

# “At a Glance” Oral Health Indicators – Summary

“At-a-Glance” highlights twelve county-level oral health indicators. The indicators’ data sources and years collected vary. Combining or using one indicator’s numbers or percentages with another indicator’s could be misleading.

## Demographic Data

*Click above for link to table data.*

### **1. Population by age**

The U. S. Census Bureau publishes county population estimates each year by certain age groupings. The data shows the estimated population on July 1 of each year. The web tool uses the July 1, 2008, estimates, which were derived from the 2000 decennial census. Small geographic areas are difficult to accurately estimate due to intrastate migration.

### **2. Percentage of population below 100 percent and 200 percent of poverty level**

Two data sources are used. The Census Bureau’s 2005–2007 American Community Survey provided information for counties with 20,000 or more people (47 of 87 Minnesota counties and 91 percent of the state’s population). The 2000 Census provided data for counties under 20,000 people, and is almost ten years old. The 2007 federal poverty level was \$21,200 for a four-person household and the 200 percent level was \$42,400. Data for poverty rates for counties under 20,000 is taken from the 1999 poverty level.

Counties were ranked based on the percentage of population below 100 and 200 percent of the poverty level. The first-ranked county has the highest poverty percentages and the 87<sup>th</sup> county has the lowest.

### **3. Total number of schools and percent with 50 percent or more of students eligible for the Free and Reduced Price Meal Program**

Free and reduced lunch data is often used as an oral health measurement because low-income populations have high dental-disease rates.<sup>1</sup> Free meals are available to students from households under 130 percent of the federal poverty level (\$27,560 for a household of four). Reduced-price meals are available to students from households up to 185 percent of the federal poverty level (\$39,220 for a household of four).

School districts report this information annually each fall to the Minnesota Department of Education. The most recent data is from fall 2008. County

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<sup>1</sup> Minnesota Department of Health, *Minnesota Oral Health Data Book: Children and Youth*, October 2008, page 22. [www.health.state.mn.us/divs/cfh/oralhealth/oraldatabook.doc](http://www.health.state.mn.us/divs/cfh/oralhealth/oraldatabook.doc)

designations are based on the school district administrative office's location. A school district may serve students from another county.

### **Minnesota Health Care Programs**

*Click above for link to table data.*

#### **4. Percent of total county population enrolled in a Minnesota Health Care Program**

The Minnesota Department of Human Services provided the number of people enrolled in a Minnesota Health Care Program for twelve consecutive months. Total program enrollees may be higher because this data excludes people with fewer than twelve months of enrollment. This data only represents individuals in public health programs.

The enrollment number is divided by the county's population to obtain the percent of the county population enrolled for twelve consecutive months. This data is from calendar year 2008 and is updated annually.

#### **5. Number and percent of Minnesota Health Care Program enrolled-population with a dental visit**

The Minnesota Department of Human Services provided the number of twelve-month enrollees who had at least one dental visit during calendar year 2008. This number was divided by total enrollees with twelve consecutive months of enrollment. This data is updated annually.

The number of low-income children and adolescents, ages 0–18, who received preventive dental care in the past twelve months is a federal Healthy People 2010 objective.<sup>2</sup> The federal goal is 57 percent; Minnesota's 2008 rate is 48 percent for zero to twenty-year olds enrolled in a Minnesota Health Care Program with any dental visit (preventive or not). However, not all low-income children are enrolled in MHCP.

### **Dental Disease Prevention**

*Click above for link to table data.*

#### **6. Percent of population served by optimally fluoridated water**

Minnesota community water systems report their fluoridation levels to the Minnesota Department of Health on an ongoing basis. The data used here is from the December 2008 annual reports. Optimal systems maintain 0.9 to 1.5 milligrams of fluoride per liter of water to prevent tooth decay. A water system may add fluoride or have natural

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<sup>2</sup> Objective 21-12: Dental services for low-income children. "Low-income" is at or below 200 percent of the federal poverty level. <http://www.healthypeople.gov/Document/HTML/Volume2/21Oral.htm>

fluoride but not at the optimal level. Community water systems served 80 percent of Minnesotans, but only 61 percent are served by an optimal system.<sup>3</sup>

The population-served data is updated every even-numbered year, and the latest is from 2006. County is based on the water system's location. Some people may be served by a system in a neighboring county. The biggest example is Benton County's 6,800 St. Cloud residents, who are included under Stearns County's population served by optimal systems. The St. Paul and Minneapolis water systems each serve two counties, but their populations served are counted in the appropriate county.

“Community water fluoridation continues to be the most cost-effective and equitable means to provide protection from tooth decay. Income level or social status does not affect a person's ability to receive the benefits.”<sup>4</sup> This indicator is a federal Healthy People 2010 Oral Health objective and the federal goal is 75 percent;<sup>5</sup> Minnesota's current rate is 61 percent.

### **Dental Care Resources**

*Click above for link to table data.*

#### **7. Number of licensed dental professionals**

The Minnesota Board of Dentistry licenses dentists, hygienists and dental assistants. The data source is licensing applications, which are renewed biennially on licensees' birth month. This data is from June 2009. The licensee's county location is based on the license mailing address, which could be a work or home address. The data also includes retired licensees who maintain their licenses. Licensees with an out-of-state address are excluded. A new license category, dental therapist, will be added in 2011.

#### **8. Ratio of population per licensed professional**

The ratio is a county's 2008 population estimate divided by its licensed professionals. The ratios assume that people only receive dental services in their county, which is not always likely. The ratios exclude dental professionals with Wisconsin, North Dakota, and Iowa addresses who work in Minnesota.

#### **9. Number of dentists who treated Minnesota Health Care Program patients**

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<sup>3</sup> An optimal system's reported fluoridation levels are sufficient to prevent tooth decay. Systems that do not report fluoridation levels to the Minnesota Department of Health are not considered optimal, even if their fluoridation level is sufficient, because there is no verification. Almost all people on community water systems are on fluoridated systems, but not all these systems are at the optimal level.

<sup>4</sup> Minnesota Department of Health, *Minnesota Oral Health Data Book: Children and Youth*, October 2008, page 6. [www.health.state.mn.us/divs/cfh/oralhealth/oraldatabook.doc](http://www.health.state.mn.us/divs/cfh/oralhealth/oraldatabook.doc)

<sup>5</sup> Objective 21-9: Community water fluoridation.  
<http://www.healthypeople.gov/Document/HTML/Volume2/21Oral.htm>

The Minnesota Department of Human Services tracks payments to dentists who treat Minnesota Health Care Program enrollees. This data counts the number of distinct patients that the provider treated based on the provider's county location in 2007. Some of the payment data is to a clinic rather than the treating dentist. A clinic may have more than one dentist treating patients.

The data was grouped to show how many providers in each county served 1 to 10 patients, 11 to 70, and more than 70. These groupings divide the statewide data into approximate thirds. A provider working in more than one county is counted in each county worked. Distinct patients are anyone enrolled, not just people with 12 consecutive eligibility-months. The data does not indicate if the patient is a regular client of the treating dentist or the type of treatment provided (preventive or other).

#### **10. Ratio of Minnesota Health Care Program enrollees to dentists who treat them**

The ratio of MHCP enrollees to dentists is based on total county enrollees with 12 consecutive months and the number of dentists who treated at least one MHCP patient in 2007. The enrollee total includes people who did not have a dental visit during the year.

#### **11. Dental Health Professional Shortage Areas based on geography or population**

The Minnesota Department of Health submits an application to the U.S. Department of Health and Human Services (DHHS) to designate or re-designate an entire county or parts of one as dental shortage areas based on federal criteria.<sup>6</sup> Nearly all of Minnesota's designated areas are entire counties that do not have enough providers serving people under 200 percent of the federal poverty level. Two areas of St. Louis County are the state's only designated shortage areas for people of all incomes. The department reviews shortage area re-designation every four years. A county without a designation does not necessarily mean no shortage exists. Counties need to apply for the designation, which the department reviews and submits to DHHS for final approval.

#### **12. Number of Dental Health Professional Shortage Areas based on "facility"**

This list includes comprehensive health centers, Federally Qualified Health Center Look-alikes, Rural Health Clinics and Indian Health Service facilities. These organizations are government, private, and nonprofit clinics serving in health professional shortage areas or underserved populations. In 2002, Congress granted these facilities an "automatic facility Health Professional Shortage Area" designation due to their existing federal status as health centers serving underserved populations. The data is updated whenever a new clinic receives this designation.

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<sup>6</sup> A 5,000 to one population/dentist ratio and "overutilized" dentists in neighboring areas, for example.