

# High Blood Pressure

## DESCRIPTION

High blood pressure (hypertension) is a medical condition where prolonged excessive force from blood on artery walls may lead to more serious problems such as heart disease, stroke and kidney disease. A person can have high blood pressure for years without any symptoms. Even without symptoms, damage to blood vessels and the heart continues and can be detected.<sup>1</sup>

## HOW ARE WE DOING

Statewide mortality rates due to high blood pressure have decreased since 2005; from 9.8 to 7.6 deaths for every 100,000 people in 2015. A study that analyzed five years of survey data from the Minneapolis/Saint Paul area found that high blood pressure rates were among the highest in the U.S. and exceeded Healthy People 2020 objectives.<sup>2</sup> In 2012, 75 percent of Minnesotans aged 18-85 in managed care plans who received a diagnosis of high blood pressure had their blood pressure controlled to 140/90 mm Hg or lower within one year after the diagnosis. In 2014, 22.3 percent of Ramsey County residents surveyed had been diagnosed with high blood pressure, and an additional 22 percent with pre-hypertension.<sup>3</sup>

## BENCHMARK INDICATOR

Healthy People 2020: Reduce the percent of adults aged 18 and older who have diagnosed high blood pressure.  
U.S. Target: 26.9 percent<sup>4</sup>

## DISPARITIES

In Minnesota, 29 percent of African-Americans report high blood pressure, compared to 28 percent of whites, a smaller gap than for the U.S.<sup>5</sup> Populations with lower education have higher rates of high blood pressure. Among the Metro population residents surveyed, 45 percent of those having a high school education had a diagnosis of high blood pressure compared to 16 percent of those with bachelor's degrees. Populations with lower income had higher rates of high blood pressure. Among the Metro population residents surveyed, 34 percent of those from lower income households had a diagnosis of high blood pressure compared to 20 percent of those from higher income households.<sup>6</sup>

## RISK FACTORS

Individuals who are unemployed or experience job insecurity may face health risks such as increased blood pressure and stress.<sup>7</sup> In 2012, hypertensive heart disease (caused by high blood pressure) was listed as the underlying or contributing cause of death for 6,764 Minnesotans, representing almost 17 percent of all deaths.<sup>2</sup> Keeping blood pressure levels in a healthy range usually involves reducing sodium in the diet, getting daily physical activity, not smoking and taking prescribed medications.<sup>8</sup>

## Information to note

- In 2014, 22.3% of Ramsey County residents surveyed were diagnosed with high blood pressure, and an additional 22% with pre-hypertension.
- There's a 29 percentage point education disparity gap for high blood pressure, with higher rates among those having high school education compared to those having a bachelor's degree.
- There's a 14 percentage point income disparity gap for high blood pressure, with higher rates among those with lower household income compared to those with higher household income.



## Community voice

*"Diabetes and blood pressure, so I have to regularly visit doctor."*  
- Black/African American  
Female, age 55-64

<sup>1</sup> High Blood Pressure (Hypertension). (2016) Mayo Clinic. Accessed 8/04/2017 from: <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/basics/definition/con-20019580> , Accessed January 2018.

<sup>2</sup> Luepker, R., et. al; Trends in blood pressure and hypertension detection, treatment and control 1980–2009: The Minnesota Heart Survey. (2012) US National Library of Medicine National Institutes of Health. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3482957/> . Accessed January 2018.

<sup>3</sup> Saint Paul – Ramsey County Public Health. Metro SHAPE 2014 Ramsey County Data Book. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed January 2018.

<sup>4</sup> Centers for Disease Control and Prevention. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives>. Accessed January 2018.

<sup>5</sup> High Blood Pressure in Minnesota (2015) Minnesota Department of Health. <http://www.health.state.mn.us/divs/healthimprovement/data/quick-facts/hypertension.html>. Accessed January 2018.

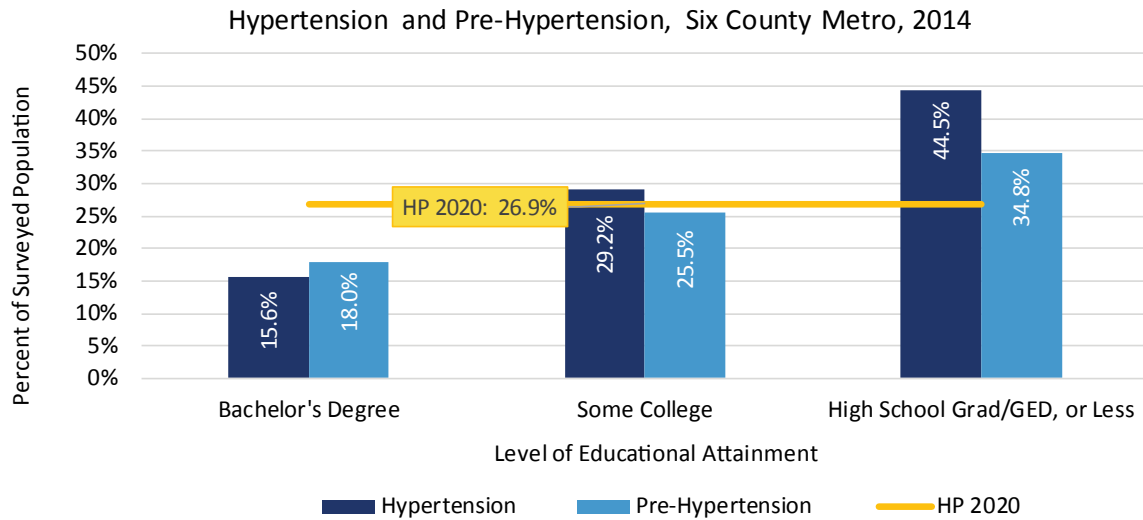
<sup>6</sup> Metro Public Health Analyst Network. Metro SHAPE Six County Data Book. 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed January 2018.

<sup>7</sup> Demographics Affecting Health – Ramsey County Profile. (2012) Culture Care Connection. <http://www.culturecareconnection.org/documents/RamseyCounty.pdf>. Accessed January 2018.

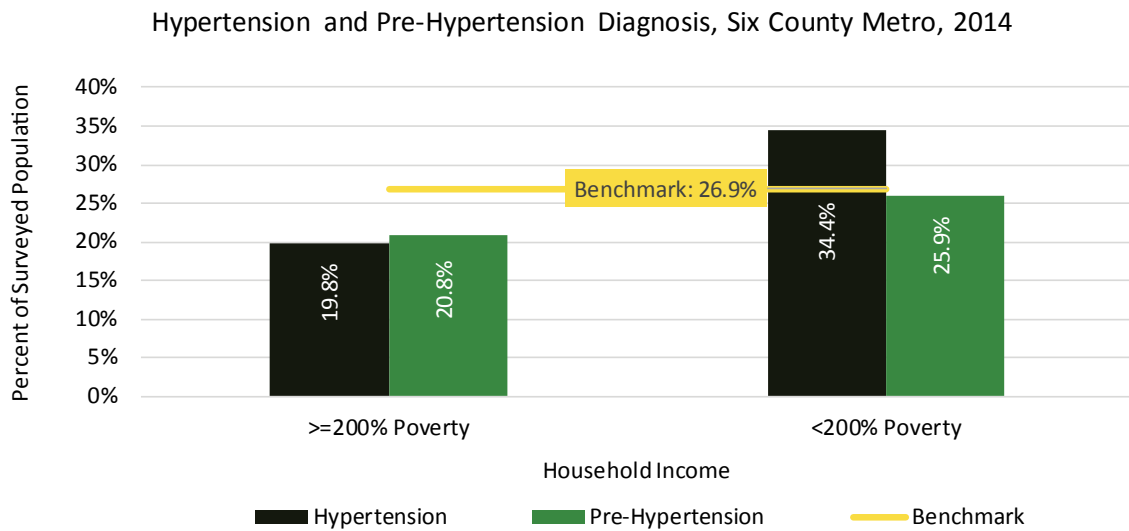
<sup>8</sup> High Blood Pressure Fact Sheet (2016) Center for Disease Control and Prevention. [https://www.cdc.gov/dhdsp/data\\_statistics/fact\\_sheets/fs\\_bloodpressure.htm](https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_bloodpressure.htm). Accessed January 2018.

## 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: Metro Public Health Analyst Network. Metro SHAPE Six County Data Book.<sup>9</sup>



Source: Metro Public Health Analyst Network. Metro SHAPE Six County Data Book 2014.<sup>10</sup>

<sup>9</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 July 17, 2017.

<sup>10</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 January 2018.