Start Survey, 2009; Make Your Smile Count Survey, 2008).

- Oral health disparities in Wisconsin also exist by disability status. Wisconsin children with special health care needs were more likely to have decayed teeth or cavities in the past six months (21 percent) compared to children without special health care needs (15 percent) and were twice as likely to have had a toothache in the past six months (National Survey of Children's Health, 2007).
- According to the 2008 Wisconsin Behavioral Risk Factor Survey, African American adults were more likely to report having lost permanent teeth due to decay/gum disease (52 percent) compared to White adults (38 percent).
- Of the 955,336 Wisconsin Medicaid and BadgerCare members in 2008, 23 percent received at least one dental service (Wisconsin Department of Health Services, Medicaid Dental Utilization Data Tables, 2008). In 2006, one Wisconsin county was without a Medicaid billing dentist and six other counties did not have a dentist billing Medicaid for claims totaling at least \$10,000 per year (Medicaid claims data, 2009).
- During the 2008-09 school year, the Wisconsin Seal-A-Smile program screened almost 9,800 children, placed dental sealants on more than 6,200 children, and provided fluoride varnish to almost 6,000 children (Sealant Efficiency Assessment for Locals and States, 2009).
- Approximately 90 percent of Wisconsin's population who are on a public water supply receive the benefit of fluoride. Nationally, Wisconsin ranks 16<sup>th</sup> highest among states for fluoridation of community water supplies (Wisconsin Public Water Supply Fluoridation Census, 2009).

## **Objective 1**

**By 2020, assure access to ongoing oral health education and comprehensive prevention, screening and early intervention, and treatment of dental disease in order to promote healthy behaviors and improve and maintain oral health.**

### **Objective 1 Indicators**

- Percent of third-graders with dental sealants and untreated decay (School Survey).
- Percent of Head Start children with untreated decay.
- Percent of adults with self-reported oral health problems (Behavioral Risk Factor Survey).

### **Objective 1 Rationale**

The oral disease burden in Wisconsin can be reduced through early education and preventive services. In addition, access to preventive and treatment services would reduce morbidity and mortality and would reduce the severity of oral disease, which would lead to better overall health. Improved overall health status would result in better nutrition, improved school and work attendance and performance, and enhanced interpersonal relationships. It would also facilitate the search for, and attainment of, work.

## **Objective 2**

**By 2020, assure appropriate access to effective and adequate oral health delivery systems, utilizing a diverse and adequate workforce, for populations of differing races, ethnicities, sexual identities and orientations, gender identities, and educational or economic status and those with disabilities.**

### **Objective 2 Indicators**

- Proportion of BadgerCare enrollees with at least one dental claim in a year.
- Number of oral health related emergency room visits by population group. (Indicator to be developed.)
- Percent of schools with school-based dental screening/sealant programs.
- Number of dental providers by type of provider by demographics and location. (Indicator to be developed.)

### **Objective 2 Rationale**

Certain populations in Wisconsin disproportionately bear the burden of oral disease. The oral disease burden can be reduced through early education and preventive services. In addition, access to preventive and treatment services would reduce morbidity and mortality and would reduce the severity of oral disease, which would lead to improved overall health. Improved overall health status would result in better nutrition, improved school and work attendance and performance and enhanced interpersonal relationships; it would also facilitate job searches and attainment of work. However, in order to address these disparities, adequate and accessible infrastructure must be maintained and services delivered by a culturally competent and diverse workforce.

### **Potential evidence- or science-based actions to move the focus area objectives forward over the decade**

- Expand scope of practice for dental hygienists and the types of settings where dental hygienists may practice independently of a dentist (Booske, et al., 2009).
- Increase Medicaid reimbursement rates for dentists to 75 percent of regional market rates (Booske, et al., 2009).
- Allow alternative dental care providers. Expanded-function dental assistants supplement and support dentists by performing basic dental procedures, enabling dentists to see more patients (Booske, et al., 2009).
- Provide mobile dental health program for on-site dental care (Booske, et al., 2009).
- Establish a state-based oral health surveillance system (Association of State and Territorial Dental Directors, 2010).
- Develop and support state oral health coalitions and collaborative partnerships (Association of State and Territorial Dental Directors, 2010).
- Engage in state oral health plans and collaborative planning (Association of State and Territorial Dental Directors, 2010).
- Create a statutory mandate for a state oral health program (Association of State and Territorial Dental Directors, 2010).

- Support community water fluoridation (Association of State and Territorial Dental Directors, 2010; Guide to Community Preventive Services, 2010).
- Support school-based fluoride mouth rinse and fluoride supplement programs (Association of State and Territorial Dental Directors Proven and Promising Best Practices for State and Community Oral Health Programs, 2010)
- Support school-based dental sealant programs (Association of State and Territorial Dental Directors, 2010; Guide to Community Preventive Services, 2010).
- Engage in workforce development to increase access to oral health care services (Association of State and Territorial Dental Directors, 2010).
- Address the oral health of children, adolescents, and adults with special health care needs (Association of State and Territorial Dental Directors, 2010).

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