

# Health Equity Data Analysis

## Final Report

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2017



## Executive Summary

To further the Minnesota Department of Health’s (MDH) commitment to creating conditions for all Minnesotans to live healthy lives, a document called *Using Data to Identify Healthy Inequities: A Guide for Local Health Departments in Minnesota* was created. This guide provides a general outline of how to execute a Health Equity Data Analysis (HEDA) in order to shed light on factors that influence a population’s health outside of individual behavior. Policy, systems, and environment (PSE) play major roles in shaping individual behavior choices. By focusing on these high-level areas, a wide net can be cast that can encourage healthy behaviors, discourage unhealthy behaviors, and address root causes of chronic disease.

Saint Paul – Ramsey County Public Health (SPRCPH) was selected as a pilot site to conduct a HEDA using data and community input to help identify health inequities. U.S.-born African Americans living in Saint Paul were chosen as the population for this project. The following report presents a variety of health data that illustrate harsh health disparities facing this population and goes on to explain why these disparities are not merely differences based on chance but are inequitable and avoidable. African Americans experience higher rates of disease, even when controlling for variables such as income, education, and employment. A likely explanation for this fact is racism. Racism negatively impacts the social determinants of health for people of color by causing increased stress, increased poverty rates, less access to education/housing, lower quality of life, etc.

SPRCPH’s African American Planning Committee — made up of African American community members and allies who work in the health field — participated in an activity to attempt to answer the following questions:

- 1) What are the effects of chronic disease in the African American community?
- 2) What systems, structures, and policies create the conditions in which African Americans have higher rates of chronic disease than other groups?

The Committee confirmed racism to be a primary factor in the high rates of chronic disease faced by African Americans. Historical trauma and structural racism have created the unjust current conditions and effects in the African American community in Saint Paul, particularly through a lack of affordable, healthy food; lack of safe spaces for recreation; unhealthy eating; and limited transportation. Segregation, unfair hiring practices, unemployment, and lack of community investment are some of the policies and systems that have caused high levels of chronic disease for African Americans.

This HEDA has provided SPRCPH an opportunity to work through a comprehensive analysis of data to help shape future work. This analysis will be used to seek funding opportunities that may help develop and implement solutions to the causes discussed in the report. It will also inform partners, community members, colleagues, and initiatives.

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## I. Definition of Health Equity

Healthy People 2020 defines *health equity* as the “attainment of the highest level of health for all people.” Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.<sup>1</sup>

*Health inequities* are created when barriers prevent individuals and communities from reaching their full potential. Inequities differ from *health disparities*, which are differences in health status between people related to social or demographic factors such as race, gender, income, or geographic region. Health disparities can measure progress toward achieving health equity.

In order to achieve health equity, one must first recognize and understand the health disparities and health inequities in a given population or community. A **health disparity** is a population-based *difference* in a health outcome or health risk behavior. This is a mathematical comparison; it does not address any possible causes of such a difference in health. A **health inequity** does include causality. The difference (disparity) in a health outcome between more and less advantaged groups (socially, economically, etc.) is that it is *caused* by systemic differences in the social conditions and processes that determine health. See the box at the right for an example of these definitions.<sup>2</sup>

*“Male babies are generally born at a heavier birth weight than female babies. This is a health disparity – a simple mathematical difference. At a population level, this difference is unavoidable and is rooted in genetics; therefore, this difference is not a health inequity. On the other hand, babies born to Black women are more likely to die in their first year of life than babies born to White women. Differences exist between the health of Black and White mothers and babies even if Blacks and Whites are compared within the same income level (residual difference). Many scientists believe that racism experienced by Black women explains the residual difference in infant mortality. Regardless of income, racism creates stress, and too much stress creates a risk for mothers and babies. This health difference is a health inequity because the difference between the groups is unfair, avoidable and rooted in social injustice in the form of racism.”*

*- Boston Public Health Commission Center for Health Equity and Social Justice via MDH’s Using Data to Identify Health Inequities report*

### **Social Determinants of Health (SDOH)** The

social determinants of health are the economic and social conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources and can influence individual and group differences in health status.<sup>3</sup> SDOH contribute to poor health outcomes, lack

<sup>1</sup> U.S. Department of Health and Human Services, Office of Minority Health. National Partnership for Action to End Health Disparities. The National Plan for Action Draft as of February 17, 2010 [Internet]. Chapter 1: Introduction. Retrieved 3/8/17: <http://www.minorityhealth.hhs.gov/npa/templates/browse.aspx?&lvl=2&lvlid=34>.

<sup>2</sup> Using Data to Identify Health Inequities, Version 1.0, March 2016, pg. 1, Minnesota Department of Health. Advancing Health Equity in Minnesota: report to the Legislature February 1, 2014 [Internet] Executive Summary. Retrieved 3/20/17: [http://www.health.state.mn.us/divs/chs/healthequity/ahe\\_leg\\_report\\_020414.pdf](http://www.health.state.mn.us/divs/chs/healthequity/ahe_leg_report_020414.pdf)

<sup>3</sup> Centers for Disease Control and Prevention. Social Determinants of Health. Retrieved 3/20/17: <https://www.cdc.gov/nchstp/socialdeterminants/fag.html> World Health Association. Social Determinants of Health. Retrieved 3/20/17: [http://www.who.int/social\\_determinants/sdh\\_definition/en/](http://www.who.int/social_determinants/sdh_definition/en/)

of access to adequate care, increased chronic stress, preventable diseases, and obesity rates. Structural differences in opportunities to be healthy result in health inequities.

**How to achieve health equity:** SPRCPH strives to make the conditions, in which people are born, grow, live, work, learn, and age, equitable for all Ramsey County residents. SPRCPH plans to work with other sectors to address the factors that influence health, including employment, housing, education, health care, public safety, and food access. Racism, as a social construct, is a force that determines how social determinants are distributed.<sup>4</sup>

## II. HEDA Purpose and Steps

Saint Paul – Ramsey County Public Health was a pilot site selected to learn and understand the steps to conduct a Health Equity Data Analysis (HEDA) at a local level. The HEDA uses data analysis that involves first looking at differences in health outcomes by population groups and then considers not only individual factors, but also the high-level factors (e.g. policies and systems) that create those differences. In other words, a HEDA requires the examination of the policies, systems, and environments in place as well as the SDOH influencing the health of people.<sup>5</sup>

The 5 step process to conduct a HEDA is as follows:

- A. Connection Step: Connect health outcomes to conditions that create health
- B. Population Step: Identifying the population likely to experience health inequities
- C. Differences Step: Looking for population-based differences in health outcomes
- D. Conditions Step: Linking social and economic conditions to differences in health outcomes
- E. Causes Step: Describe and recognize the causes of these unjust conditions

## III. Connections Between Social Determinants of Health and Health Outcomes

Data shows that people with more education tend to live longer, have better health outcomes, and have healthier children.<sup>6</sup> Healthy eating and physical activity can play a role in long-term health. Diabetes, cancer, heart disease, and obesity are all factors related to lifestyle. When you consider race alone, persons of color tend to have higher rates of chronic disease, even after accounting for the impact of education, income, and employment factors.<sup>7</sup> Figures 1 and 2 illustrate racism’s effect on health outcomes.

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<sup>4</sup> American Public Health Association. Racism and Health. Retrieved 3/20/17: <https://www.apha.org/topics-and-issues/health-equity/racism-and-health>

<sup>5</sup> Minnesota Department of Health. Using Data to Identify Health Inequities. Retrieved 3/20/17: <http://www.health.state.mn.us/divs/chs/healthequity/guide/index.htm>

<sup>6</sup> Commission to Build a Healthier America. (2009, September). *Education Matters for Health* (Issue Brief No. 6). Retrieved 3/8/17: <http://www.commissiononhealth.org/PDF/c270deb3-ba42-4fbd-baeb-2cd65956f00e/Issue%20Brief%206%20Sept%2009%20-%20Education%20and%20Health.pdf>

<sup>7</sup> Smedley, B., Jeffries, M., Adelman, L., & Cheng, J. (2008). *Race, Racial Inequality, and Health Inequities: Separating Myth from Fact* [Issue Brief via Unnatural Causes]. Retrieved 3/8/17: [http://www.unnaturalcauses.org/assets/uploads/file/Race\\_Racial\\_Inequality\\_Health.pdf](http://www.unnaturalcauses.org/assets/uploads/file/Race_Racial_Inequality_Health.pdf)

**Figure 1: Conceptual Model of how Racism Impacts Health<sup>8</sup>**



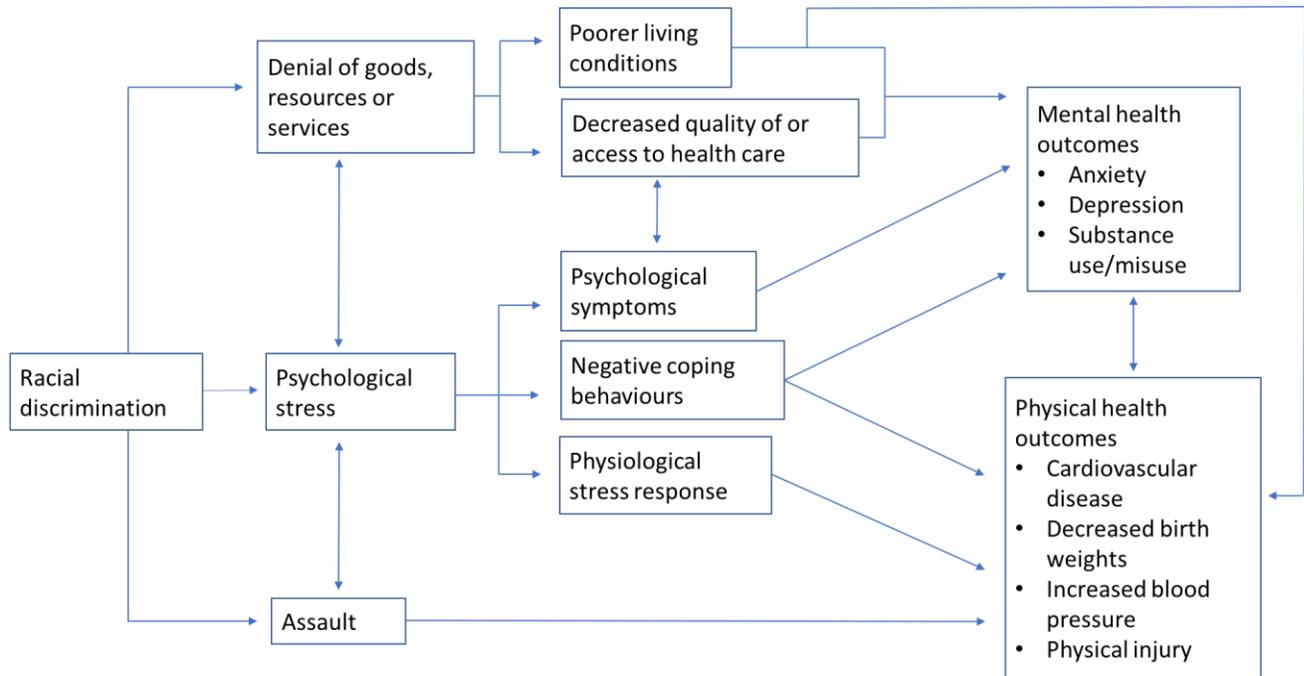
Historical trauma due to racism impacts future generations. Racism is a SDOH that can have a negative impact on health outcomes for people of color. See Figure 2 on the effects that racial discrimination has on long term health. Racism affects education levels, poverty status, neighborhood health, employment, health behaviors, and finally the quality of health care a person receives.<sup>9</sup> People living in poverty have additional stressors linked to poor health outcomes because of lack of adequate health care. All of these factors influence chronic disease and obesity rates for a community.<sup>10</sup>

<sup>8</sup> Adapted from the Boston Public Health Commission. What is Health Equity. Retrieved 3/20/17: <http://www.bphc.org/whatwedo/health-equity-social-justice/what-is-health-equity/Pages/what-is-health-equity.aspx>

<sup>9</sup> Jones, C. P. (2002). Confronting institutionalized racism. *Phylon (1960-)*, 7-22.

<sup>10</sup> Institute for Research on Poverty, University of Wisconsin – Madison. (2013). *Poor and in Poor Health* [Fact Sheet]. Retrieved 3/8/17: [https://morgridge.wisc.edu/documents/Poor\\_and\\_In\\_Poor\\_Health.pdf](https://morgridge.wisc.edu/documents/Poor_and_In_Poor_Health.pdf)

**Figure 2: Visual on How Self-Reported Racism Causes Poorer Health Outcomes for Minorities.<sup>11</sup>**



## IV. Identifying the Population

Ramsey County is geographically the smallest yet most densely populated county in Minnesota. Although Minnesota is one of the top states for positive health outcomes, several communities face glaring disparities according to specific SDOHs, which leads to poorer overall health. Saint Paul is the largest city in Ramsey County, with a population of over 538,000 residents.<sup>12</sup> Saint Paul is home to an extremely diverse set of residents, with 129 languages and dialects spoken in Saint Paul Public Schools (SPPS); the most frequently spoken languages other than English are Hmong, Karen, Somali, and Spanish.<sup>13</sup> More specifically, African Americans make up 11.9% of the population in Ramsey County and 15.5% of Saint Paul’s population.<sup>14</sup>

A community experiencing health inequities deserves further analysis to identify specific data, causes, and conditions, in an effort to alleviate the differences in chronic diseases. This HEDA focuses on the U.S.-born African American community in Saint Paul, MN. It is important to note, however, that most research aggregates U.S.-born Black/African American data with foreign-born Black/African American data. Since foreign-born Black/African Americans tend to have better health outcomes than their U.S.-born counterparts,

<sup>11</sup> Kelaher M, Ferdinand A, Paradies Y: Experiencing racism in health care: The mental health impacts for Victorian Aboriginal communities. Medical Journal of Australia. Under review. April 2013. Retrieved 3/20/17: <https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/2046-4053-2-85>

<sup>12</sup> United States Census Bureau. Quick Facts Ramsey County, MN. Retrieved 3/20/17: <http://www.census.gov/quickfacts/table/PST045216/27123,00>

<sup>13</sup> Saint Paul Public Schools. Office of Multilingual Learning. Retrieved 3/20/17: <http://www.spps.org/Domain/10453>

<sup>14</sup> United States Census Bureau. Quick Facts Ramsey County, MN. Retrieved 3/20/17: <http://www.census.gov/quickfacts/table/PST045216/27123,00>

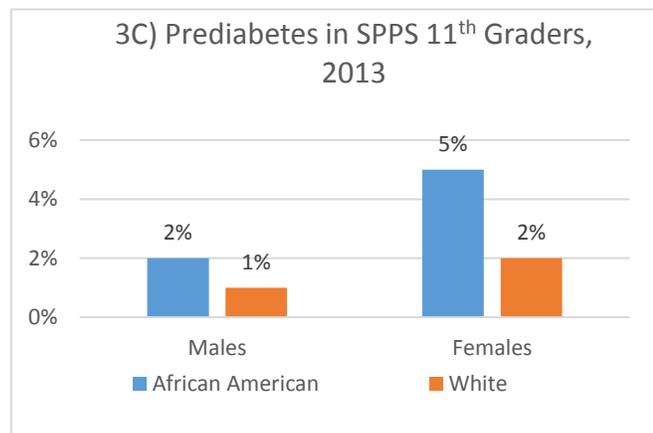
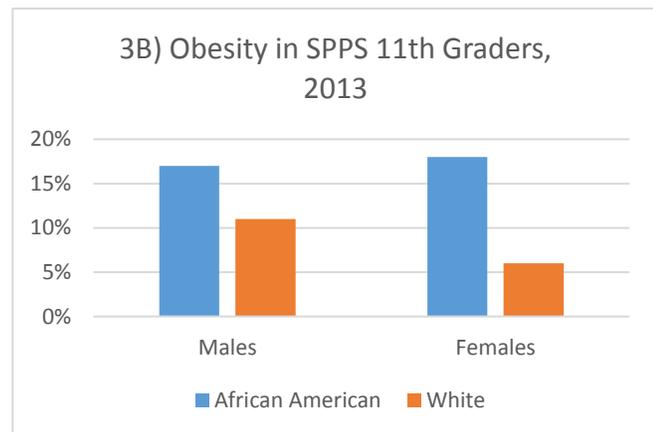
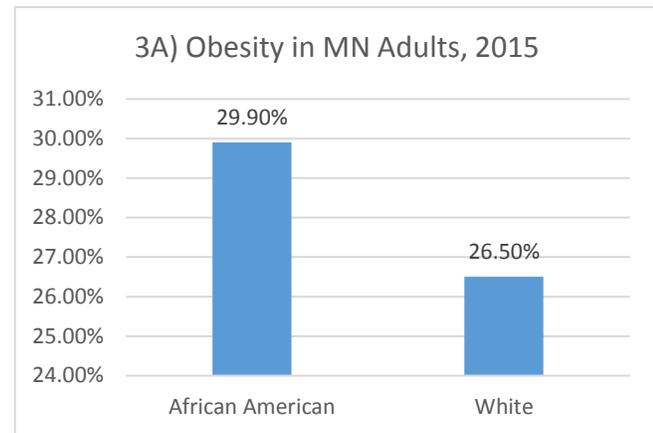
the lack of specificity in the data can disguise the true extent of health disparities.<sup>15</sup> This community was chosen after comparing quantitative data between African American and White populations and seeing differences in chronic disease outcomes.

## V. Differences in Health Data

Obesity rates for adults show disparities based on race. In 2015, 26.1% of all adults in Minnesota were obese, which includes 26.5% of White adults and 29.9% of African American adults, as shown in Figure 3A.<sup>16</sup> Differences are also evident in youth attending Saint Paul Public Schools. For example, in 11<sup>th</sup> grade students, White male students have an obesity rate of 11%, and females were at 6%, as shown in Figure 3B. For African American students, 17% of males were considered obese and females were at 18%.<sup>17</sup> African American female students are obese at three times the rate of White female students.

More than 1 in 3 adults (and 1 in 6 youth) in Minnesota have prediabetes or diabetes. In the United States, diabetes rates are 77% higher for African Americans when compared to non-Hispanic Whites. Prediabetes was a disease that once only affected older generations, but it is now prevalent in youth. Again, discrepancies exist among students in Saint Paul Public Schools by race: 2% of male and 5% female African American 11<sup>th</sup> graders have prediabetes; whereas for White 11<sup>th</sup> graders, it was 1% and 2% for male and female students, respectively, as referenced in Figure 3C.<sup>18</sup>

**Figure 3: Obesity Rates in MN Adults and SPSS 11<sup>th</sup> grade students**



<sup>15</sup> Minnesota Department of Health (2013, October). Comparison of Births to Black/African American Women born in the United States and Africa, Minnesota 2006-2010, *Vital Signs*, Retrieved 3/20/17: <http://www.health.state.mn.us/divs/chs/vitalsigns/usafricabirths20062010.pdf>

<sup>16</sup> The State of Obesity. Minnesota. Retrieved 3/20/17: <http://stateofobesity.org/states/mn/>

<sup>17</sup> Minnesota Department of Education. Minnesota Student Survey (MMS), 2013. Retrieved 3/20/17: <http://w20.education.state.mn.us/MDEAnalytics/Data.jsp>

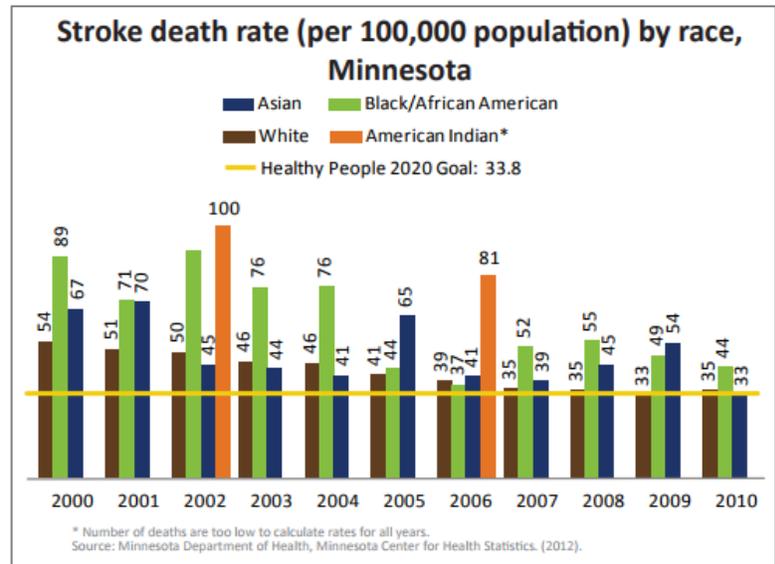
<sup>18</sup> Ibid.

African Americans in Minnesota face higher death rates from stroke than their White counterparts<sup>19</sup>, as can be seen in Figure 4. In Ramsey County, 5% of all deaths are linked to stroke; however, when compared to Whites, mortality rates are 31% higher for African Americans residents.<sup>20</sup> African American women in Ramsey County are more likely to die from stroke than all other racial groups. For middle aged African Americans (ages 45-64), death rates are 1.6 times higher than for Whites. Overall, for every age group, death rates for African Americans are 1.5 times higher than Whites.<sup>21</sup>

Even when looking at the health disparities in Minnesota’s youngest population, babies born to U.S.-born African American mothers have a much higher infant mortality rate than babies born to White mothers, 12.4 versus 4.4 respectively. Infant mortality rate is defined as the number of infants per 1,000 live births who died before their 1<sup>st</sup> birthday.<sup>22</sup>

Breastfeeding rates, a protective factor for infant and the mother’s health, are strikingly different in Saint Paul mothers when comparing low income U.S.-born African American mothers babies and their White, non-Hispanic counterparts. Preliminary data suggests 71.4% of low income U.S.-born African American mothers initiate breastfeeding, and by the time the baby is 3 months old, only 26.6% are breastfeeding. This is in comparison to an initiation rate of 85.3% and 3 months breastfeeding rate of 51.3% of low income White, non-Hispanic babies.<sup>23</sup> Studies suggest that a longer duration of breastfeeding is associated with a decreased risk of being overweight later in life.<sup>24</sup> In addition to a healthier child, longer breastfeeding duration is associated with decreased rates of type 2 diabetes for the mother as well.<sup>25</sup>

**Figure 4: MN Stroke death rate by race**



Infant Mortality in MN

U.S.-Born African American:  
12.4 per 1,000 live births

White: 4.4 per 1,000 live births

<sup>19</sup> Ramsey County. Community Health Assessment 2013. Retrieved 3/8/17: [https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community\\_health\\_assessment\\_030515.pdf](https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community_health_assessment_030515.pdf)

<sup>20</sup> Ramsey County. Community Health Assessment 2013. Retrieved 3/8/17: [https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community\\_health\\_assessment\\_030515.pdf](https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community_health_assessment_030515.pdf)

<sup>21</sup> Minnesota County Health Tables, 2010-2014 Populations of Color Health Update: Birth and Death Statistics MDH December 2015

<sup>22</sup> Minnesota Infant Mortality Race/Ethnicity Data Book 2007-2011. Retrieved: <http://www.health.state.mn.us/divs/chs/infantmortality/20082012imdatbookre.pdf>

<sup>23</sup> Breastfeeding Initiation and Duration, race/ethnicity, MDH WIC Program October 2016

<sup>24</sup> Duration of breastfeeding and risk of overweight: a meta-analysis 2005, *Am J Epidemiol.* 2005 Sep 1;162(5):397-403. Epub 2005 Aug 2

<sup>25</sup> Duration of Lactation and Incidence of Type 2 Diabetes. 2005 Alison Stuebe, MD; Janet Rich-Edwards, ScK; Walter Willet, MD, DrPH; et al. JAMA

## VI. Differences: Social and Economic Factors

The conditions that lay the foundations for the disparities in chronic conditions are possible outcomes of systemic barriers to health care, education, employment, housing, etc. African Americans in Saint Paul tend to have higher death rates for certain preventable conditions when compared to their White counterparts.

In Ramsey County, more particularly in Saint Paul, African Americans compared to Whites, tend to have poorer health, face more barriers accessing health care, and receive less than optimal care when treated for chronic disease. There are issues with healthy food access, availability of space for physical activity, and existing or historical policies that have created more inequities in health.<sup>26</sup> Part of Saint Paul’s history includes the intentional destruction of the Rondo neighborhood, a vibrant African American community, in order to build Interstate Highway 94 (I-94) in the 1960s. Homes and businesses were demolished, people were displaced, relationships were severed, and the community was given another reason to distrust local government officials. Health issues, economic situations, and generational historical personal trauma caused increased chronic disease rates in African Americans living in Saint Paul.<sup>27</sup>

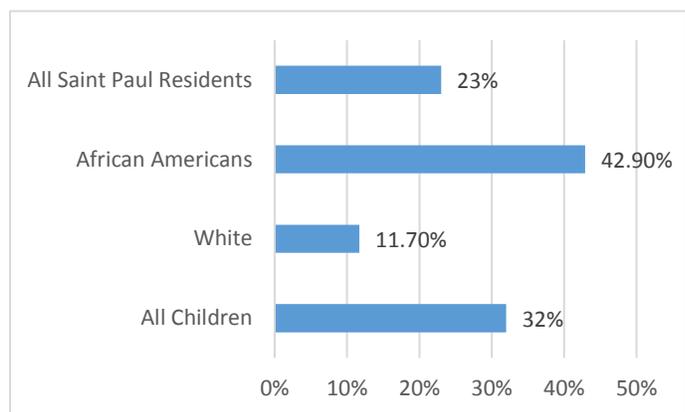
### Differences in Poverty and Income

The term cost-burdened in housing means that “30% or more of a family’s monthly gross income is dedicated to housing. People whose housing costs exceed this threshold of affordability are likely to struggle to pay for other basic needs, forcing difficult tradeoffs.”<sup>28</sup>

In Minnesota, 43% of African Americans are cost-burdened, whereas 25.4% of Whites are cost-burdened.<sup>29</sup> Additionally, U.S.-born African Americans in the Twin Cities have the lowest median income of all ethnic and racial groups, with a median household income of \$25,517, compared to \$70,900 for Whites.<sup>30</sup>

More specifically, 23% of Saint Paul residents live in poverty.<sup>31</sup> When this is separated by race,

**Figure 5: Saint Paul Residents Living in Poverty**



Source: United States Census Bureau

<sup>26</sup> Saint Paul- Ramsey County Public Health. Root Cause Analysis performed September 2016

<sup>27</sup> Saint Paul- Ramsey County Public Health. Root Cause Analysis performed September 2016

<sup>28</sup> Minnesota Compass, *Cost-Burdened Households*, Retrieved 3/16/17: <http://www.mncompass.org/housing/cost-burdened-households#1-6930-g>

<sup>29</sup> Minnesota Compass, *Disparities: Race*, Retrieved 8/8/16: <http://www.mncompass.org/disparities/race#1-13036-g>

<sup>30</sup> Minnesota Compass, *Disparities: Race*, Retrieved 8/8/16: <http://www.mncompass.org/disparities/race#7-9427-g>

<sup>31</sup> United States Census Bureau. Quick Facts. St. Paul, MN. Retrieved 3/2017: <http://www.census.gov/quickfacts/table/PST045215/2758000>

disparities are evident. The percentage of African Americans below the poverty line is 42.9%, whereas only 11.7% of Whites are below the poverty line.<sup>32</sup> Nearly 32% of all children in Saint Paul are living in poverty.<sup>33</sup> Figure 5 is a chart showing the percentage of Saint Paul residents living in poverty.

The Minnesota Student Survey (MSS) shows the dramatic differences in recipients of free and reduced price lunch at public schools, where eligibility for the program is determined by parental income. On average, 72% of Saint Paul children receive free and reduced lunches, compared to 46% in Roseville Area Schools, a first-ring suburb outside of Saint Paul. However, in Saint Paul Public Schools, poverty rates reveal an increase in disparities based on race: 76% of African American male and 80% of African American female students receive free or reduced price lunch, and 31% of White males and 33% of White females receive a free or reduced price meal at school.<sup>34</sup>

### Difference in Neighborhoods

It is important to pay attention to historical events that are still having an impact on residents. In the 1930s Rondo Avenue was at the heart of Saint Paul's largest African American neighborhood. The neighborhood was intentionally targeted for construction of the I-94 freeway in the 1960s. African Americans whose families had lived in Minnesota for decades made up a vibrant, vital community that was in many ways independent of the White society around it. The construction of I-94 shattered the connected community, displaced thousands of African Americans into a racially segregated city and a discriminatory housing market, and diminished a now-legendary neighborhood.<sup>35</sup> It was said that over 600 family homes and over 300 businesses were destroyed as a result of the I-94 construction with Rondo street itself virtually disappearing.<sup>36</sup> The community also felt the effects of racial redlining, in which mortgage lenders refused to offer loans in a figurative red line around minority neighborhoods so that African Americans could not purchase a home.<sup>37</sup>

*"There were properties where interest rates went up, and they were no longer able to afford them. So a lot of establishments were lost."*

*"All the Black owned businesses, from...the 50's...started to change, [by the] 80's they were empty buildings."*

– Anthony Ware, Rondo resident

In an interview with Mr. Anthony Ware, a long time and current Rondo community resident, reflected on the Rondo community and the changes that occurred with the building of the highway. Once, old Rondo neighborhood was a location where Hall of Fame Baseball players such as Dave Winfield got their start playing at the Old Oxford

<sup>32</sup> United States Census Bureau. Fact Finder. Retrieved 8/8/16: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

<sup>33</sup> United States Census Bureau. Quick Facts. St. Paul, MN. Retrieved 3/20/17: <http://www.census.gov/quickfacts/table/PST045215/2758000>

<sup>34</sup> Minnesota Department of Education. Minnesota Student Survey (MMS), 2013. Retrieved 3/20/17: <http://w20.education.state.mn.us/MDEAnalytics/Data.jsp>

<sup>35</sup> City pages, St. Paul map shows how I-94 cut through heart of city's African-American neighborhood. 8/19/14. Retrieved 3/20/17: <http://www.citypages.com/news/st-paul-map-shows-how-i-94-cut-through-heart-of-citys-african-american-neighborhood-6541556>

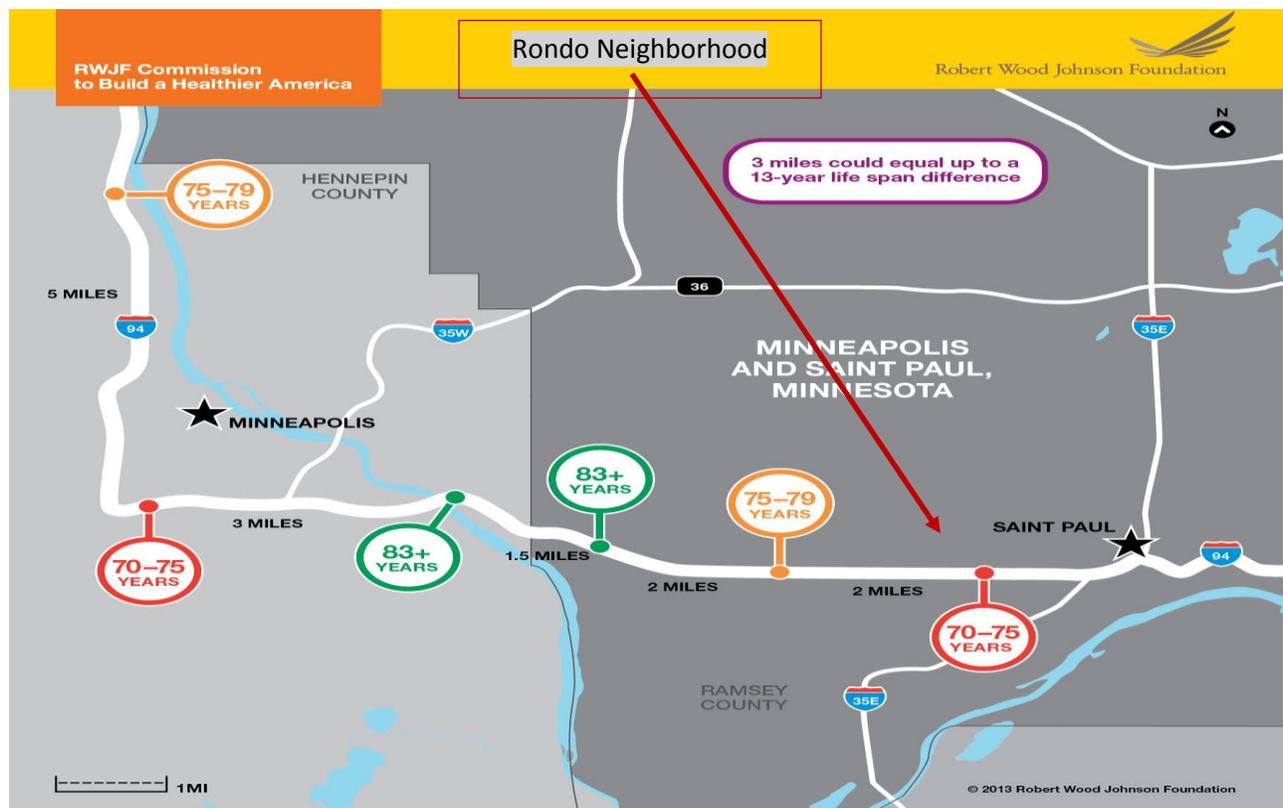
<sup>36</sup> Rondo Ave Inc (RAI), Reconciliation, Retrieved 3/8/17: <https://rondoavenueinc.org/reconciliation/>

<sup>37</sup> GIS for Sustainable and Equitable Communities. Racial Redlining: A Study Of Racial Discrimination By Banks And Mortgage Companies In The United States. Retrieved 3/20/17: <http://www.public-gis.org/reports/red1.html>

Recreation Center (now called Jimmy Lee). Soon property taxes rose and wiped out the remaining African American businesses resulting in more abandoned buildings and lost property. With the influx of drugs, not even churches — which were pivotal in keeping the remaining parts of the Rondo Community together with its congregation and leaders — could maintain enough influence. The remaining African American families, leaders, and elderly residents of Rondo, who survived the initial construction of the highway, then fled to the East Side of Saint Paul because they no longer felt safe or comfortable. The changes that drugs, crime, and the lack of an economic infrastructure in the neighborhood made it difficult to thrive.<sup>38</sup>

According to the Robert Wood Johnson Foundation, lifespan is based on neighborhood or location of where you reside.<sup>39</sup> As demonstrated in the Figure 6 below, the once-vibrant Rondo neighborhood now shows one of the lowest lifespans when compared to other areas of Saint Paul. Community members discussed some of the reasons for disparities noting that through historical and structural racism, communities of color have less access to health care, healthy eating, physical activity opportunities, and general resources as a whole.<sup>40</sup>

**Figure 6: Life Expectancy by Zip Code in Minneapolis and Saint Paul**



<sup>38</sup> William Moore interview with Anthony Ware. 3/18/17.

<sup>39</sup> Robert wood Johnson Foundation infographics, Metro Map of Minneapolis and St. Paul. Retrieved 8/31/15: [www.rwjf.org/en/library/infographics/minneapolis-map.html](http://www.rwjf.org/en/library/infographics/minneapolis-map.html)

<sup>40</sup> Saint Paul- Ramsey County Public Health. Root Cause Analysis performed September 2016

Investigating further into neighborhood differences, there are extremely concentrated areas of poverty in Saint Paul, where undue burdens of poverty exist in the more diverse neighborhoods. For example, in the Summit-University neighborhood, 36% of residents are African American, 30% of residents are living below the poverty line, and 42.6% of households are cost-burdened. Compared to another neighborhood only a few miles away, the Mac-Groveland area has similar population totals, but the majority of residents are White (85%), only 3% are African American, only 9.8% live below the poverty line, and 31.5% of households are cost-burdened.<sup>41</sup>

### Differences in Education

Between 2013-2016, only 38% of third-grade students of color in Minnesota achieved reading standards, compared to 66.5% of White third-graders.<sup>42</sup> For Saint Paul Public School students, the graduation rates reflect the large educational disparity. In 2015, the African American student graduation rate (in four years) was 69.9%, whereas during the same period, White students graduated at a rate of 82.9%.<sup>43</sup>

### Differences in Community Concerns

In 2013, SPRCPH conducted a Community Concerns survey (Figure 7) asking residents to identify and rank their greatest public health concerns.<sup>44</sup> The discrepancies are notable. The top three concerns for Whites in Saint Paul are distracted driving, driving under the influence, and childhood obesity, whereas African American residents are more concerned with poverty, unemployment, and lack of health care. This is a significant reflection of the disparities of basic human needs. According to Maslow's Hierarchy of Needs, it is hard to be concerned for health when housing, economic resources, and safety are missing.<sup>45</sup>

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<sup>41</sup> 2009-2013. American Community Survey 5-year estimates.

<sup>42</sup> MNCompass.org: Disparities: Race, viewed on 8/18/16 <http://www.mncompass.org/disparities/race#1-9515-g>

<sup>43</sup> Minnesota Report Card: [http://rc.education.state.mn.us/#graduation/orgId--1062500000\\_groupType--district\\_graduationYearRate--4\\_categories--black%7Cwhite%7CFRP\\_p--3](http://rc.education.state.mn.us/#graduation/orgId--1062500000_groupType--district_graduationYearRate--4_categories--black%7Cwhite%7CFRP_p--3) accessed on 8/18/16

<sup>44</sup> Community Health Concerns Survey, Ramsey County 2013, retrieved 3.9.17:

[https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/CHIP\\_report\\_rev\\_june2016.pdf](https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/CHIP_report_rev_june2016.pdf)

<sup>45</sup> Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.

**Figure 7: Top 10 Concerns Among Respondents Who Self-Identified in The Listed Groups <sup>46</sup>**

Survey Question	Black/African American	White
Distracted driving (such as cell phone texting)	8	1
Lack of health insurance	3	5
Abuse or neglect of children		8
Rape/sexual assault		
Violence in schools (bullying, fights)		
Lack of mental health services that are low/no cost		
Domestic violence (spouse or boyfriend/girlfriend)		10
Lack of quality housing that is affordable	4	
Poverty	2	7
Lack of medical services that are low/no cost		
Tobacco use by youth	9	4
Alcohol use by underage youth	10	6
Obesity (overweight) among children		3
Driving under the influence of alcohol or drugs		2
Unemployment	1	9
Youth gang activity		
Use of other illegal drugs (such as cocaine, heroin, meth)		
Spending too much time watching TV, using computers, playing videos		
Obesity (overweight) among adults		
Diabetes	7	
High blood pressure		
Stroke		
Alcohol abuse among adults		
Language/communication barriers in accessing health care services		
Tobacco use by adults		
Mental health problems among adults (such as anxiety, depression, illness)		
Lack of options for older adults unable to live alone		
Lack of culturally appropriate health care services		
Teen pregnancy		
Secondhand smoke exposure		
Lack of citizen preparedness for extreme weather or natural disasters		
High cholesterol		
Students dropping out of school	5	
Lack of social or family support	6	
Lack of dental services that are low/no cost		

<sup>46</sup> Adapted from the Community Health Concerns Survey, Ramsey County 2013, retrieved 3.9.17:  
[https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/CHIP\\_report\\_rev\\_june2016.pdf](https://www.ramseycounty.us/sites/default/files/Departments/Public%20Health/CHIP_report_rev_june2016.pdf)

### Differences in Healthy Eating and Physical Activity Opportunities

According to the United States Department of Agriculture (USDA), food insecurity is defined as “a household-level economic and social condition of limited or uncertain access to adequate food.”<sup>47</sup> In 2010, data showed that 12.4% of the population of Ramsey County were food insecure. In that same year, 18% of children in Ramsey County were food insecure, which is higher than any other metro county in Minnesota. Data also shows that 5.8% of the population had limited access to healthy foods.<sup>48</sup> In Saint Paul specifically, the African American community also faces lack of affordable healthy foods and lack of physical environments that allow spaces for physical activity.<sup>49</sup> Diving deeper into the data, 11<sup>th</sup> grade African American students in Saint Paul Public Schools reported skipping meals at an alarming rate due to their family not having enough money to buy food. For African American students, the rate was 10% for males and 7% for females. Compared to their White counterparts, only 3% of male and 5% of female students reported skipping meals due to financial constraints.<sup>50</sup> Using particular markers, such as vegetable intake to indicate healthy eating, Saint Paul Public Schools reported that at least some of their students did not have one vegetable in the last 7 days; 18% of African American males and 14% of females compared to 11% of White males, and 6% of females. However, in general, neither group had strong results of eating more than one vegetable per day: 41% of African American males, 36% of African American females, 51% of White males, and 50% of White females in the 11<sup>th</sup> grade.

The Centers for Disease Control and Prevention recommends 60 minutes of physical activity for students 7 days a week.<sup>51</sup> Students of color in Saint Paul Public Schools fall far short of this recommendation. Among African American students in the 11<sup>th</sup> grade, 60% of males and 36% of female report 4 or more days of activity, while 13% of males and 22% of females had no exercise during the past week. White 11<sup>th</sup> graders report that 63% of males and 43% of females have four or more days of activity, while 8% of males and 12% of females had no exercise in the past week.

## VII. Causes of the Unjust Conditions

Structural racism and historical trauma cause a lack of resources for the African American community in Saint Paul. Systematic policies and conditions in the community can result in higher incidences of poverty rates, lower education attainment, and increased stress levels. Historical policies and structural racism, such as redlining practices, and the intentional demolition of the strong Rondo neighborhood community for the construction of a highway, have resulted in many lasting effects, felt in the African American community for generations. Community members echoed the same sentiment by stating several economic and social factors, such as unemployment or underemployment, poverty, unjust hiring practices, as well as lack of

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<sup>47</sup> United States Department of Agriculture. Definitions of Food Security. Retrieved 6/10/2017: <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>

<sup>48</sup> Ramsey County. Community Health Assessment 2013. Retrieved 3/8/17: [https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community\\_health\\_assessment\\_030515.pdf](https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/community_health_assessment_030515.pdf)

<sup>49</sup> Saint Paul- Ramsey County Public Health. Root Cause Analysis performed September 2016

<sup>50</sup> Minnesota Department of Education. Minnesota Student Survey (MMS), 2013. Retrieved 3/20/17: <http://w20.education.state.mn.us/MDEAnalytics/Data.jsp>

<sup>51</sup> Centers for Disease Control and Prevention. Retrieved 3/20/17: <https://www.cdc.gov/nutrition/>

stable housing, strong/connected families, and a general lack of resources, have caused an increase in chronic disease rates. In addition, community members surveyed stated there was no investment in the community, and segregation played a large role of the disparities of chronic diseases.<sup>52</sup>

Finally, the lack of safe spaces for recreation and limited transportation options leading to an increase of chronic disease rates, as well as the lack of affordable healthy food available, were other causes of unjust conditions.<sup>53</sup> In Figure 8, community input was gathered and displayed in a visual word cloud; the process is documented in the next section.

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<sup>52</sup> Saint Paul- Ramsey County Public Health. Root Cause Analysis performed September 2016

<sup>53</sup> Ibid.



## VIII. Methodology

This HEDA report has been completed through analysis of several qualitative and quantitative methods. The qualitative method included using a community focus group comprised of members of an existing group that was working on improving the quality of care for African Americans for the SHIP healthcare strategy. Thirteen people participated in the focus group, primarily composed of U.S.-born African Americans from the Twin Cities area. The members who participated represent various professional backgrounds; however, the group consisted of people working within healthcare services in some capacity (see Appendix 2).

Focus group participants responded to the following problem statement: disparities in chronic disease in the African American community in Saint Paul, MN. They were then asked to identify the cause and effects of that problem by responding to the following questions:

- 1) Identify the causes of that problem
  - a. What are the conditions that create chronic disease in the African American community in Saint Paul?
  - b. What is unjust/unequal or targets a particular neighborhood and community?
  - c. Has there been an increase of chronic diseases over time? If so, why?
- 2) Identify the effects of that problem
  - a. Who is impacted?
  - b. What is the implication on the individual, family, or community?
  - c. What are the short- and long-term effects?
  - d. What are the local, state, or regional impacts?

Figures 9 and 10 show the responses to the above questions put into categories by cause and effects.

**Figure 9: Coding the *causes* of health difference identified in the qualitative data**

Food/ Food Access	Physical Environment/ Lack of Resources	Policy/Government: Local, City, State	Medical	Economic	Personal/Social
bad cooking/eating habits are passed on to next generation (youth)	limited or no transportation	grandparents are parenting	shorter life expectancy / life span	no income/unable to work (due to medical conditions)	grandparents are parenting
perpetual cycle of poor nutrition		loss of housing / homelessness lack of support decrease in quality of life more need for foster parents increase in school drop-out rates more divorce broken families hopelessness incarceration stress on the family strain on available resources rising social decay segregation lack of education	health issues are more advanced/expensive by the time help is received fetal alcohol exposure fetal drug exposure chronic fatigue depression drug and alcohol addiction obesity mental illness early death rate COPD Cancers (lung) stress High rates of premature births	poverty more divorce increased cost for medication less work productivity incarceration strain on available resources unemployment / underemployment lack of childcare	loss of housing / homelessness lack of support chronic fatigue decrease in quality of life depression drug and alcohol addiction broken families obesity hopelessness mental illness incarceration COPD cancers (lung) stress unconscious bias health literacy

**Figure 10: Coding the *effects* of health identified in the qualitative data**

Food/ Food Access	Physical Environment/ Resources	Policy/Government: Local, City, State	Medical	Economic	Personal/Social
fast food companies target our communities	lack of safe places for recreation	no investment in community	continued disease in family	Underemployment	trauma
unhealthy foods, lack of affordable healthy foods unhealthy eating	fear of community, unwilling to go out air pollution	homelessness lack of education	overweight depression	unemployment poverty	ACES
grocery store deserts	limited or no transportation	no support	stress	employment retention	stress
limited access to healthy foods	lack of time and/or money for physical activities	trust homelessness segregation class warfare	unidentified or untreated mental illness or behavioral health disorders lack of access to health care uninsured / underinsured smoking	hiring practices low wage jobs women-headed single parent families stress/anxiety, worried about finances no access to resources unstable housing homelessness	homelessness smoking unstable housing

## IX. Next Steps

Completion of the HEDA enhanced SPRCPH methodology for gathering community input and compiling data. This report will serve as a foundation for future work, especially within the African American community in Saint Paul. SPRCPH plans to gain further community input to direct SHIP work and funding priorities, based on policy, systems, and environmental changes identified around healthy eating and active living behaviors. Information gained outside these parameters will be communicated to other divisions within SPRCPH as well as external partners.

Efforts for communication of the HEDA report will reach members of the African American Planning Committee, the Community Leadership Team, and other community members to assist in planning future work, as well as gain other funding possibilities. This report will be delivered to several community organizations, as well as health care agencies and organizations. The hope is that by distributing to different community institutions, such as community centers, churches, and gathering sites, more funding and energy could be harnessed to help alleviate the root causes of the injustice as well as help identify solutions. HEDA version 2 will have more community input to identifying which strategies would be appropriate for implementation.

## X. Acknowledgements and Contact Information for Staff

This HEDA report was made possible through funding from the SHIP grant, as directed by the Minnesota Department of Health. SHIP focuses on making policy, systems, and environmental changes through the support of community partnerships to make all Minnesotans healthier.

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## XI. Appendices

### Appendix 1: Root Cause Analysis Activity

Given that Racism is a SDOH that impacts chronic disease in the African American Community in Ramsey County, the committee created the following lists of causes and effects. Some items appeared on both lists so the middle column was added.

Causes	Both	Effects
<ul style="list-style-type: none"> <li>• No investment in community</li> <li>• Fast food companies target black and minority communities</li> <li>• Continued disease in family</li> <li>• Underemployment</li> <li>• Unemployment</li> <li>• Lack of [safe] places for recreation</li> <li>• Fear of community, unwilling to go out</li> <li>• Lack of education</li> <li>• Overweight</li> <li>• Unhealthy foods, lack of affordable healthy food</li> <li>• Unhealthy eating</li> <li>• Environment</li> <li>• Air pollution</li> <li>• Depression</li> <li>• Grocery store deserts</li> <li>• No support</li> <li>• Trauma</li> <li>• Adverse Childhood Experiences (ACE) Study</li> <li>• Poverty</li> <li>• Retention (employment)</li> <li>• Hiring practices</li> <li>• Trust</li> <li>• Low wage jobs</li> <li>• Stress</li> <li>• Lack of time &amp; money for physical activities</li> <li>• Women-headed single parent families</li> <li>• Stress/anxiety – worried about finances</li> <li>• Unidentified or untreated mental/behavioral health disorders</li> <li>• Homelessness</li> <li>• No access to resources</li> <li>• Limited access to healthy foods</li> <li>• Lack of access to health care</li> <li>• Uninsured/underinsured</li> <li>• Smoking</li> </ul>	<ul style="list-style-type: none"> <li>• No or limited transportation</li> <li>• Segregation – White people don’t know or understand black lived experience</li> <li>• Stress</li> <li>• Unemployment</li> <li>• Unstable housing/homelessness</li> <li>• Poverty</li> </ul>	<ul style="list-style-type: none"> <li>• Shorter life expectancy</li> <li>• Health issues are more advanced/expensive by the time help is received</li> <li>• Grandparents are parenting</li> <li>• Fetal alcohol exposure</li> <li>• Fetal drug exposure</li> <li>• Impact on communities</li> <li>• No income / unable to work</li> <li>• Loss of housing</li> <li>• Poverty</li> <li>• Shorter lifespan</li> <li>• Lack of support</li> <li>• Chronic fatigue</li> <li>• Decrease in quality of life</li> <li>• More need for foster parents</li> <li>• All are effected – family, neighbors, schools, churches, communities</li> <li>• Increase in school dropout rates</li> <li>• Instability</li> <li>• Increased stress</li> <li>• Depression</li> <li>• More divorce</li> <li>• Drug and alcohol addiction</li> <li>• Broken families</li> <li>• Increased cost for medication</li> <li>• Less work productivity</li> <li>• Obesity</li> <li>• Hopelessness</li> <li>• Mental illness</li> <li>• Incarceration</li> <li>• Homelessness</li> <li>• Early death rate</li> <li>• COPD</li> <li>• Lung cancer</li> <li>• Strain on available resources</li> <li>• Stress on the family</li> <li>• Rising social decay</li> <li>• Class warfare</li> </ul>

<ul style="list-style-type: none"> <li>• Unstable housing</li> </ul>		<ul style="list-style-type: none"> <li>• Bad cooking/eating habits are passed to youth (generational learning perpetuates a cycle of poor nutrition)</li> </ul>
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Appendix 2: African American Planning Committee members who participated in the root cause analysis

Name	Affiliation
Bilal-Robym, Sameerah	African American Babies Coalition
Bush, Loretta	Stairstep Foundation
Greer, LaRone	MN Department of Human Services
Lewis, Candace	North Memorial Health Care
Mattson, Lisa	UCare
Miller, Ravyn	Medtronic
Njee, Brendabell	PhD candidate, Foster mom
Nichols, Eugene	African American Leadership Forum
Orstad, Heidi	HealthPartners
Philmon, Leslie	MN Department of Labor & Industry
Wigren, Jeffery	Natalis Outcomes
Williams, Audrey	Medica

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