Hennepin County Public Health

2016-2020 Community Health Assessment

Prepared January 2017

Revised December 2018

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Acknowledgements

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CHIP Partner Organizations

Advance Consulting
African Challenges Corporation
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American Cancer Society
Bloomington Public Schools
Blue Cross and Blue Shield of Minnesota
Bridging
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Collaboration Catalyst
Domestic Abuse Project
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Hennepin County Health Works
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About this report

Hennepin County Public Health prepares a comprehensive assessment of the health of its residents every five years. The report is updated periodically through fact sheets and other publications. This report and related fact sheets and publications are available on the Hennepin County website at:

hennepin.us/publichealthdata and hennepin.us/shape

For additional information, please contact David Johnson, Program Manager at David.Johnson2@hennepin.us.

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Background

The Community Health Assessment (CHA) serves as a foundational document in implementing the Hennepin County Public Health mission to "improve the health of all County residents by addressing social and environmental factors that impact their health and offering programs and services that help them be healthy. " As a key function of Public Health, the CHA is used to monitor the health status of the population, and to better understand and diagnose the root causes of health problems in our community. The CHA represents the broad knowledge base that underpins the work of our department. It shows us which health concerns are most common, and helps describe their impact on the lives of residents.

Health and racial equity

This assessment serves to demonstrate the links between social and environmental factors that determine the health of residents in our community. While we know that our community in Minnesota typically ranks highly in overall health, there are significant disparities in our communities' ability to achieve health. As such, in many ways health disparities by race in Minnesota and Hennepin County are among the worst in the country. Where possible for available data sources, health trends are analyzed by racial and ethnic group. Identifying the populations at highest risk or with the greatest need ensures that we are working to reduce health disparities.

In addition to analysis of the impact of race and racism on health, another key priority of the CHA was to identify populations facing increased risk of poor health outcomes, and to describe the relationship between those health outcomes and the social factors that influence health, such as income, education, employment. In order to do this, the CHA process for each indicator was to document the current status (e.g. incidence/prevalence of the issue), trends over time, and identify communities that are disproportionately impacted. Investigation of the communities that were impacted was grounded in a standard practice of investigating health outcome differences across populations; for example, by place of residence (community/city/ZIP), age, gender, race/ethnicity. Where possible, we examined whether differences existed vulnerable populations such as individuals living with a disability, or with mental distress. In addition, differences are examined by social determinants of income, poverty, housing insecurity, education and employment. This analysis is built on an understanding of disease causation and risk for different communities that may differ by the health concern under investigation. Community impact in some cases is limited by availability of data for certain groups.

At the core of making decisions about what health priorities are important to the community, the CHA exists to help understand the impact that different health concerns have in our community and can help identify health disparities that exist for uniquely impacted populations. In some cases, our work focuses on specific age groups, such as infants and young children, or the elderly; for some conditions, gender differences are important. In particular, marginalized populations, including people of color,

indigenous people, sexual and gender minority communities, and others, are significantly more likely to experience negative health outcomes per this assessment.

Determining that an issue is a priority is a balance of many factors in our agency. Identifying disparities based on health outcomes and/or risk can occur at the same time as determining if an issue is a priority. It is important to disaggregate data to identify those disparities and target interventions to as segmented a group as possible. Our primary concern is the impact on public health and safety, which is determined, in part, by both quantitative and qualitative data on current and emerging health issues and community needs. We must also pay attention to the priorities of leadership, partner agencies and organizations, the requirements of our funders, and the concerns of the public. Issues also become priority when they create health disparities within the populations we serve. Our agency proactively pursues the elimination of health inequities and preventable differences in health among groups based on gender identity, sexual orientation, race and ethnicity, education, English language proficiency, income, disability and geographic location.

The analysis approach developed in the CHA aligns with the CHIP commitment to health and racial equity.

> ***Our commitment to health and racial equity:***
>
> ***Health and racial equity are at the core of our work. Because of this, we will focus on the ways structural and institutional racism and also bias impact outcomes for people of color. We will use a racial equity lens to focus our intent, which will bring us all to a shared understanding, language, and definitions on race and bias as we catalyze and carry out our work.***
>
> ***-CHIP Steering Committee***

Using data to determine priorities

In early 2016, representatives from Hennepin County Public Health, City of Minneapolis Health Department, and Bloomington Public Health (serving Bloomington, Richfield, and Edina) began the process of updating the Community Health Assessment for Hennepin County. These three health departments serve the population of Hennepin County. The primary purpose of the CHA update was to inform the priority-setting activities of the Community Health Improvement Partnership (CHIP), a collaborative of the 3 public health agencies, along with agencies and organizations interested in promoting health broadly, including physical, social and mental well-being. A list of CHIP partner agencies can be found in the Acknowledgements section on page 3.

A major component of updating the CHA was to update health indicators across a number of key data sources that provide information about the health status of residents. Because each department has responsibility for addressing the unique needs of residents within their own jurisdictions, each agency updated health indicators for their jurisdictions independently. This document represents the indicator

update for Hennepin County Public Health. The CHA referenced many of the same health indicators as the previous CHA but was expanded to include new indicators (e.g. oral health) and to include findings from hospital and health plan CHNAs. In addition, results from various community engagement projects conducted across Hennepin County were also included. The indicators were organized under 13 domains, developed in part from the Healthy People 2020 objectives and the Center for Community Health Core Health Indicators. Hennepin County Public Health is an active participant in the Center for Community Health, a collaborative between public health agencies, non-profit health plans, and not-for-profit hospital/health systems in the seven-county metropolitan area in Minnesota. One of the products of this collaborative was a list of common health indicators of interest to local public health, hospitals, health plans and other entities conducting community health/community health needs assessments.

The 13 domains included in this report are:

1. Social Determinants and race/ethnicity
2. Overall health and death
3. Injury and violence
4. Access to health services
5. Maternal, infant, & child health
6. Mental health
7. Reproductive and sexual health
8. Environmental quality
9. Substance abuse
10. Social connectedness
11. Nutrition, physical activity, obesity
12. Oral health
13. Tobacco

Forces of Change (UPDATE 2018)

In October 2017, Hennepin County Public Health collaborated with partners through CCH to conduct a regional Forces of Change assessment. This assessment was adopted and updated to reflect the current environment in Hennepin County. More detail is included further in this report.

County demographics

Hennepin County is the most populous county in Minnesota, comprising 22 percent of the population of Minnesota. It is located in the western portion of the Twin Cities metropolitan area and encompasses 607 square miles, 554 square miles in land and 53 square miles in water. The county shares borders with the following counties: Wright County to the west and northwest, Anoka County to the north, Carver County to the southwest, Scott County to the south, Ramsey County to the east, and Dakota County to the southeast. The seven member elected Board of County Commissioners is the legislative body of the county. Each member represents a specific district within the county. Hennepin County is home to 1.2 million residents. Nearly 31 percent of the county's population lives in Minneapolis, the largest city in the county and in Minnesota.

Hennepin County is the most racially diverse county in Minnesota. With large populations of immigrant and refugee families, Minneapolis is home to one of the largest resettlements of Somali residents in the United States. The county population is 12 percent black /African American, seven percent Asian, less than one percent American Indian/Alaskan Native, three percent two or more races, and seven percent Hispanic/Latino. Nearly 12 percent of the population lived below the poverty level in the past 12 months.

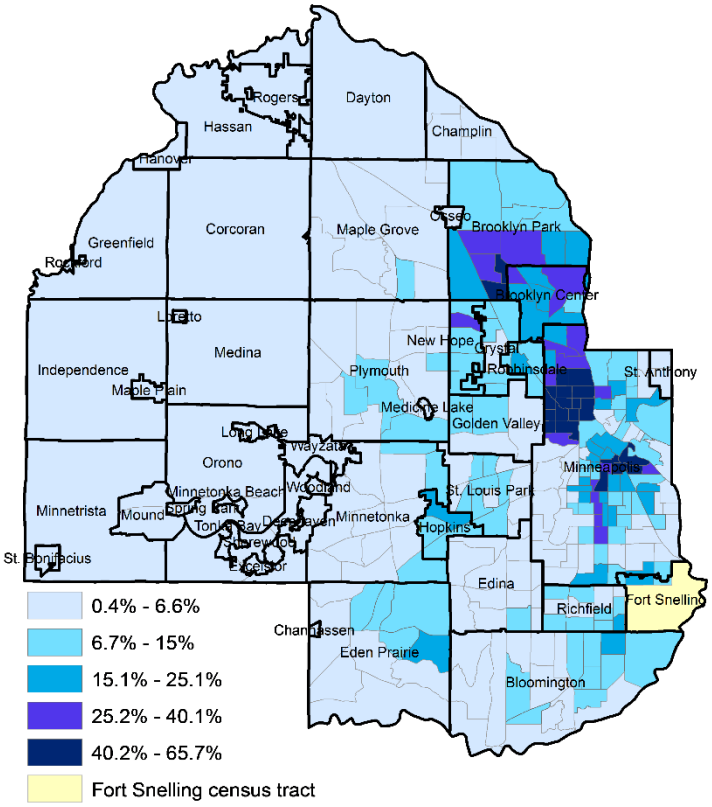
Racial diversity is concentrated in portions of Minneapolis and a few inner ring suburbs, including Brooklyn Center, Saint Louis Park, and Richfield. The following series of maps describes the concentration of populations of color within those areas in the county.

This community health assessment addresses the needs of the entire population of Hennepin County, Minnesota.

Race and ethnicity by census tract, 2010 Census

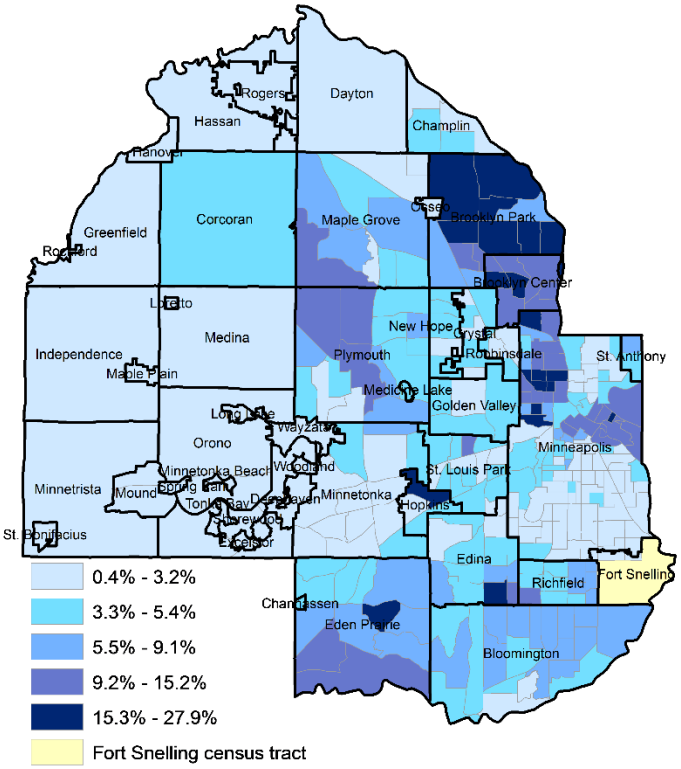
When possible, health indicators are examined by racial and ethnic breakdowns. The following maps (figures 1-5) show the distribution by census tract using 2010 Census data for race and ethnicity. Note- Fort Snelling/Minneapolis-St Paul Airport (MSP) has a very small population compared to other tracts, therefore percentages are not displayed.

Figure 1. Non-Hispanic African American/black by tract, Census 2010



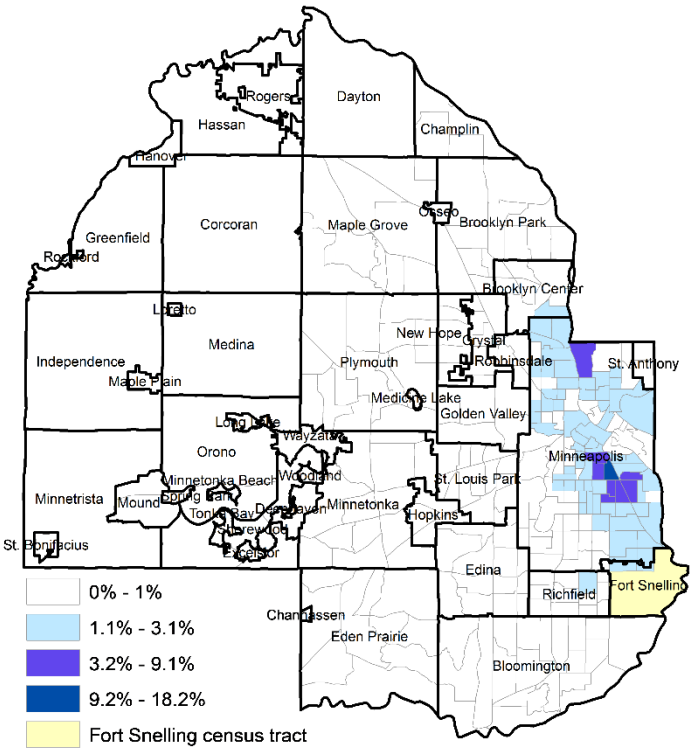
Data Source: United States Census Bureau. 2010 Census.

Figure 2. Non-Hispanic Asian by tract, Census 2010



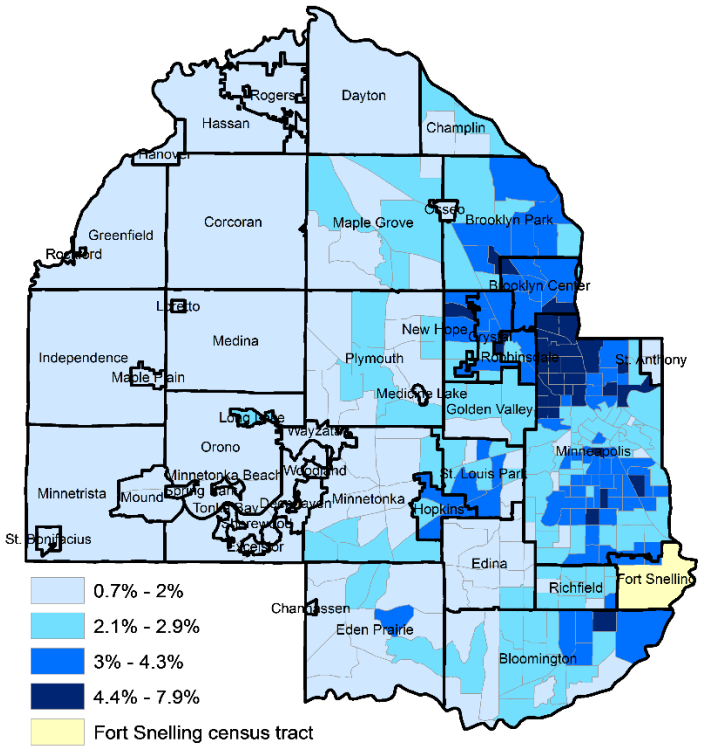
Data Source: United States Census Bureau. 2010 Census.

Figure 3. Non-Hispanic American Indian/Alaskan Native by tract, Census 2010



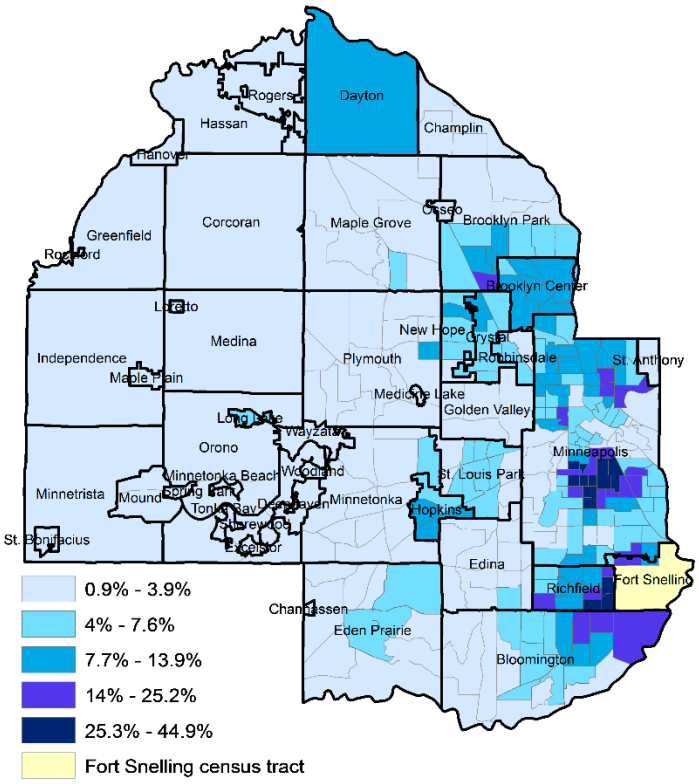
Data Source: United States Census Bureau. 2010 Census.

Figure 4. Non-Hispanic Two or more races by tract, Census 2010



Data Source: United States Census Bureau. 2010 Census.

Figure 5. Hispanic ethnicity by tract, Census 2010

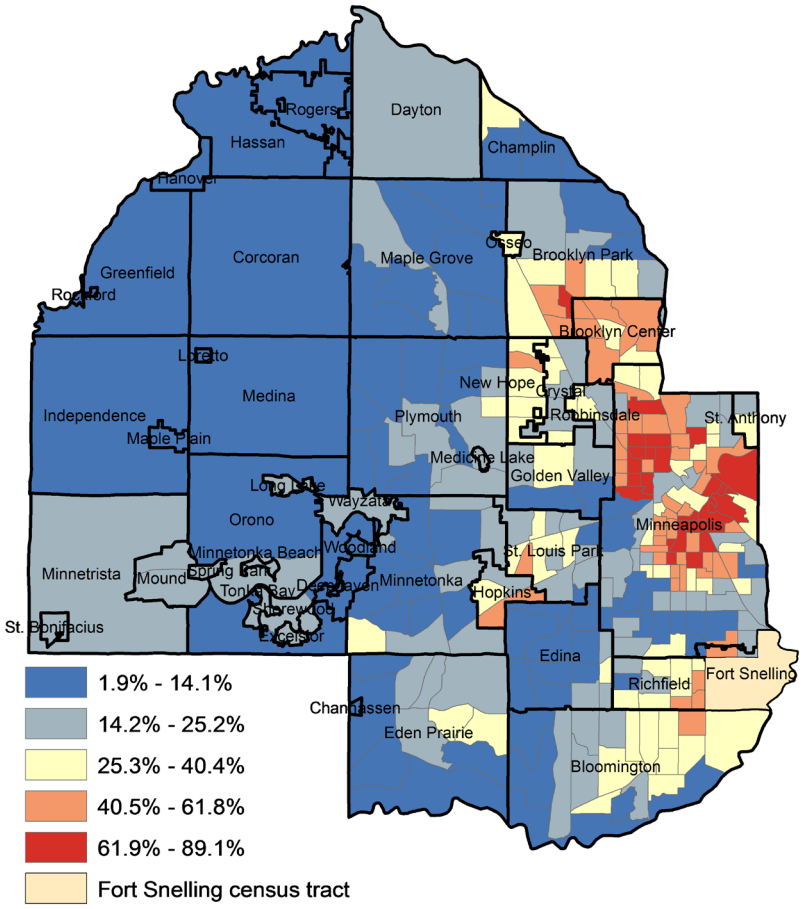


Data Source: United States Census Bureau. 2010 Census.

Social determinants

The Center for Disease Prevention and Control (CDC) defines social determinants of health as the conditions in which people live, work and play and how those conditions impact a wide range of health risk and outcomes. These conditions are influenced by factors such as income, education, employment, housing, and neighborhood safety. These factors vary geographically through Hennepin County. A series of maps using data from the American Community 5 year estimates show variation by census tract, and demonstrate that many social determinants such as low income, low levels of educational attainment, burden of housing costs are all concentrated in similar areas of the county.

Figure 6. Percentage of population living under 200% of the Federal Poverty Level, by census tract, 2010-2014

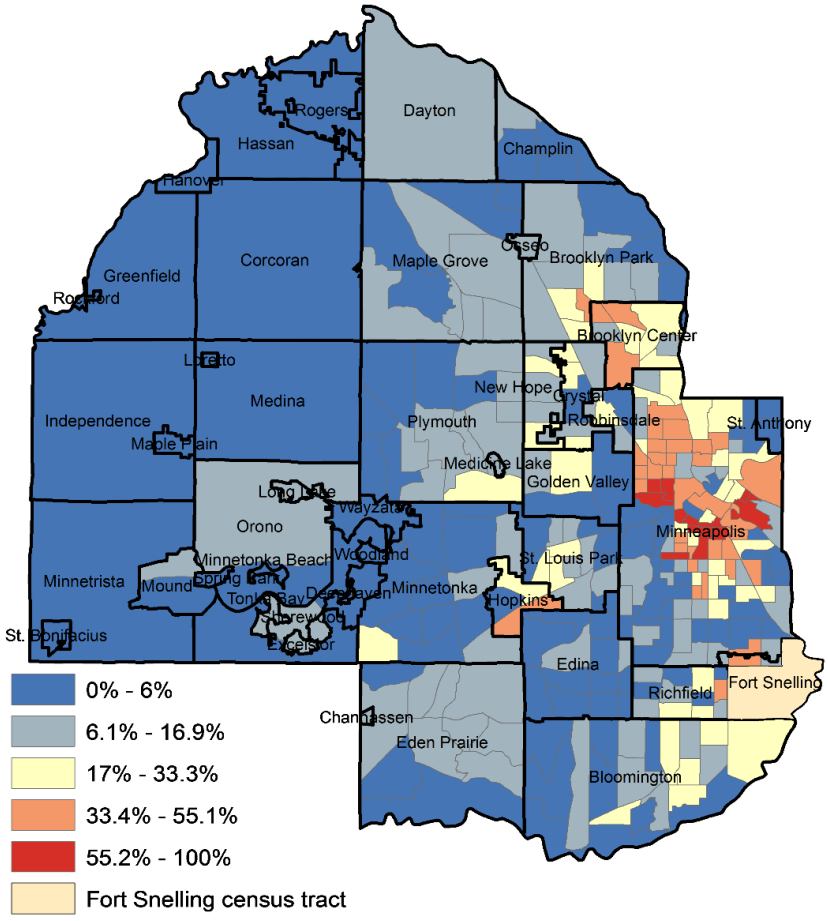


Data Source: 2010-2014 American Community Survey 5 year estimates

Low income

Low income in this community health assessment is defined as the percent of the population whose income is under 200 percent of the Federal Poverty Level (FPL). The FPL is the set minimum amount of gross income that a family needs for food, clothing, transportation, shelter and other necessities. In the United States, this level is determined by the Department of Health and Human Services. In 2014, an individual making less than $23,340 per year was under 200 percent of the FPL. For a family of 4, this amount was $47,700 (2). The map above (Figure 6) highlights a higher concentration of low income persons in Minneapolis and first ring suburbs such as Brooklyn Center, Brooklyn Park, Richfield, Hopkins and areas of Bloomington, New Hope and St. Louis Park in comparison to the outer ring suburbs.

Figure 7. Families in poverty - percentage of families with children under 18 that are living at or below 100% of the federal poverty level by census tract, 2010-2014

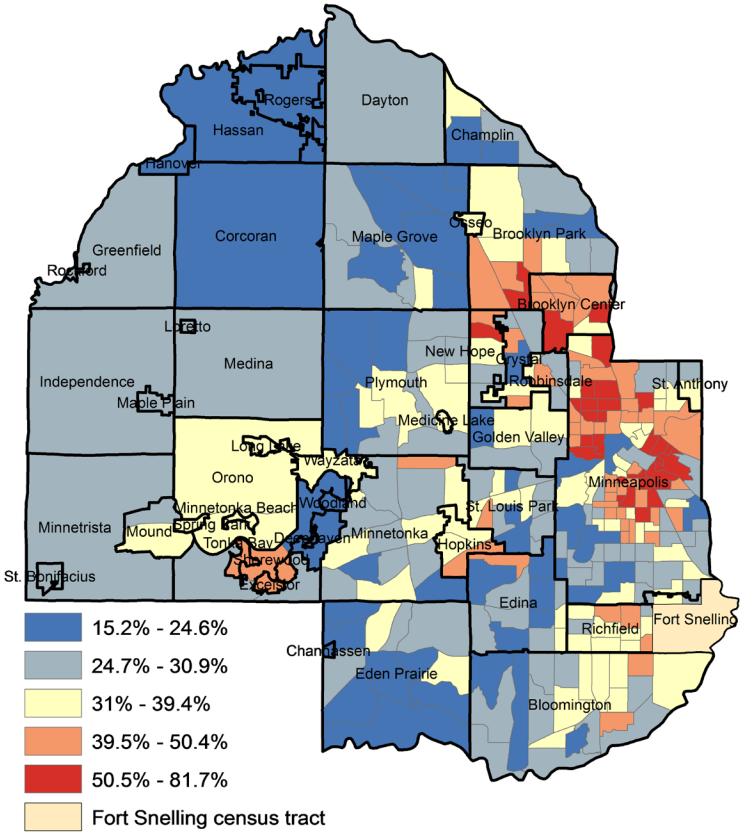


Source: 2010-2014 American Community Survey 5 year estimates

Families in poverty

The distribution of families in poverty is similar to that of low income persons, though not as widespread. Those areas with the highest percent of families living in poverty is primarily in Minneapolis, with a few tracts in the 1st ring suburbs including Brooklyn Center, Brooklyn Park, Hopkins, and Richfield having more than 1/3 of families with children under 18 living at 100 percent of the poverty level.

Figure 8. Burden of housing- percentage of population paying more than 30% of income towards housing (includes renter and owner occupied*), by census tract, 2010-2014



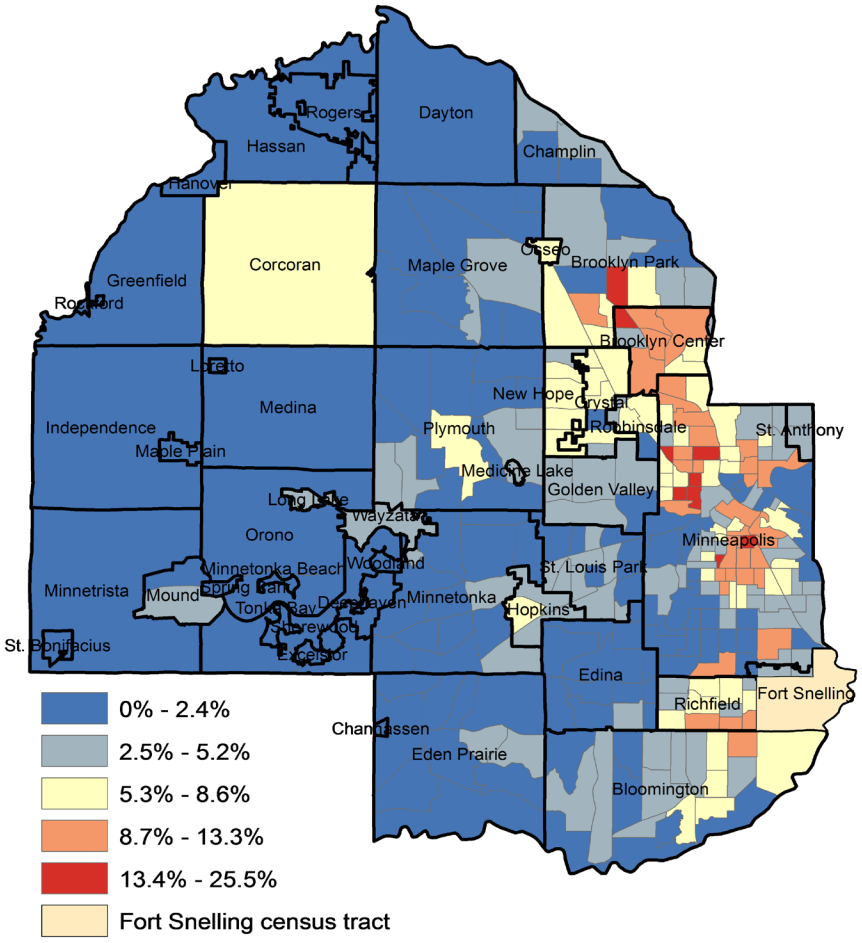
Source: 2010-2014 American Community Survey 5 year estimates

**Renter and owner occupied housing units are combined in the map due to a small number of total rental units in certain tracts, resulting in percentages that were artificially high, particularly in the western part of the county.*

Burden of housing

Individuals or families who pay more than 30 percent of their income towards housing are considered burdened. This burden may result in difficulty affording necessities such as food, clothing, transportation and medical care. The map above (figure 8) highlights a higher concentration of burden of housing costs in Minneapolis and first ring suburbs such as Brooklyn Center, Brooklyn Park, Richfield, Hopkins and areas of Bloomington, New Hope and St. Louis Park in comparison to the outer ring suburbs, with the exception of Shorewood, Tonka Bay and Excelsior.

Figure 9. Educational attainment - percentage of population who have not graduated high school or earned high school graduation equivalency by census tract, 2010-2014. (Population 25 years and older)

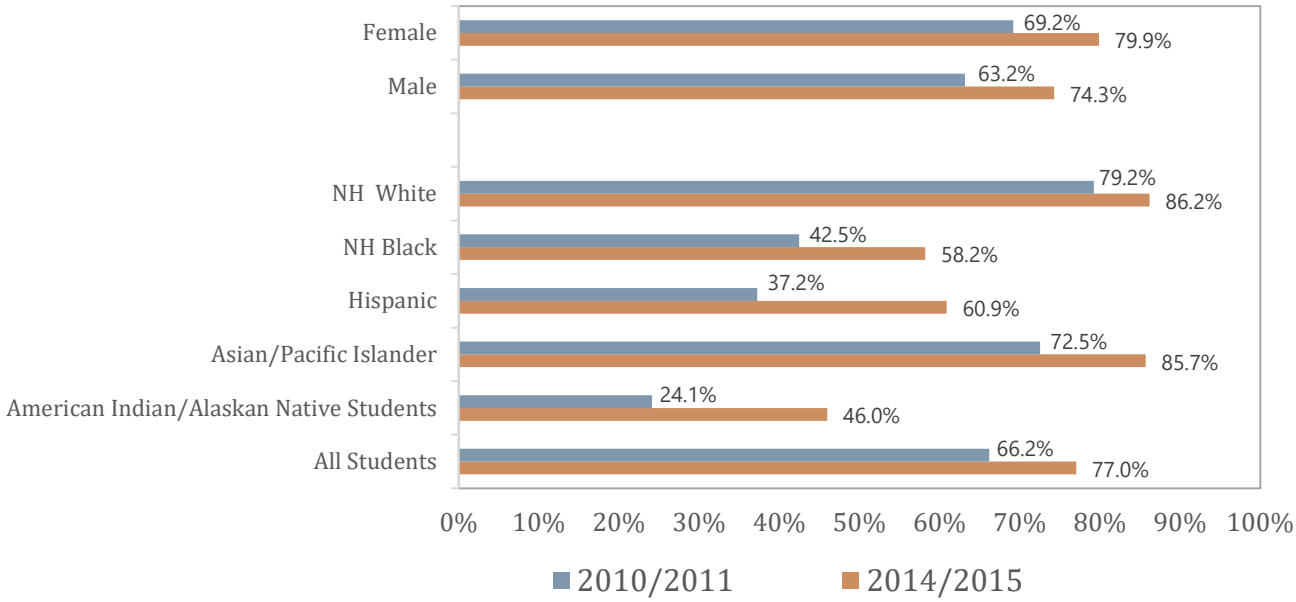


Source: 2010-2014 American Community Survey 5 year estimates

Educational attainment

Persons with a higher level of education tend to have greater socioeconomic resources for a healthy lifestyle and a greater relative ability to live and work in environments with the resources and built environment that support healthy living. The map above (figure 9) highlights a higher concentration of persons who have not graduated high school or earned a GED in Minneapolis and first ring suburbs including Brooklyn Center, Brooklyn Park, Richfield, one census tract in Bloomington, in comparison to other areas in Hennepin County.

Figure 10. Graduation rate - percentage of students graduating in four years by race/ethnicity and gender in Hennepin County, 2011 vs. 2015



Data Source: Minnesota Department of Education, 2010/11, 2014/15

Graduation rate

In comparison to 2010/2011 school year, graduation rates improved overall from 66 percent to 77 percent of all students, but also among each racial/ethnic group and for both males and females. Even though there were gains overall and in each group, disparities between groups still exist particularly between Hispanic, non-Hispanic black, American Indian/Alaskan Native students and non-Hispanic white and Asian/Pacific Islander students.

Overall health and death

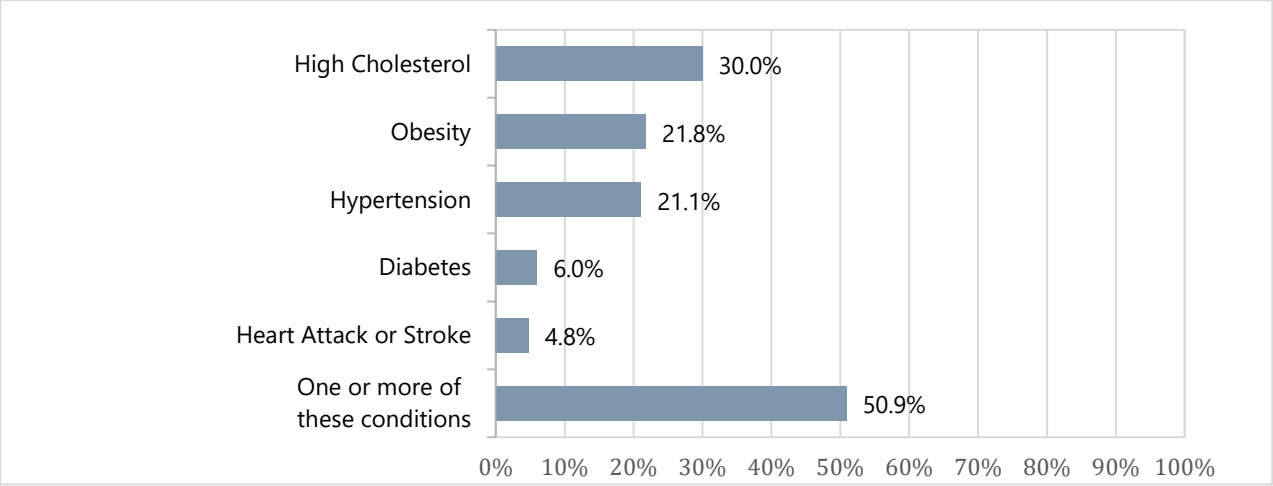
Chronic health diseases and conditions

Chronic diseases and health conditions including hypertension, high cholesterol, diabetes, obesity, and heart attack or stroke are conditions and diseases that impact millions of adults. The CDC found that seven of the ten leading causes of death in 2010 were chronic diseases. In addition, many of these chronic diseases and conditions are preventable by engaging in various healthy lifestyle behaviors such as not smoking, eating nutritious foods and exercising regularly. Unfortunately, national statistics have shown less than half of adults 18 years and older met physical activity recommendations. CDC also found nearly half of US Adults (47%) have at one or more of the following major risk factors for heart disease or stroke: uncontrolled high blood pressure, uncontrolled high LDL cholesterol or are current smokers.

KEY FINDINGS

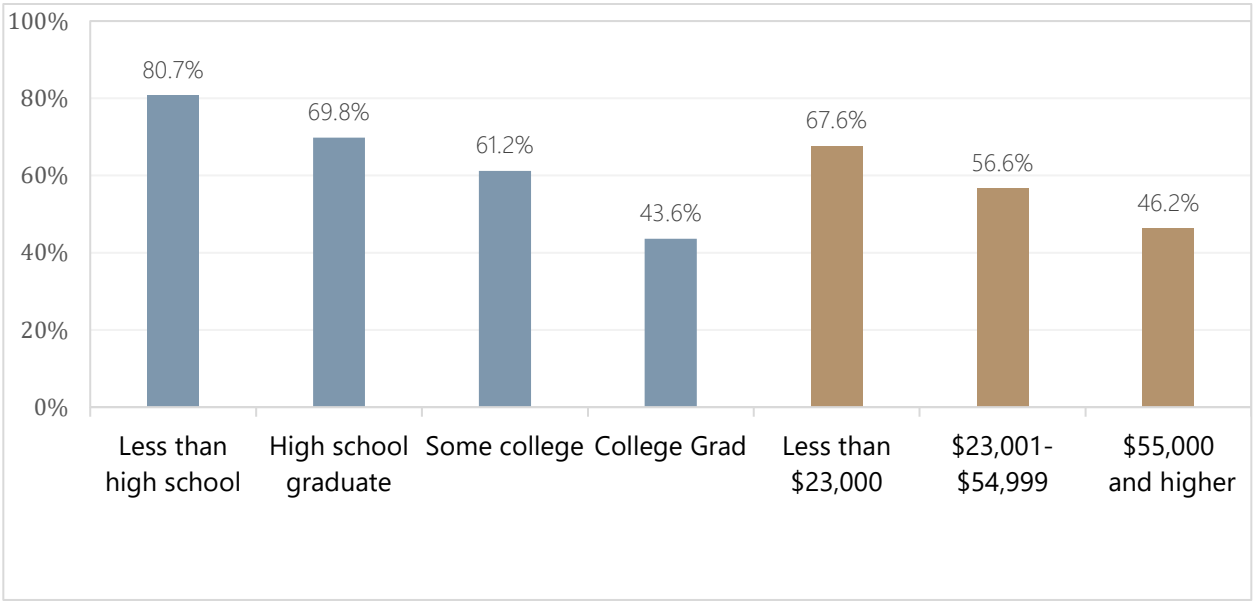
- One in two adults in Hennepin County 25 years and older reported ever having a chronic health condition. Among the five chronic health conditions included in the 2014 Metro SHAPE survey, high cholesterol is the most frequently reported by adults 25 years and older. Obesity and hypertension, or high blood pressure, are reported by approximately one in every five persons. Diabetes and heart attack or stroke are reported by a much lower percentage. (Figure 11).
- Chronic health conditions disproportionately impact non-Hispanic US born black, lower education, and low income populations in Hennepin County. Additionally, persons reporting frequent mental distress are significantly more likely to have one or more chronic health conditions compared to persons without frequent mental distress, 63 percent compared to 50 percent (Figure 12).
- Persons with one or more chronic conditions were more likely to be current smokers, not consume five or more servings of fruit and vegetables, not engage in leisure time activity, and consume sugar sweetened beverages daily compared to those who did not have one or more chronic health conditions. All of these lifestyle behaviors are considered modifiable and reduce risk of chronic disease and conditions (Figure 13).

Figure 11. Percentage of adults age 25 years and older who reported one or more chronic health conditions, 2014



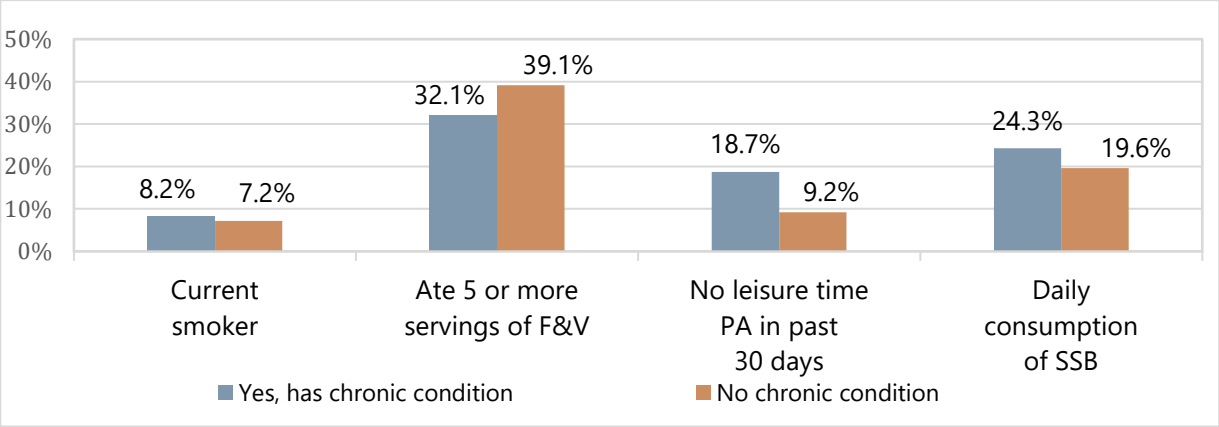
Data Source: Metro SHAPE 2014 Adult Survey

Figure 12. Percentage of adults age 25 years and older who reported one or more chronic health conditions, 2014 by education level and income



Data Source: Metro SHAPE 2014 Adult Survey

Figure 13. Percentage of adults age 25 and older with one or more chronic health conditions by lifestyle behavior, 2014

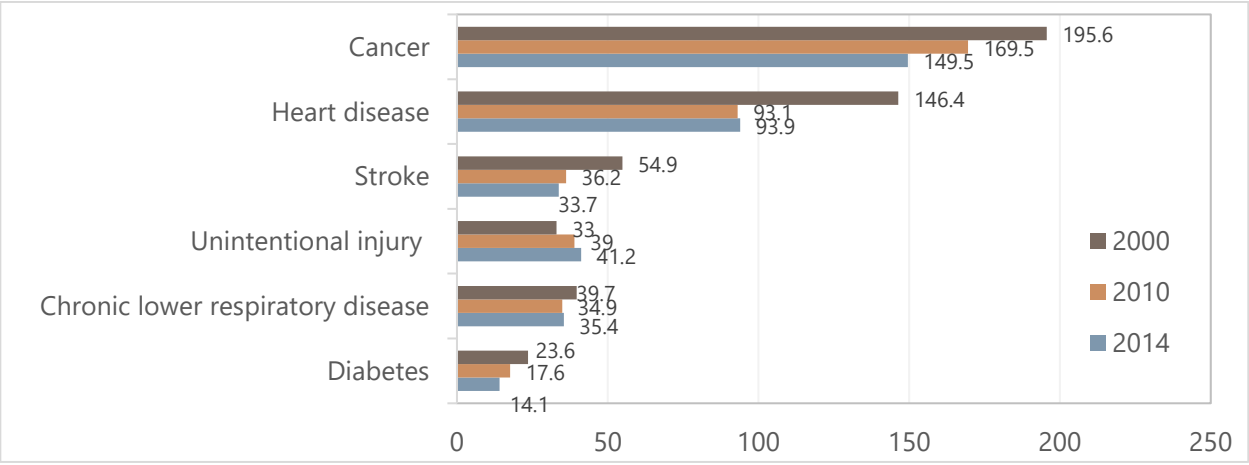


Data Source: Metro SHAPE 2014 Adult Survey

Leading causes of death

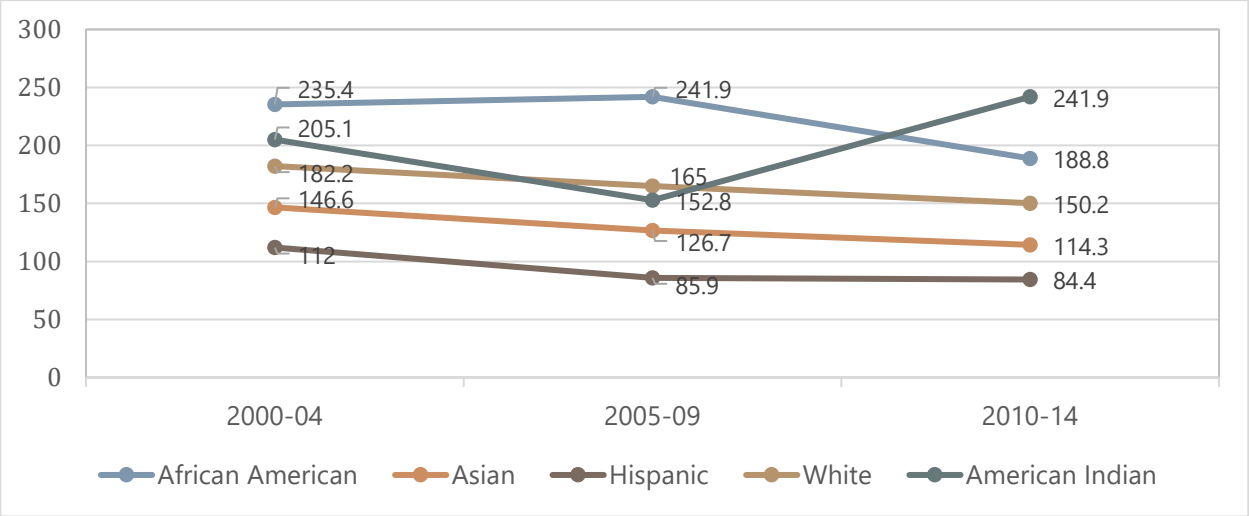
Cancer has remained the leading cause of death in Hennepin County since 2000, followed by heart disease. Unintentional injury was the only top cause of death that increased compared to 2000, which is related to falls and poisonings (overdoses) (Figure 14). The leading causes of death are similar across racial groups, though the overall burden is disproportionate (Figures 15 through 18).

Figure 14. Leading causes of death, all ages, rate per 100,000 population, Hennepin County, 2000, 2010, 2014



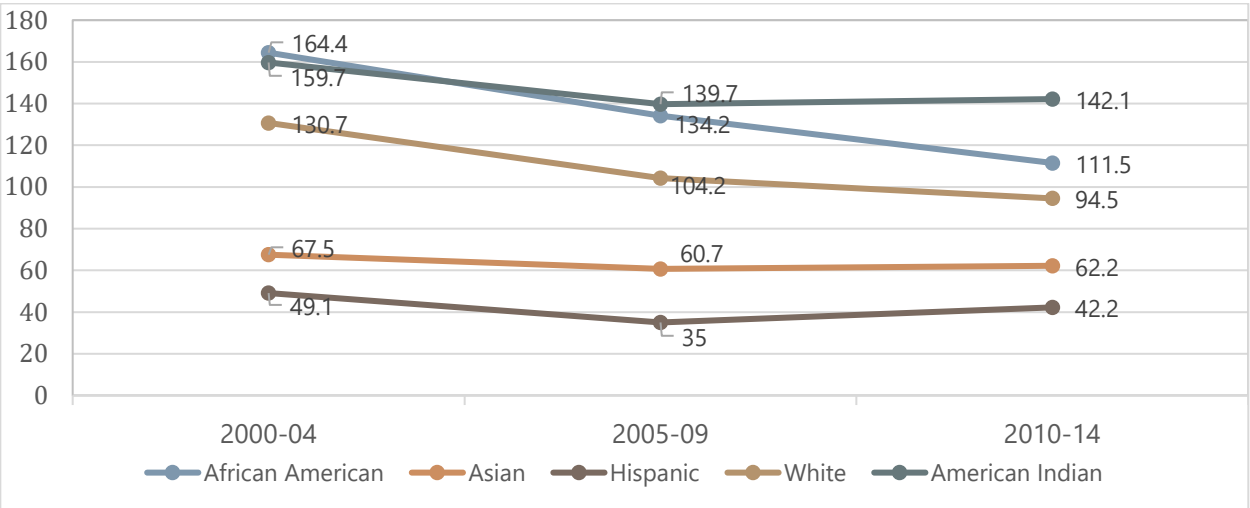
Data Source: MN Vital Stats Death Records, 2000-2014

Figure 15. Cancer death rate per 100,000 population by race/ethnicity, Hennepin County, 2000-2014



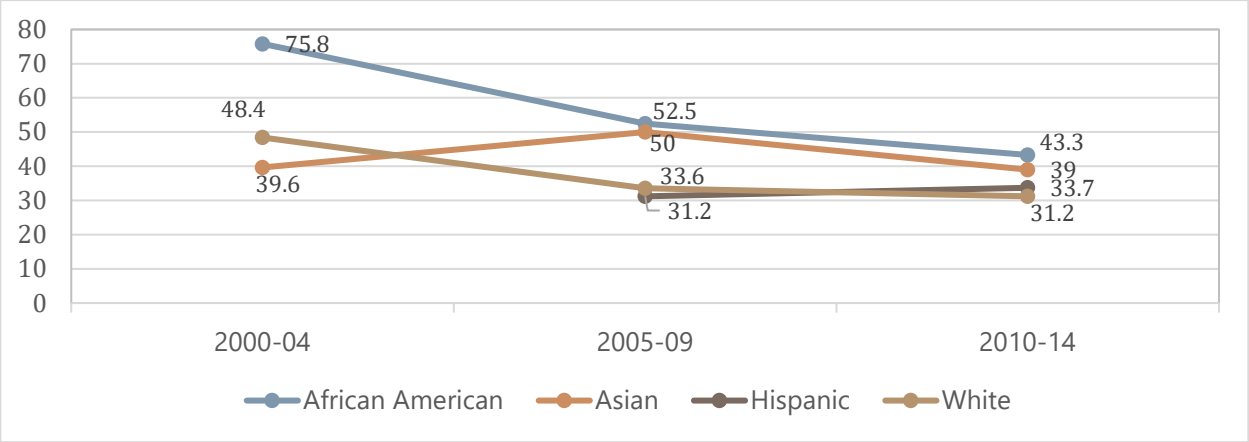
Data Source: MN Vital Stats Death Records, 2000-2014

Figure 16. Heart disease death rate per 100,000 population by race/ethnicity, Hennepin County, 2000-2014



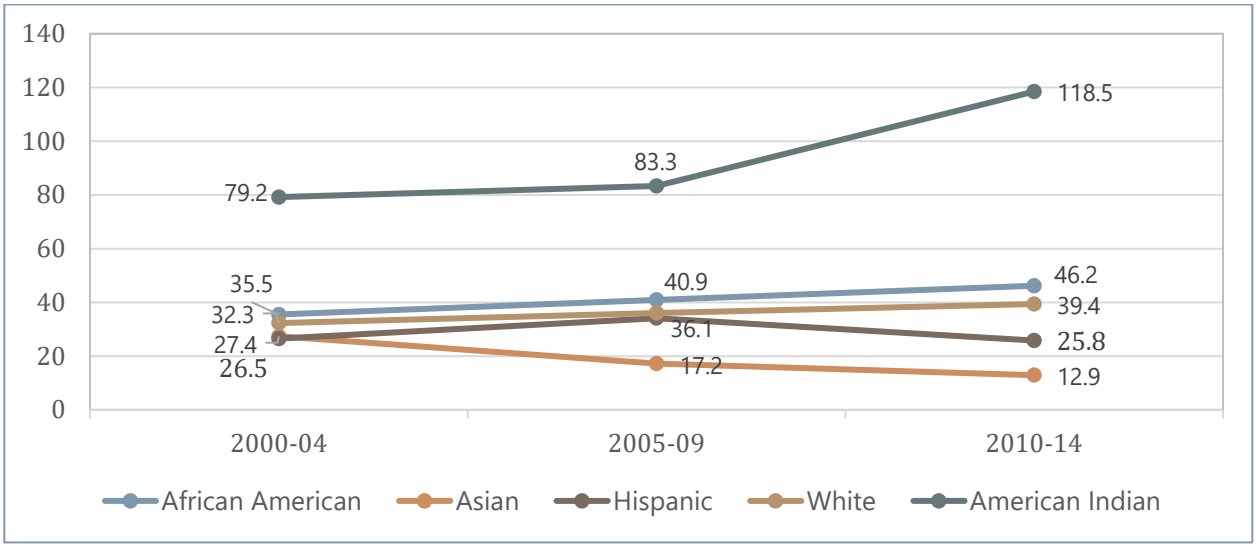
Data Source: MN Vital Stats Death Records, 2000-2014

Figure 17. Stroke death rate per 100,000 population by race/ethnicity, Hennepin County, 2000-2014



Data Source: MN Vital Stats Death Records, 2000-2014

Figure 18. Unintentional injury death rate per 100,000 population by race/ethnicity, Hennepin County, 2000-2014



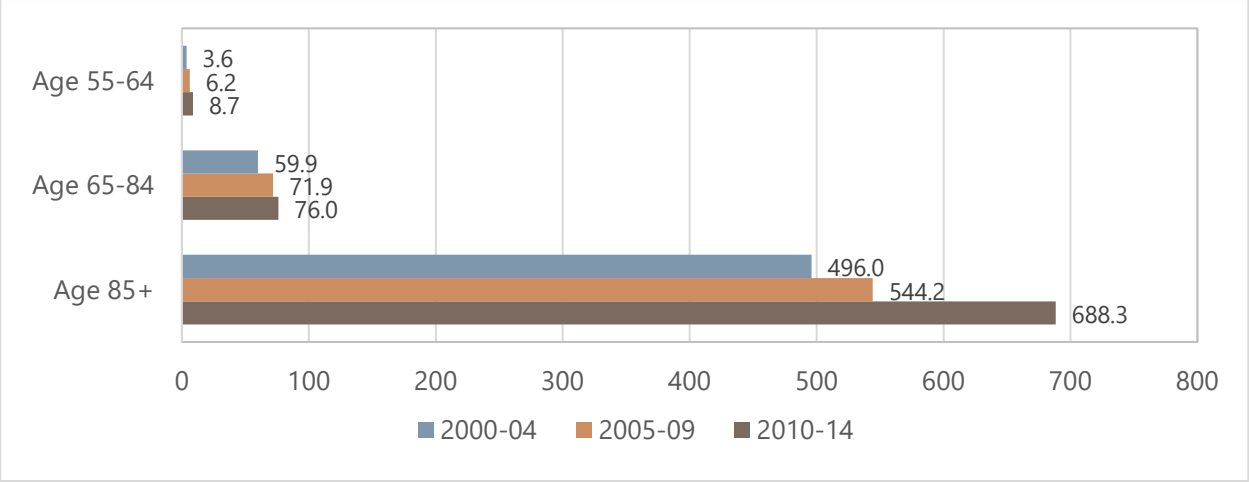
Data Source: MN Vital Stats Death Records, 2000-2014

Injury and violence

Unintentional injuries

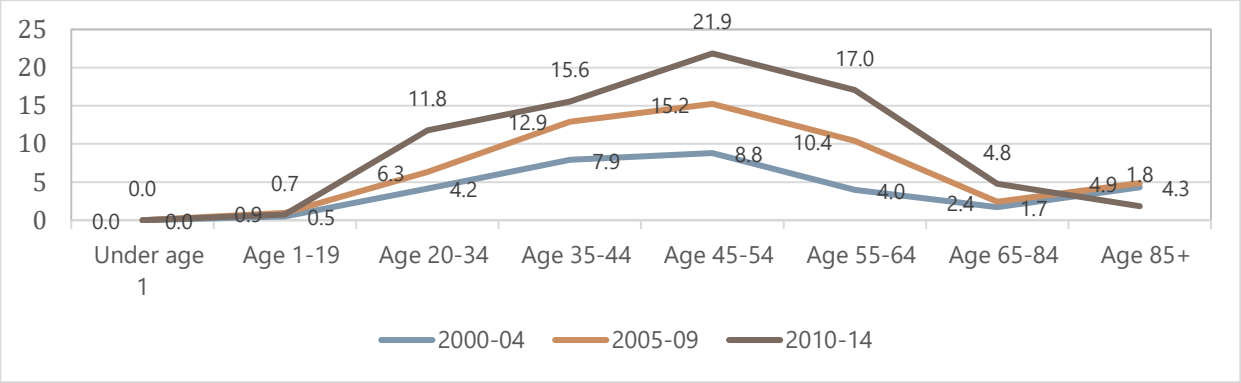
Unintentional injuries increased since 2000, an increase driven by falls and poisonings related to drug use. Disparities are seen with falls impacting a higher proportion of older adults (Figure 19) and poisonings impact young and middle aged adults, American Indian and black communities. Unintentional injuries were the fourth leading cause of death in Hennepin County 2014 (Figure 20).

Figure 19. Unintentional injury deaths rate per 100,000 population by age group, Hennepin County, 2000-2014



Data Source: MN Vital Stats Death Records, 2000-2014

Figure 20. Unintentional injury deaths rate per 100,000 population by age group, Hennepin County, 2000-2014

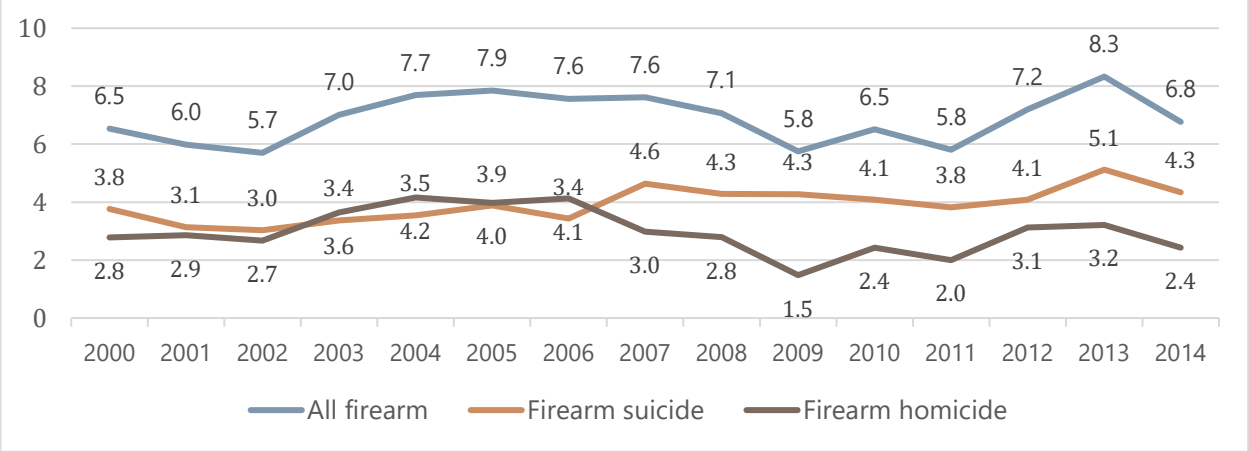


Data Source: MN Vital Stats Death Records, 2000-2014

Firearm deaths

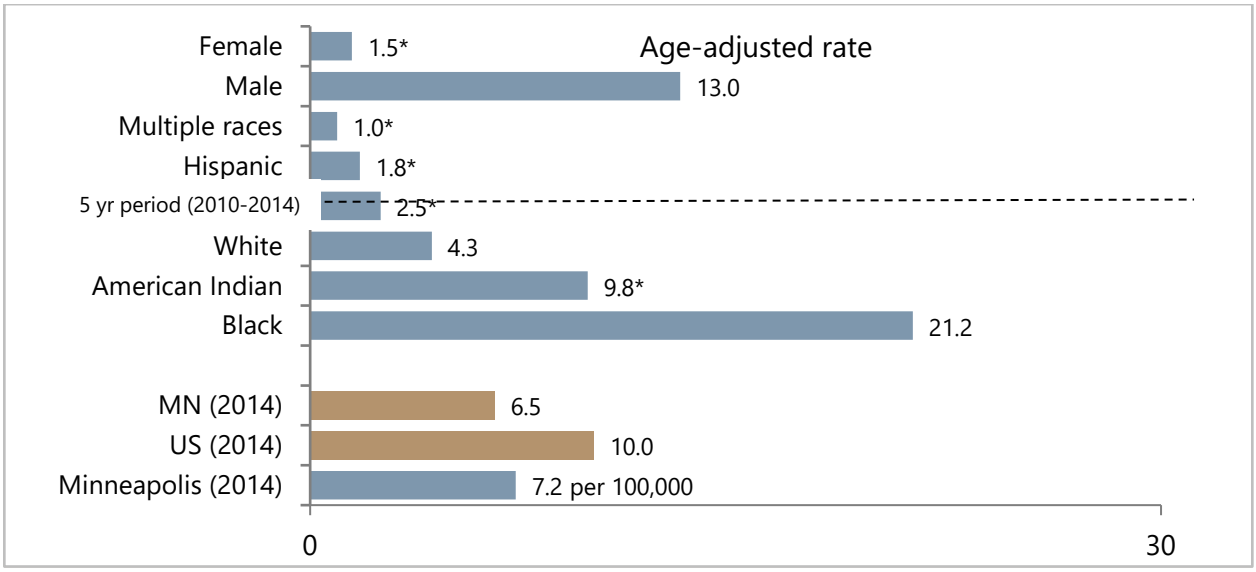
There was no change in the overall rate of deaths related to firearms in Hennepin County in 2014 compared to 2000 (Figure 21). The rate decreased in Minneapolis between 2000 and 2014. In 2014, 40 percent (50 out of a total of 125) of suicides in Hennepin County were firearm-related. There were 28 firearm-related homicides committed in 2014 in Hennepin County. Violence-related firearm deaths are higher among American Indians and blacks as well as considerably higher among males (Figure 22) and adolescents and young adults.

Figure 21. Violent firearm death rate per 100,000 population, Hennepin County, 2000-2014



Data Source: MN Vital Stats Death Records, 2000-2014

Figure 22. Age-adjusted rate of violence-related firearm deaths, by geography (2014), 5 year rates for race/ethnicity and sex, Minneapolis, 2010-2014



Data Source: Minneapolis Health Department, Minnesota Vital Records, US & MN data-CDC WISQARS

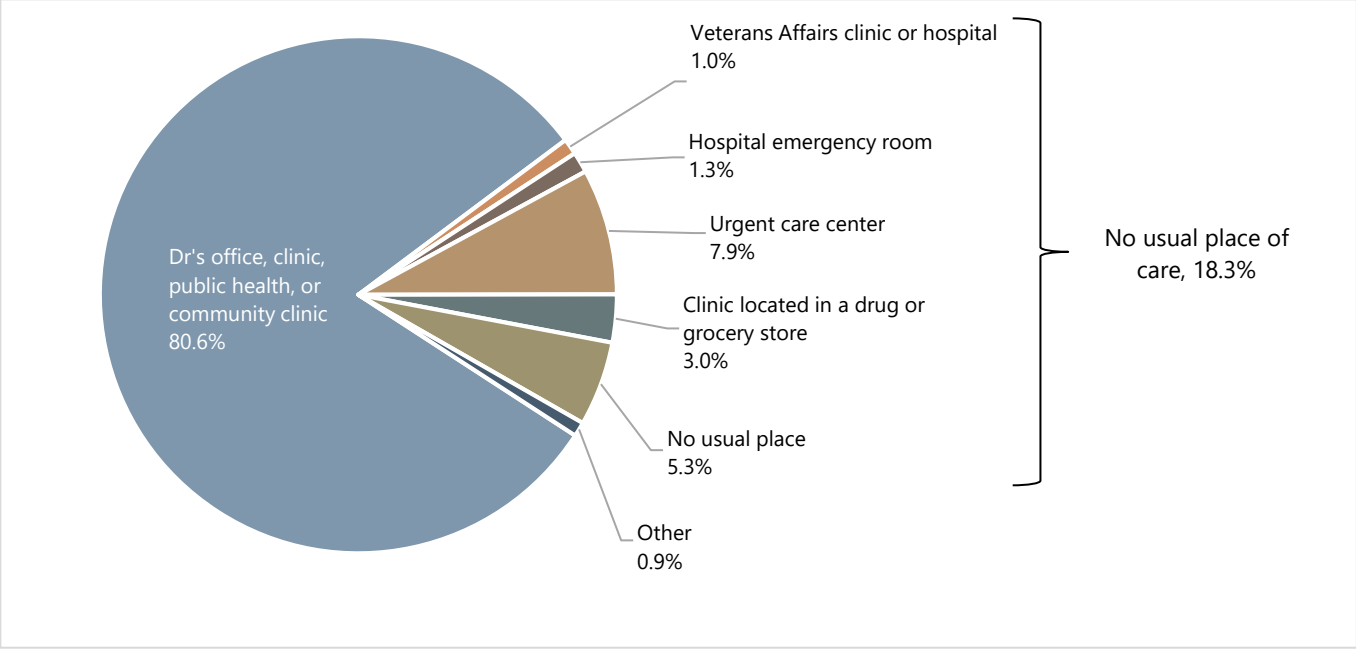
Access to healthcare

Adult/child usual place of care

In 2014, 18 percent of adults 25 years and older reported having no usual place of care. The adults included in this percentage reported either they had no usual place of care or that their usual sources of care were places such as the emergency room, urgent care center or a clinic in a grocery or drug store (Figure 23). This percentage decreased compared to 2010, but increased compared to 2002 and 2006. Disparities are present for Hispanic/Latinos (compared to non-Hispanic whites) (Figure 24), for adults who did not graduate high school and for adults reporting frequent mental distress. The younger population was less likely to have a usual place of care compared to the older population (Figure 25).

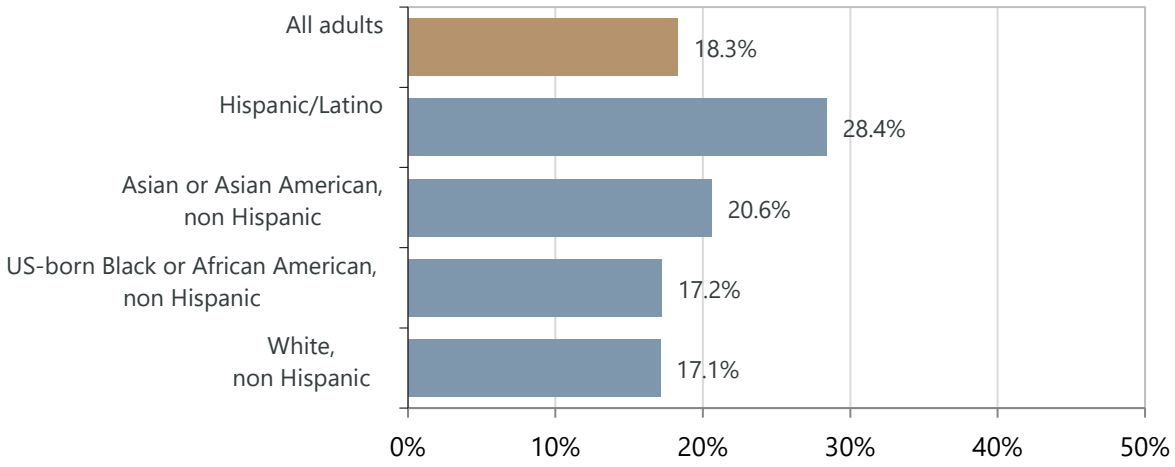
A higher percentage of children 0-17, (92%) reported having a usual place of care compared to adults. There was no difference between those living in Minneapolis compared to suburban Hennepin County. Children from low income households were less likely to report not having a usual place of care (88%) compared to children from higher income families (94%).

Figure 23. Percentage with no usual place of care, Hennepin County adults 25 years and older, 2014



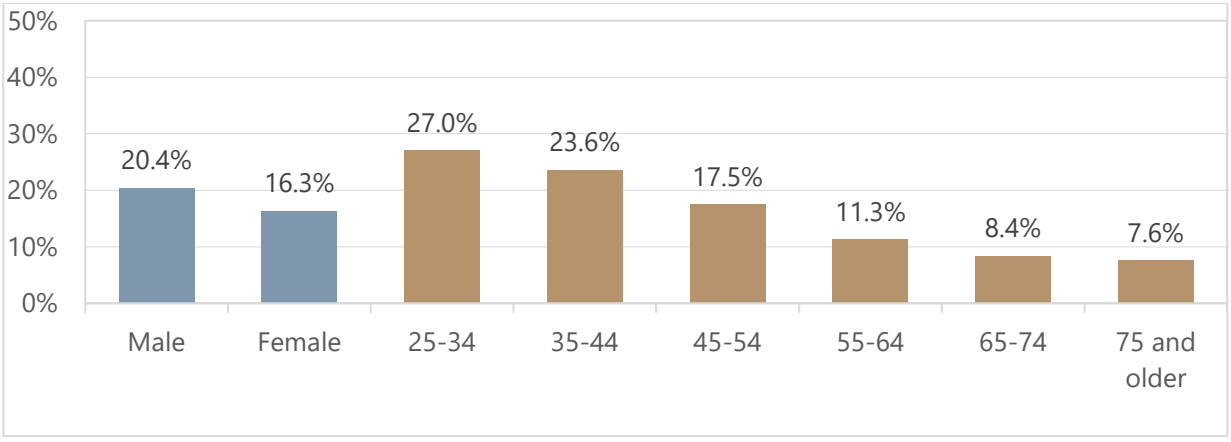
Data Source: Metro SHAPE 2014 Adult Survey

Figure 24. No usual place of care race/ethnicity for adults 25 years and older, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 25. No usual place of care by age and gender, Hennepin County, 2014

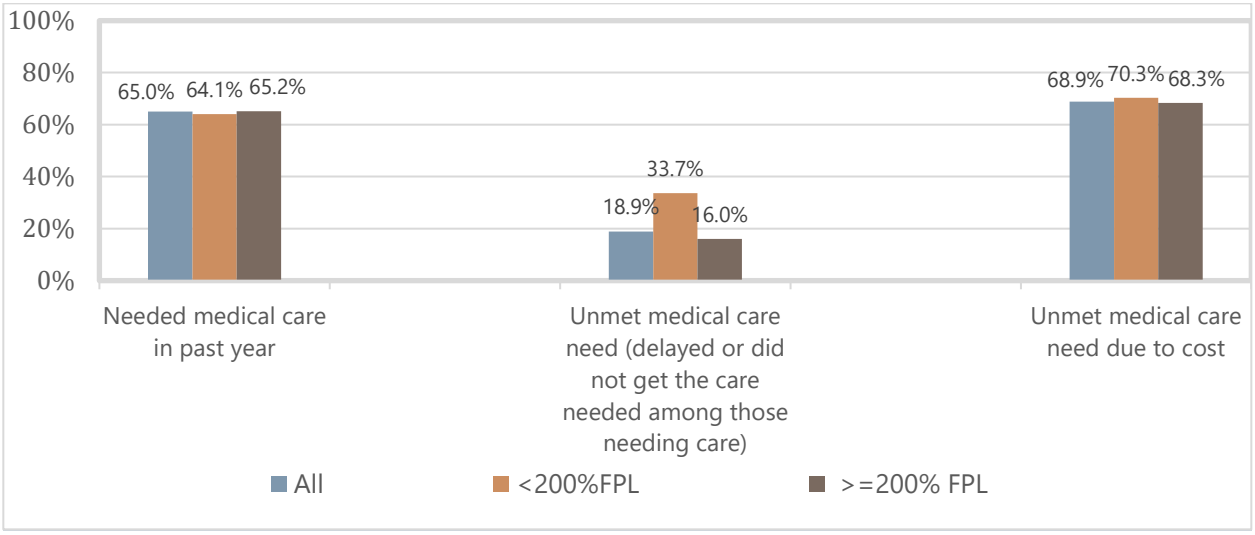


Data Source: Metro SHAPE 2014 Adult Survey

Difficulty to pay and unmet medical and mental health care needs

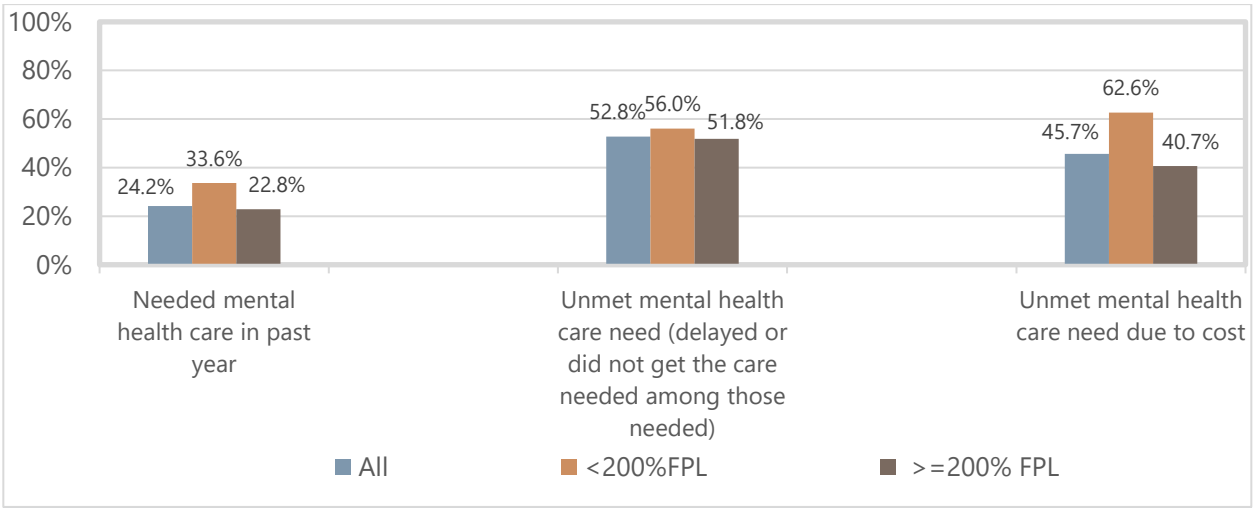
Adults 25 years and older who are low income were more likely to delay medical care compared to adults with higher incomes (Figure 26). Additionally, they were more likely to have unmet mental health care needs and delay mental health care needs due to cost compared to non-low income adults and skip or decrease doses of prescriptions medications due to cost (Figures 27 and 28).

Figure 26. Unmet medical needs and affordability, adults age 25 and older, Hennepin County, 2014



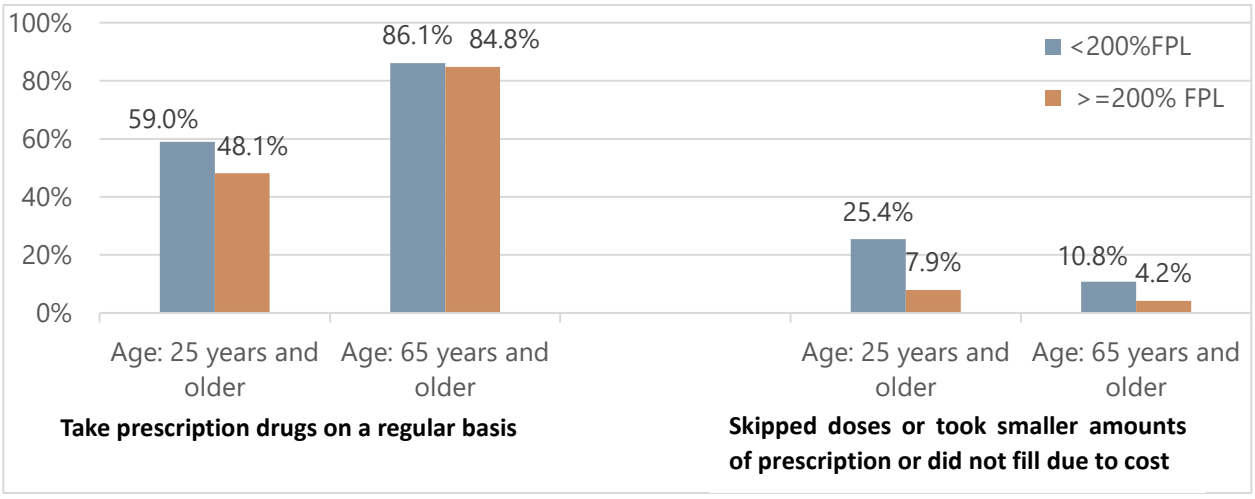
Data Source: Metro SHAPE 2014 Adult Survey

Figure 27. Unmet mental health care needs and affordability, adults age 25 and older, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 28. Prescription medication use and affordability, adults age 25 and older, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Maternal and child health

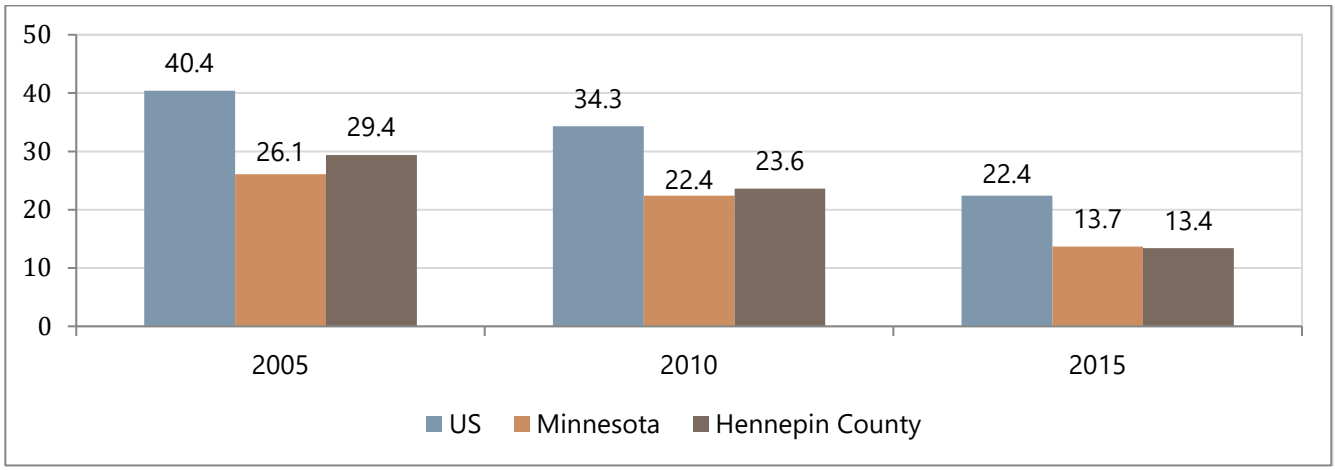
Teen births

Births to teen mothers who may not yet be fully mature, stable, or financially able to adequately support their new infants, can have significant negative consequences for the health and well-being of the infants, their parents, and their communities. Older mothers are more often better able to provide a healthier start for the infant, and a stronger, more supportive family for a child.

KEY FINDINGS

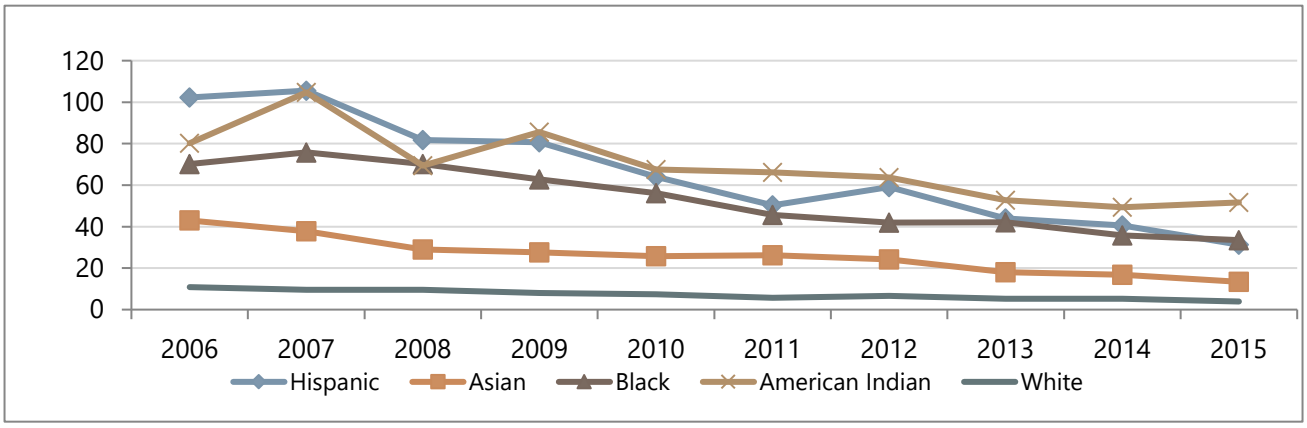
- In 2015, 477 births (2.8 percent) of all births in Hennepin County were to mothers age 15 to 19.
- Repeat births to teen mothers represented about one in seven (14%) of births to teenagers.
- The teen birth rate has continued to decline, from 32 births per 1,000 in 2007 to the current rate of 13.4 in 2015.
- Disparities persist, however, in the rate of teen births within some racial and ethnic subpopulations, especially American Indian, Hispanic, and African American mothers.
- Rates of teen births were higher in Minneapolis compared to other geographic areas in Hennepin County in 2015. However, over the past 10 years, the county has seen a general downward trend in all geographic regions of the county.

Figure 29. Teen birth rate per 1,000 15-19 yr olds: US, Minnesota, Hennepin County: 2005-2015



Data Source: MN Vital Stats Birth Records, 2005-2015

Figure 30. Birth rate (per 1,000 15-19 yr olds) for mothers 15-19 years by race/ethnicity: 2006-2015



Data Source: MN Vital Stats Birth Records, 2005-2015

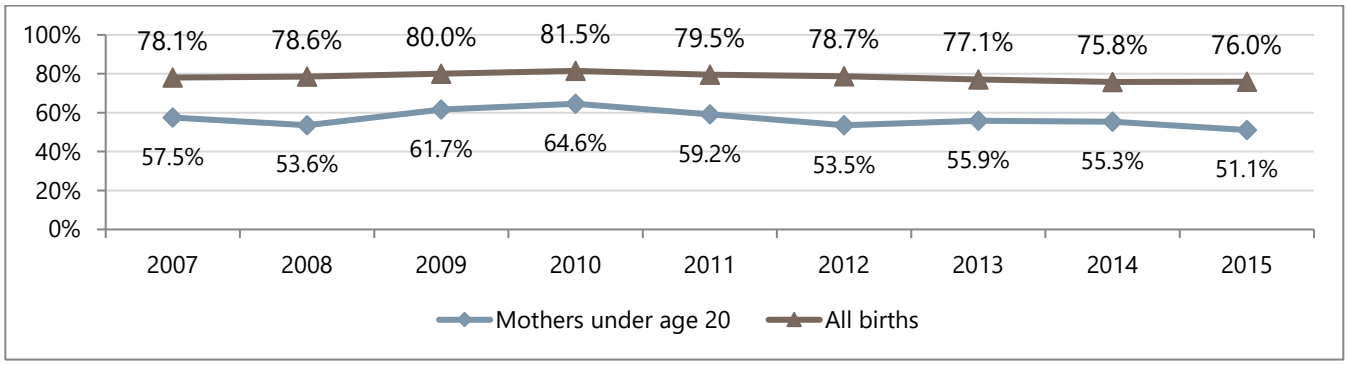
Early and adequate prenatal care

Medical care during pregnancy is essential for monitoring, diagnosis, preventing, and treating many significant health risks and birth complications that could harm both mother and child. Prenatal care starting in the first trimester of pregnancy is ideal; mothers who do not receive prenatal care until their third trimester, or who do not receive any care prior to delivery, are at risk for birth complications.

KEY FINDINGS

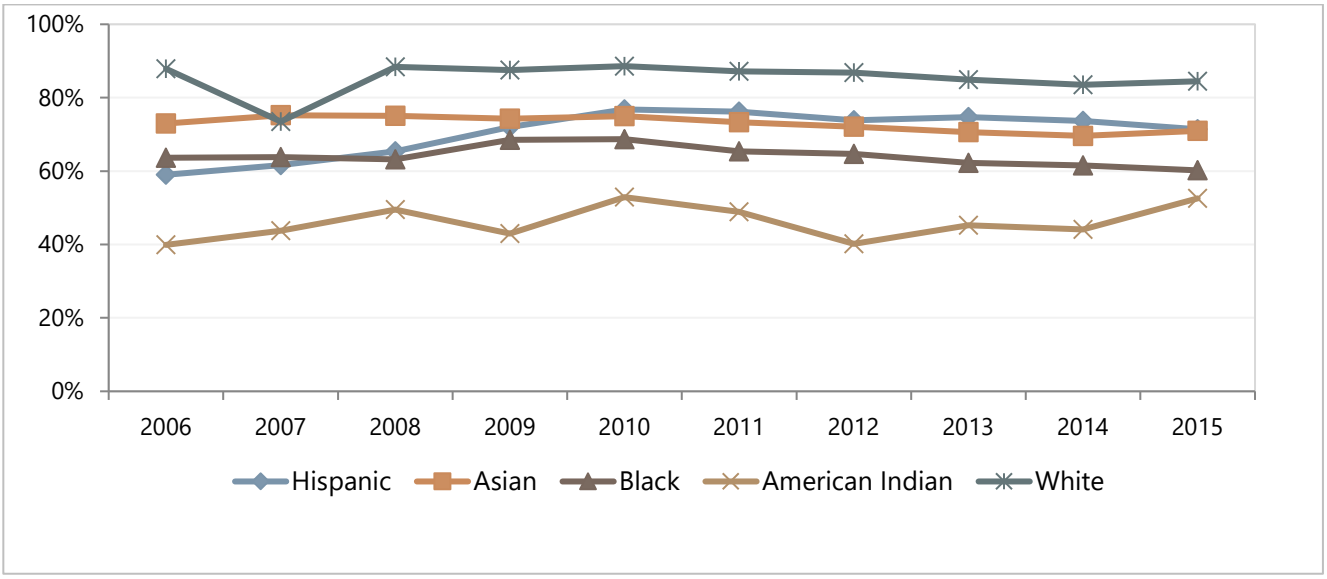
- In 2015, mothers received early and adequate prenatal care for 76 percent of births in Hennepin County.
- Mothers under age 20 receive early and adequate prenatal care at low rates compared to all mothers (Figure 31).
- American Indian and black/African American mothers are less likely to receive early and adequate prenatal care compared to other mothers. The trends have been fairly stable since 2006, though white and Asian mothers saw small declines (Figure 32).
- While there is little geographic variability in the percentage of early prenatal care births across the county, mothers in Minneapolis are slightly less likely to begin prenatal care in the first trimester.

Figure 31. Hennepin County early and adequate prenatal care births: 2007-2015



Data Source: MN Vital Stats Birth Records, 2005-2015

Figure 32. Hennepin County early and adequate prenatal care births by race/ethnicity: 2006-2015



Data Source: MN Vital Stats Birth Records, 2005-2015

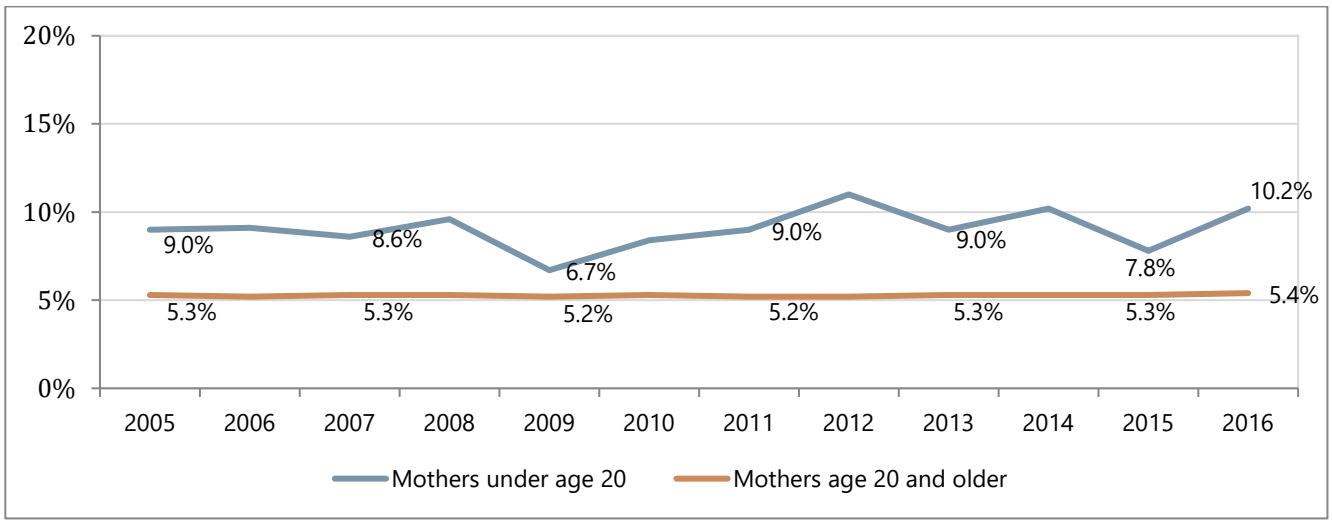
Low birth weight births

Babies born weighing less than 2,500 grams, or 5.5 pounds, are at risk for multiple health complications. They may have been born prematurely before all of their body functions are fully developed, or they may have underlying health conditions. Low birth weight is more common among twins and multiples. For this indicator, the statistics are limited to singleton births (one-child births).

KEY FINDINGS

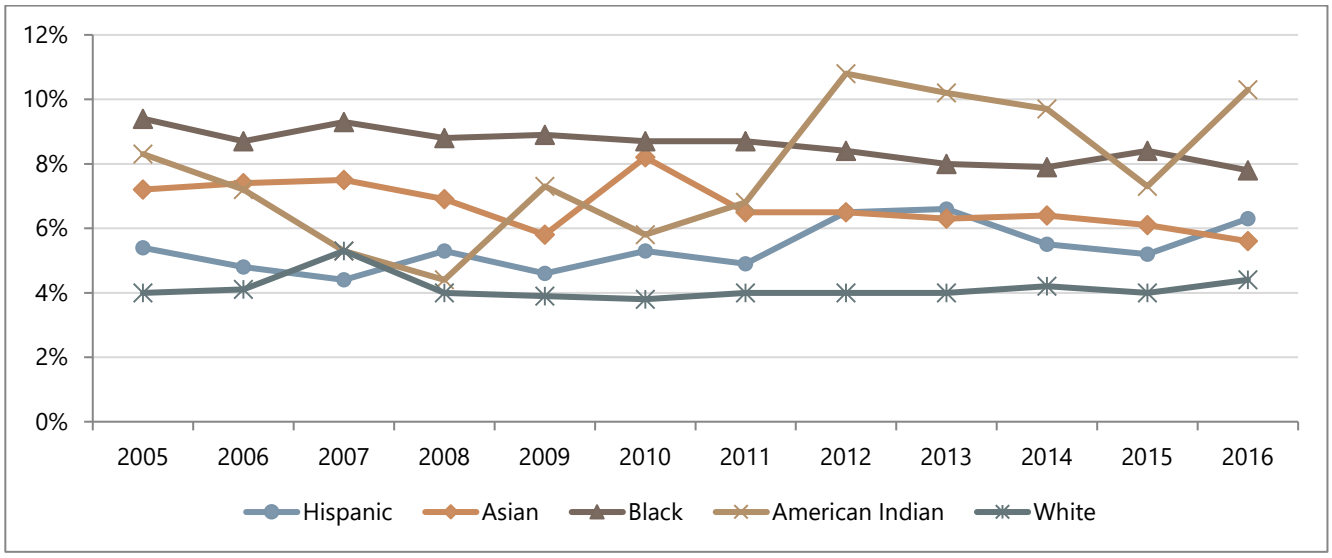
- In 2015, 863 births, or 5.4 percent, of all births in Hennepin County were babies who weighed less than 5.5 pounds.
- The percentage of babies born with low birth weight to mothers younger than 20 was higher compared to older mothers, but lower than previous years (Figure 33).
- Disparities persist in the percentage of low birth weight births within some racial and ethnic subpopulations, especially African American and American Indian mothers (Figure 34).
- There is little geographic variability in the percentage of low birthweight births across the county. While slightly higher than suburban Hennepin County, the proportion of low birthweight babies born in Minneapolis decreased in 2015.

Figure 33. Percentage of singleton births of low birth weight by maternal age, Hennepin County, 2005-2015



Data Source: MN Vital Stats Birth Records, 2005-2016

Figure 34. Hennepin County low birth weight births by race/ethnicity: 2006-2015



Data Source: MN Vital Stats Birth Records, 2005-2016

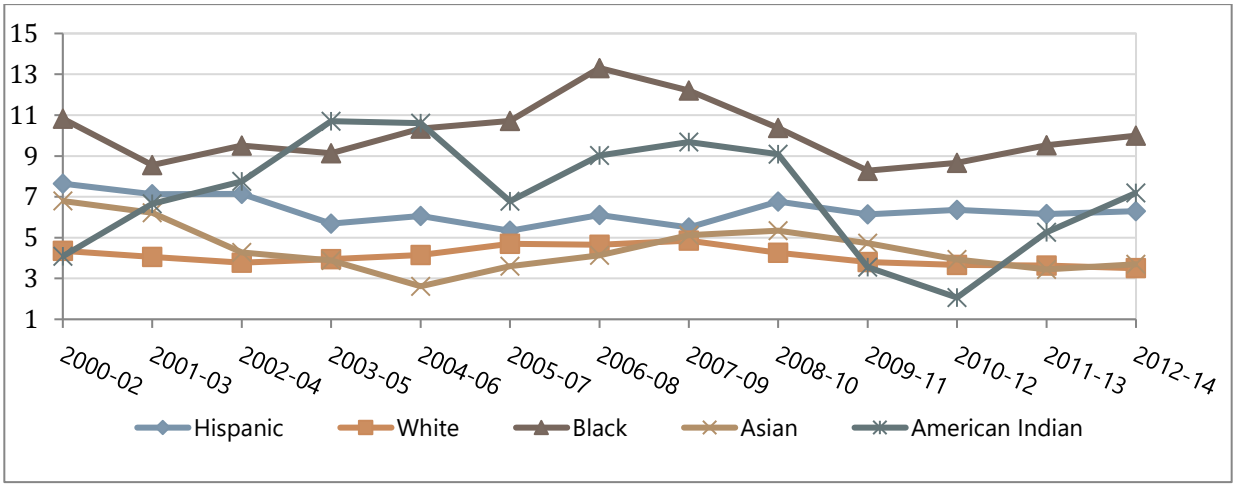
Infant mortality

Infant mortality is a public health indicator. Because infants are among the county's most vulnerable residents, infant mortality is an indicator of population health.

KEY FINDINGS

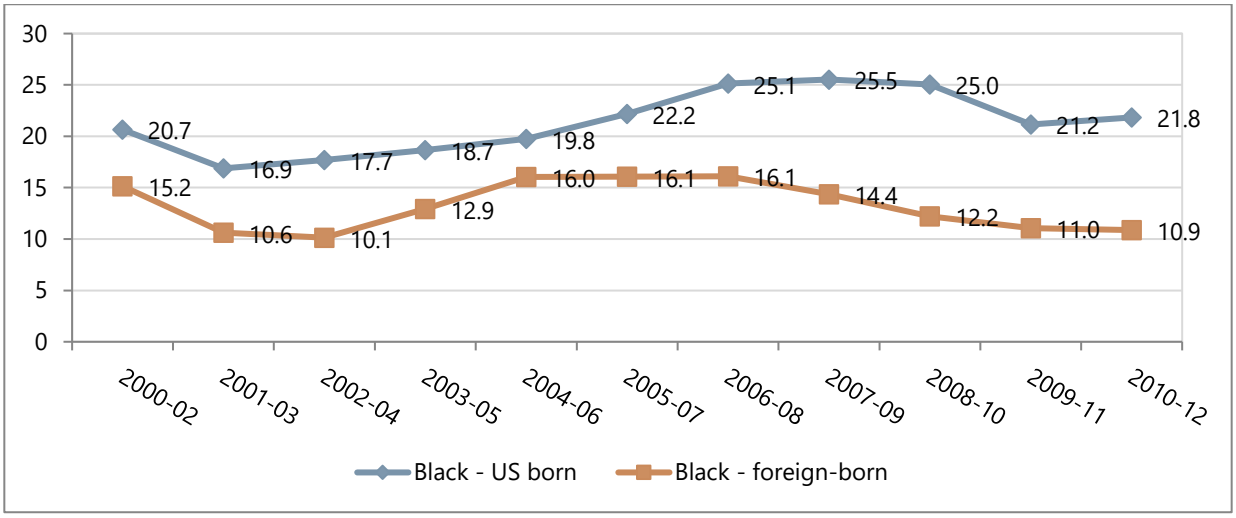
- In Hennepin County, racial and ethnic disparities mirror those seen nationally, with the highest rates of infant mortality among babies born to US-born African American mothers (Figure 35).
- Infant mortality rates are much higher for babies born to US-born African American mothers compared to foreign-born African American mothers (Figure 36).
- The highest rate of infant mortality is among African American babies, followed by Hispanic and American Indian babies. The infant mortality rate among American Indian babies fluctuates, though remains high relative to other racial groups.
- In 2014, 82 babies in Hennepin County died before their first birthday. This represents 4.9 babies per 1,000 born, slightly below the national rate and the Healthy People 2020 target of 6.0 deaths per 1,000 babies (Figure 37).
- Infant mortality rates in Minneapolis have consistently been higher than suburban Hennepin County (Figure 38).

Figure 35. Infant mortality 3 year rolling rates (deaths per 1,000 live births) by race/ethnicity: 2000-2014, Hennepin County



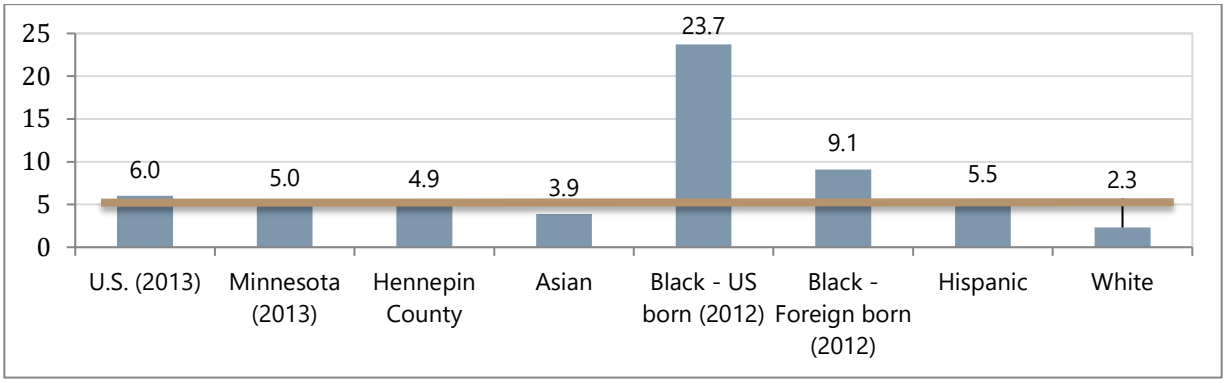
Data Source: MN Vital Stats Birth and Death Records, 2000-2014

Figure 36. Infant mortality 3 year rolling rates (deaths per 1,000 live births) among black/African American babies by mother's place of birth: 2000-2012, Hennepin County



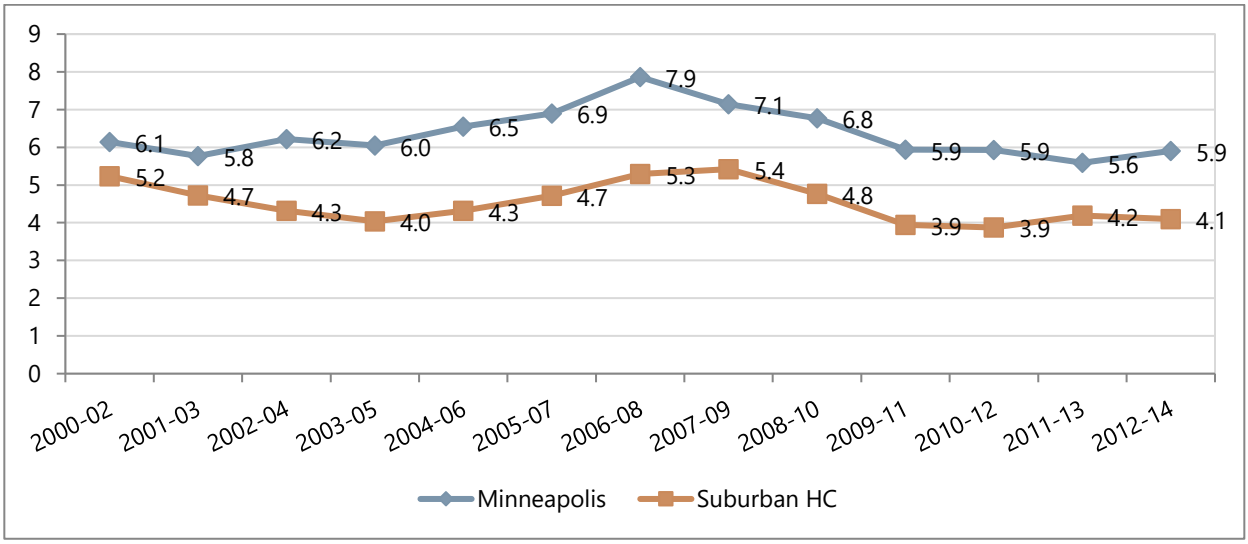
Data Source: MN Vital Stats Birth and Death Records, 2000-2014

Figure 37. Infant mortality rates (deaths per 1,000 live births) compared to Healthy People 2020 target, Hennepin County, 2014



Data Source: MN Vital Stats Birth and Death Records, 2000-2014

Figure 38. Infant mortality rates (deaths per 1,000 live births) by geography, Hennepin County, 2014



Data Source: MN Vital Stats Birth and Death Records, 2000-2014

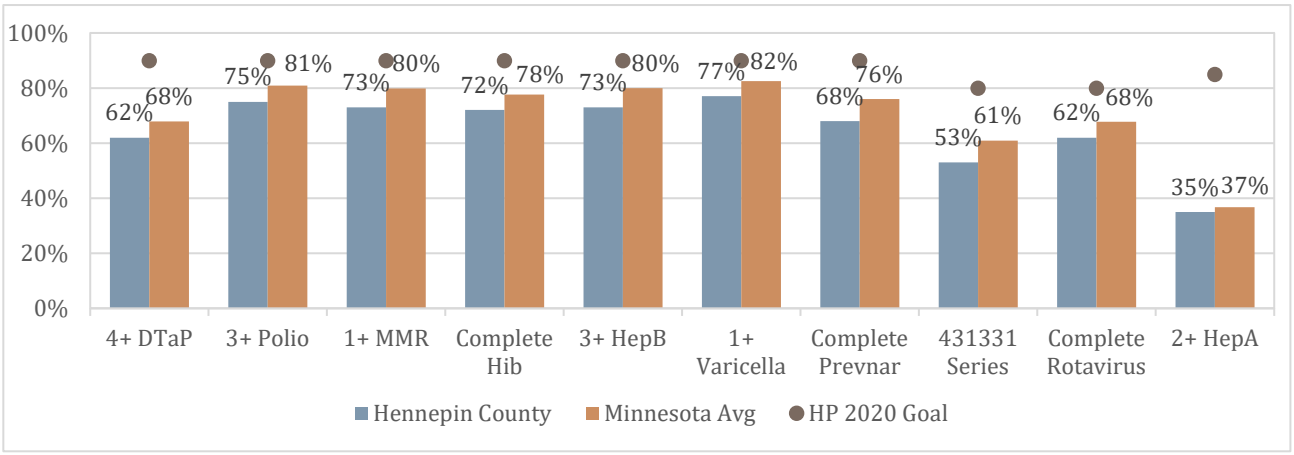
Immunizations

Vaccines are one of the best ways to help keep children healthy. Many outbreaks of preventable diseases occur when children in the community do not receive the recommended vaccines. A higher coverage rate indicates a greater level of overall protection against vaccine-preventable diseases. By two years of age, it is recommended that all children should have received 4 doses of diphtheria-tetanus-pertussis (DTaP), 3 doses of polio, 1 dose of measles-mumps-rubella (MMR), 3 doses of Hepatitis B, 3 doses of Haemophilis Influenza, type B (Hib), and 1 dose of Varicella vaccine. This series is known as complete series or "4:3:1:3:3:1."

KEY FINDINGS

- In 2017, 53 percent of Hennepin County children age 24-35 months completed the 431331 series. The Healthy People 2020 target goal for complete series is 80 percent. Since young children are at a higher risk for vaccine-preventable diseases, increasing the rate is important (Figure 39).
- Hennepin County's coverage rates of 24-35 months of age for the complete (431331) series are slightly lower than the Minnesota average in all three years (2015-2017) (Table 1).
- There are a couple contributing factors that influence Hennepin County rates to be slightly lower than the Minnesota average: (1)MIIC participation of health care providers are voluntary and immunization data submission is not mandatory. It is possible that MIIC may not have all immunization records to truly indicate a completed series and (2)The Hennepin County 24-35 months old population may include children who have moved out of the county but not updated their address in MIIC. These children may still be included in the denominator causing the rate to be lower than what it should be.

Figure 39. Vaccination coverage 24-35 month olds: Hennepin County, 2017



Data Source: MIIC data, 2017

Table 1: Vaccination coverage 24-35 month olds, Hennepin County, 2017 compared to State Average (Comp=Complete)

	4+ DTaP	3+ Polio	1+ MMR	Comp Hib	3+ Hep B	1+ Var	Comp Prev	Comp Series	Comp Rota	2+ Hep A
Hennepin County	62%	75%	73%	72%	73%	77%	68%	53%	62%	35%
Minnesota Average	68%	81%	80%	78%	80%	82%	76%	61%	68%	37%

Data Source: MIIC data, 2017

Mental health

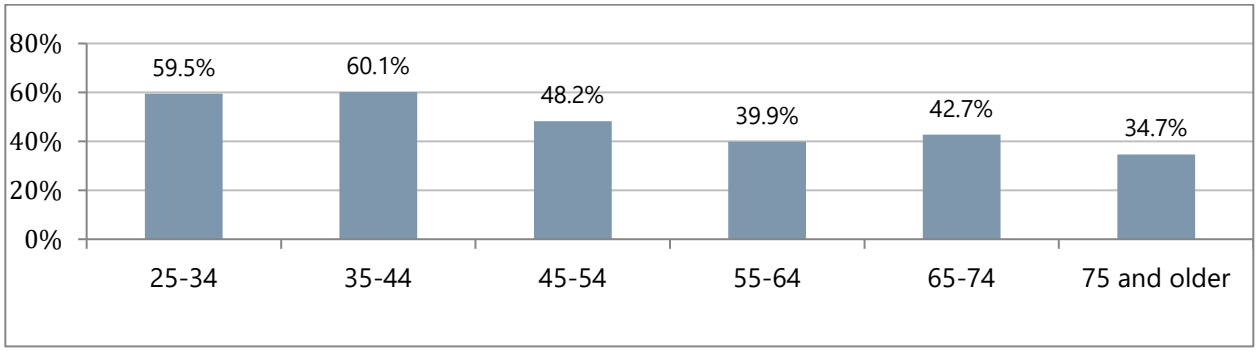
Adults with frequent mental distress

Mental health is essential to personal well-being, family and interpersonal relations and ability to contribute to community or society. Yet, mental distress affects many and could be disabling and costly. Frequent mental distress is defined as reporting mental health as "not good" on at least 14 of the last 30 days.

KEY FINDINGS

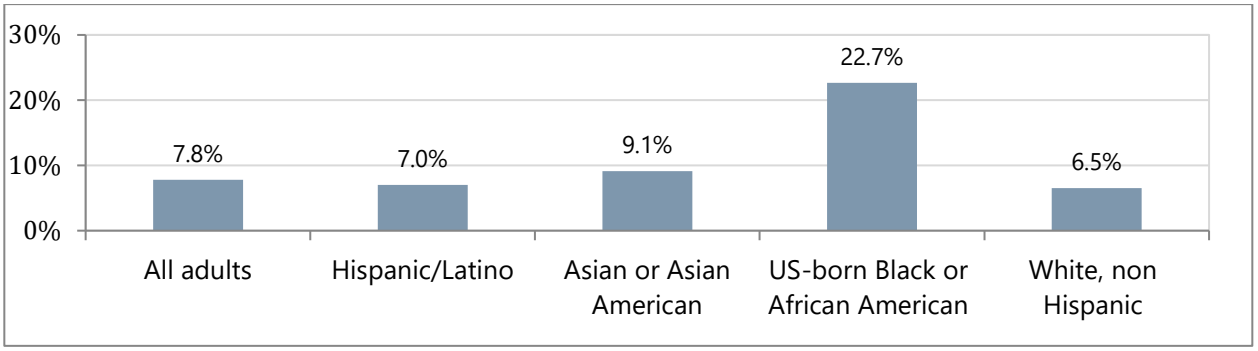
- About eight percent of adults aged 25 and older reported experiencing frequent mental distress.
- While there is little variation by age (Figure 40), women are more likely to report experiencing frequent mental distress.
- Those identifying as US born blacks reported frequent mental distress at much higher rates compared to others (Figure 41).
- Lower income and respondents with less than high school education were much more likely to report frequent mental distress (Figure 42).
- Rates of frequent mental distress among Hennepin County residents is similar to rates of adults aged 25 and older throughout Minnesota.

Figure 40. Percentage of adults, 25 years and older, experiencing frequent mental distress by age



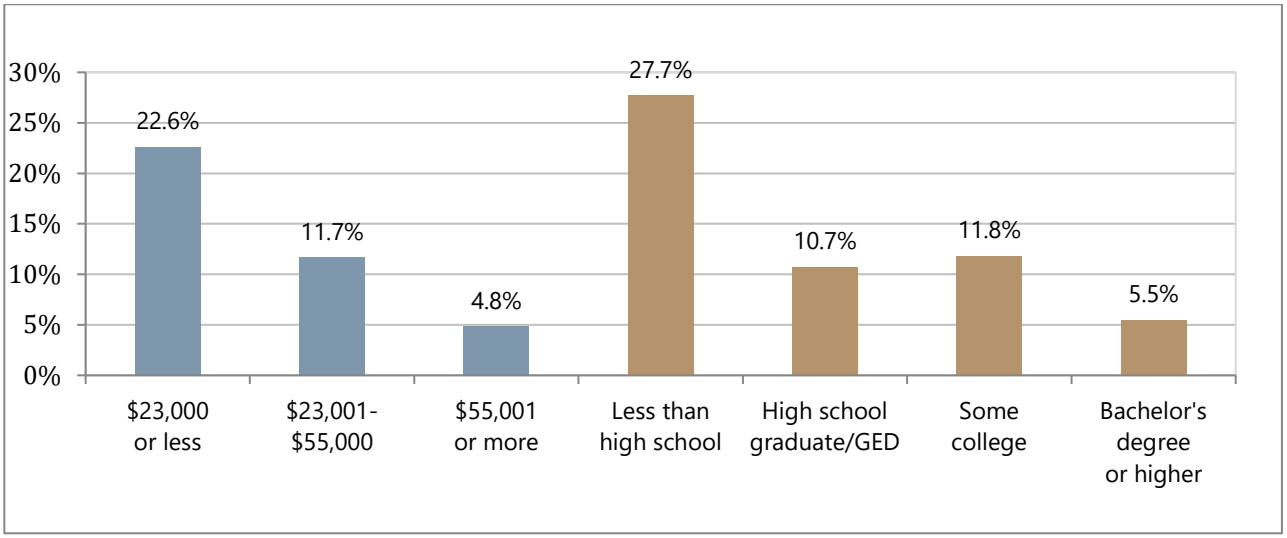
Data Source: Metro SHAPE 2014 Adult Survey

Figure 41. Percentage of adults age 25 and older who experienced frequent mental distress by race/ethnicity, Hennepin County 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 42. Percentage of adults age 25 and older who experienced frequent mental distress by income and education, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

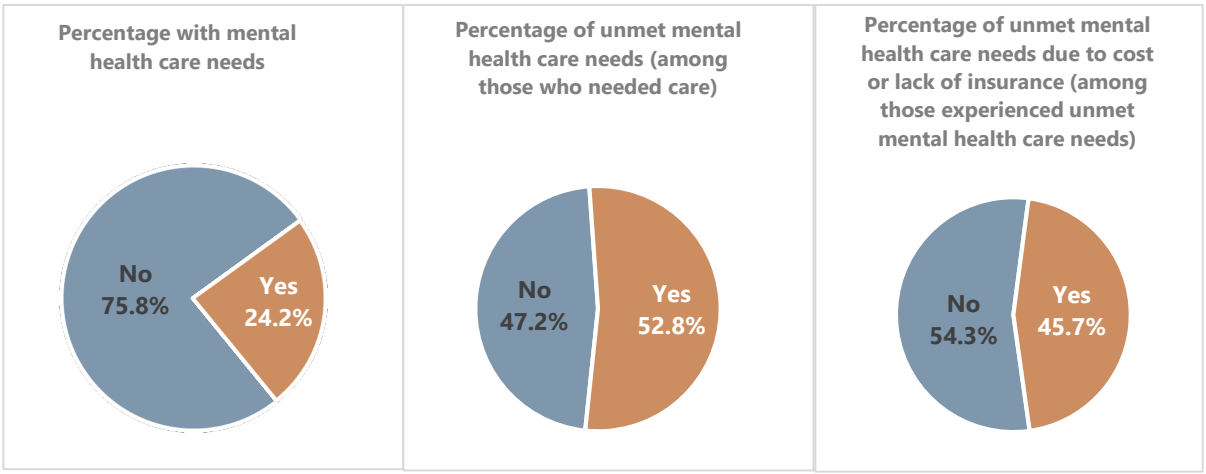
Adults with unmet mental health needs

The 2014 SHAPE survey shows about one-third of county adults 25 years and older experienced a clinical diagnosable mental health condition. Many mental illnesses are preventable and treatable. Yet many delayed needed care due to lack of access to mental health care or for other reasons.

KEY FINDINGS

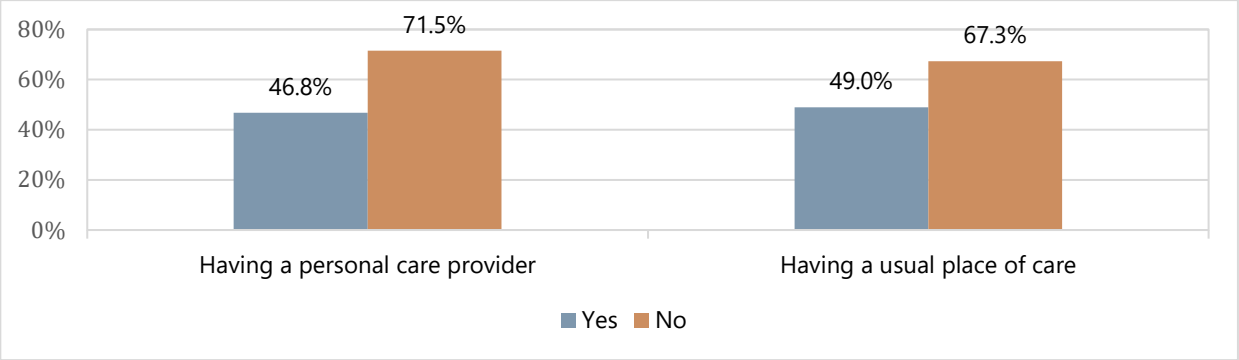
- About 24 percent of adults aged 25 and older reported that there was a time when they "wanted to talk with or seek help from a health professional about stress, depression, a problem with emotions, excessive worrying, or troubling thoughts." (Figure 43).
- Mental health care needs were much higher among females, adults who are US-born blacks, LGBT, low income, low education and those with a disability.
- Of those who reported wanting to see a health professional for mental health concerns, more than half (53%) delayed or did not get the care they needed.
- Nearly half (46%) of those who delayed seeing a health professional for mental health concerns did so because of concerns about cost. Those of lower income were more likely to report that they delayed due to cost compared to not low income (63% vs. 41%).
- Health access matters. Hennepin County residents who have personal care providers or have a usual place of care are much less likely to report unmet mental health care needs than their counterparts who do not (Figure 44).
- Asian residents also reported delaying care at higher rates compared to Hispanic, US born black, and white residents (Figure 45).

Figure 43. Hennepin County adults 25 years and older with unmet mental health care needs, 2014



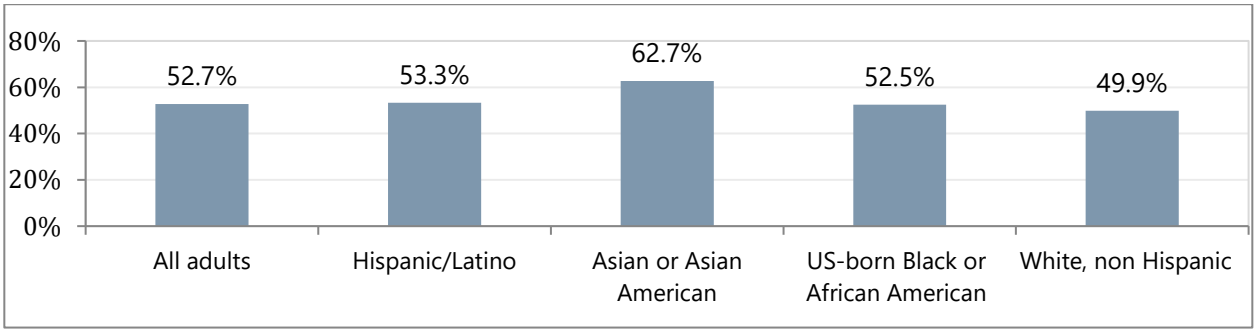
Data Source: Metro SHAPE 2014 Adult Survey

Figure 44. Percentage of adults with unmet mental health care needs by health access status (among those who needed mental health care), 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 45. Percentage of adults (age 25+) who delayed care (among those who needed it) for mental health concerns by selected race/ethnicities



Data Source: Metro SHAPE 2014 Adult Survey

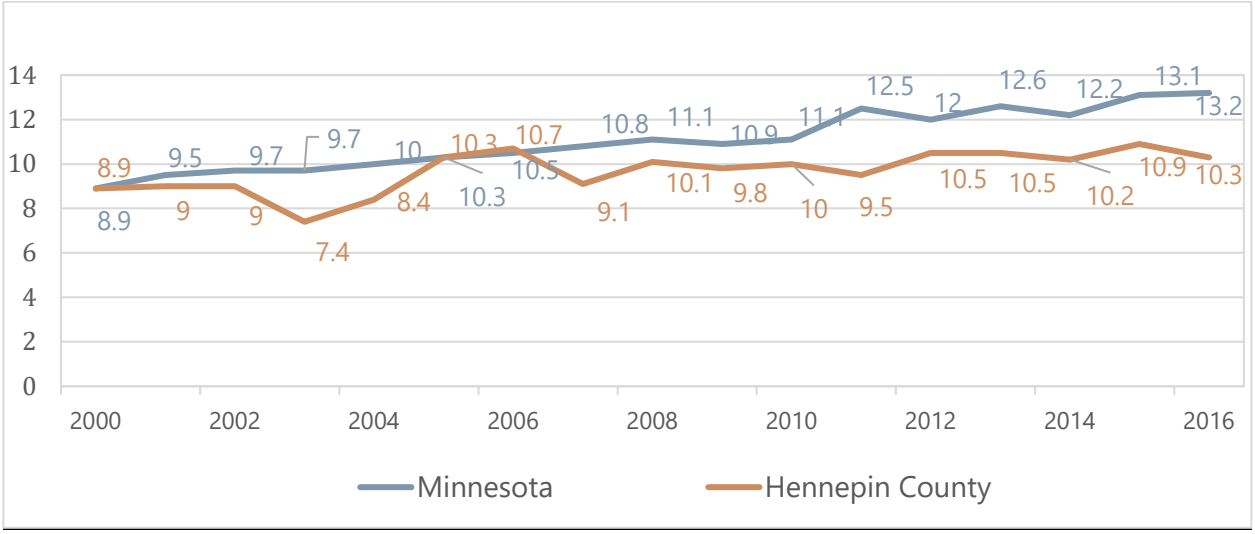
Suicide

Suicide is the 10th leading cause of death among in Hennepin County and across Minnesota. A suicide attempt is when people harm themselves with the intent to end their lives, but they do not die as a result of their actions. Many more people survive suicide attempts than die, but they often have serious injuries. However, a suicide attempt does not always result in a physical injury. Females tend to consider and attempt suicide at higher rates than boys, but males are more likely to die by suicide.[1]

KEY FINDINGS

- The suicide rate in Hennepin County has seen a small increase in the past 16 years from 8.9 to 10.3 per 100,000 population (Figure 46).
- The age adjusted suicide rate in Hennepin County is lower than overall in Minnesota.
- The rate of self-injurious behavior begin to increase for pre-teens (10-14), peak for the 15-19 age group with 15-29 ages having the highest rates. Once past the age of 65 years, rates level off.
- Suicide rates are higher for males compared to females and highest among white middle-aged males.

Figure 46. Age adjusted suicide rate per 100,000 population, 2000-2016



Data Source: MN Vital Stats Death Records, 2000-2016

Adolescent suicidality

Suicide is the 3rd leading cause of death among adolescents in Hennepin County and across Minnesota.

KEY FINDINGS

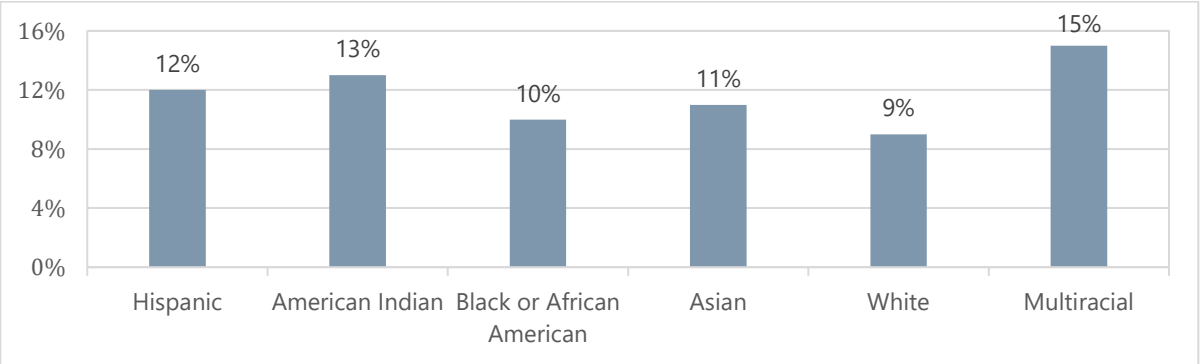
- In 2016, about one in ten 9th graders in suburban Hennepin County seriously considered suicide in the past 12 months. Girls in 8th, 9th and 11th grade were almost twice as likely as boys to consider suicide (Table 2).
- Ninth graders receiving free or reduced price lunch were more likely to consider suicide compared to non-low income students. In addition, these students were also more likely to have attempted suicide in the past year (4%) than non-low income students (2%).
- Hispanic, American Indian and multiracial 9th graders were more likely to consider suicide in the past year than other students. Rates of suicide attempts were similar for students of most race/ethnicities, though multi-racial students were more likely to attempt suicide (4% vs 2-3%) (Figure 47).

Table 2 Adolescent suicidality by grade and gender, suburban Hennepin County, 2016

Suburban Hennepin County students	8th graders	9th graders	11th graders
Seriously considered suicide in past year	**11%**	**10%**	**11%**
Boys	7%	6%	8%
Girls	15%	14%	15%

Data Source: Minnesota Student Survey, 2016

Figure 47. Adolescent suicidality by race, Suburban Hennepin County, 2000-2016



Data Source: Minnesota Student Survey, 2016

Mental, emotional or behavioral health conditions among children

Mental health is a significant factor in determining overall wellbeing. Chronic mental health, behavioral, or emotional problems may impact or limit a child's physical health, intellectual growth, and social development.

KEY FINDINGS

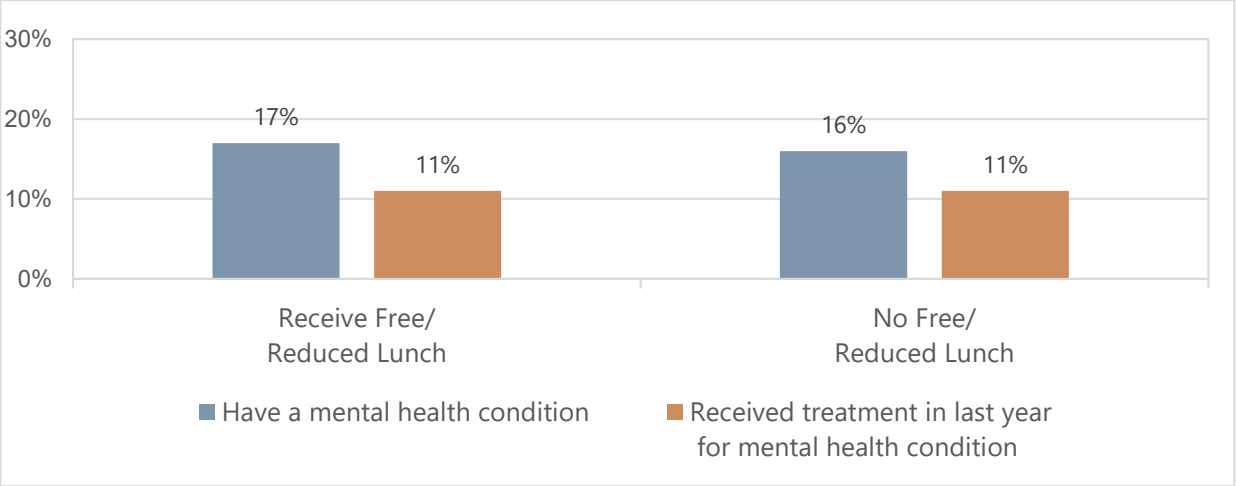
- In 2016, 17 percent of ninth graders reported having a long-term mental health, behavioral or emotional problem, and 20 percent reported signs of depression.
- More than one in four 11th grade girls reported having a chronic mental health problem, and one in five reported receiving treatment in the past year. Girls of any grade were more likely to both have a chronic condition and to have received treatment compared to boys (Table 3).
- Students who receive free or reduced lunch are slightly more likely to report having mental health, behavioral, or emotional problems compared to those who do not receive free or reduced lunch; however, there was no difference in the percentage who received treatment (Figure 48).
- The presence of mental health, behavioral, or emotional problems varies slightly by race; Asian and black students report slightly lower rates of mental health problems (Figure 49).
- Students in suburban Hennepin County report slightly higher rates of mental health, behavioral, or emotional problems compared to ninth graders across Minnesota in 2013.

Table 3. Adolescent mental health in suburban Hennepin County, 2016

Suburban Hennepin County students attending school in public school districts	8th graders	9th graders	11th graders
Reported signs of depression	**19%**	**20%**	**24%**
Boys	15%	15%	19%
Girls	23%	25%	28%
Reported a chronic mental health, emotional or behavioral problem	**16%**	**17%**	**21%**
Boys	13%	12%	14%
Girls	19%	21%	28%
Received treatment for a mental health, emotional or behavioral problem in last year	**12%**	**11%**	**14%**
Boys	11%	9%	10%
Girls	13%	14%	19%

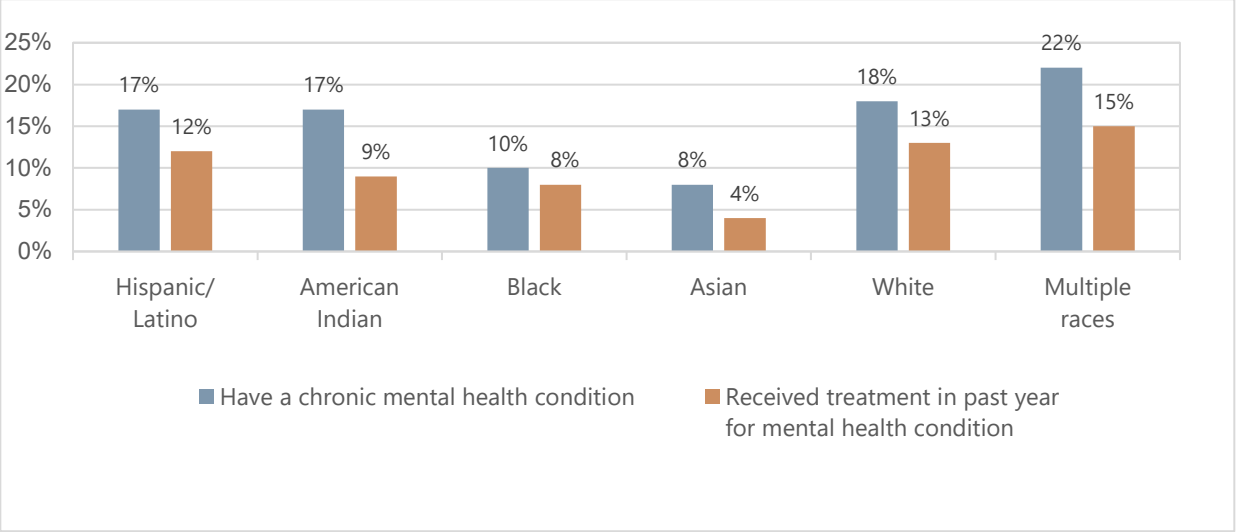
Data Source: Minnesota Student Survey, 2016

Figure 48. Percentage of ninth graders who reported a chronic mental health condition and those who were treated in the past year by income, 2016



Data Source: Minnesota Student Survey, 2016

Figure 49. Ninth grade students reporting a chronic mental health condition and those who received treatment by race/ethnicity, 2016



Data Source: Minnesota Student Survey, 2016

Reproductive and sexual health

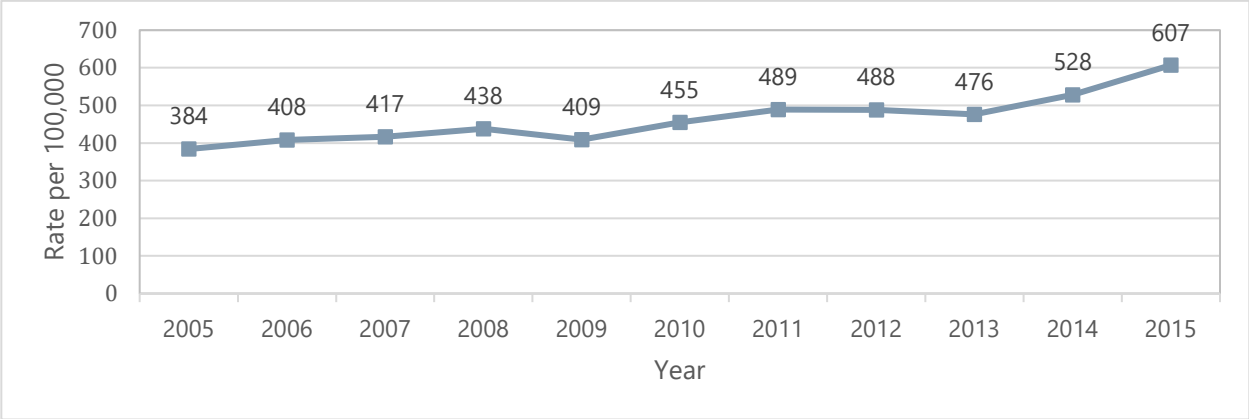
Chlamydia

Chlamydia is the most commonly reported communicable disease in Hennepin County. For women, complications from chlamydia include pelvic inflammatory disease (PID) which may cause infertility, chronic pelvic pain, or tubal pregnancy. Men who are left untreated typically develop urethral infections, and in rare cases, may become sterile.

KEY FINDINGS

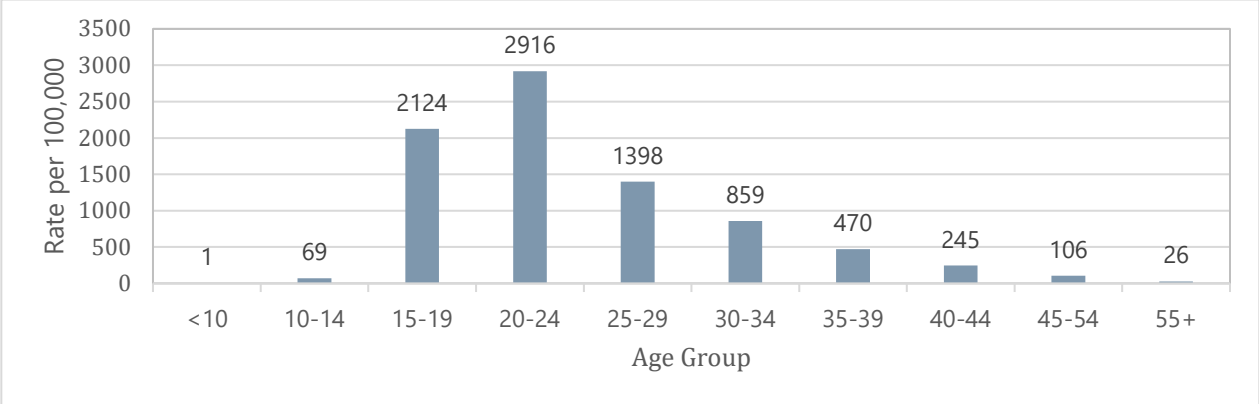
- Chlamydia rates have been increasing over the years. This trend may be due to improved screening and diagnosis; however, the continued rise also reflects an increase in infections (Figure 50).
- Sexually active adolescents (aged 15-19 years) and young adults (aged 20-24 years) comprise the age groups with the highest risk for chlamydia infections (Figure 51).
- The chlamydia rate for females in 2015 was nearly one and a half times higher than for males (713 cases compared to 497 cases per 100,000 population).
- Chlamydia infection is disproportionately found in minority populations, especially the black/African, Hispanic, and American Indian populations (Figure 52).

Figure 50. Chlamydia rate per 100,000 by year, Hennepin County, 2005-2015



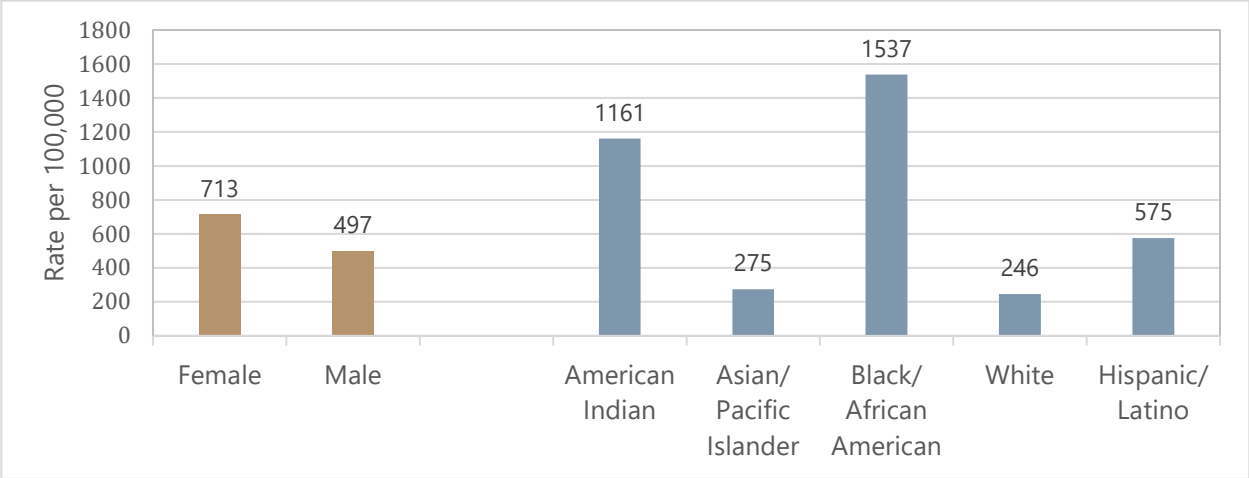
Data Source: Hennepin County Epidemiology, 2005-2015

Figure 51. Chlamydia rate per 100,000 by age group, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

Figure 52. Chlamydia rate per 100,000 by gender and race/ethnicity, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

Gonorrhea

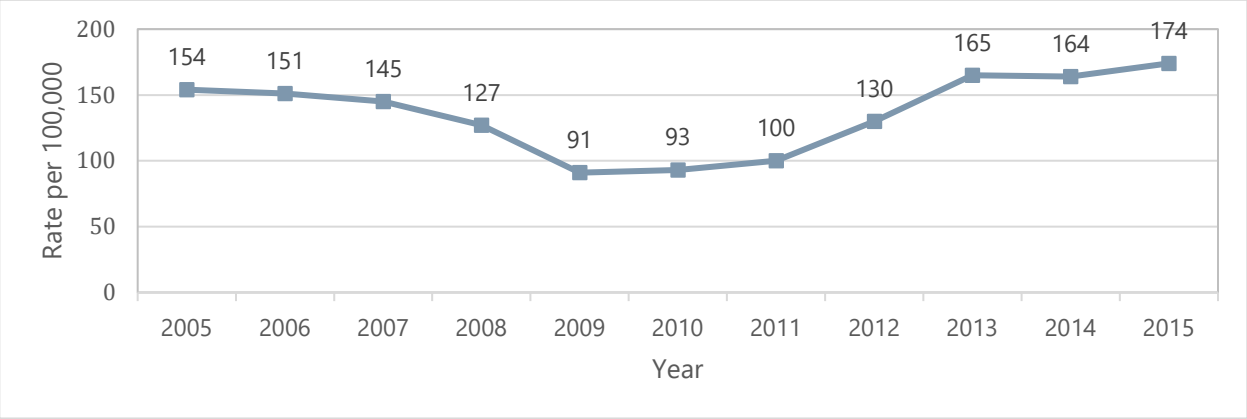
Nearly half of the gonorrhea cases reported in Minnesota are among Hennepin County residents. In men, epididymitis (a painful condition affecting the testes) and in women, pelvic inflammatory disease (PID), may develop as a result of untreated gonorrhea. These conditions can lead to infertility in both

sexes. Although treatable, gonorrhea continues to persist in the population because people may fail to recognize the symptoms or attribute their condition to other causes.

KEY FINDINGS

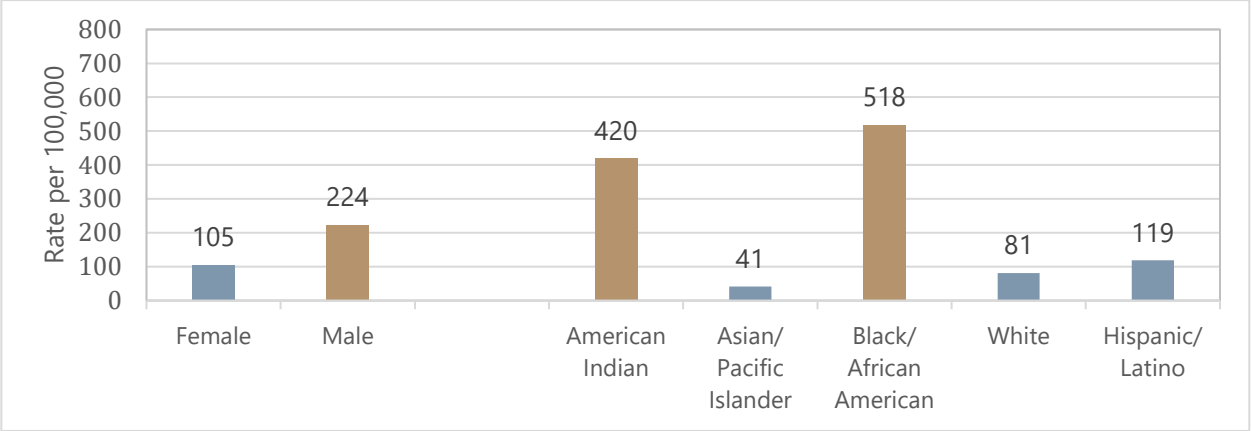
- In 2015, the gonorrhea rate was higher in males than in females (239 cases versus 111 cases per 100,000 population) (Figure 53). Previously, gonorrhea rates were reported about equally in women and men.
- Gonorrhea remains disproportionately high in the American Indian and the black/African American population (Figure 54).
- Sexually active young adults (aged 20-24 years or aged 25-29 years) are at highest risk for gonorrhea infections (Figure 55).

Figure 53. Gonorrhea rate per 100,000 by year, Hennepin County 2005-2015



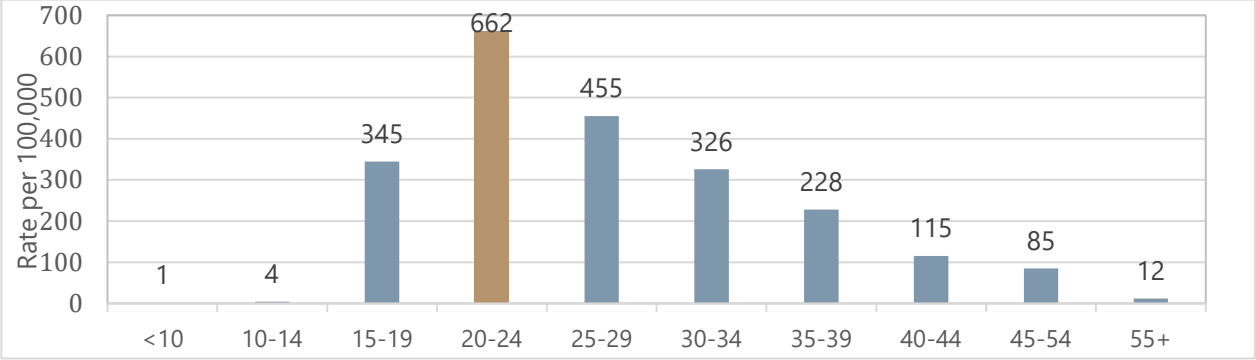
Data Source: Hennepin County Epidemiology, 2005-2015

Figure 54. Gonorrhea rate per 100,000 by gender and race/ethnicity, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

Figure 55. Gonorrhea rate by age group, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

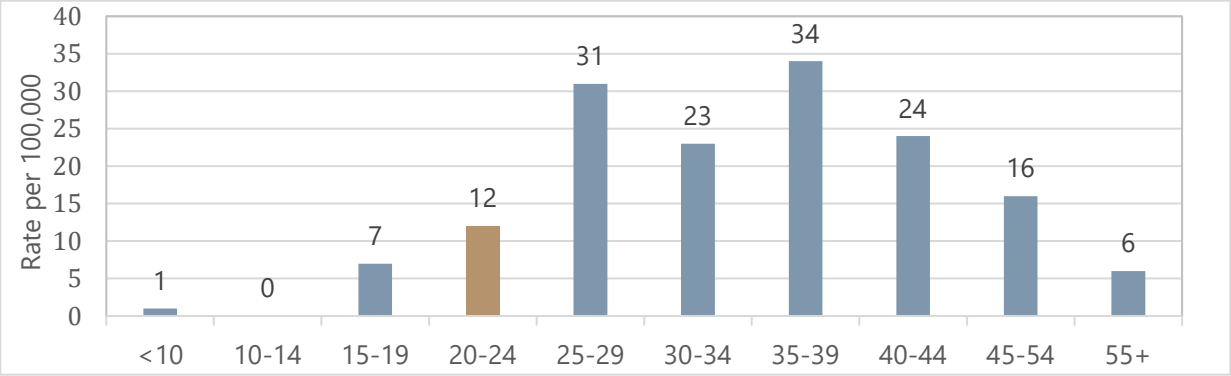
Early Syphilis

Nearly two out of three syphilis cases reported in Minnesota are among Hennepin County residents. The symptoms of syphilis emerge as a single sore (primary stage), a rash (secondary stage), and may progress to organ damage, brain or nerve problems, and possibly even death. Although treatable, syphilis continues to persist because people may fail to recognize the symptoms or attribute their condition to other causes.

KEY FINDINGS

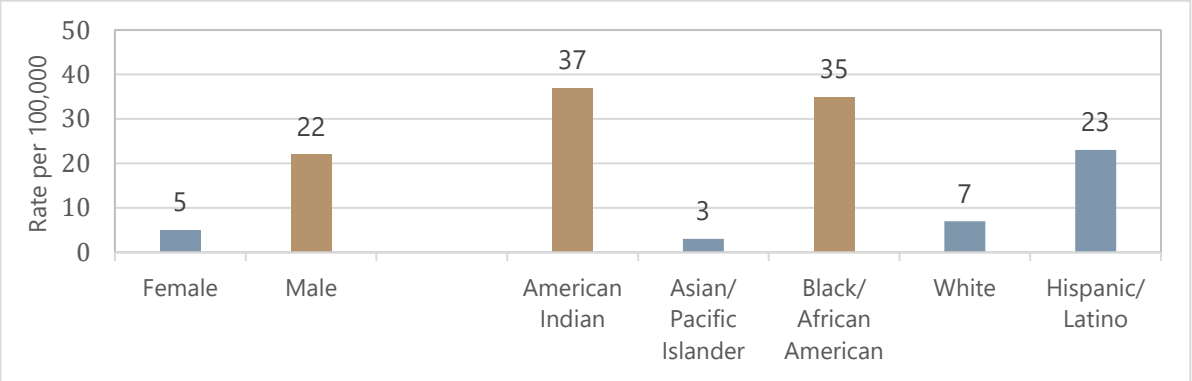
- In 2015, *early syphilis* (primary and secondary stages) was most commonly found in young adults aged 25-29 and in adults aged 35-39 years (Figure 56).
- The majority of early syphilis cases were found in men (in 2015, 127 (82%) of early syphilis cases were male). Of these male cases, 57 percent reported having a male sex partner (*men who have sex with men* (MSM)).
- Syphilis is reported disproportionately in minority populations; the populations with the highest rates of early syphilis were the *black/African American* and *American Indian* populations. (Figure 57).

Figure 56. Early Syphilis rate by age group, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

Figure 57. Early Syphilis rate per 100,000 by sex and race/ethnicity, Hennepin County, 2015



Data Source: Hennepin County Epidemiology, 2005-2015

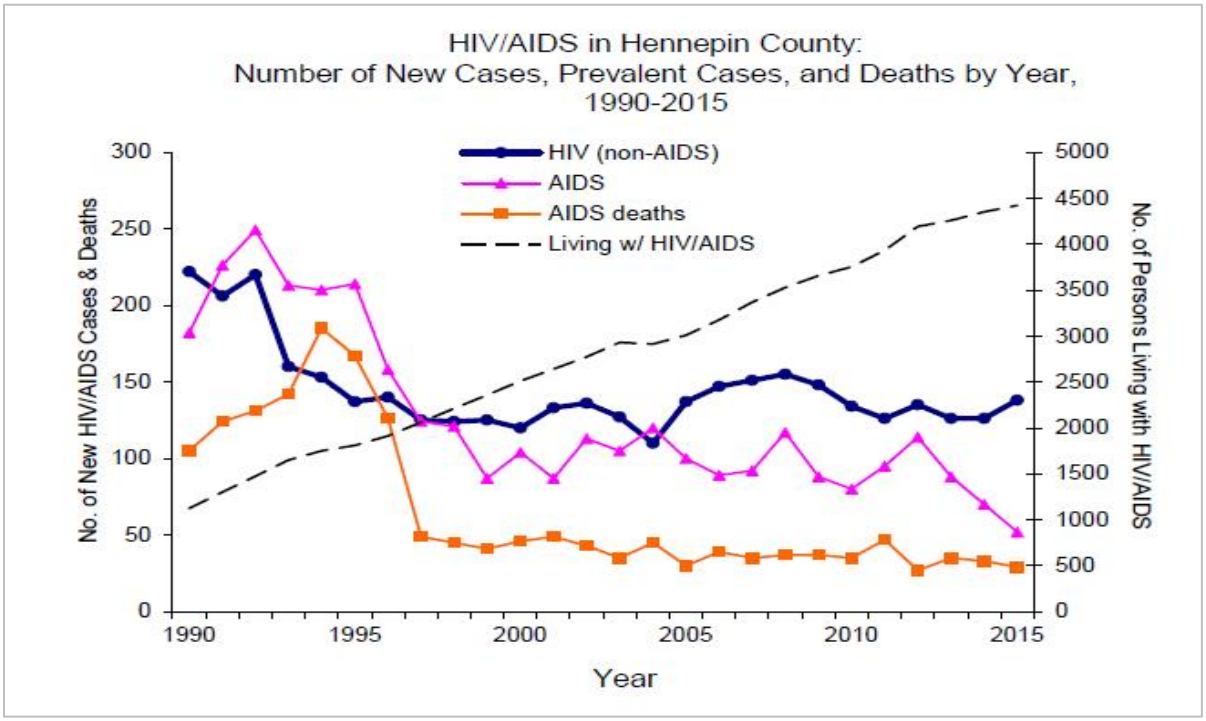
HIV

Human Immunodeficiency Virus (HIV) infects the cells of the immune system, destroying them and weakening the body's ability to fight other infections or diseases. The most advanced stage of HIV infection is *Acquired Immunodeficiency Syndrome (AIDS)*. Without proper medical treatment, AIDS is a fatal condition.

KEY FINDINGS

- The number of new HIV cases has been relatively stable since 2005, while the number of AIDS cases and AIDS deaths has sharply declined since 1994 (Figure 58).
- In 2015 the majority of *new HIV infections* were found in young adults 20-24 years old and adults 25-29 years old (Figure 59).
- *Men who have sex with men (MSM)* are at the greatest risk for acquiring HIV infection. The MSM risk factor for acquiring HIV infection accounted for 49 percent of new HIV cases in 2015. Persons who were both injection drug users (IDU) and MSM accounted for 4 percent of new cases; heterosexual contact accounted for another 2 percent of new cases (Figure 60).
- HIV infection is disproportionately found in minority populations, especially the *black/African American p*opulation.

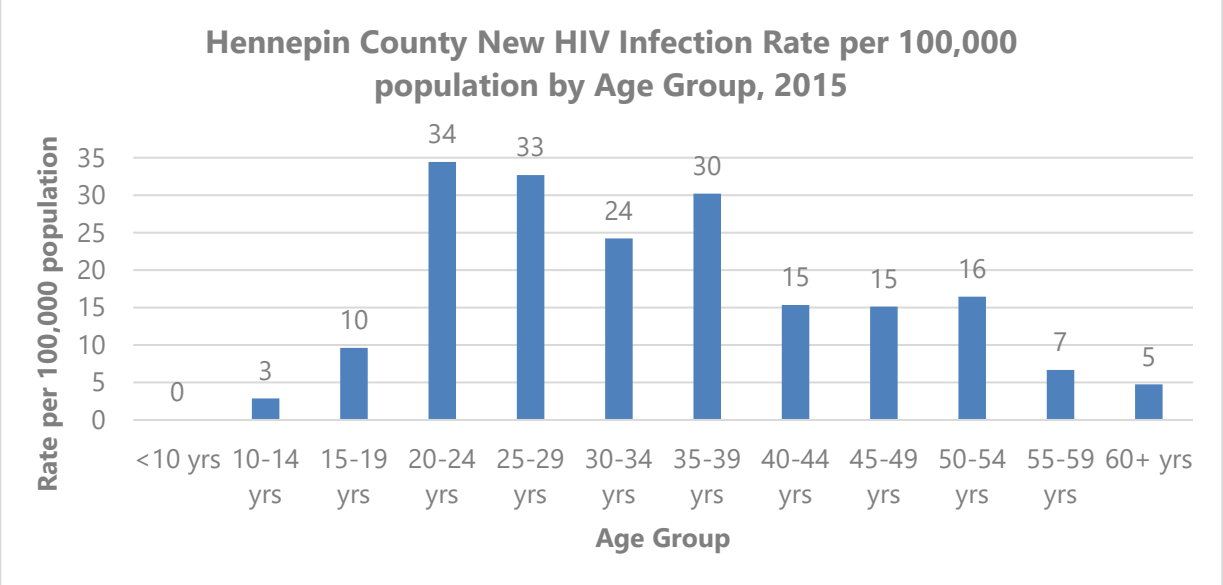
Figure 58. HIV/AIDS incidence and prevalence in Hennepin County, 1990-2015



Data Source: Hennepin County Epidemiology, 2005-2015

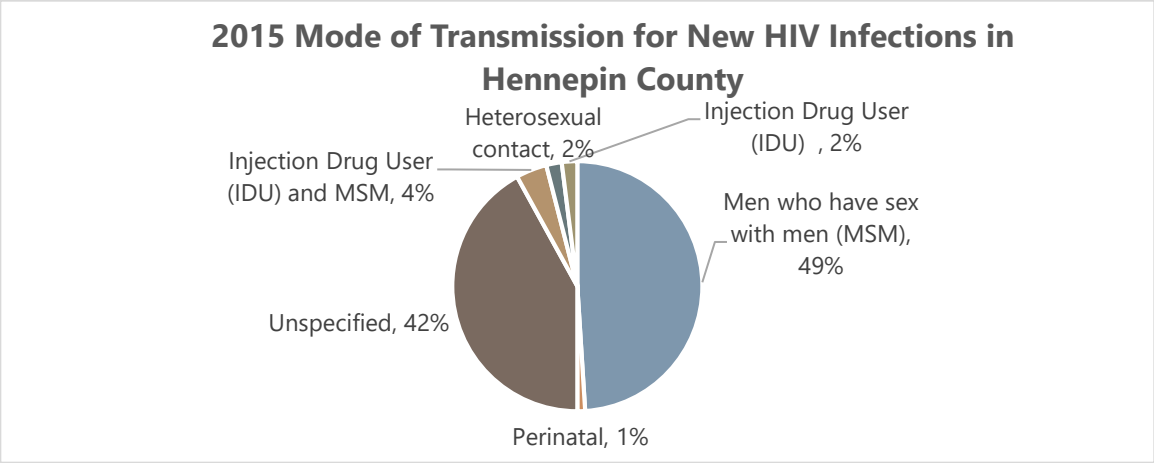
Figure 59. HIV/AIDS modes of transmission for new HIV infections in Hennepin County, 2015

Data Source: Hennepin County Epidemiology, 2005-2015



Data Source: Hennepin County Epidemiology, 2005-2015

Figure 60. HIV/AIDS modes of transmission for new HIV infections in Hennepin County, 2015



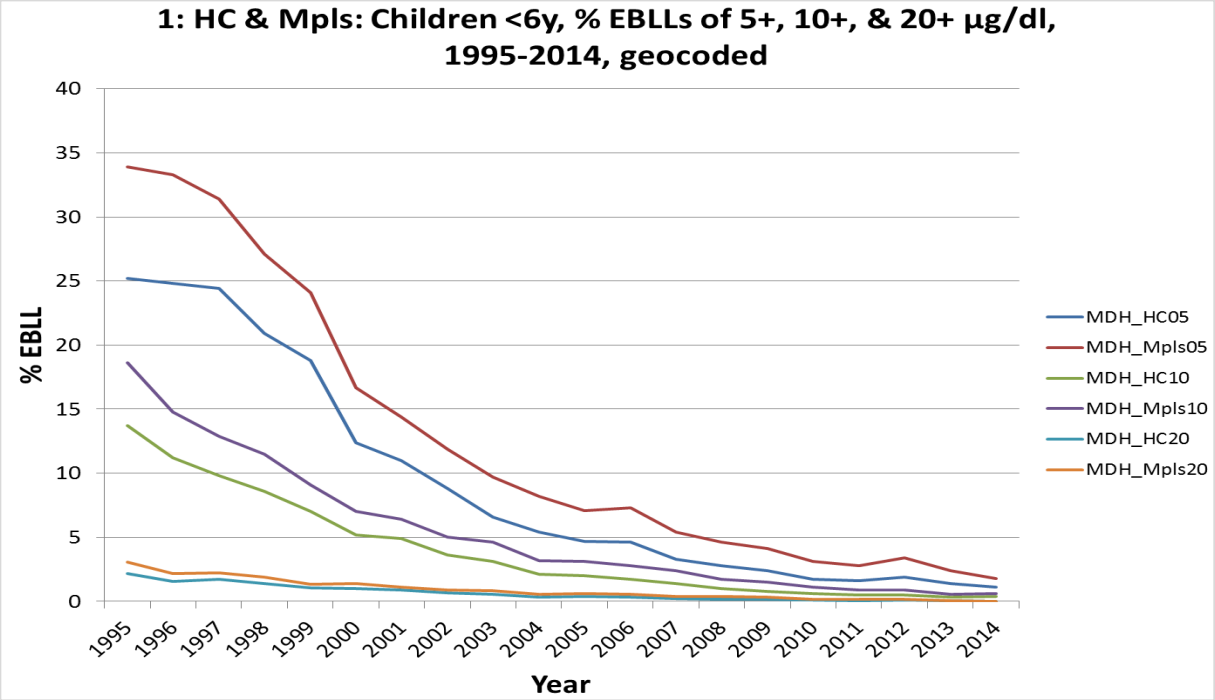
Data Source: Hennepin County Epidemiology, 2005-2015

Environmental quality

Blood lead inspections

Lead can affect almost every organ and system in the body. Children six years old and younger are most susceptible to its effects. Public Health's Epidemiology and Environmental Health teams continue to engage in initiatives to reduce lead poisoning in the community. These activities include: outreach, education, and public information, blood lead testing, lead hazard evaluations and risk assessments, and control of lead hazards in housing. The percentage of Hennepin County children with elevated blood lead levels (EBLLs) has continued to drop since 1995**.** The CDC defines an elevated blood lead level in children as 5 micrograms of lead per deciliter of blood µg/dl or greater. Figure 1 shows the decline in elevated blood lead levels over the past two decades in children under six years. The values charted are for Hennepin County, including Minneapolis, and for Minneapolis separately, at the 20+, 10+, and 5+ µg/dl levels.

Figure 61. Percentage of blood lead tests with elevated levels for children under 6 years, Minneapolis and Hennepin County, 1995-2014



Data Source: Hennepin County Epidemiology, 2005-2015

Substance abuse

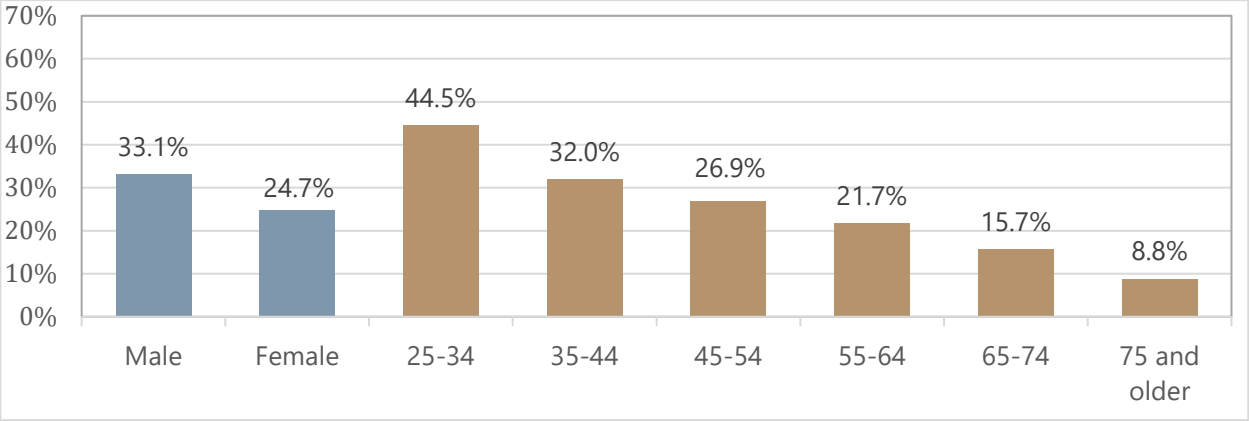
Adult problem drinking

Drinking too much can harm your health. Nationally, problem alcohol consumption led to approximately 88,000 deaths and 2.5 million years of potential life lost each year each year. The economic costs associated with alcohol use in Minnesota alone was $5.06 billion in 2007. Problem drinking was defined on the 2014 adult SHAPE survey as being a binge drinker or a heavy drinker. Binge drinking was defined for women as consuming four or more drinks during a single occasion at least one time during the past 30 days and for men, consuming five or more drinks during the 30 day same time frame. Heavy drinking was defined for women as consuming more than one drink per day on average during the past 30 days, and for men, consuming more than two drinks per day on average during the past 30 days.

KEY FINDINGS

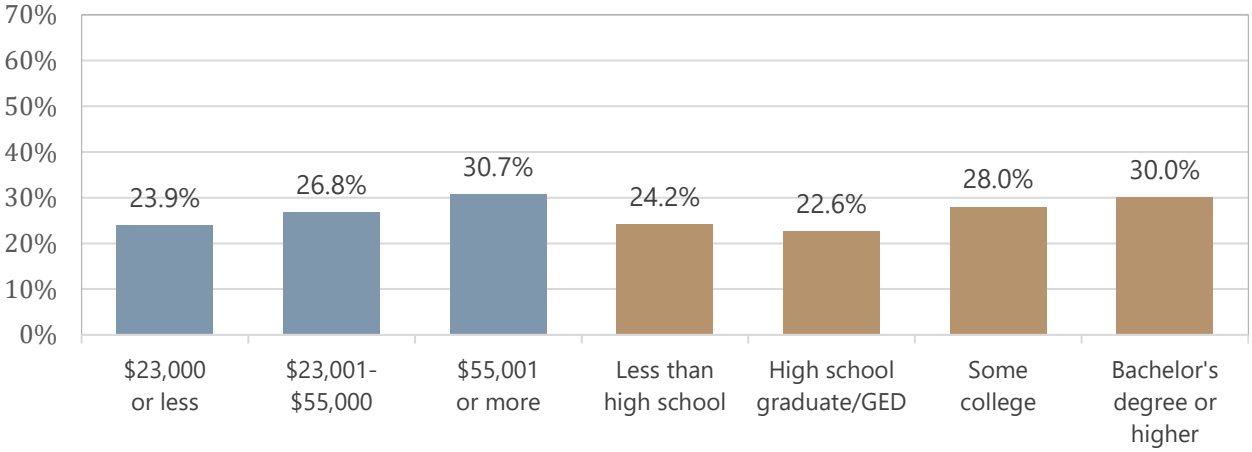
- Nearly three in ten (29%) Hennepin County adults aged 25 and older reported problem alcohol consumption, meaning they engaged in heavy or binge drinking.
- The rate of problem alcohol drinking is significantly higher among young adults than among older adults. Additionally, males reported significantly higher rates than females. Over half of young males aged 24-34 reported problem drinking (Figure 62).
- Adults who have higher income and higher education reported disproportionately high rates of problem drinking compared to their counterparts (Figure 63).
- The LGBT community reported a rate of problem drinking that is significantly higher than the rate reported by adults who are not members of LGBT (42% vs. 28%). There is no significant difference in rates of problem drinking by race and ethnicity.
- The rates of problem alcohol use among Hennepin County adults aged 25 and older did experience a significant change between 2010 and 2014. These rates are higher than Health People 2020, which aims to reduce the rate to 25% or lower.

Figure 62. Problem drinking for adults 25 years and older by gender and age, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 63. Problem drinking for adults 25 years and older by income and education, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Adolescent 30 day alcohol use and binge drinking

Alcohol is the most commonly abused drug among youth in Hennepin County, Minnesota, and nationally. Youth who drink alcohol are at risk of academic, social, legal, physical and emotional problems. Youth who binge drink are at risk of experiencing problems related to drinking more so than youth who drink alcohol but do not binge drink.

KEY FINDINGS

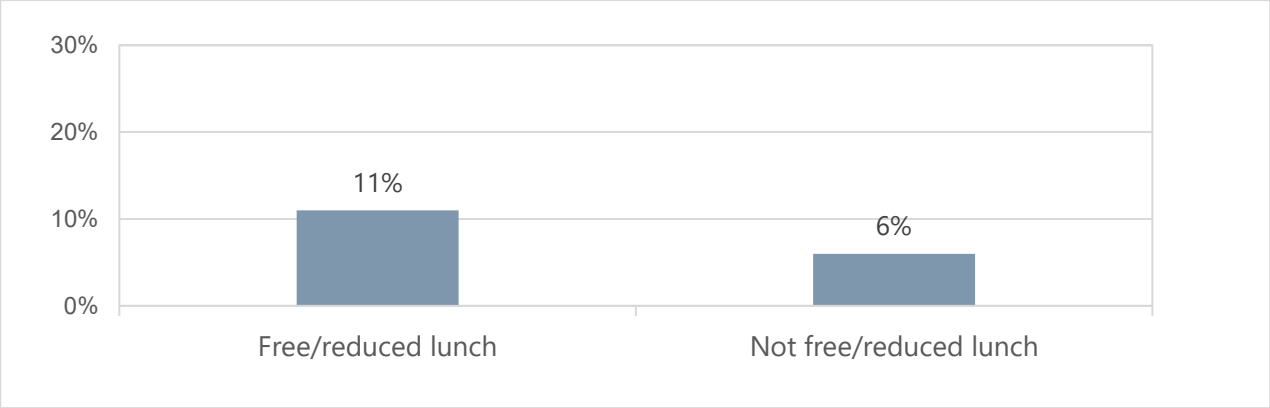
- In 2016, one-fifth of 11th graders (21%) in suburban Hennepin County used alcohol at least once in the past 30 days. One in ten 11th graders (11%) reported binge drinking in the past 30 days. Fewer 9th and 11th graders reported using alcohol in 2016 compared to previous years (table 3).
- Ninth graders receiving free or reduced lunch were more likely to have used alcohol in the past 30 days. Low income students were only slightly more likely to report binge drinking in the past 30 days (5% low income vs 2% not low income) (figure 64).
- American Indian, Hispanic and multiracial students were more likely to drink in the past 30 days compared to other students. American Indian students were also more likely to report binge drinking compared to other students (figure 65).

Table 3. Adolescent alcohol use and binge drinking by grade and gender, suburban Hennepin County, 2016

Suburban Hennepin County students	8th graders	9th graders	11th graders
Used alcohol in past 30 days	**5%**	**7%**	**21%**
Boys	5%	7%	21%
Girls	6%	7%	22%
Engaged in binge drinking in past 30 days	**2%**	**3%**	**11%**
Boys	2%	3%	12%
Girls	1%	3%	11%

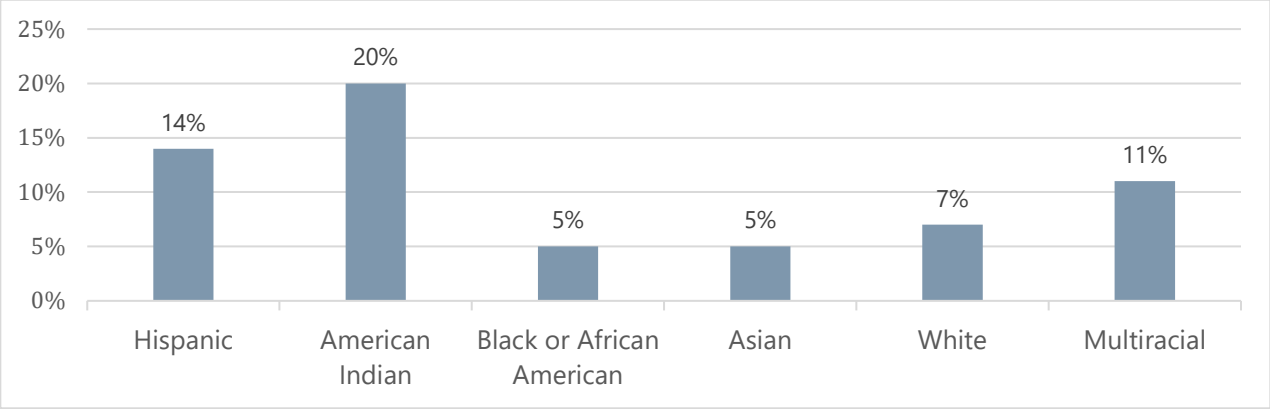
Data Source: Minnesota Student Survey, 2016

Figure 64. Percentage of 9th graders drinking alcohol in past 30 days by income, suburban Hennepin, 2016



Data Source: Minnesota Student Survey, 2016

Figure 65. Percentage of 9th graders using alcohol in past 30 days by race/ethnicity, suburban Hennepin, 2016



Data Source: Minnesota Student Survey, 2016

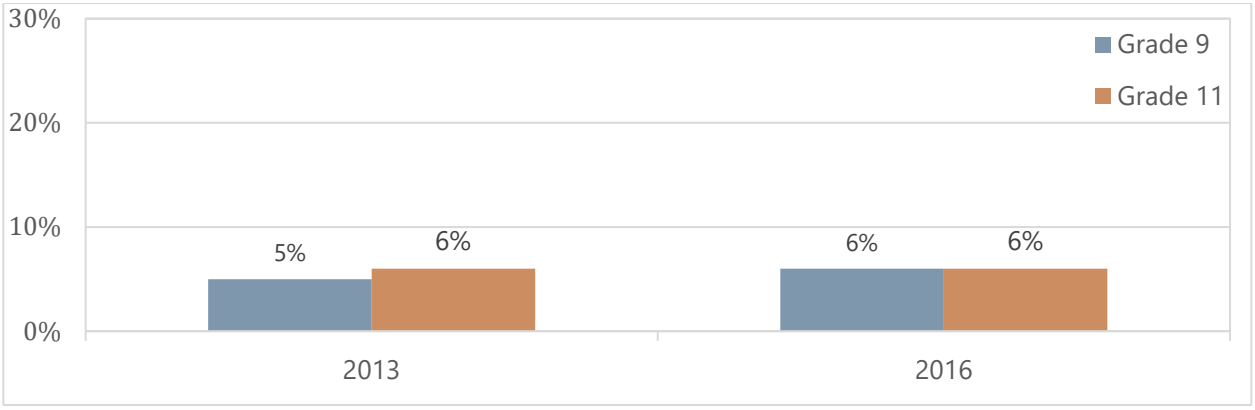
Adolescent drug use (excludes alcohol and tobacco)

The Minnesota Student Survey asked about past 30 day use of drugs, excluding alcohol and tobacco, but including marijuana and prescription drugs not prescribed to the student. They also ask about 12 month use on a number of other illicit drugs such as heroin, cocaine, methamphetamines, but overall 12 month usage for 9th grade was very low (0-2%). Prescription drugs and marijuana were the most frequently reported drugs in the past 12 months for both 9th and 11th graders.

Key Findings

- Six percent of 9th graders and six percent of 11th graders reported using illicit drugs in the past 30 days in 2016 in suburban Hennepin County (Figure 66).
- There was no change in usage between 2013 and 2016
- Higher rates of usage was reported among black, American Indian, Hispanic and low income students

Figure 66. Percentage of 9th and 11th graders using drugs (other than alcohol or tobacco) in past 30 days, suburban Hennepin, 2016



Data Source: Minnesota Student Survey, 2016

Opioid fatalities

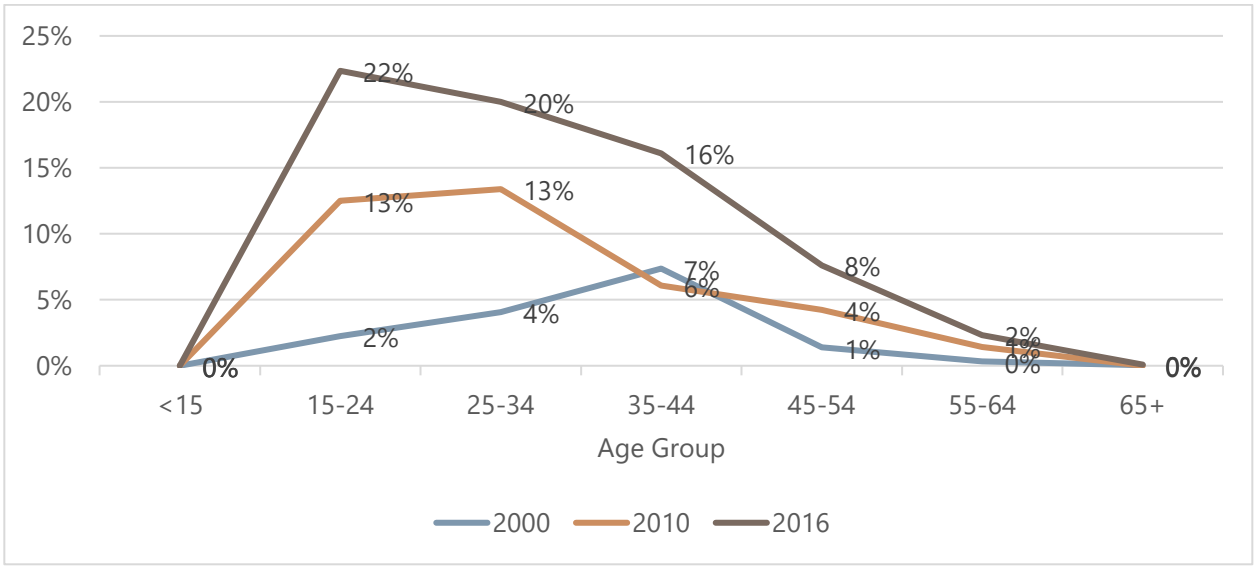
Opioid use has been on the increase in Hennepin, across the state and United States. The CDC reports on average 115 Americans die every day from an opioid overdose (including both prescription and illicit opioids). At the national level, nearly all of the increase in opioid deaths the last five years have been due to heroin and fentanyl. Prescription opioids still account for the greatest number of overdose deaths in Minnesota. Since 2010, Minnesota has seen an increase in heroin-involved deaths, and a rise in fentanyl-involved deaths between 2015-2016.

Opioids are a class of drugs that include prescription pain pills, heroin, fentanyl, and fentanyl analogs. Opioids can be natural (opium), semi-synthetic (hydrocodone, oxycodone) and synthetic (fentanyl, fentanyl analogs). Opioids are substances that act on opioid receptors. The intentional effects are to relieve pain; however, opioids also produce respiratory depression, and have a potential for misuse, dependence, addiction, withdrawal, and overdose.

Key Findings

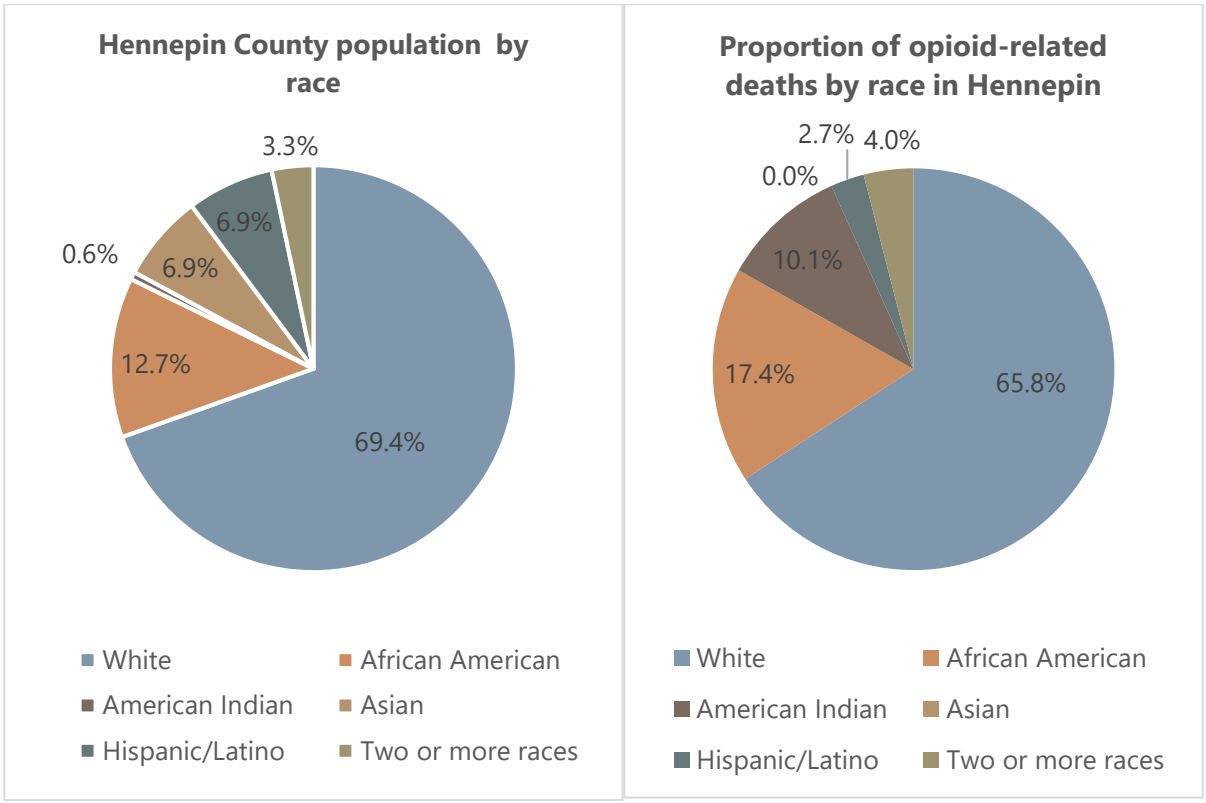
- In Hennepin County, opioid-related deaths rose from 38 deaths in 2000 to 149 deaths in 2016.
- From 2000 to 2016, opioid deaths represented an increasing proportion of deaths to all age groups for those between the ages of 16 and 64 in Hennepin County. In 2000, only 1 in 50, or two percent of deaths to those age 15 to 24 was opioid-related. In 2016, that proportion had increased to 1 in 5 deaths (22%) (Figure 67).
- Racial disparities are strikingly apparent when looking at opioid-related deaths. The American Indian population represents less than one percent of the total population of Hennepin, but accounts for 10 percent of all drug overdose deaths in Hennepin residents. The African American population represents 13 percent of the total population of Hennepin, but represents 17 percent of all drug overdose deaths to Hennepin residents (Figure 68).

Figure 67. Opioid-related deaths as a percentage of all deaths, Hennepin County, 2000, 2010, 2016



Data Source: Hennepin County Vital Stats, Death Records, 2000-2015

Figure 68. Comparison of Hennepin County population to the proportion of opioid-related deaths by race, Hennepin County, 2016



Data Source: Hennepin County Vital Stats, Death Records, 2000-2015

Social connectedness

Adults reporting discrimination

Research has shown that perceived discrimination is linked to specific types of physical health problems, such as hypertension, self-reported poor health, and breast cancer, as well as potential risk factors for disease, such as obesity, high blood pressure, and substance use. In addition, research studies have documented the harmful health effects of discrimination across a range of mental health outcomes including depression, psychological distress, anxiety, and well-being. Frequency of discrimination was assessed via the SHAPE survey in 2014. The survey asked, "How often are you in situations where you feel unaccepted because of your race, ethnicity or culture?" Respondents who answered, "at least once a month" were classified as experiencing frequent discrimination.

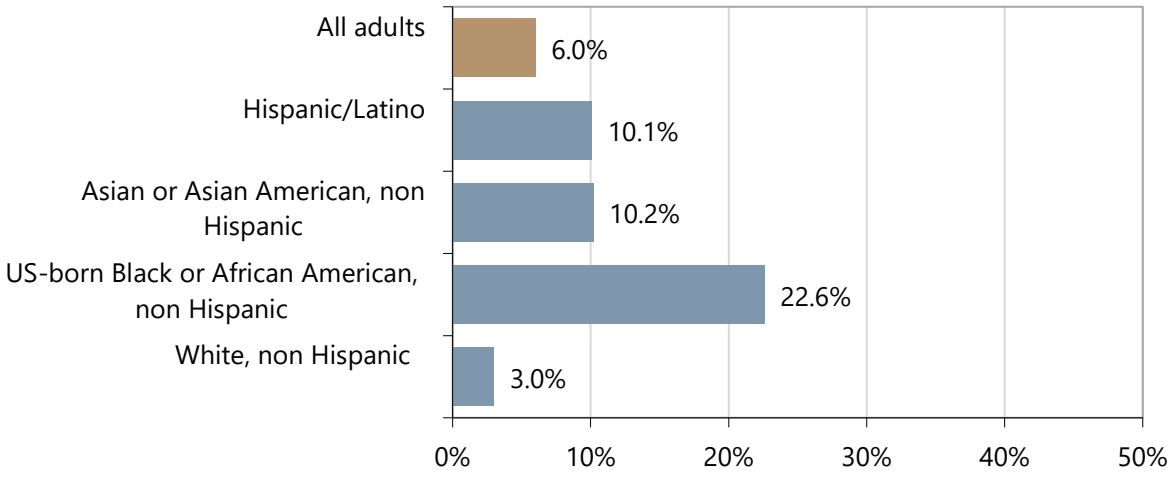
Key Findings

- In 2014, 6.0 percent of adults reported frequent discrimination in Hennepin County, though this varied widely by geography in the county, with areas as high as 17 percent in the Camden and Near North Communities in Minneapolis to 4 percent in the western outer-ring suburbs of the County (Figure 69).
- Disparities present for U.S born blacks, non-Hispanic Asian and Hispanics (Figure 70) those with disabilities, and for adults who experience frequent mental distress.
- Lower income and lower education adults 25 years and older more frequently reported frequently discrimination compared to non-low income adults (17% vs 4%) and higher education (9% vs 6%) (Figure 71).

Figure 69. Percentage of adults 25 and older who experienced frequent discrimination by geography, 2014

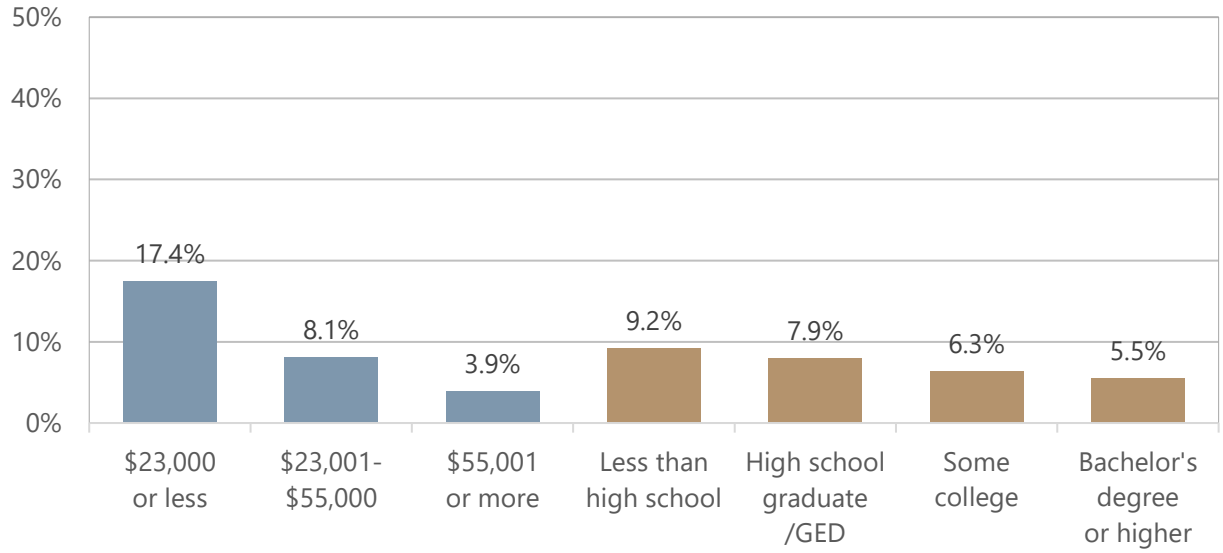
Data Source: Metro SHAPE 2014 Adult Survey

Figure 70. Percentage of adults 25 and older who experienced frequent discrimination by race/ethnicity, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 71. Percentage of adults 25 and older who experienced frequent discrimination by education and income, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Adult neighborhood cohesion

Many researchers across a variety of settings in numerous countries around the world have consistently found that having strong neighborhood cohesion is a protective factor that helps people be healthier than similar people who live in neighborhoods with less cohesion. One of the reasons given include that in areas with higher cohesion, there is a greater sense of personal safety and, therefore, people are more willing to go outside and walk and bike. In areas with higher cohesion, people feel more connected with their neighbors, which makes people feel less isolated and improves one's mental health.

Key Findings

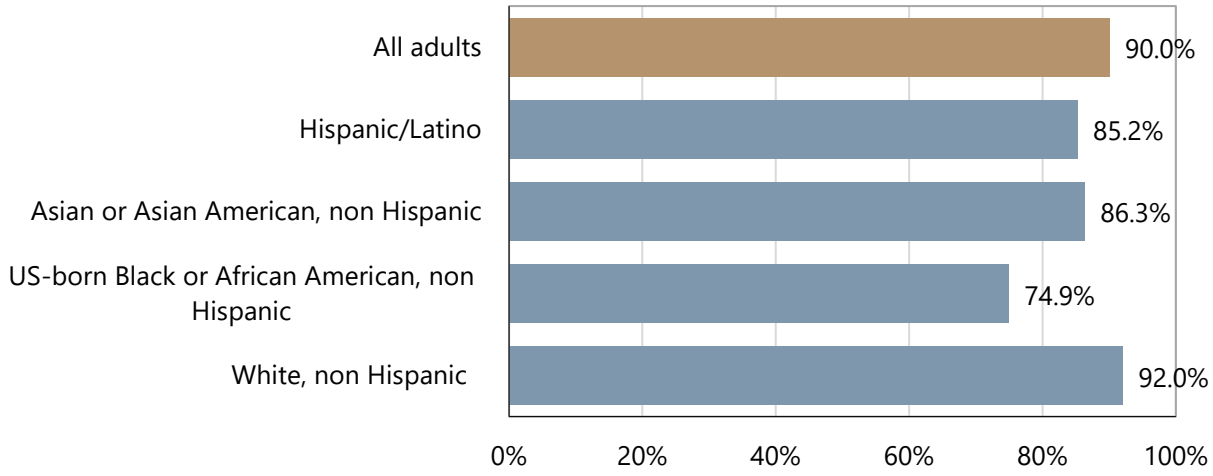
- In 2014, 90 percent of adults aged 25 and older in Hennepin County somewhat or strongly agreed people in their neighborhood were willing to help one another. This varied widely by geography, however, with areas as low as 76 percent in the Camden and Near North communities in Minneapolis to 96 percent in the western outer-ring suburbs (Figure 72).
- Disparities present for U.S born blacks, non-Hispanic Asians (Figure 73), LGBT, and those with disabilities and who experience frequent mental distress

- Lower income and lower education adults 25 years and older were less likely to report strong neighborhood cohesion compared to non-low income adults (80% vs 93%) and adults with higher education (75% vs 91%) (Figure 74).

Figure 72. Neighborhood cohesion for adults 25 years and older by geography, Hennepin County, 2014

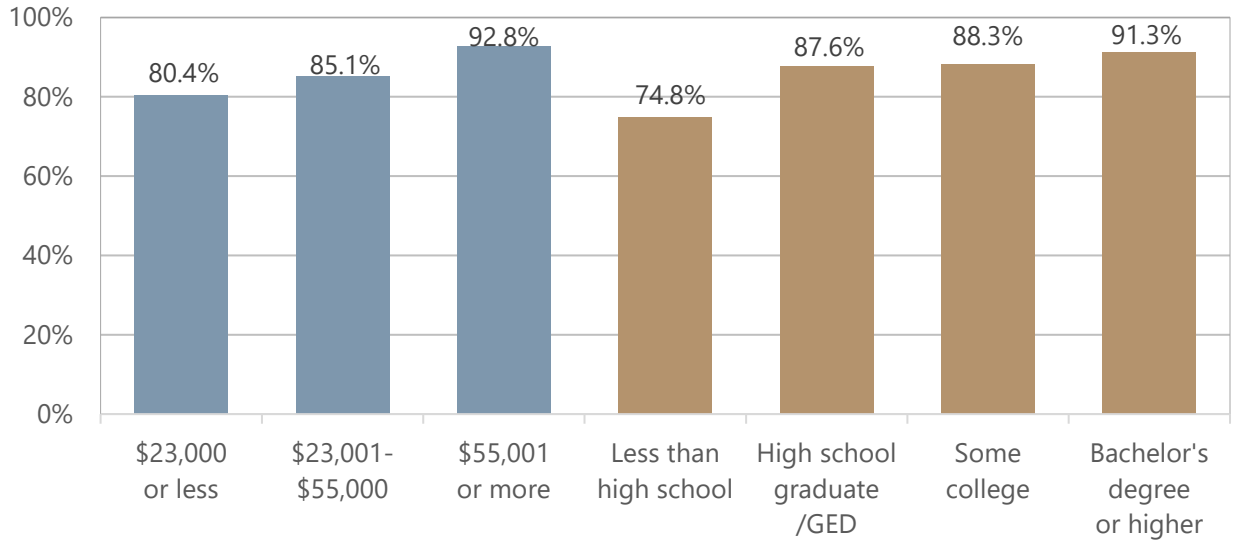
Data Source: Metro SHAPE 2014 Adult Survey

Figure 73. Neighborhood cohesion for adults 25 years and older by race/ethnicity, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 74. Neighborhood cohesion for adults 25 years and older by income and education, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Adult neighborhood safety

Just as conditions within your home impacts health, conditions in and around neighborhoods impacts health as well. If the neighborhood is unsafe, people are less likely to spend time outside for yardwork, gardening, walking to do errands, and exercise. When people feel that a neighborhood is unsafe, they distrust their neighbors and feel more isolated. Finally, a sense that a neighborhood is unsafe adds additional stress to everyone's daily life, which negatively affects health.

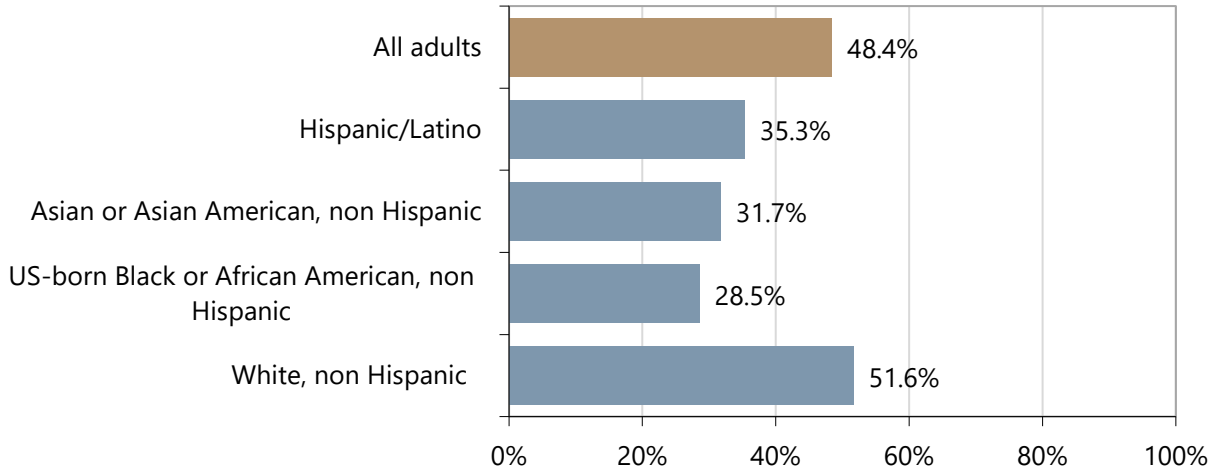
Key Findings

- In 2014, almost half (48%) of adults aged 25 and older in Hennepin County say they believe their neighborhood is very safe from crime. This varied widely by geography, however, with areas as low eight percent in the Camden and Near North communities in Minneapolis to 78 percent in the western outer-ring suburbs (Figure 75).
- Disparities present for young adults 25-34, U.S born blacks, non-Hispanic Asian and Hispanics (figure 76), low income, low education, LGBT, those with disabilities and who experience frequent mental distress
- Lower income and lower education adults 25 years and older were less likely to feel their neighborhood was very safe from crime compared to non-low income adults (27% vs 56%) and adults with higher education (24% vs 53%) (Figure 77).

Figure 75. Perception of neighborhood as "very safe" for adults 25 years and older by geography, Hennepin County, 2014

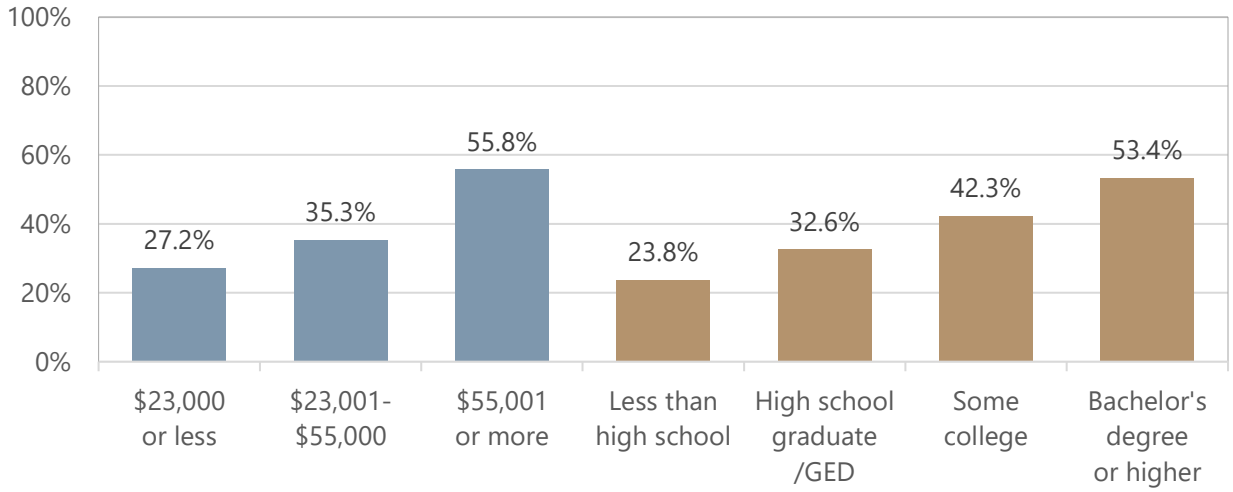
Data Source: Metro SHAPE 2014 Adult Survey

Figure 76. Perception of neighborhood as "very safe" for adults 25 years and older by race/ethnicity, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 77. Perception of neighborhood as "very safe" for adults 25 years and older by income and education, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

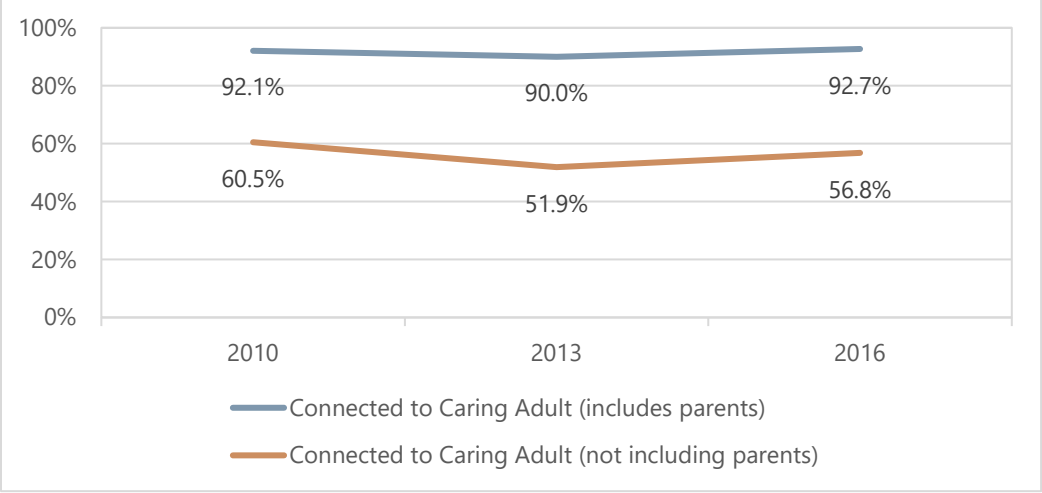
Adolescents connected to caring adults

The Healthy People 2020 Adolescent Health Objective AH-3 is to "Increase the proportion of adolescents who are connected to a parent or other positive adult caregiver". This objective is included due to research that shows having a positive relationship with a caring non-parent adult is beneficial in many areas for adolescents. Researchers have documented the impact of a caring adult in reducing risky behavior and tobacco use, having better mental health, and improving other aspects of the health of adolescents.

Key Findings

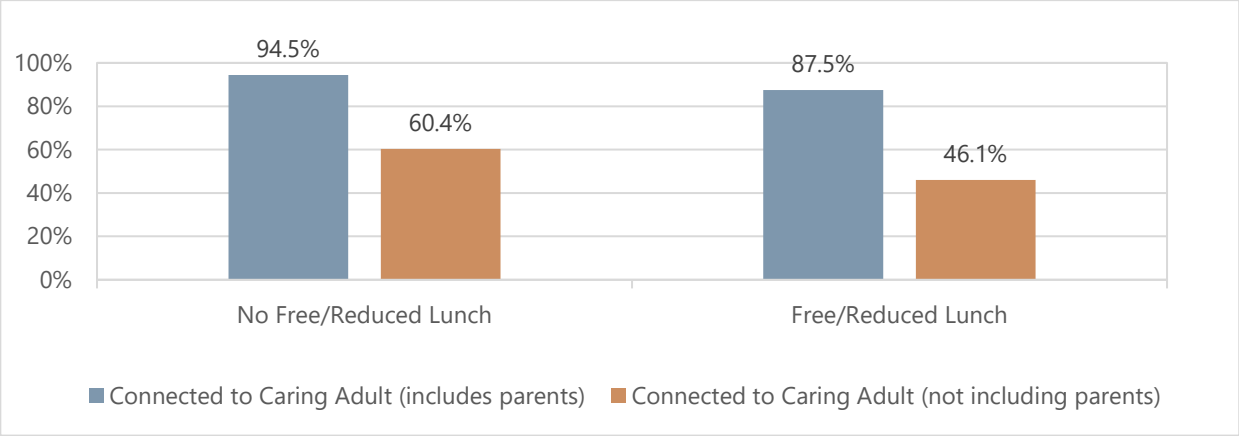
- In 2016, nine out of every ten ninth graders in suburban Hennepin County stated they felt connected to a caring adult in the community. This rate has been relatively consistent since 2007 (Figure 78).
- Disparities present for young adults 25-34, U.S born blacks, non-Hispanic Asian and Hispanics (figure 79), low income, low education, LGBT, those with disabilities and who experience frequent mental distress.
- Lower income and lower education adults 25 years and older were less likely to feel their neighborhood was very safe from crime compared to non-low income adults (27% vs 56%) and adults with higher education (24% vs 53%) (Figure 80).

Figure 78. Percentage of 9th grade students connected to a caring adult, suburban Hennepin County, 2010-2016.



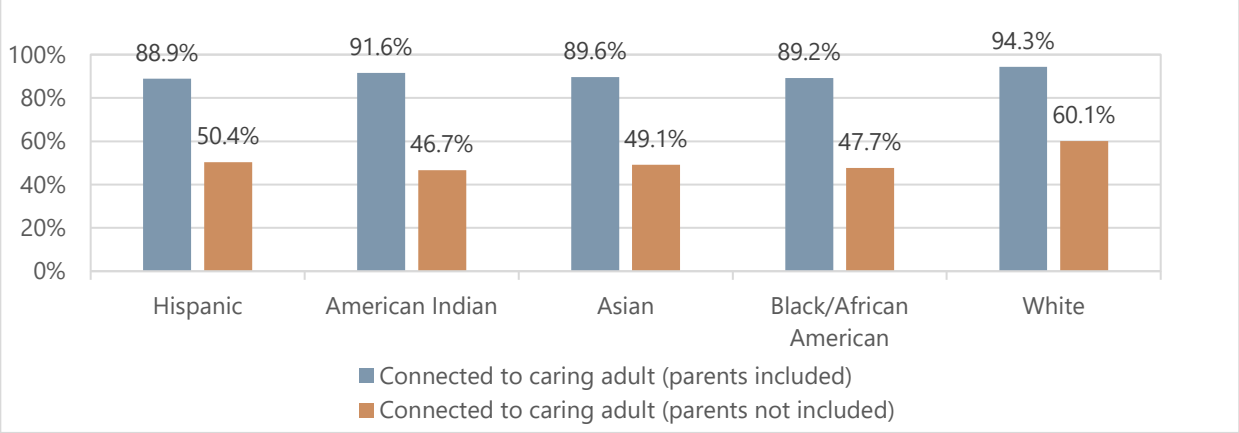
Data Source: Minnesota Student Survey 2016

Figure 79. Percentage of 9th grade students connected to a caring adult by free or reduced-price lunch participation, suburban Hennepin County, 2016



Data Source: Minnesota Student Survey 2016

Figure 80. Percentage of 9th grade students connected to a caring adult by race and Hispanic ethnicity[1], suburban Hennepin County, 2016



[1]Hispanic ethnicity not exclusive of race

Data Source: Minnesota Student Survey 2016

Nutrition, physical activity, and obesity

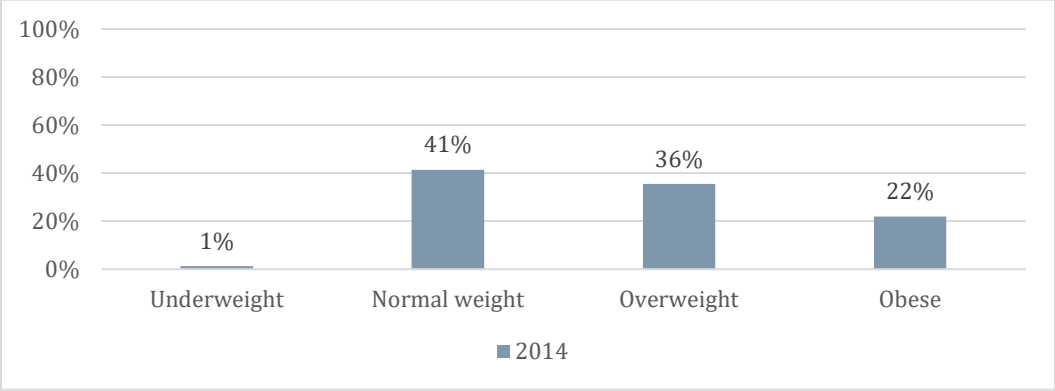
Adult and child weight status

Obesity and overweight are associated with increased risk of premature death and many chronic health conditions and diseases, such as heart disease, stroke, type 2 diabetes, and certain types of cancer, which are some of the leading causes of preventable death. More than one-third (36.5%) of U.S. adults have obesity. The CDC found the estimated annual medical cost of obesity in the U.S. was $147 billion in 2008; the medical costs for people who are obese were $1,429 higher than those of normal weight.

Key Findings

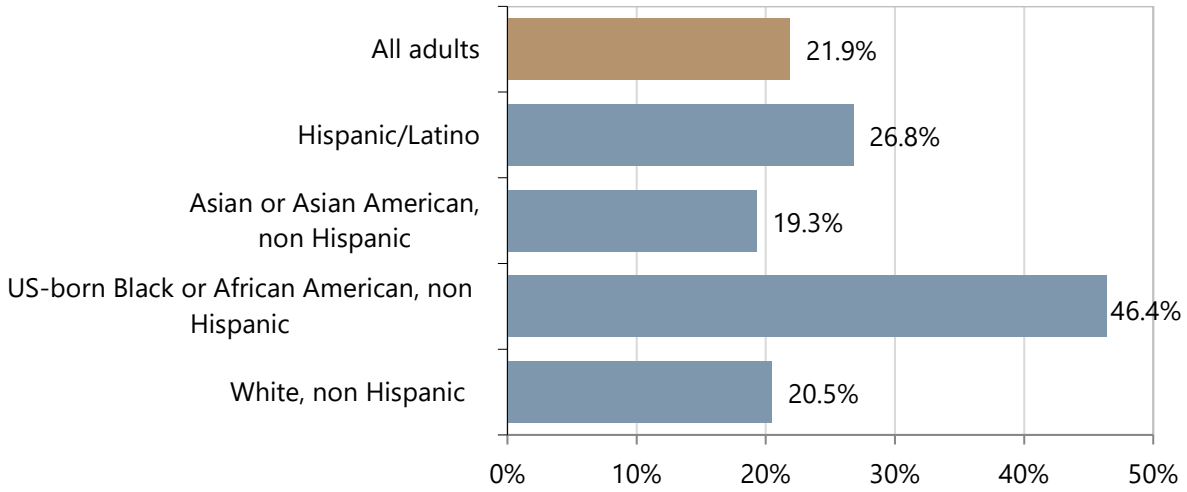
- In 2014, 22 percent of Hennepin County adults aged 25 and older were obese, and another one-third (36%) were overweight. Together, over half of (57%) county adults were either overweight or obese, higher than the percent of adults at a healthy weight (41%) (Figure 81).
- The percent of obese adults (25+) has steadily increased since 1998, from 15 percent to 22 percent.
- There are disparities present for Hispanic/Latinos (27%) and U.S born blacks (46%) compared to non-Hispanic whites (21%) (Figure 82).
- Higher rates of obesity were also found among adults who did not graduate high school, are low income, have a disability and who reported frequent mental distress (Figure 83).
- In the WIC population of 2-5 year olds, higher rates of obesity and overweight were seen among American Indian, Hispanic, Asian, and multi-racial children compared to black/African American or white children (Figure 84).
- Among suburban 9th grade student, higher percentages of black, Hispanic, multiracial and American Indian students were classified as obese compared to white or Asian students. Additionally, a higher percentage of students receiving free/reduced lunch were obese compared to students who did not (Figure 85 and Figure 86).

Figure 81. Weight status for adults 25 years and older, Hennepin County, 2014



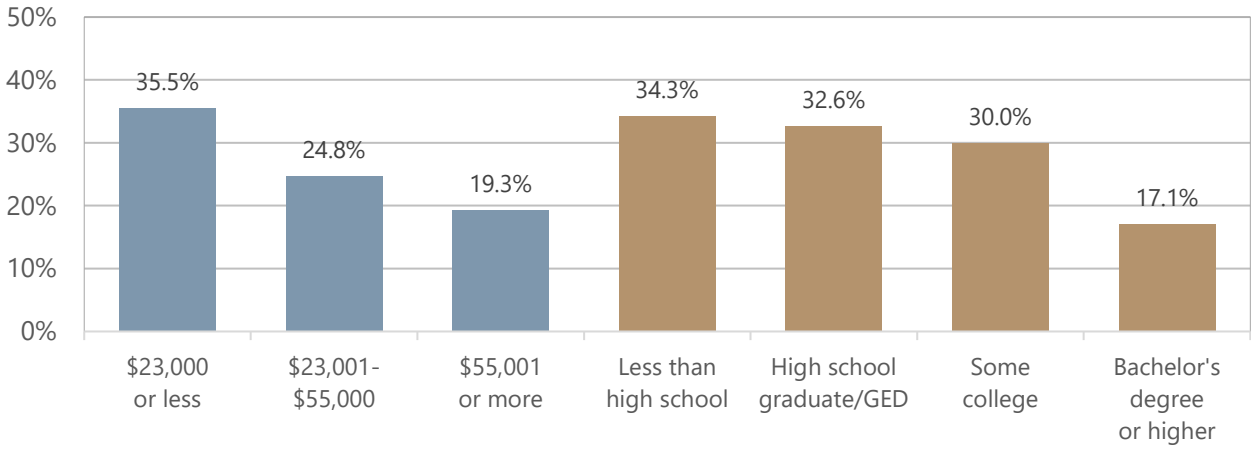
Data Source: Metro SHAPE 2014 Adult Survey

Figure 82. Percentage of adults 25 years and older obese by race/ethnicity, Hennepin County, 2014



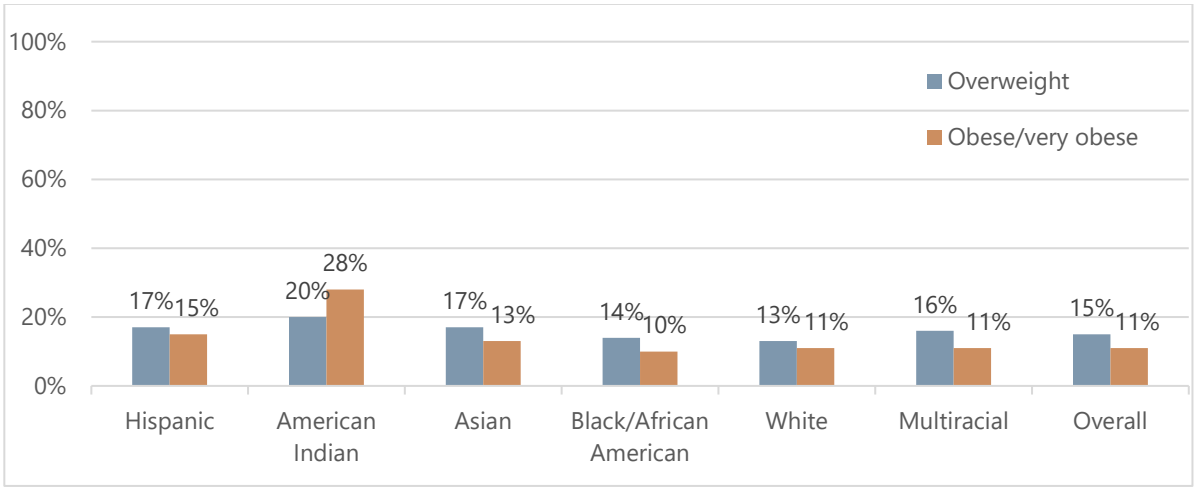
Data Source: Metro SHAPE 2014 Adult Survey

Figure 83. Percentage of adults 25 and older obese by income and education, Hennepin County, 2014



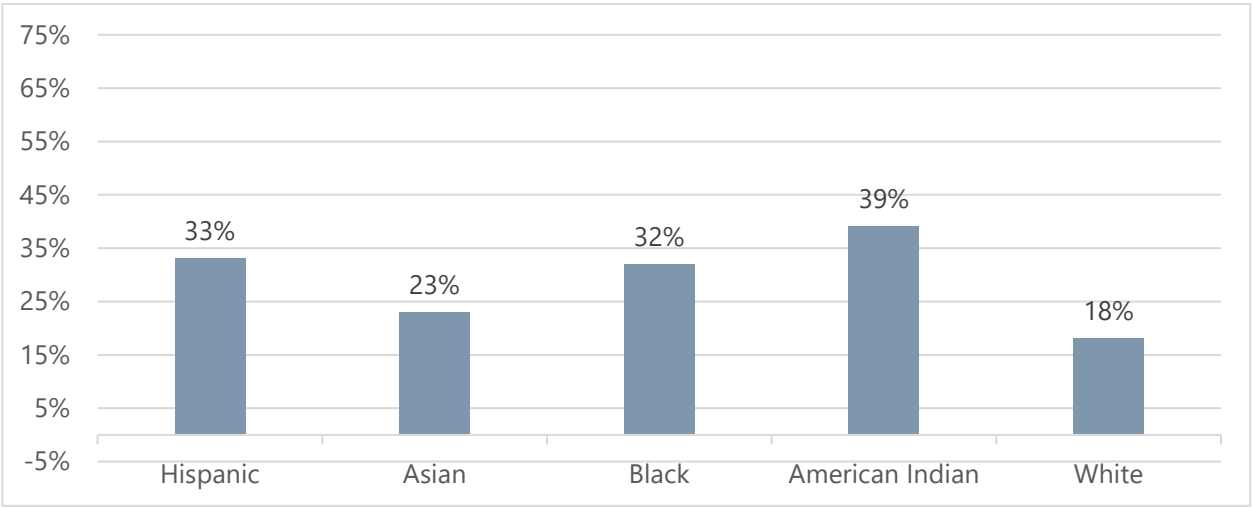
Data Source: Metro SHAPE 2014 Adult Survey

Figure 84. Weight status of 2-5 year olds enrolled in WIC by race/ethnicity, Hennepin County, 2015



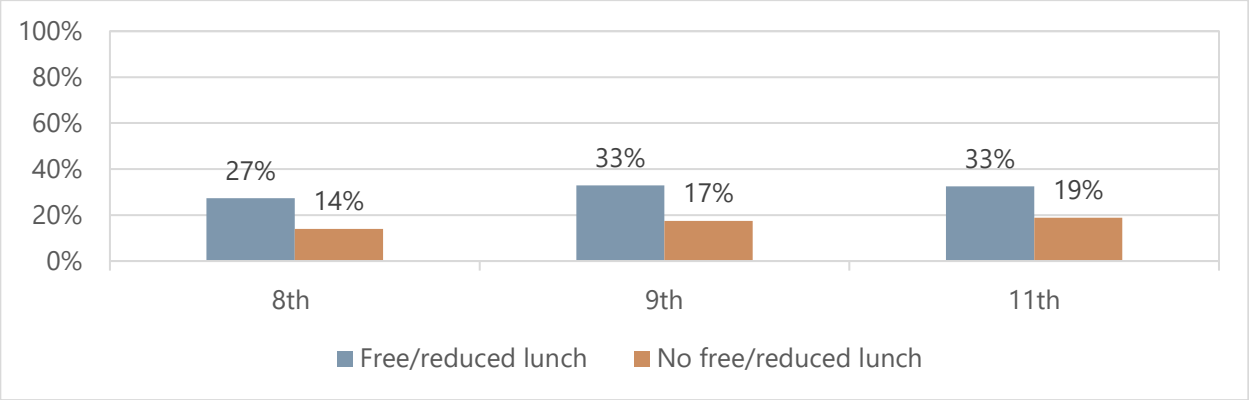
Data Source: Hennepin County WIC Program Data, 2015

Figure 85. Percentage of 9th grade students classified as overweight/obese by race/ethnicity, Suburban Hennepin County, 2016



Data Source: Minnesota Student Survey 2016

Figure 86. Percentage of 9th grade students classified as overweight/obese by free or reduced lunch, Suburban Hennepin County, 2016



Data Source: Minnesota Student Survey 2016

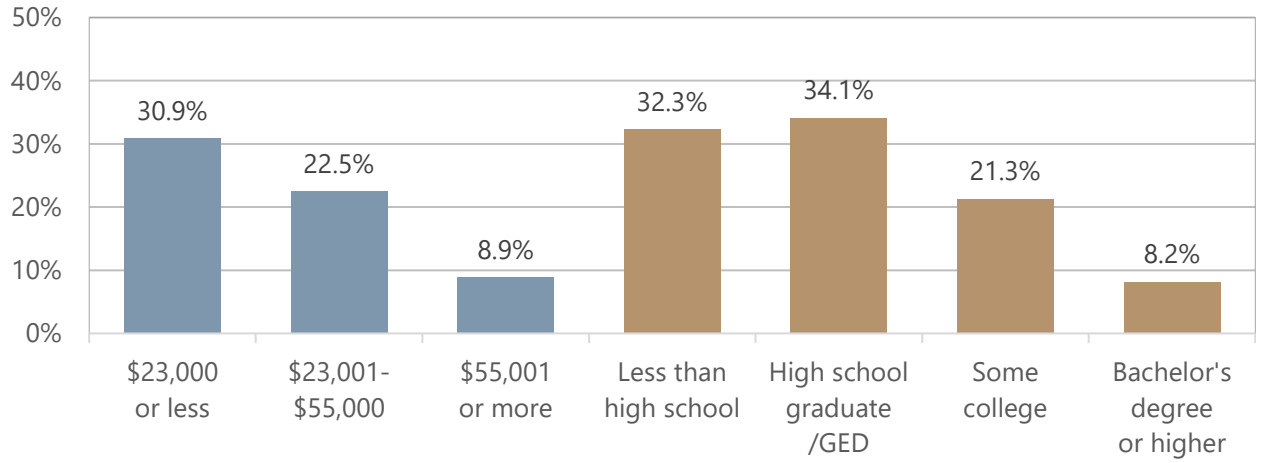
Adult and child physical activity

Physically active people tend to live longer and have a lower risk of heart disease, stroke, type 2 diabetes, depression, and some cancers. Physical activity can also help with weight control, lowering blood pressure, cholesterol and stress. The Centers for Disease Control and Prevention recommend a minimum of 150 minutes of moderate intensity or 75 minutes of vigorous aerobic activity and muscle strengthening activity on at least two days per week for adults 18-64. Recommendations vary for adults over 65 and pregnant/post-partum women. They also recommend children and adolescents 6-17 get 60 minutes per day of physical activity. Unfortunately, many children and adults fall short of these recommendations.

Key Findings

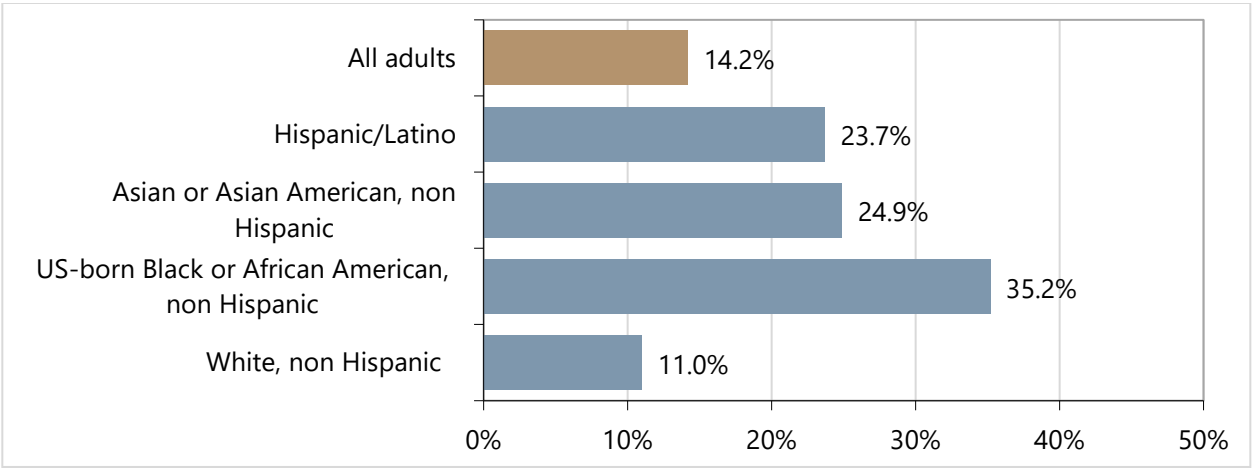
- In 2014, 14 percent of Hennepin County adults aged 25 and older engaged in no leisure time physical activity. While 86 percent of adults engaged in any leisure time physical activity, only 74 percent of adults aged 25 and older met the 150 minutes of aerobic activity guideline.
- Lower income adults are less likely to engage in leisure time activity compared to higher income adults. Disparities are similar for adults with lower education levels (Figure 87).
- Non-Hispanic US born blacks are most likely to not engage in any leisure time physical activity compared to adults from other racial and ethnic groups (Figure 88).
- Decreasing since 2006, only 1 in 6 students meeting recommended 60 minutes daily physical activity in 2013, lower among girls at every grade level (Figure 89).
- Adults with frequent mental distress or a disability are also more likely to not engage in any leisure time physical activity compared to persons without those health factors.

Figure 87. Percentage of adults 25 and older reporting no leisure time activity by income and education, Hennepin County, 2014



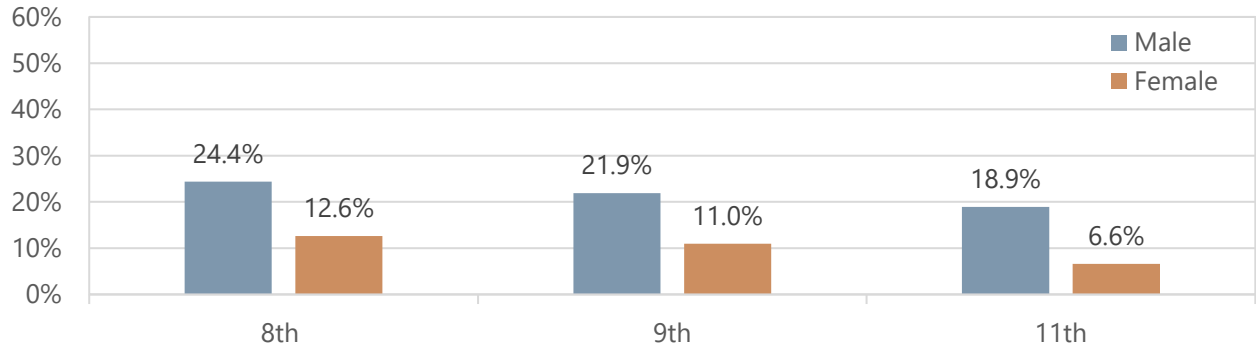
Data Source: Metro SHAPE 2014 Adult Survey

Figure 88. Percentage of adults 25 and older reporting no leisure time activity selected by race/ethnicity



Data Source: Metro SHAPE 2014 Adult Survey

Figure 89. Students physically active 7 days per week by grade and gender, Suburban Hennepin County, 2016



Data Source: Minnesota Student Survey 2016

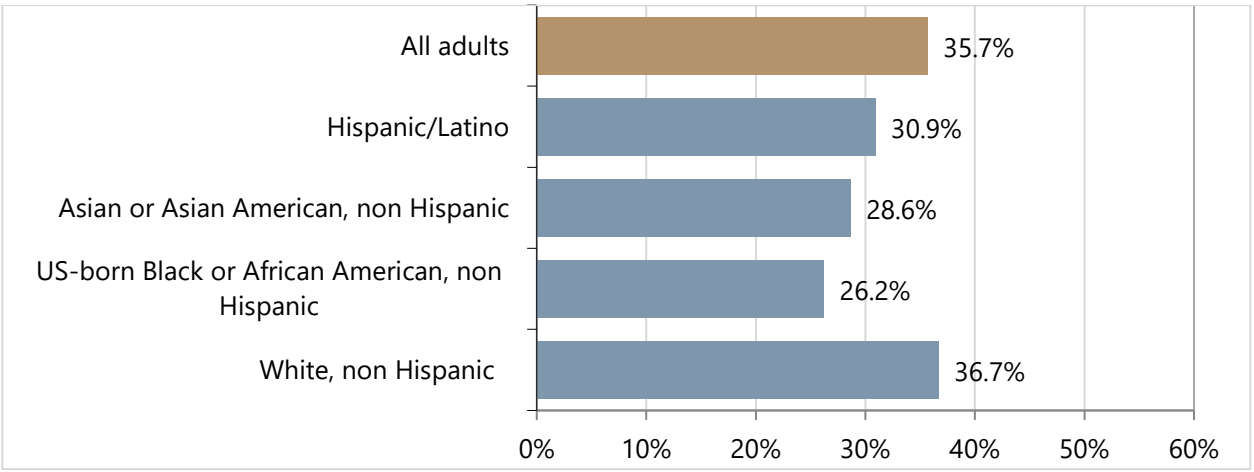
Adult and child fruit and vegetable consumption

Eating a diet rich in fruits and vegetables is an important element of healthy eating. This has been associated with lower risks for many chronic diseases, including stroke, type 2 diabetes, obesity, some types of cancer, and heart disease and high blood pressure. The World Health Organization (WHO) advises that adults eat a minimum of 400g of fruit and vegetables every day, equating to five portions. To maintain healthy growth and development, it is recommended that children eat a well-balanced diet that also includes two or more servings of fruit and three or more servings of vegetables per day.

Key Findings

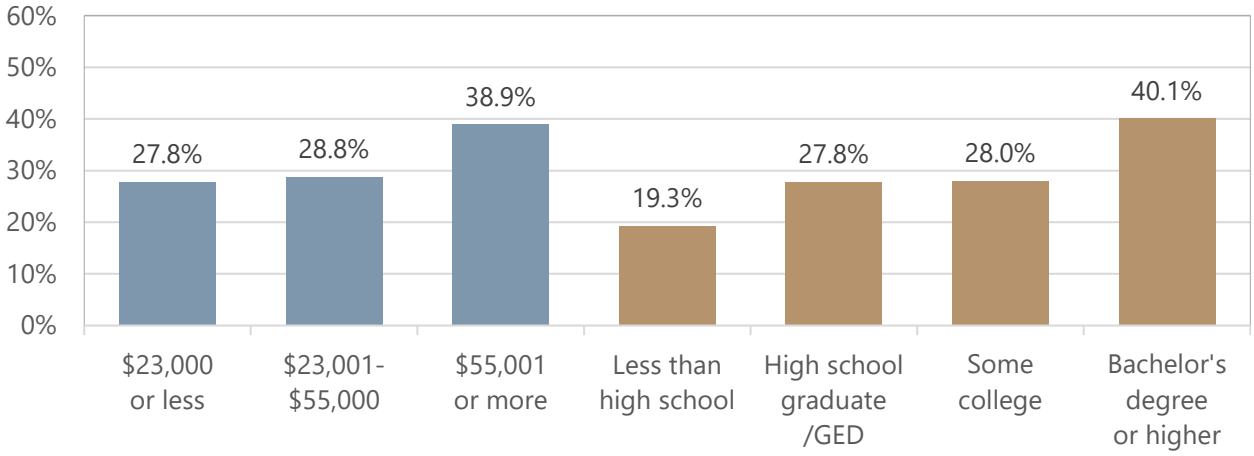
- In 2014, 36 percent of Hennepin County adults aged 25 and older reported consuming five or more servings of fruits and vegetables a day. Thirty-five percent of adults reported having 3-4 servings of fruits and vegetables a day compared to 29 percent consuming fewer than 3 servings.
- Non-Hispanic US born blacks are least likely to have five or more servings a day of fruits and vegetables compared to adults from other racial and ethnic groups, though non-Hispanic Asians and Latinos also consumed less than non-Hispanic whites (Figure 90).
- In, 2014, the percent of adults 25 years and older, that consumed 5 or more fruits and vegetables, increased with income and education level (Figure 91).
- In 2015, children age 3-5 years were most likely to consume five fruits and vegetables (47%) compared to children and teenagers of other ages (28-35%) (Figure 92).

Figure 90. Percentage of adults 25 and older reporting 5 fruits and vegetables/day by selected race/ethnicity



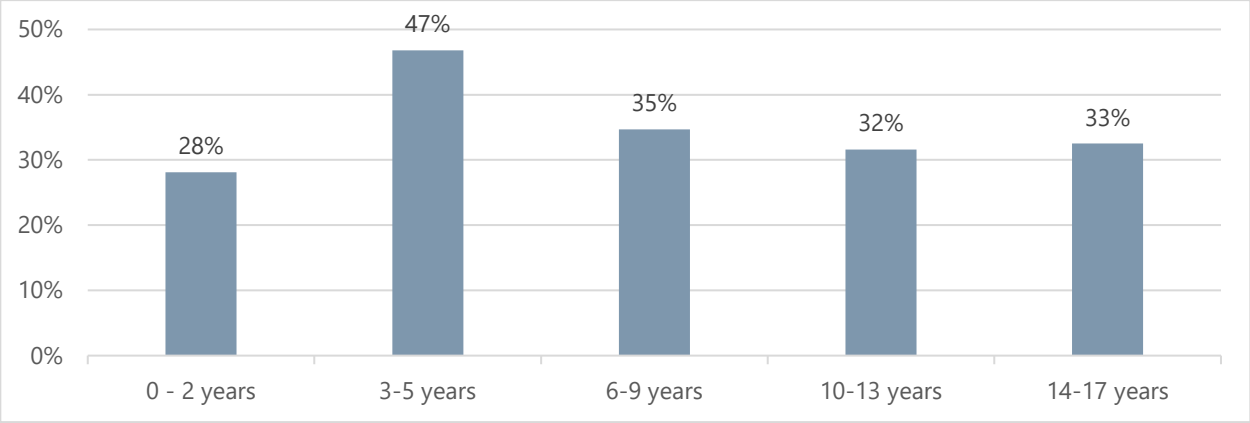
Data Source: Metro SHAPE 2014 Adult Survey

Figure 91. Percentage of adults 25 and older reporting 5 fruits and vegetables/day by income and education



Data Source: Metro SHAPE 2014 Adult Survey

Figure 92. Percentage of children consuming "5 a day" of fruits and vegetables by age, 2015



Data Source: Child SHAPE 2015 Survey

Adult and child sugar sweetened beverage consumption

Sugar-sweetened beverages are leading sources of added sugars in the American diet. Drinking sugar-sweetened beverages (SSB) can be associated with weight gain/obesity, type 2 diabetes, heart disease, kidney diseases, non-alcoholic liver disease, tooth decay and cavities, and gout, a type of arthritis. Limiting the amount of SSB intake can help individuals maintain a healthy weight and have a healthy diet.

Key Findings

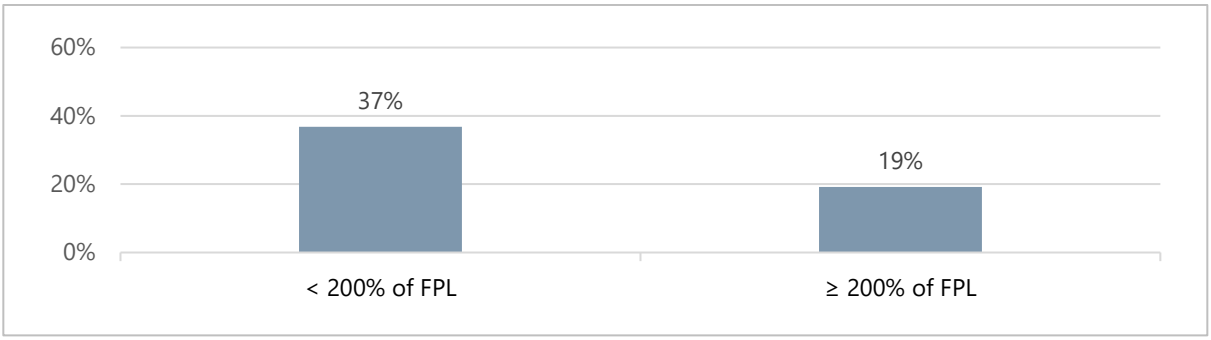
- In 2014, one in five (22%) Hennepin County adults aged 25 and older reported having a sugar-sweetened beverage daily or more often. In 2016, seven out of ten, 8th, 9th and 11th graders reported drinking one or more sugar-sweetened beverages in the previous day (Table 4).
- More than one-third of adults (37%) of adults age 25 and older in Hennepin County households where income is less than 200 percent of the Federal Poverty Level reported having sugar-sweetened beverages daily or more often compared to 19 percent of adults with higher incomes (Figure 93).
- A higher percentage of black, American Indian and Hispanic students reported consumption of one or more sugar sweetened beverages compared to Asian or white students (Figure 94).

Table 4: Percentage of Suburban Hennepin County students' sugar-sweetened beverage consumption by grade and gender, 2016

Suburban Hennepin County students attending school in public school districts	8th graders	9th graders	11th graders
Consumed at least once sugar sweetened beverage	**71%**	**71%**	**69%**
Boys	74%	76%	73%
Girls	67%	66%	65%

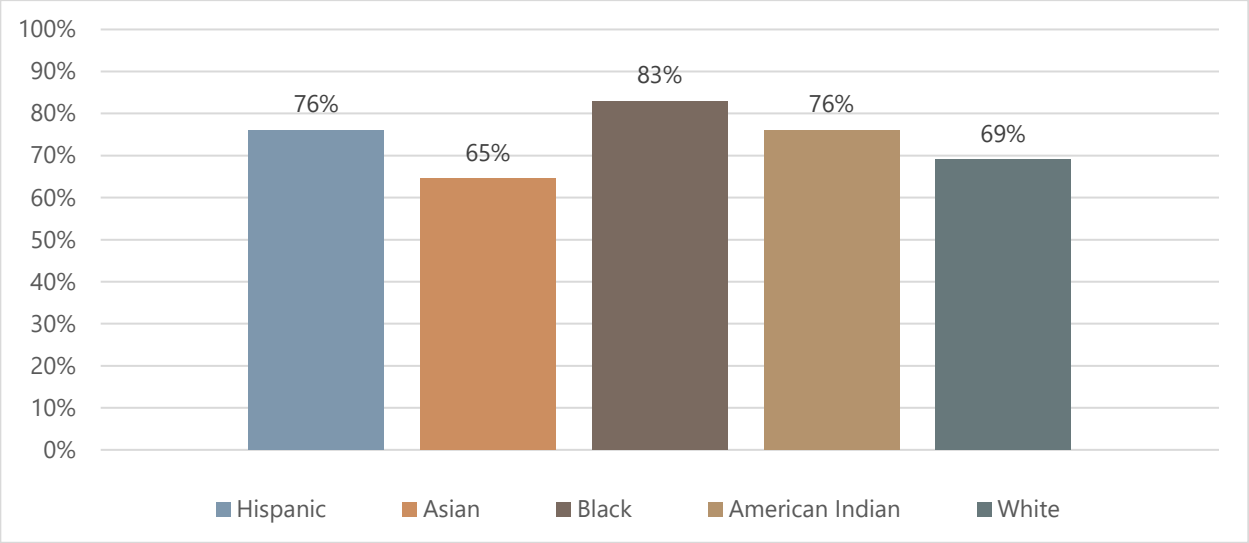
Data Source: Minnesota Student Survey 2016

Figure 93. Percentage of adults age 25 and older who consumed sugar-sweetened beverages daily or more often by household income, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 94. Students consuming one or more sugar sweetened beverages by race/ethnicity, 9th grade, suburban Hennepin County, 2016



Data Source: Minnesota Student Survey 2016

Oral health

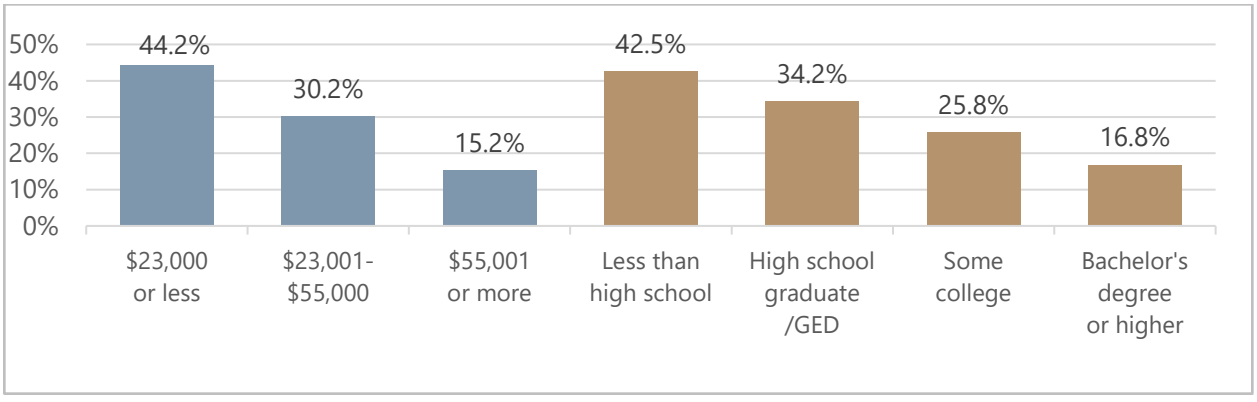
Adult and child oral health/dental care

Oral and dental health is an indicator of overall health and is important to general health and well-being. Oral health problems are often painful, costly, and result in diminished quality of life for those suffering. The 2010 Surgeon General's Report on Oral Health was the first of its kind and highlighted dramatic improvements in the nation's oral and dental health over the past century. However, the report also addressed the inequities and disparities in oral and dental health gains. Healthy People 2020 include goals for improved oral and dental health as part of an overall plan for the prevention of disease and promotion of health across the nation.

Key Findings

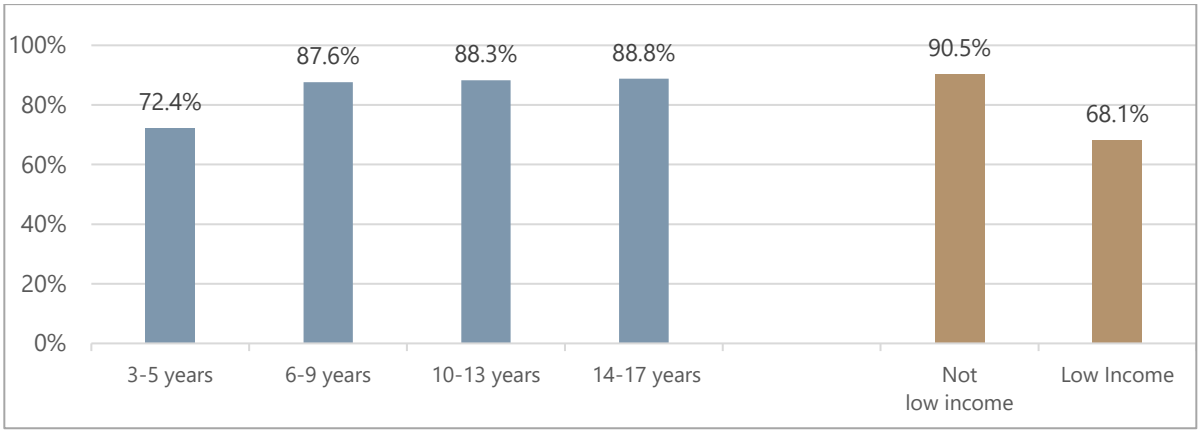
- In 2014, a majority (79%) of county adults visited a dentist or a dental clinic for dental care within the past year. The highest disparities were found among low income residents (44% for those having household income $23,000 or less) and low education (42% for those having less than high school education) (Figure 95).
- In 2014, many county adult populations and groups reported disproportionately higher rates of no dental visit within the last year. These include, but may not be limited to males (24%), young adults aged 25 to 34 (25%), populations of color (all around 30%), being LGBT (26%).
- In 2015, 85% of children 3-17 years in Hennepin County had a regular dental check up in the past year; however, children from low income households were much less likely to have had an annual dental visit in the past year. In addition, younger children were less likely to have seen a dentist in the past year compared to older children (Figure 96).

Figure 95. No dental visit in past year by income and education, adults 25 years and older, Hennepin County, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 96. No dental visit in past year by age and income, children 3-17 years, Hennepin County, 2015



Data Source: CHILD SHAPE 2015 Survey

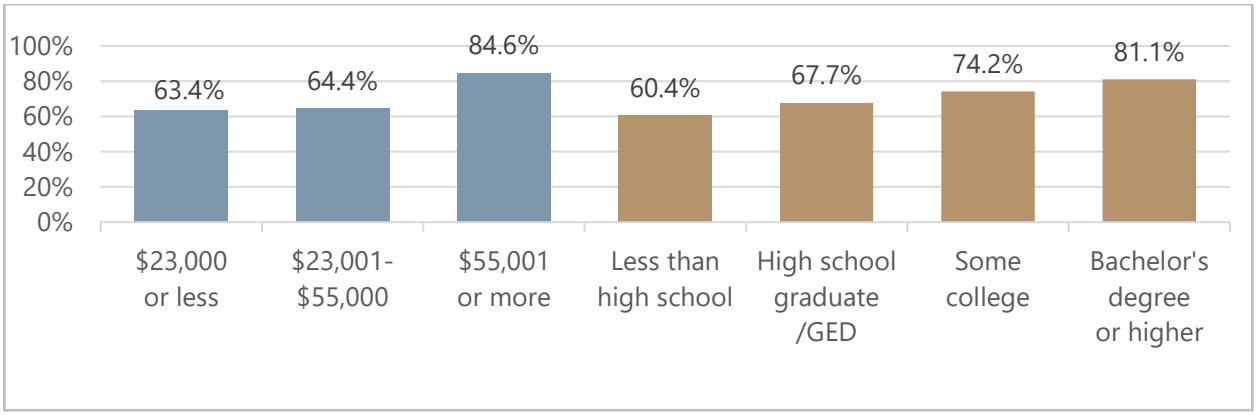
Adult and child oral health/dental care coverage

Lack of access to dental care remains a public health challenge. According to the CDC, ability to access dental services are associated with employment, income, education, race and ethnicity. Persons who have the least amount of access to preventive services due to lack of coverage or limited coverage have higher rates of oral disease.

Key Findings

- In 2014, a large proportion (78%) of Hennepin County adults reported they currently had dental insurance that covered part or all dental care. However, lack of dental coverage was particularly higher among adults who were low income, low education, as well as older adults (Figure 97).
- In 2014, Hennepin residents who had dental insurance reported a significantly lower rate of no dental visit than those who did not have dental insurance (16% vs. 39%).
- In 2015, 92 percent of children in Hennepin County (age 3 and older) had dental care coverage. Among those with coverage, 9 percent of all children and 26 percent of low-income children had difficulty finding a dentist who would accept their insurance.

Figure 97. Dental insurance by income and education, adults 25 years and older, Hennepin County, 2014.



Data Source: Metro SHAPE 2014 Adult Survey

Tobacco use

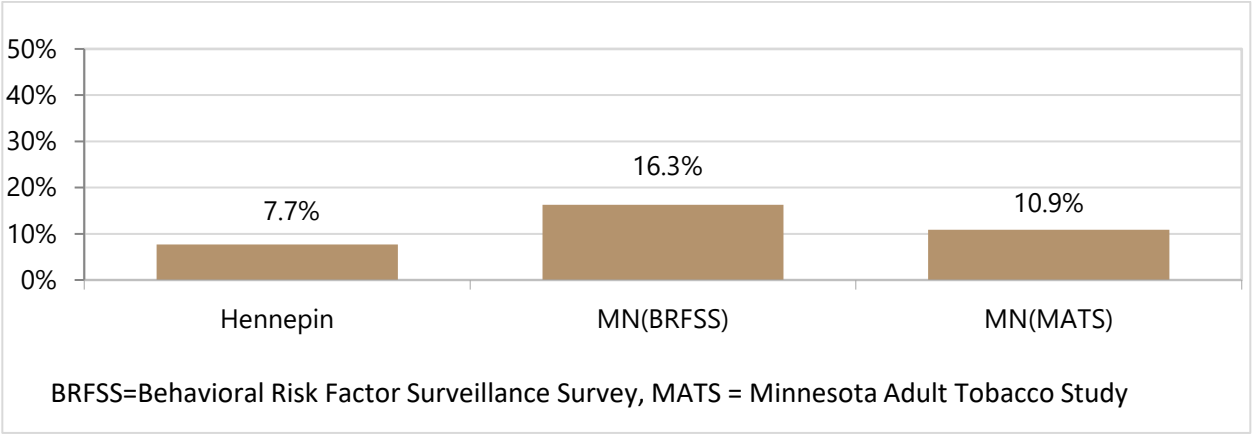
Adult tobacco use

Tobacco use remains the single largest preventable cause of death, disability and disease in the United States. Smoking is linked to heart disease, stroke and other chronic lung diseases, including 90 percent of lung cancer cases in the United States. Smoking can also increase your risk for cancer of the bladder, throat and mouth, kidneys, cervix and pancreas. According to the CDC, cigarette smoking kills more than 480,000 Americans each year. Almost one third of deaths from coronary heart disease are attributable to smoking and secondhand smoke.

Key Findings

- In 2014, 8 percent of Hennepin County adults aged 25 and older were classified as current smokers. This rate is lower compared to adults in Minnesota overall (11%) (Figure 98).
- The smoking rate among Hennepin County adults age 25 and older declined from 19 percent in 1998 to 8 percent in 2014 (Figure 99).
- There are disparities by income and education. In 2014, 19 percent of low-income (household income less than $23,000) adults age 25 and older in Hennepin County were current smokers compared to six percent of adults from households making $55,001 or more. Similar differences were seen for education with adults with less than a high school education currently smoking (23%) compared to a Bachelor's degree or higher (5%) (Figure 100).
- The percentage of adults age 25 and older who are current smokers vary by race/ethnicity. Smoking rates remain significantly higher among US-born blacks, compared to adults from other racial and ethnic groups (Figure 101).
- A majority of US-born African American smokers smoke menthol tobacco.

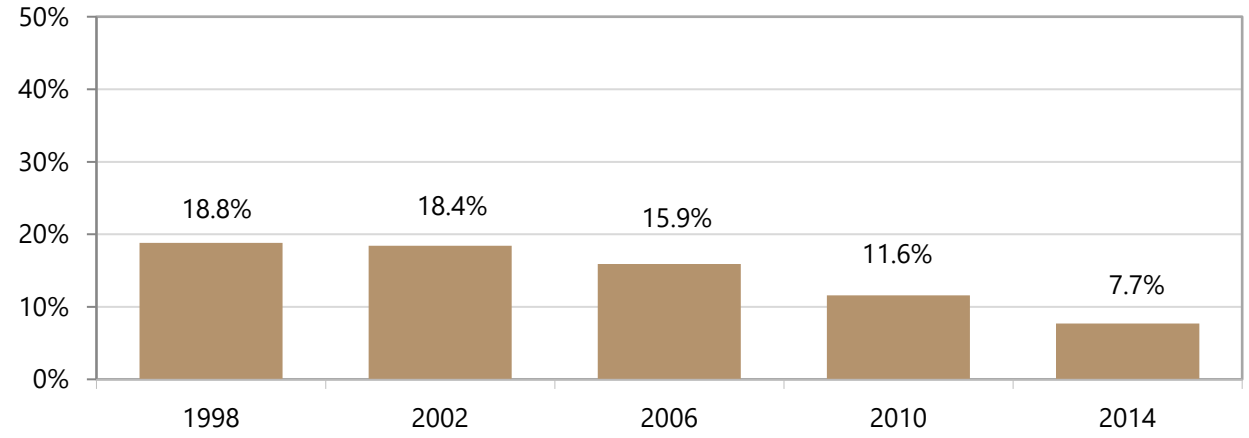
Figure 98. Current smoking status, adults 25 years and older, Hennepin County and Minnesota, 2014.



BRFSS=Behavioral Risk Factor Surveillance Survey, MATS = Minnesota Adult Tobacco Study

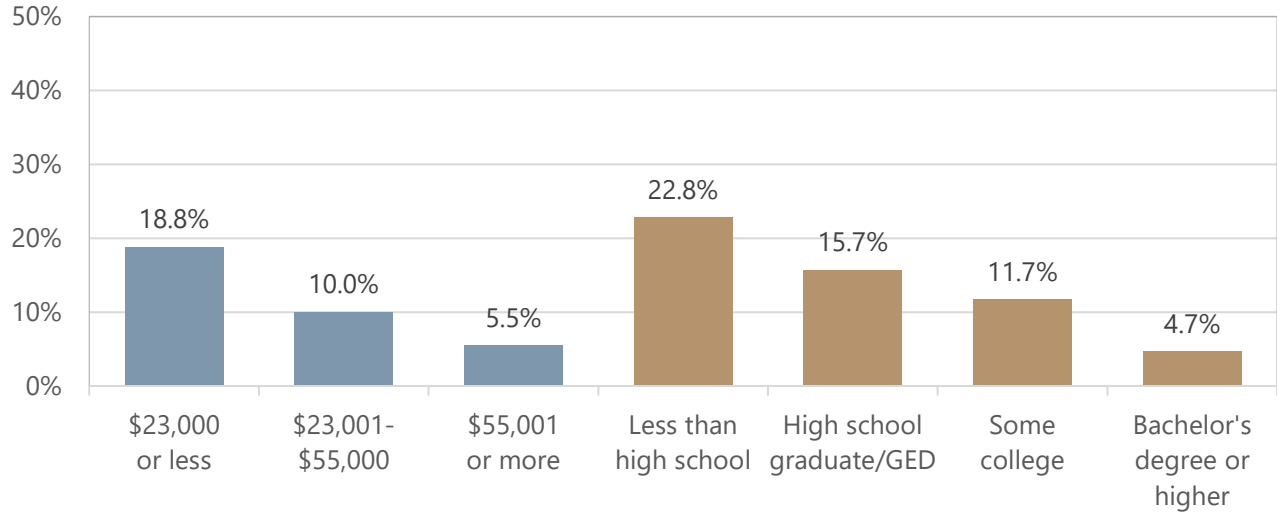
Data Source: Metro SHAPE 2014 Adult Survey

Figure 99. Current smoking status, adults 25 years and older, Hennepin County 1998 - 2014



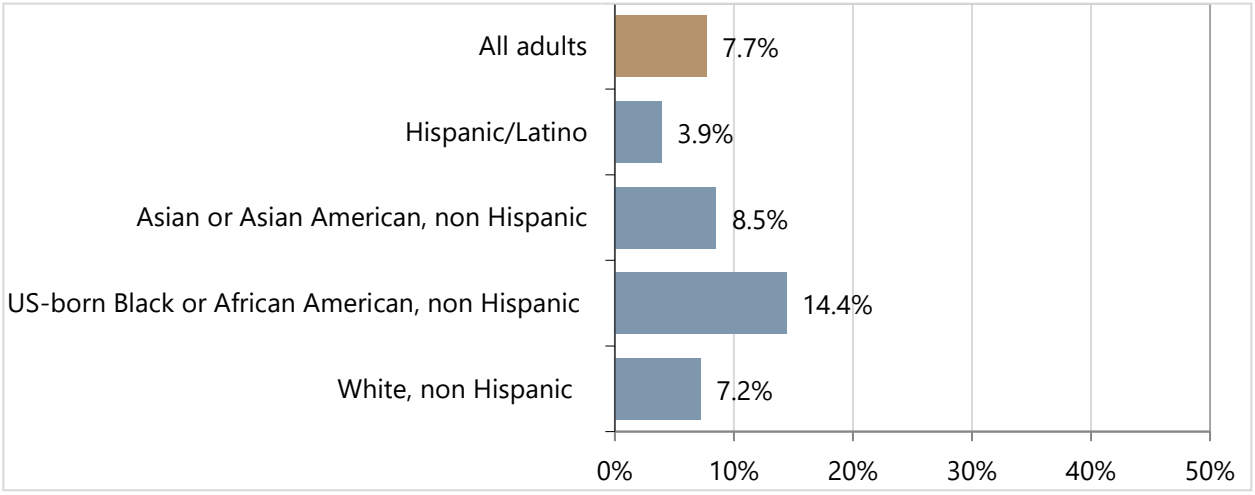
Data Source: Metro SHAPE 2014 Adult Survey

Figure 100. Current smoking status, adults 25 years and older, by income and education, Hennepin County 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 101. Current smoking status, adults 25 years and older, by race/ethnicity, Hennepin County 2014



Data Source: Metro SHAPE 2014 Adult Survey

Menthol tobacco use (UPDATE 2018)

In 2016, Hennepin County Public Health, along with Bloomington Public Health, Minneapolis Health Department, and Saint Paul-Ramsey County Public Health, was awarded funding to engage members of the African American community and community-based organizations to implement strategies and interventions to reduce the disproportionately high usage of cigarettes by African Americans, especially the use of menthol-flavored cigarettes. In collaboration with a local advocacy organization, African American Leadership Forum (AALF), Hennepin County Public Health surveyed a convenience sample of African American residents living in Hennepin and Ramsey counties.

Key Findings

Results from the survey found that the majority of African American smokers (84%) preferred menthol tobacco, and most agreed (74%) that menthol makes it harder to stop smoking. Detailed findings from the survey are in Appendix A.

Adult environmental tobacco

Smokers are not the only ones affected by tobacco smoke. Secondhand smoke is a serious health hazard for nonsmokers. Nonsmokers who have high blood pressure or high blood cholesterol have an even greater risk of developing heart diseases when they are exposed to secondhand smoke. Secondhand tobacco smoke contributes to about 34,000 premature heart disease deaths and 7,300 lung cancer deaths. Studies show that the risk of developing heart disease is about 25-30 percent higher among people exposed to environmental tobacco smoke.

Key Findings

- In 2014, overall five percent of Hennepin County adults aged 25 and older were exposed to secondhand smoke at home. The rates for secondhand smoke exposure were higher for those living in apartment building (7%) compared to those living in single-family homes (4%). There were geographic differences in the secondhand smoke exposure ranging from three percent in the western suburbs to 12 percent in Minneapolis North (Figure 102).
- Among adults 25 years and older who had a household income of less than 200 percent of the Federal Poverty Level, 13 percent were exposed to secondhand smoke at home and 16 percent were exposed in a car. However, among those adults where the household income is at or above 200 percent of the Federal Poverty Level, three percent of the adults were exposed to secondhand smoke at home and five percent were exposed in a car (Figure 103).
- The percentage of adults age 25 and older who are current smokers vary by race/ethnicity. Smoking rates remain significantly higher among US-born blacks, compared to adults from other racial and ethnic groups (Figure 104).

Figure 102. Percentage of adults age 25 and older exposed to secondhand smoke at home or in a car by geography, 2014

Hennepin County 4.5%

Minneapolis 6.6%

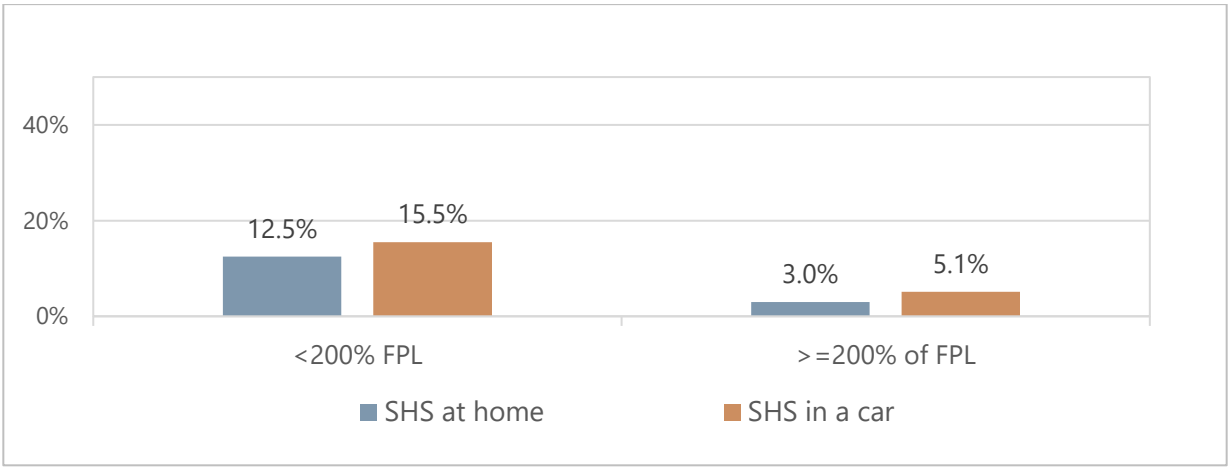
N	Near-North Camden
E	Northeast, University, Longfellow, City of St. Anthony
C	Central, Phillips, Powderhorn
S	Calhoun-Isles, Southwest, Nokomis

Suburban Hennepin 3.5%

NW1	Northwest Inner Ring Suburbs
W1	West Inner Ring Suburbs
S1	South Inner Ring Suburbs
NW2	Northwest Outer Ring Suburbs
W2	West Outer Ring Suburbs
S2	South Outer Ring Suburbs

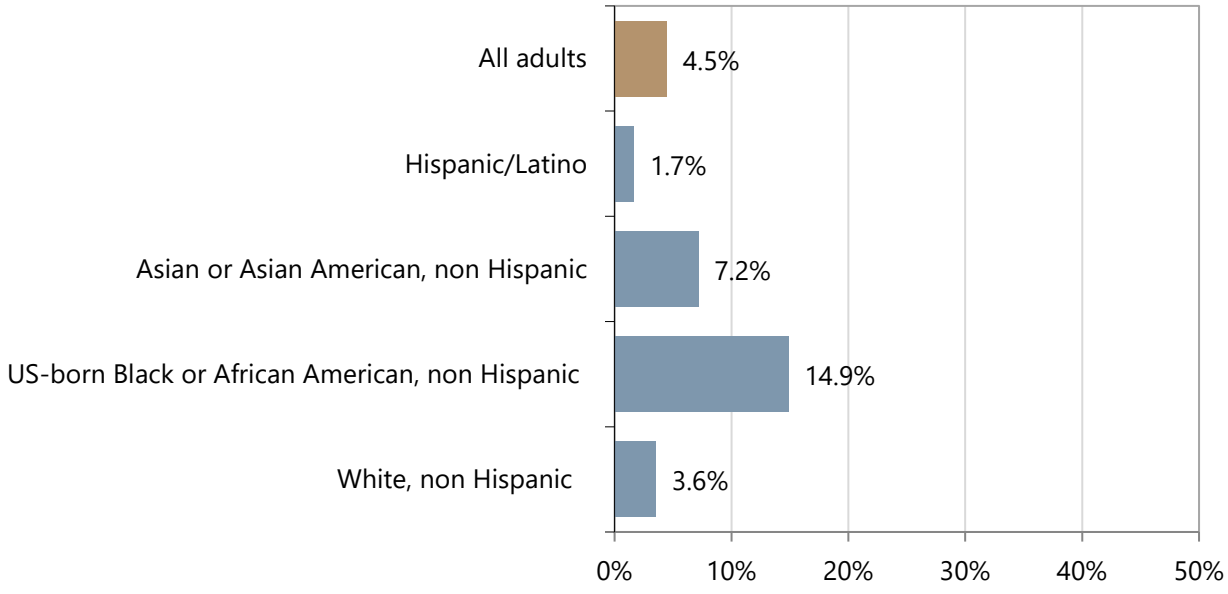
Data Source: Metro SHAPE 2014 Adult Survey

Figure 103. Percentage of adults age 25 and older who were exposed to secondhand smoke (SHS) at home or in a car by household income, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Figure 104. Percentage of adults age 25 and older who were exposed to secondhand smoke at home or in a car by race/ethnicity, 2014



Data Source: Metro SHAPE 2014 Adult Survey

Adolescent tobacco and secondhand smoke exposure

Reducing direct and indirect exposure to tobacco smoke is a critical factor in reducing serious health conditions in the population. For teens, direct use of tobacco may later lead to nicotine addiction, and to the onset of chronic heart and lung conditions as adults.

Key Findings

- In 2016, nine percent of 11th graders in suburban Hennepin County reported using tobacco in the past 30 days. There was a decrease from 2013 where 15 percent reported using any tobacco in the same timeframe. Three percent of 9th graders and five percent of 8th graders reported using tobacco in the past 30 days in 2016. (Table 5).
- Ninth graders receiving free/reduced lunch were more likely to report using tobacco in the past 30 days compared to not low-income ninth graders (5% vs 2%). However, there was no difference by income among 11th graders
- Hispanic and white students used tobacco at the highest rates compared to their classmates. The highest rates of e-cigarette use were reported by white and Hispanic students in the past 30 days compared classmates of other races/ethnicities (Figure 105).
- Low-income children were much more likely to be exposed to be secondhand smoke compared to non-low-income children 0-17 years (16% vs 2%), as were children in Minneapolis compared to suburban Hennepin County (10% vs 4% (Figure 106).

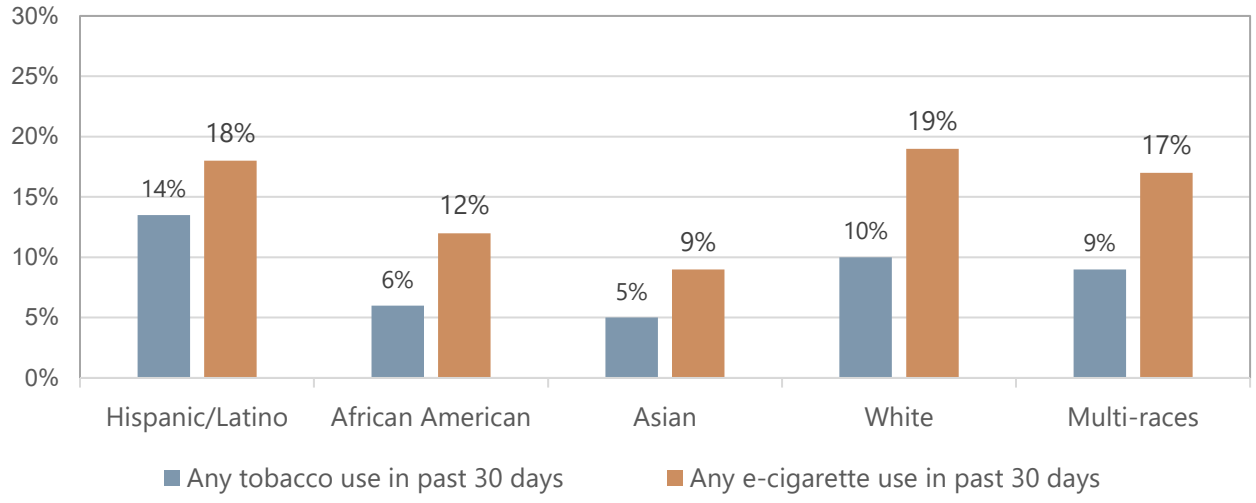
Table 5. Past 30 day tobacco use, 8th, 9th, and 11th, graders by gender, suburban Hennepin County, 2016

Suburban Hennepin County students attending school in public school districts	8th graders	9th graders	11th graders
30 day any conventional tobacco use	**2%**	**3%**	**9%**
Boys	2%	3%	12%
Girls	2%	3%	6%
30 day cigarette use	**1%**	**2%**	**6%**
Boys	1%	2%	6%
Girls	2%	2%	5%
30 day chewing tobacco, snuff, dip use	**1%**	**1%**	**3%**
Boys	1%	1%	5%
Girls	1%	0%	1%
30 day cigars, cigarillos, little cigar use	**1%**	**1%**	**5%**
Boys	1%	2%	8%
Girls	1%	1%	2%

30 day electronic cigarette use	4%	7%	8%
Boys	5%	7%	21%
Girls	4%	7%	13%
30 day hookah or water pipe use	**1%**	**2%**	**3%**
Boys	1%	1%	3%
Girls	1%	2%	3%

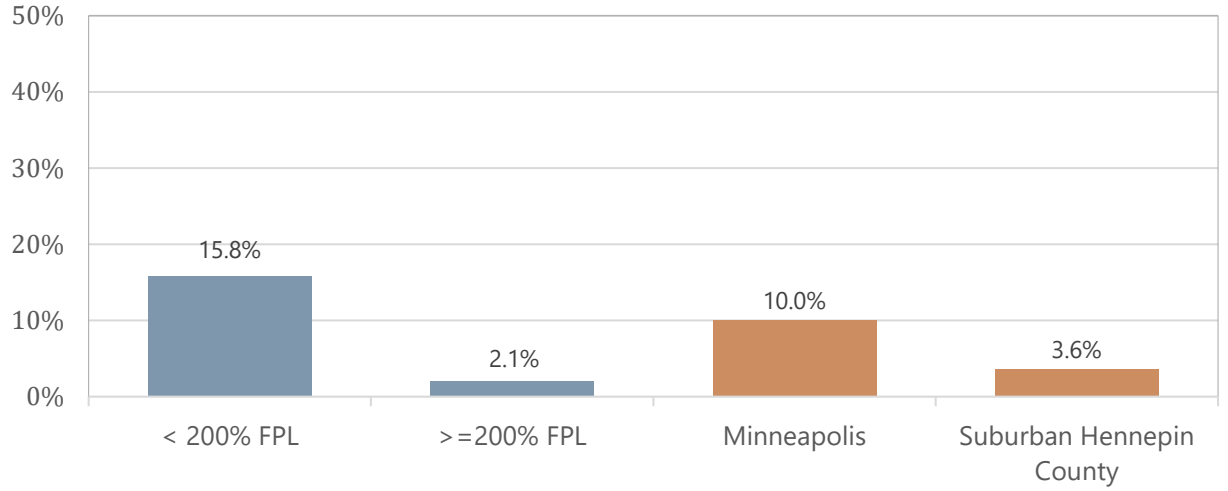
Data Source: Minnesota Student Survey, 2016

Figure 105. Past 30 day use of any conventional tobacco and e-cigarette use, 11th graders, by race/ethnicity, suburban Hennepin County



Data Source: Minnesota Student Survey, 2016

Figure 106. Secondhand smoke exposure by income and geography, children 0-17 years, Hennepin County



Data Source: CHILD SHAPE 2015 Survey

Community partners and assets

There are hundreds of coalitions and agencies throughout Hennepin County working to address health issues and health equity. The following list describes some of the closest partnerships in Hennepin County Public Health, with specific efforts to reduce health disparities and inequities.

Community outreach partners

- Brian Coyle Center
- CLUES
- E Lake Street Clinic
- African American AIDS Task Force
- Just Us Health
- The Aliveness Project

Clinical partners

- Annex Teen Clinic
- Planned Parenthood North Central States
- North Point
- Hennepin County Schools district school nurses
- International Institute of Minnesota
- Metro Immigrant and Refugee Health Network through Minnesota Department of Health
- Lutheran Social Services

Program partners

- Minneapolis Public Schools
- YouthLink
- Hennepin Healthcare EMS
- Three Rivers Park District

Mental health provider partners

- Metro Children's Crisis Response Service
- Prairie Care
- The Bridge for Youth
- Hennepin Healthcare Acute Psychiatric Services
- Minneapolis Police Department
- Nancy Page crisis stabilization

Early childhood partners

- PICA Head Start
- Way to Grow
- Fraser
- Head Start
- Help Me Grow
- Minnesota Visiting Nurses Association
- St. David's Center for Child and Family Development

Homeless services partners

- People Serving People
- St. Stephen's Street Outreach
- Rise Inc.

Forces of Change

Hennepin County Public Health collaborated with local public health, hospital and health plan partners to conduct a regional Forces of Change assessment in October 2017. The assessment identified threats and opportunities that are disappearing, established, emerging, or on the horizon. The findings from the assessment continue to inform the approach Hennepin County takes to ensure we are meeting the needs of the community, and our partners who also serve residents in Hennepin County.

The results from the assessment are available on the CCH website: http://www.mnmetrocch.org/resources

Relevant community engagement efforts

Findings and experiences from recent community engagement efforts within Hennepin County were an important source of information for the prioritization process following the CHA. Highlights from some recent community engagement efforts in Hennepin County Public Health are described below. In addition, findings from community engagement conducted by hospital partners are also summarized below.

Community engagement summary, 2012-2015

Select examples of community engagement done at Hennepin County Public Health between 2012- 2015. This list is not exhaustive but rather provides examples of select community engagement efforts across a range of program areas.

- **Menthol Cigarette Intervention Grant**: Reduce tobacco use in US born African American community in Hennepin and Ramsey counties, in particular menthol products. Project is led by an African American community based organization, funded by HCPH, to assess, educate, and engage the US born African American community in targeted cities in Hennepin and Ramsey counties. Through this, community driven solutions will be identified and implemented.
- **Safer Sex Initiative at YouthLink**: Reduce teen pregnancy rates. Staff is at Youth Link two days a week to offer the program to clients and to answer questions about sexual health. Clients meet to one on one to discuss relationships, health and any concerns or questions they may have.
- **African American Gay/Bi/MSM Workgroup, Latino Gay/Bi/MSM and Latina Transgender Workgroup, and African Leaders Workgroup**: Purpose of workgroups is to address the HIV disparities impacting these communities. The first goal is to engage key leaders and HIV experts from these communities, then develop a strategic plan to reduce disproportionate HIV burden experienced by the three named communities.
- **Hennepin County Mental Health/Minneapolis Police Round Table**: Develop greater understanding of the various roles of the Minneapolis Police/emergency services and community mental health providers and how these roles intersect. Goal is to better serve mental health clients. Monthly meeting to collaborate, problem solve and learn from each other. Often involves presentation of case scenarios and problem solving efforts. Yearly planning and promotion of a roundtable training for the professionals and consumers.
- **CIT/ Law Enforcement Trainings**: Service delivery improvement to families experiencing a mental health crisis in Hennepin County where police are involved. Child Crisis and COPE are collaborating with Minneapolis Police to ensure proper training to new recruits and CIT officers on accessing the crisis teams and providing quality service to individuals experiencing a mental health crisis.
- **Birth to 3 community advocacy**: Improve community knowledge of the importance of B-3 development and resources to improve development for this population. There are several community groups that are working on improving the developmental trajectory for high risk families with children B-3 who have experienced toxic stress.
- **Health at communities of faith**: Increase access to healthy foods and physical activity opportunities to low-income community members through communities of faith. Working with communities of faith in Brooklyn Park and Brooklyn Center to increase access to healthy foods and physical activity opportunities.

Summary of hospital and health plans community health needs assessments in Hennepin County, December 2016

Since 2012, as part of the Affordable Care Act, 501(c)(3) hospitals have been required to conduct a community health needs assessment and adopt an implementation strategy to meet the identified community health needs once every three years. Progress on the implementation plan is then annually reported to the IRS. Many hospitals In Hennepin County, recently completed their community health needs assessments.

Key themes from across CHNAs:

- Hospitals used a variety of data sources, both qualitative and quantitative data to inform their community health assessments and prioritization process (see table 1 and table 2).
- Most hospitals convened a steering committee, Community Advisory Group, or Community Engagement Advisory Team, comprised of representatives from key organizations serving residents of their community or key organizations focused on health (Reference list). These committees/groups were the primary means by which hospitals identified top priority health needs for their communities.
- Mental health was the most frequently chosen priority area among all hospitals and the MCHP Collaboration Plan, followed by health access/access to health care and physical activity, nutrition and obesity-each chosen by 3 hospitals and the health plans as priority areas.
- An information gap citied by three hospitals is the need for additional subpopulation breakdowns in regards to data. Example of subpopulations are foreign born, Oromo, Somali, and Hmong.

The table below summarizes the priorities nine hospitals Hennepin County have chosen to work on for the next three years.

Community health priorities identified by hospitals and health plans serving Hennepin County residents

	Access to health services	MCH	Mental health	Nutrition, PA, obesity	Social determinants of health	Chronic Disease	Substance Abuse	Other
Abbott Northwestern Hospital	Health care access		Mental health and wellness	Physical activity and nutrition				
Phillips Eye Institute	Health care access		Mental health	Physical activity and nutrition				
Children's Hospitals and Clinics of Minnesota			Mental health and well-being		Access to resources Income/ employment education Structural racism			Asthma
University of MN Medical Center (includes Masonic Children's Hospital)			Mental health			Heart disease		
Fairview Southdale			Mental health	Obesity				
Hennepin County Medical Center		MCH	Mental health		Social determinants of health			
Maple Grove Hospital			Mental health				Substance abuse	Healthy aging/senior services
Methodist	Access and affordability of health care		Mental and behavioral health			Chronic disease and illness prevention		Equitable care
North Memorial			Mental health		Food – access, affordable, education on nutrition		Substance abuse	

Health plans prioritization process:

The Minnesota Council of Health Plans (MCHP) is required to submit a collaboration plan to the Minnesota Department of Health. The purpose of the plan is to demonstrate ways that health plans work with local public health to achieve one or more high priority public health goals. The collaboration plan covers five years, with the most recent plan covering the time frame 2015-2019. The collaboration involves Minnesota's seven non-profit health plans, including: Blue Cross and Blue Shield/Blue Plus of Minnesota, HealthPartners, Medica, Metropolitan Health Plan, PreferredOne, Sanford Health Plan of Minnesota and UCare. Based on review of priority areas from the last collaboration plan, alignment with local public health plans, analysis done by the Center for Community Health, and analysis of the public health priorities from recently completed community health needs assessments submitted by hospitals, MCHP identified the five topics below for their priority areas for 2015-2019. While these five topics will be key priority areas for health plans' work with local public health, health plans will continue to work on other public health issues as well. Topics include:

- Access to health care
- Mental health
- Physical activity and nutrition
- Chronic disease prevention and management
- Chemical health
- Health disparities and health inequities

Determining health priorities

The CHIP 2.0 Planning Group led the planning efforts for the joint CHA between Hennepin County Public Health, Bloomington Public Health, and Minneapolis Health Department. Once the joint CHA presentation was completed, the CHIP 2.0 Planning Group convened representatives from various local public health departments, hospitals, health plans, community-based organizations, and other entities who had previously been involved in Hennepin County CHIP activities to participate in a process to identify priorities for the next iteration of CHIP. This group of stakeholders was first brought together in January 2017 to review the data from the joint CHA and identify new priorities for collaboration.

(UPDATE 2018)

Over a series of meetings from January through April 2017 using the CHAs, hospital and health plan CHNAs and community engagement summaries, the CHIP partners selected mental health and wellbeing as the priority for the collaborative, with housing as a key social determinant to explore under the mental health and well-being umbrella. Planning continued throughout 2017 to narrow down these two broad priorities into strategies and potential actions. A newly convened executive committee determined that key informant interviews would help committee members learn from organizations and individuals with intimate knowledge of the two priorities above, and that their expertise was needed to more clearly determine and drive strategies.

Members of the executive committee conducted 23 interviews from January through June 2018 with individuals representing various types and sizes of communities, businesses and organizations. Key informants provided their knowledge and perspectives on both priorities. The full report from these interviews, a compilation of advice, findings, potential models and impassioned quotes from those interviews can be found online at https://www.hennepin.us/CHIP.

As this report demonstrates, CHIP 1.0 laid the foundation for health leaders in the public, private, and non-profit sectors to work with community stakeholders from multiple sectors across the county. One key lesson learned from CHIP 1.0 and the collaborative CHA process in both CHIP 1.0 and 2.0 was how vital collaboration between health departments, hospitals and health plans, and community organizations was to provide an in-depth assessment of the health issues affecting residents in the County in order to provide for informed priority selection. Additional detail of the CHIP 2.0 process and prioritization can be found in the full CHIP 2.0 Plan.

Data sources and limitations

All of the data sources that we used have their own limitations. Data can help to inform decisions and to develop priorities but we understand that it is not the only factor that influences decision-making. Below are brief descriptions and limitations of each of the main data sources used for this presentation and process.

Minnesota Student Survey

The Minnesota Student Survey (MSS) is one of the longest running youth surveys in the nation. A triennial survey that began in 1989, the survey is an anonymous statewide school-based survey conducted to gain insights into the world of students and their experiences.

The survey asks students about their activities, opinions, behaviors and experiences. Students respond to questions on school climate, bullying, out-of-school activities, health and nutrition, emotional and mental health, relationships, substance use and more. Questions about sexual behaviors are asked only of 9th- and 11th-grade students. All responses are anonymous.

Some limitations of the MSS include:

- Variable response rate by district and grade
- Trend data set only includes districts participating in every year of trend analysis.
- Minneapolis Public Schools not represented due to inconsistent participation over time
- Association versus causation
- Recall bias
- Exaggerated student responses - The majority of students exhibit patterns of responses to questions that are reasonable for a given question and consistent across similar questions. In addition, as results have demonstrated, percentages for many answers are consistent over time across the eight Minnesota Student Survey administrations studied for this report. Such similarities are likely to occur only if the survey responses reflect the actual perceptions of Minnesota's youth; it is extremely unlikely that these patterns could be replicated by chance over time. Furthermore, the survey findings are often consistent with findings in similar states and with national trend lines of increasing or decreasing behaviors.

SHAPE 2014

The 2014 Metro Adult Survey of the Health of All the Population and the Environment, or Metro SHAPE 2014, is the latest implementation in a nationally-recognized series of surveys collecting information on the health of residents living in the seven-county area around Minneapolis and Saint Paul, Minnesota and the factors that affect their health across a broad range of topics. SHAPE, a public health

surveillance project, was initiated by Hennepin County initiated in 1998, and has been repeated every four years, including data collection iterations in 2002, 2006 and 2010. A primary reason for conducting the SHAPE survey is to provide data on the health status and the factors that affect health for adults in Hennepin County, for use in planning, programming and policy development in a range of government, community and health organizations. A second goal is to provide baseline data for Hennepin County to help measure changes in health indicators and status over time.

Some limitations of SHAPE 2014 include:

- Low response rate (22%), non-response bias impacts ability to generalize
- Survey was weighted to best match the demographic characteristics of the county, but cannot correct for bias to the extent that non-respondents were less healthy than responders
- SHAPE 2014 reports only adults age 25 and older due to low response
- Non-English speaking residents not represented
- Estimates of health status likely present a more favorable picture of health, and underestimate health disparities
- Small sample sizes limit ability to report some crosstabs
- Association versus causation
- Recall bias

US Census/American Community Survey

The US Census is conducted every ten years and is the most accurate count of the population.

The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about our nation and its people.

Census

- Dated-data collected seven years ago
- Short-form only, basic demographics only

American Community Survey

- Estimates, not actual counts such as with census.
- Five year estimates used for census tract data. Five year estimates are more accurate than one year estimates, but less timely. Therefore five year estimates are not as strong of a measure for a timely/frequently fluctuating indicator such as unemployment or insurance status.
- Margin of error increases as geographic unit decreases in size (i.e., tract versus county). One year data frequently not available or reliable for tract level.

MN vital statistics

The Minnesota Vital Statistics System (MVSS) is a part of the Minnesota Center for Health Statistics (MCHS) at the Minnesota Department of Health. The MVSS compiles statistical data on all births, deaths, infant deaths, and fetal deaths to Minnesota residents. These data are provided to MVSS by the Office of Vital Records, the state entity responsible for registering the facts of birth and death in the State of Minnesota using information submitted by hospitals, clinics, or medical examiners. Limitations of these data include:

Birth records

- Medical record extraction for some elements inconsistent
- Race/ethnicity categories inadequate
- Race/ethnicity category changes make reporting trends challenging

Death records

- Race/ethnicity reported by other than decedent
- Cause of death could be influenced by death reporting practices of certifiers

Other data sources

- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) data
- Minnesota Department of Education Graduation rates
- Behavioral Risk Factor Surveillance Survey
- Minnesota Adult Tobacco Survey
- Oral Health Program-State Dental Survey of 3rd graders

Appendix A

U.S.-born African American Tobacco Pre-Survey Data Highlights

October 2016
Hennepin & Ramsey Counties
The African American Leadership Forum, in coordination with Hennepin County Public Health, surveyed a convenience sample of 407 African Americans in Hennepin and Ramsey counties from May through July 2016.
This assessment is part of a Statewide Health Improvement Partnership (SHIP) grant required by the Minnesota Legislature[1] to address African American menthol tobacco use. It is a first step to deepen understanding of African American use patterns and perceptions and attitudes toward menthol tobacco. It will serve as a basis for community engagement and education in the second year of the two-year grant.

[1] Statewide Health Improvement Partnership: Menthol Cigarette Intervention Grant
http://www.health.state.mn.us/divs/oshii/ship/menthol.html

[2] Hereafter referred to as African Americans

Twenty-four percent of the respondents to this survey are current smokers.

U.S.-born African Americans[2] confirm menthol tobacco is a serious threat to their health.

- 84% of surveyed smokers smoke a brand that is menthol.
- 72% of surveyed smokers agreed menthol makes it harder to quit.

Menthol's soothing effect and minty taste makes smoking easier and more attractive, especially for youth.

- Surveyed menthol smokers were attracted to menthol products because they taste and feel different than other types of cigarettes; the top three reasons for using menthol: It's soothing, cooling, and "tastes better" than non-menthol.
- 69% of surveyed smokers agreed menthol's cooling sensation makes it easier for young people to start smoking.

African American community members are targeted by tobacco industry marketing.

- 83% of surveyed smokers get their cigarettes at gas stations or convenience stores – locations commonly visited on a day-to-day basis.
- 61% of respondents agree menthol cigarettes are marketed to African Americans more than other racial groups
- In the past 30 days, one in four of all respondents noticed:
  - Cigarettes at sale prices.
  - Coupons for cigarettes.
  - Advertisements for cigarettes in magazines.

• 57% of surveyed smokers noticed coupons for cigarettes in the past 30 days.
• 28% of surveyed smokers noticed cigarettes promotions in the mail in the past 30 days.

Survey results reinforce the need to educate and raise awareness on the harms of menthol tobacco use.

• 88% of respondents thought tobacco use was a significant health issue in the African American community.
• 57% of surveyed smokers didn't know menthol cigarettes are just as harmful as other cigarettes.
• 44% of surveyed smokers wrongly thought menthol cigarettes are less harmful than other cigarettes.

A majority of African American community members support new laws to reduce tobacco's harm.

• 69% of surveyed smokers supported more laws to reduce the harms of smoking.
• 60% of surveyed smokers said they would quit if menthol was no longer sold in stores.

[1] Statewide Health Improvement Partnership: Menthol Cigarette Intervention Grant http://www.health.state.mn.us/divs/oshii/ship/menthol.html
[2] Hereafter referred to as African Americans