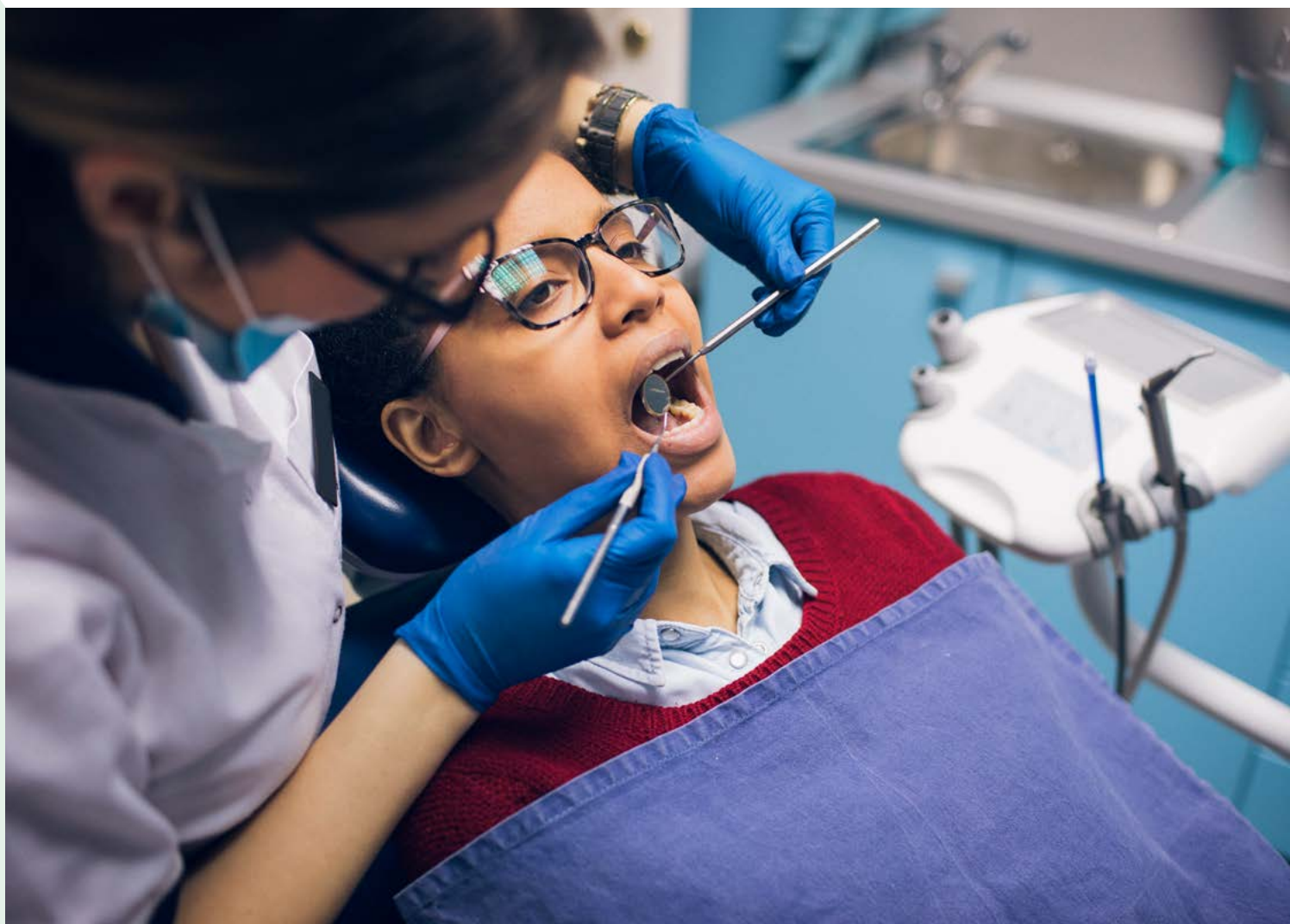


DATA AND TREND ANALYSIS

# Oral Health



*Oral diseases ranging from dental cavities to oral cancers cause pain and disability for millions of Americans. The impact of these diseases does not stop at the mouth and teeth. A growing body of evidence has linked oral health, particularly periodontal (gum) disease, to several chronic diseases, including diabetes, heart disease, and stroke. In pregnant women, poor oral health has also been associated with premature births and low birth weight.*

## DESCRIPTION

Oral health is essential to the health of the whole person. Oral health hygiene involving twice daily brushing and flossing is key to a healthy mouth and smile. Poor oral health can lead to poor self-esteem, barriers to employment, malnutrition, increased risk for heart disease, pre-term or low-birth weight births and other physical and emotional health problems.<sup>1</sup> At their most severe, oral health problems lead to debilitating pain and even death. A regular dental checkup can help prevent and treat oral health problems that cause poor attendance at work or school, behavioral problems and an inability to concentrate.

## HOW WE ARE DOING

Ramsey County and Minnesota exceed the Healthy People 2020 goal of 49 percent of children, adolescents and adults visiting a dentist.<sup>2</sup> However, compared to statewide rates, Ramsey County adults and adolescents are less likely to see a dentist regularly. Ramsey County adults are less likely than adolescents to get regular dental checkups.

### BENCHMARK INDICATOR

Healthy People 2020: Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.  
U.S. Target: 49 percent.

## DISPARITIES

People of color, with disabilities, other health problems, limited education and low income are more at risk for oral health problems. Barriers to care such as limited availability of dentists accepting Medical Assistance, lack of awareness of the role of oral health care in overall health, high cost and fear of dental procedures contribute to these disparities.<sup>1</sup>

## RISK FACTORS

Oral health hygiene and a healthy diet with calcium-rich foods and water as the main beverage choice is critical for good oral health. Environmental factors like living in a food desert make purchasing healthy foods more challenging. Tobacco, alcohol and drug use greatly increases the risk of cavities, gum disease and oral cancers.<sup>3</sup> Chronic diseases like diabetes are both a risk factor for poor oral health conditions and can become made worse by cavities and gum disease.<sup>3</sup>

## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

In 2014, Ramsey County received the honor of being named an Oral Health Zone through the National Children's Oral Health Foundation. Partnerships with faith-based organizations, schools, parks and recreation centers, child care programs and others have supported the county in educating over 6,000 individuals about correct oral health. The Ramsey County Child and Teen Checkups program offers families who are insured through a Minnesota public insurance program help finding a dental clinic, arranging transportation or scheduling an interpreter for visits.

## Information to note

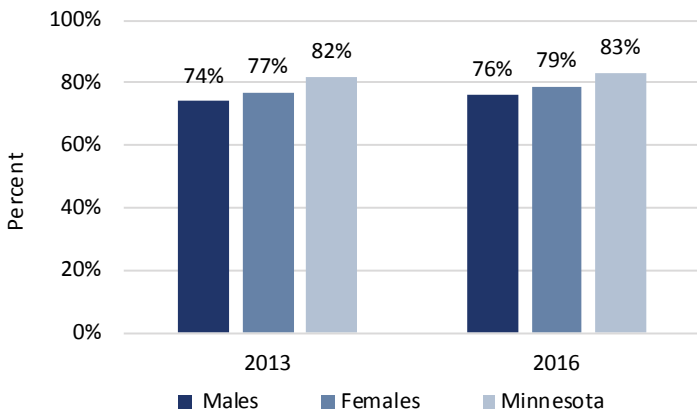
- Ramsey County residents are less likely to regularly visit a dentist compared to other Minnesotans.
- There are striking disparities related to regular dental care.
- Partnerships with faith-based organizations, schools, parks and rec centers, child care programs and others have helped Ramsey County educate over 6,000 individuals about oral health.

<sup>1</sup> Oral Health. Minnesota Department of Health. <https://apps.health.state.mn.us/mndata/oral-health>. Accessed July 24, 2017

<sup>2</sup> Oral Health. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives>. Accessed July 24, 2017.

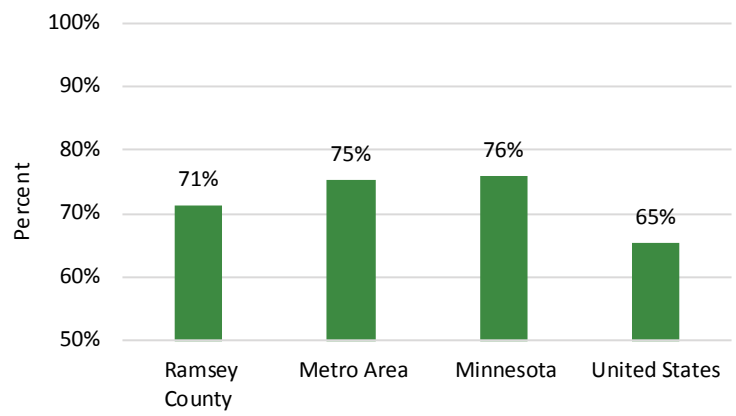
<sup>3</sup> The Status of Oral Health in Minnesota. Minnesota Department of Health. 2013. <https://www.astdd.org/docs/mn-third-grade-bss-2013.pdf>. Published September 2013. Accessed August 2018.

9th Graders Who Visited a Dentist During the Past Year, Ramsey County



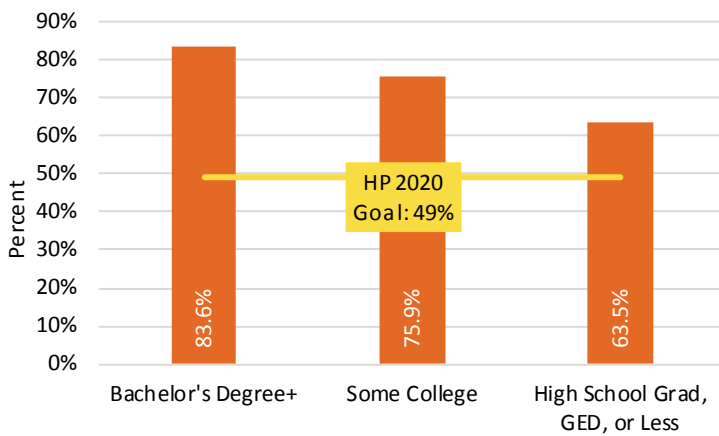
Source: Minnesota Student Survey

Adults Ages 18+ Who Visited a Dentist in Past Year, 2012



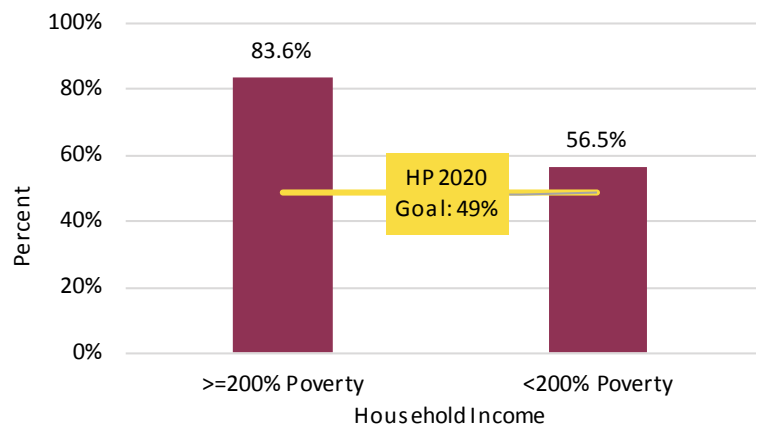
Source: Centers for Disease Control and Prevention (CDC).<sup>4</sup>

Visited Dentist within Past Year, Six County Metro Adults Ages 25+, 2014



Source: Metro Public Health Analyst Network. Metro SHAPE 2014 Six County Data Book.<sup>5</sup>

Visited Dentist within Past Year, Six County Metro Adults Ages 25+, 2014



Source: Metro Public Health Analyst Network. Metro SHAPE 2014 Six County Data Book.<sup>5</sup>

<sup>4</sup> Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2012.

<sup>5</sup> Metro Public Health Analyst Network. Metro SHAPE Six County Data Book 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed August 2017.

## DESCRIPTION

This indicator focuses on tooth loss among adults 65 years old and older. Tooth loss is one way to gauge oral health among seniors. Research has shown associations between chronic oral infections and heart/lung diseases, stroke, and diabetes. It can also affect facial appearance and quality of life. Tooth loss is preventable in almost all cases.<sup>1</sup>

## HOW ARE WE DOING

Almost 23 percent of people 65-75 have severe gum disease which can lead to tooth loss.<sup>2</sup> Thirty-six percent of Minnesotans 65 and older have lost some teeth. In Ramsey County in 2012, about 10 percent of adults 65 and older lost all their teeth due to tooth decay or gum disease, which was lower than both the state and national rates.<sup>3</sup> Preventive services are a key to good oral health, and those without dental insurance are less likely to use preventive services. More than 12 percent of Minnesotans did not access dental care in the past year because of the cost.<sup>4</sup>

## BENCHMARK INDICATOR

Healthy People 2020: Reduce the proportion of adults 65-74 years who have lost all of their natural teeth.

U.S. Target 21.6 percent.<sup>5</sup>

## DISPARITIES

Significant disparities exist among seniors for dental health. In general, the elderly, people with low incomes, and people of color experience a higher rate of oral diseases because they have less access to affordable dental care. In addition, higher levels of teeth loss are seen among these same groups as well as those with diabetes, disabilities or a smoking habit.<sup>1</sup> In 2014, 13 percent of Minnesota older adults with less than a high school education had complete tooth loss compared to 2 percent of older adults with a college degree. About 16 percent of Minnesota older adults with a household income less than \$35K had complete tooth loss compared to 4 percent of those with a household income of \$35K or more. About 15 percent of Minnesota older adults with a disability had complete tooth loss compared to 7 percent of those without a disability.<sup>1</sup>

## RISK FACTORS

There are several oral health risks that apply specifically to older adults. The use of multiple prescription or over-the-counter medications can leave them open to medication mistakes, drug interactions or negative reactions to drugs.<sup>6</sup> Prescription and other medications can reduce saliva production, leading to dry mouth condition that occurs in 30 percent of older adults.<sup>1</sup> This in turn can contribute to tooth decay and gum disease. The physical and cognitive changes that can come with aging may also create challenges for education, communication and self-care.<sup>6</sup>

(continue on back)

## Information to note

- About 10% of Ramsey County residents 65 and older are missing all their natural, permanent teeth because of tooth decay or gum disease.
- An older person in Minnesota who does not have a high school degree is 16 times more likely to have all their teeth extracted than a person who has a college degree.
- African-American seniors, current smokers, and those with less income and lower levels of education have fewer remaining teeth.

<sup>1</sup> Minnesota Department of Health Oral Health Program (2014). Behavioral Risk Factor Surveillance System. St. Paul, Minnesota: MN Public Health Data Access portal. <https://apps.health.state.mn.us/mndata/oral-health>. Accessed August 2017.

<sup>2</sup> Seniors Oral Health. Washington Dental Service Foundation Web site. <http://seniorsoralhealth.org/>. Accessed August 10, 2017.

<sup>3</sup> Chronic disease and Health Promotion Data Indicators. Centers for Disease Control and Prevention Web site. <https://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/ToothLoss/ToothLossSeniors65andOlder.htm>. Accessed July 31, 2017.

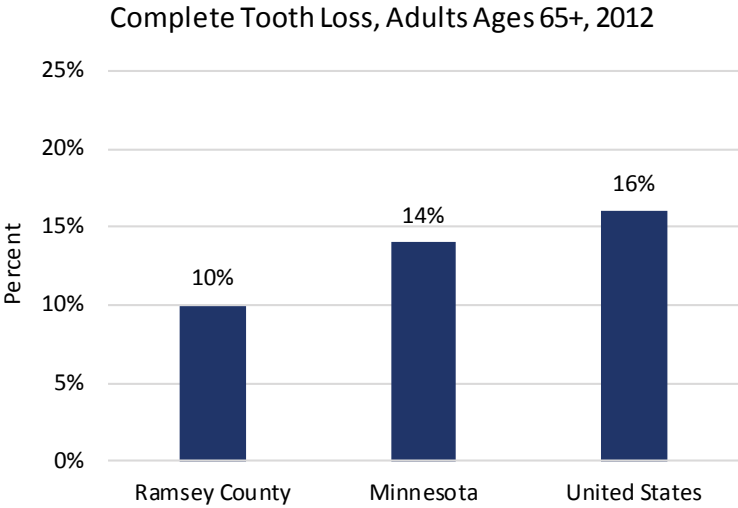
<sup>4</sup> Quick Facts: Oral Health in Minnesota. Minnesota Department of Health Web site. <http://www.health.state.mn.us/divs/healthimprovement/data/quick-facts/oralhealth.html>. Accessed July 31, 2017.

<sup>5</sup> Centers for Disease Control and Prevention. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives>. Accessed January 2018.

<sup>6</sup> Oral Health Topics: Aging and Dental Health. American Dental Association Website. [http://www.ada.org/en/member\\_center/oral-health-topics/aging-and-dental-health](http://www.ada.org/en/member_center/oral-health-topics/aging-and-dental-health). Accessed August 10, 2017.

**WHAT RAMSEY COUNTY GOVERNMENT IS DOING**

Saint Paul - Ramsey County Public Health provides data monitoring and reporting for this topic in order to better understand the overall health and current conditions in the community. The information may help inform community partners, policy makers or county program leadership.



Source: Centers for Disease Control and Prevention

<sup>7</sup> Behavioral Risk Factors: Selected Metropolitan Area Risk Trends, Chronic Disease and Health Promotion Data & Indicators. Centers for Disease Control and Prevention Web site. <https://chronicdata.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factors-Selected-Metropolitan-Area/cpem-dkkm>. Accessed August 2, 2017.

<sup>8</sup> Chronic disease and Health Promotion Data Indicators. Centers for Disease Control and Prevention Web site. <https://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/ToothLoss/ToothLossSeniors65andOlder.htm>. Accessed August 2, 2017.