

# Where Is the Greatest Need for Oral Health Care in Texas?



## BACKGROUND

Although oral health in the United States has improved significantly during the past several decades, certain segments of the population continue to suffer disproportionately from oral diseases. The same is true in Texas. The following chapter focuses on five key groups of Texans:

- Low-income children
- Nursing home residents and the elderly
- Individuals with special health care needs
- Low-income adults
- Residents of medically underserved areas

## LOW-INCOME CHILDREN

Although many low-income children have access to Medicaid, CHIP and other safety net programs, far too many fall through the cracks and do not receive adequate dental care. As a result, poor children are less likely to visit the dentist for preventive care and more likely to suffer from oral diseases than children from more affluent families. In fact, a national survey conducted in 2003 found that higher-income Texas children were far more likely to have gone to a dentist for a preventive visit during the previous 12-month period than lower-income children (see *Exhibit 7 below*).<sup>2</sup>

EXHIBIT 7 Percentage of children with preventive visits in the past 12 months by income		
FAMILY INCOME	U.S.	TEXAS
0–99% Federal Poverty Level	58%	59%
100–199% Federal Poverty Level	66	56
200–399% Federal Poverty Level	77	70
400%+ Federal Poverty Level	82	78

SOURCE: *The Oral Health of Children: A Portrait of States and the Nation 2005*,<sup>2</sup> based on data from the *National Survey of Children's Health (2003)*.

“Approximately 80 percent of dental caries (tooth decay) is concentrated in 25 percent of U.S. children — mostly low-income children — with even higher levels of caries found in African-American and Hispanic children.”<sup>1</sup>

SOURCE: *Center for Health Care Strategies, 2006*.

“Dental caries is a disease in which acids produced by bacteria on the teeth lead to loss of minerals from the enamel and dentin, the hard substances of teeth. Unchecked, dental caries can result in loss of tooth structure, inadequate tooth function, unsightly appearance, pain, infection, and tooth loss.”<sup>3</sup>

SOURCE: *Centers for Disease Control and Prevention, 2008*.

## NURSING HOME RESIDENTS AND THE ELDERLY

The State of Texas, regrettably, lacks clear documentation on the oral health status of older Texans in general and nursing home residents in particular. Data is available on the percentage of elderly Texans with complete tooth loss. However, information on other important indicators of oral health status (such as incidence of periodontal disease or the percentage of long-term residents who use the oral health care system) is not currently collected by the state.

Although oral health data on the elderly is somewhat limited, the fact that the elderly, especially those in nursing homes, are at high risk for oral diseases, is well-documented. For starters, access to care is a significant issue. Medicare does not provide dental coverage and only a small number of elderly persons have private dental coverage. Older adults are also at greater risk for oral

1 Carolyn Ballard and Nikki Highsmith, “Catalyzing Improvements in Oral Health Care: Best Practices from the State Action for Oral Health Access Initiative,” *Center for Health Care Strategies Inc.* (August 2006): 44.

2 The National Survey of Children's Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration.

3 Centers for Disease Control and Prevention, “The Burden of Oral Disease: Tool for Creating State Documents,” Atlanta: U.S. Department of Health and Human Services, 4 June 2007, <<http://www.cdc.gov/oralhealth/library/burdenbook/>> (11 April 2008).

disease because many take one or more prescription or over-the-counter drugs. Certain medications, including decongestants, heart medications and diuretics, can cause a condition known as “dry mouth,” which may limit the flow of saliva that protects the teeth against decay.

Many nursing home residents are at high risk for oral disease because of the simple fact that they may not have the physical or cognitive ability to take care of their teeth. Visiting a dentist for a routine cleaning may pose logistical or even physical challenges. And caregivers may not have the time or training to provide the level of care needed to residents of long-term care facilities.

As described earlier in this report, oral disease has also been linked to systemic diseases, such as pneumonia, one of the most common causes of death among elderly nursing home residents. The existence of dental plaque (a colorless layer of bacteria that builds up on the teeth) has been found to contribute to the presence of pneumonia-causing bacteria, which can enter the lower respiratory tract. One study compared the incidence of pneumonia among two groups of nursing home residents: an “oral care group” and a “no-oral care group.” The persons in the oral care group had their teeth cleaned after each meal by a nurse or caregiver and had weekly professional care, such as tartar control and plaque removal. Patients in the “no-oral care group” brushed their teeth by themselves. The two-year randomized study, which involved 366 residents at 11 different nursing homes, found significantly lower rates of pneumonia among the “oral care group” than the “no oral care group.”<sup>4</sup>

## TEXANS WITH SPECIAL HEALTH CARE NEEDS

Data on access to care for special populations, including foster children and persons with mental or physical disabilities, are also limited. The State of Texas, for example, does not gather statistics on the prevalence of oral disease among special needs populations, nor does it inquire about disability status when conducting telephone surveys on oral health care.

Although national or state-level data are limited, several studies have found that persons with special health care needs are at high risk for oral disease and often have difficulty obtaining the care they need. Useful data are available on children with special health care needs. In 2003, 23 percent of Texas children with special health care needs had no dental insurance (compared to 18 percent nationwide).<sup>5</sup> Another survey found that 16 percent of children with special health care needs had at least one unmet health care need. According to the survey, “the service most commonly reported as needed but not received was preventive dental care.”<sup>6</sup>

## LOW-INCOME ADULTS

Poor adults are also vulnerable to oral disease. The Texas Medicaid program covers only limited emergency dental treatment for adults. Preventive care,

A key trend that cannot be ignored is the fact that more older adults are retaining their natural teeth. As fewer older adults experience tooth loss, the risk of tooth-related disease, including rampant caries and periodontal disease, increases dramatically. This trend will only increase the demand for oral health care among the elderly and better training for both health care workers and family members.

<sup>4</sup> “Oral Health Affects Pnuemonia Risk in the Elderly,” PulmonaryReviews.com (2002), <[www.pulmonaryreviews.com/sep02/pr\\_sep02\\_oralhealth.html](http://www.pulmonaryreviews.com/sep02/pr_sep02_oralhealth.html)>.

<sup>5</sup> The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration. Data query performed at <[www.nschdata.org](http://www.nschdata.org)> on April 16, 2008. All numbers are rounded.

<sup>6</sup> “The National Survey of Children with Special Health Care Needs: Chartbook 2005–2006,” U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, <[www.mchb.hrsa.gov/cshcnos/cs/texas.htm](http://www.mchb.hrsa.gov/cshcnos/cs/texas.htm)> (16 April 2008).

such as cleanings or oral cancer screenings or therapeutic care, such as tooth extractions, are not covered. Low-income Texans are much less likely to have visited a dentist or had their teeth cleaned than their more affluent peers. According to the 2006 Behavioral Risk Factor Surveillance Survey, nearly 8 out of 10 Texas adults earning more than \$50,000 per year visited the dentist or a dental clinic in the past year — compared to less than 4 out of 10 Texans earning less than \$15,000 per year.

EXHIBIT 8 Percentage of adults who have had their teeth cleaned within the past year by income (2006)		
ANNUAL INCOME LEVEL	U.S.	TEXAS
< \$15,000	36%	36%
15,000 – 24,999	45	46
25,000 – 34,999	55	50
35,000 – 49,999	64	55
> 50,000	79	77

SOURCE: Behavioral Risk Factor Surveillance Survey, 2006.  
Data provided and confirmed by DSHS Oral Health Program, July 2008.  
ALL NUMBERS ARE ROUNDED.

In 2007, there were 47 counties without a single dentist, mostly in the Panhandle, West Texas, and South Texas.<sup>9</sup>

SOURCE: Texas Department of State Health Services and the Statewide Health Coordinating Council, Health Professions Resource Center for Health Statistics, 2008.

## RESIDENTS OF MEDICALLY UNDERSERVED AREAS

A detailed discussion of dental work force trends and related issues is outside the scope of this report. The geographic distribution of dentists in Texas, however, is an important issue that can and should be addressed in the context of access to care. For thousands of Texans, geography serves as a barrier to oral health care. The problem is presumably worse among poor, uninsured or elderly uninsured residents of medically underserved areas.

Every year, the Texas Department of State Health Services gathers and analyzes data on the number of dentists in Texas and where they practice. A recent state report found that, although the number of dentists in Texas per 100,000 residents has remained fairly stable over the past 20 years, the population-to-dentist ratio between metropolitan and nonmetropolitan counties has been widening. In 2007, there were 36.5 general dentists in Texas per 100,000, residents. Not surprisingly, the supply ratio in metropolitan areas were higher than nonmetropolitan areas (38.5 per 100,000, and 23.5 per 100,000 respectively).<sup>7</sup>

The State also tracks the number of Dental Health Professional Shortage Areas (HPSA) in Texas, which are designated by the federal government. The primary indicator used to determine if an area qualifies for HPSA status is the population-to-dentist ratio. In January 2008, 111 counties had some type of HPSA designation (82 of these were whole-county designations).<sup>8</sup> Partial-county HPSAs are designated by census tract and are common in major urban counties, including Bexar, Dallas, Harris and Travis.

A 2004 article published in the *Texas Dental Journal* characterized access to dental care in rural areas of Texas as an “emerging crisis.” According to the

<sup>7</sup> Texas Department of State Health Services and the Statewide Health Coordinating Council, Health Professions Resource Center for Health Statistics, “Promoting Excellence Through Healthcare Workforce Planning in Texas 2007,” <[www.dshs.state.tx.us/chs/hprc/shpo7ch2.pdf](http://www.dshs.state.tx.us/chs/hprc/shpo7ch2.pdf)> (30 July 2008).

<sup>8</sup> Ibid, 29.

<sup>9</sup> Ibid, 28.

study's author, although Texas has become increasingly urban, the state's rural population is projected to grow over the next 20 years and may exceed 4 million by 2020. The analysis found that only 5.5 percent of all licensed practicing dentists worked in a rural area and that less than 4 percent of recent dental school graduates (defined as dentists out of school for 10 years or less) were located in a rural area. In addition, the analysis found that rural dentists are more likely than their urban counterparts to be an older male and to be a general dentist rather than a specialist.<sup>11</sup>

## CONCLUSION

Poor oral health persists in Texas. Too many of the state's young, sick, poor and elderly are falling through the cracks and are at higher risk of developing serious dental diseases, most of which could have been prevented with routine care. The changing demographics of Texas demand a new, more aggressive state strategy to improve access to oral health care.

## Oral health and adults with diabetes

One of the serious complications of diabetes is periodontal disease, the chronic inflammation of the tissues supporting the teeth, which is linked to poor glycemic control and glucose intolerance among diabetic patients. As such, one of the goals of Healthy People 2010 is to increase the percentage of people with diabetes who have an annual dental exam to 71 percent.

According to an analysis of data collected by the U.S. government through the Behavioral Risk Factor Surveillance System (BRFSS), in 2004 only seven states exceeded the Healthy People 2010 goal for annual dental exams among persons with diabetes. The statistics for Texas, a state with a high incidence of diabetes, are disturbing. In 2004, only 50 percent of dentate adults (those with teeth) with diabetes had a dental exam in the past year, down from 65 percent in 1999. The only state that had a lower rate of dental visits in 2004 among dentate diabetic patients was Mississippi, at 49 percent.

The survey also found that white adults diagnosed with diabetes were more likely than their Hispanic or black counterparts to see a dentist. Dental visits were also higher among people with higher income and education levels and those patients who attended a diabetes management class.<sup>10</sup>

SOURCE: Centers for Disease Control and Prevention, 2005.

## Did you know?



<sup>10</sup> Centers for Disease Control and Prevention, "Dental Visits Among Dentate Adults: United States, 1999 and 2004," *MMWR Weekly*, 54(25 November 2005):1181-1183. Downloaded <[www.cdc.gov/mmwr/preview/mmwrhtml/mm5446a3.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5446a3.htm)> 4 April 2008.

<sup>11</sup> Eric S. Solomon, "Dentists in Rural Areas of Texas," *Texas Dental Journal* 121 (2004).