Cardiovascular Health in the Southland

An Exploration of How Location and Race Impact Cardiovascular Disease Survival in Cook County

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September 2022

A Letter from Donna Miller, Cook County Commissioner, 6th District

As an elected official, I take my position very seriously and it is no secret that I am passionate about healthcare. It is my deepest desire to use my background in the healthcare field and to apply it to my current role as the Commissioner for the 6th District of Cook County. I have pushed since my very first day in office, to introduce all employees of the County to CPR training and stress the importance of this life-saving skill and stress that it is one of the best ways to increase survival and avoid death due to a cardiac event.

I am committed to overall health and bridging the gap in healthcare disparities within the Southland and throughout the entire County, advocating for increased awareness and action around Heart Disease, Diabetes, Asthma, Sickle Cell Anemia, as well as funding for a new mental health facility in the South Suburbs.

Through my many initiatives, including the distribution of this body of work, I aim to continue to shine the spotlight around the lack of access to healthcare in our County and the need for more resources to meet the needs of our community through preventative care to improve outcomes. The time has come to be proactive instead of reactive and take control of our own well-being and quality of life.

Everywhere I go, it is my goal to live and breathe wellness through exercise, healthy eating habits, access to care, education, advocacy, awareness, and wholeness. I hope this project opens your eyes to the importance of the issues discussed herein, and that it inspires you to make a move.

Yours in Health,

Donna Miller

Cook County Commissioner, 6th District

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ACKNOWLEDGMENTS

I cannot express enough thanks to my community and my constituents for their continued support and encouragement. I offer my sincere appreciation for the learning opportunities provided by this group of committed citizens. Thank you for electing me as your Commissioner.

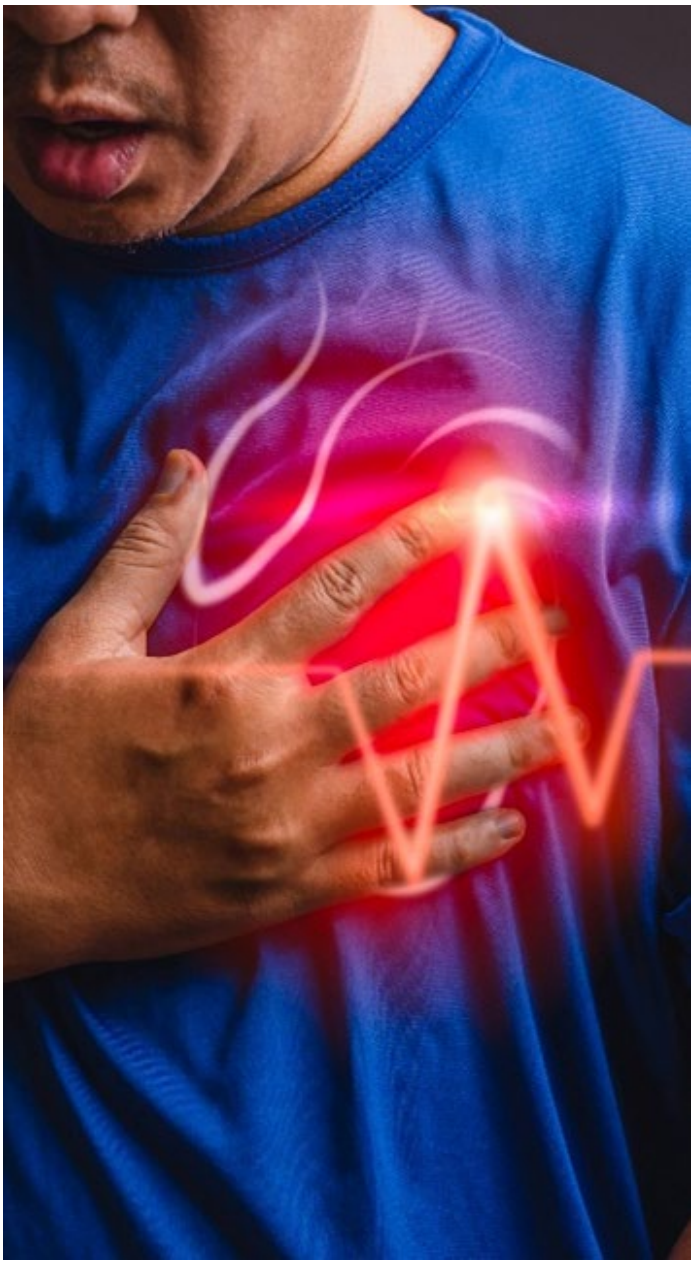
My completion of this project could not have been accomplished without the support of my staff: Brian Ceci, your expertise is unmatched. Michal thank you for your tireless efforts in support of this project. We wouldn't have gotten over the finish line without you. To the rest of Team Miller, thank you for keeping things running smoothly.

To my husband David, my deepest gratitude. Your encouragement at all times is much appreciated and truly needed. It is always a great comfort and relief to know that you are on my side. To my sons Donovan and Daniel, you are my inspiration and I love you both dearly.

EXECUTIVE SUMMARY

Cardiovascular Disease remains the leading cause of death within Cook County, Illinois, and throughout the entire United States.

Cardiovascular Disease accounts for more than a third of the deaths within the county. Cardiovascular Health in the Southland: An Exploration of How Location and Race Impact Cardiovascular Disease Survival in Cook County was an analysis undertaken by the Office of Cook County Commissioner Donna Miller, 6th District, to better measure the high Cardiovascular Disease (CVD) death rates within Illinois and Cook County. By looking at where within the 6th District high CVD death rates exist, we have been able to establish different discernible patterns within those populations based on location and race.



This paper examined data collected by the Cook County Medical Examiner (CCME) and the Cook County Department of Public Health (CCDPH) to determine what areas within the 6th District have high death rates due to Cardiovascular Diseases and how this corresponds with the racial demographics of the district. The data was used to further pinpoint where the County and its partners should be designating resources and how we can best achieve a healthier and more equitable community. Our research targeted three main factors to observe:

Type of CVD

Location within the South Suburban 6th District

The racial make-up of the Area's Population

EXECUTIVE SUMMARY

While at first glance, the white population within the 6th District and Cook County are more susceptible to death due to cardiovascular diseases, upon closer examination the Black population accounts for a smaller percentage of the total population than their white counterparts, but the death rates remain substantially high. Our findings demonstrated that overall, CVD-related deaths occur more frequently in CCDPH's South jurisdiction, which has a substantial Black population, compared to the Southwest jurisdiction, whose population is predominantly white.

With a new focus on addressing high CVD rates through a health equity lens, it is recommended that Cook County plan to develop a new community-driven, place-based approach focused on improving community health through concentrated strategies targeting three key social determinants of health:

Greater Access to High-Quality

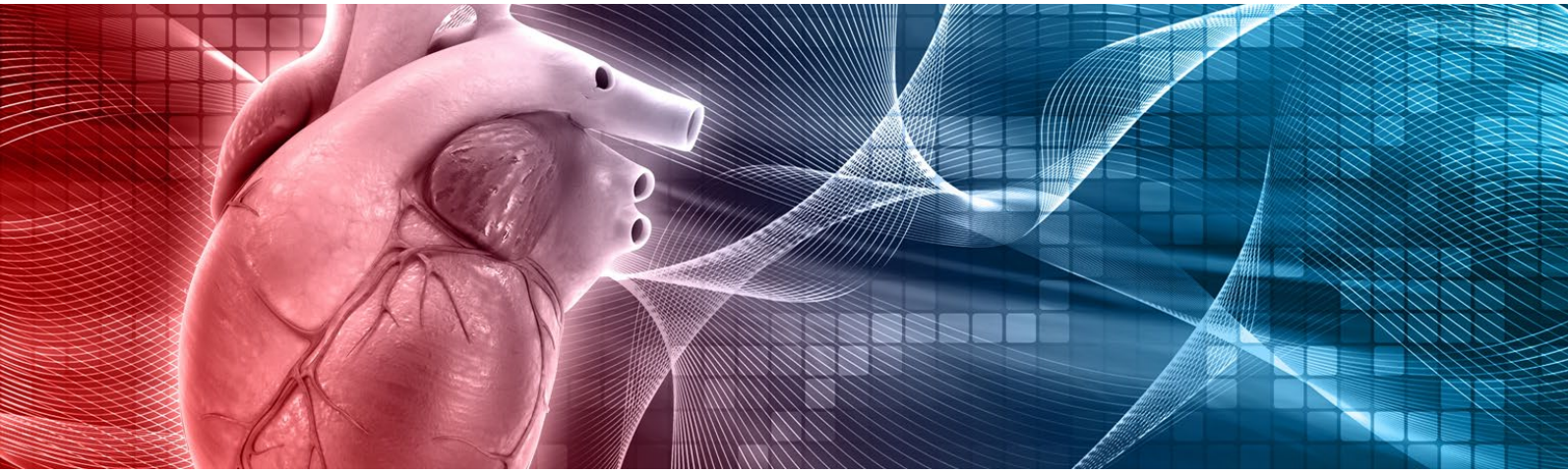
Healthcare

Enhanced

Food Security

Improving

Built environment & increasing active transportation.

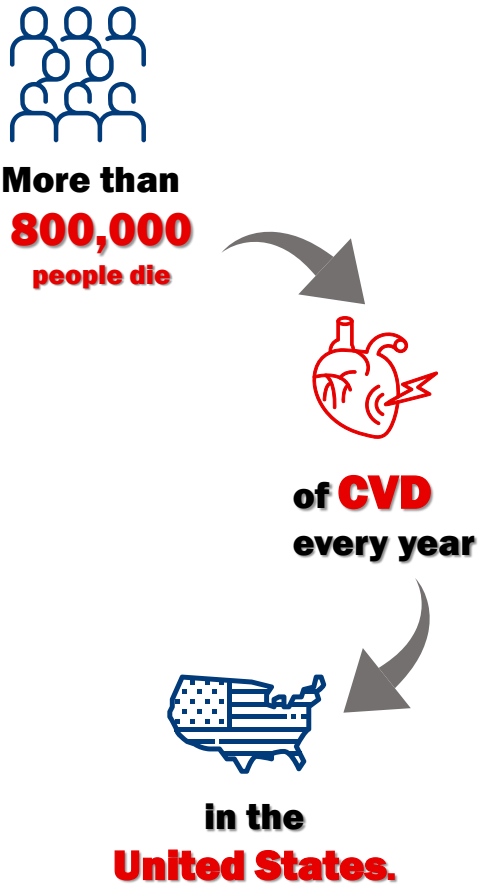


In pursuit of achieving healthier and more equitable communities within South Suburban Cook County, Cardiovascular Health in the Southland pursued and identified tangible approaches to readdress root causes of structural racism, class injustice, and other fundamental causes of health inequality by closely examining our communities' cardiovascular health. Health equity is synonymous with racial equity and by aggressively tackling cardiovascular health through a deliberate and well-resourced strategy, the 6th District and the county will foster far healthier communities.

I. INTRODUCTION

The long-term success in the community and economic development throughout the district requires incorporating health within the strategic leveraging of resources that stimulate sustainable community investment, business growth, affordable housing, and regional integration-focus planning.

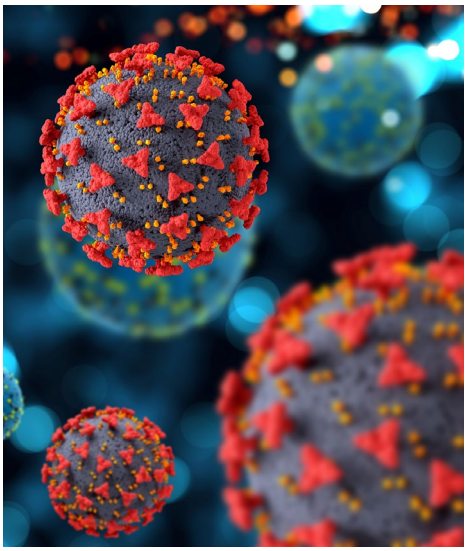
Health has been traditionally and incorrectly defined as principally an individual's responsibility. However, per the World Health Organization, health is defined as a social phenomenon, i.e., emphasizing health as a topic of collective social justice and not solely an individual's responsibility. For communities in the 6th District to thrive, efforts need to be intensified to understand the impacts and causes of health, specifically cardiovascular health, on the area's population.



- Cardiovascular disease (CVD) is the leading cause of death within Cook County, Illinois, and throughout the entire United States.
- CVD is an umbrella term defined as a group of disorders of the heart and blood vessels often resulting in heart attacks and strokes. Heart attacks and strokes are usually acute events and are mainly caused by a blockage that prevents blood from flowing to the heart or brain.
- More than **800,000 people die** of CVD every year in the United States. Heart Disease refers to a type of cardiovascular disease. All heart diseases are cardiovascular diseases, but not all cardiovascular diseases are a heart disease. Heart disease is a catch-all phrase that refers to a variety of conditions that affect the heart's structure and function.
- The most common type of heart disease is coronary heart disease (CAD), which affects the blood flow to the heart.

I. INTRODUCTION

Since the outbreak of COVID-19, there have been even higher mortality rates due to the effect the disease has had on individuals with pre-existing health conditions, primarily those which are cardiovascular-related.



According to the U.S. Centers for Disease Control and Prevention (CDC), COVID-19 was the third leading cause of death in the U.S. in 2020, while heart disease remained the leading cause. The American Heart Association found that the already sizable Black-White life-expectancy gap has now grown to over ten years due to COVID-19. Within the state of Illinois, the Illinois Department of Public Health (IDPH) reports that heart disease and stroke are, respectively, the first and third leading causes of death, and also the major causes of disability in Illinois. In 2017, **there were 25,393 deaths in Illinois** due to heart disease and 6,021 deaths due to stroke. Deaths due to heart disease and stroke combined (31,414) represent almost 29 percent of all deaths in Illinois in 2017 (109,726).

Risk factors of CVD include

- **High blood pressure**
- **Tobacco use**
- **Poor nutrition**
- **Diabetes**
- **High cholesterol**
- **Physical inactivity**
- **Overweight/Obesity**
- **Stress**

However, deeper exploration of the further implications of these defined risks is critical. In particular, we must ask:

1. **How "risk factors" develop in an individual;**
2. **How do we further determine what is the State's responsibility for ameliorating the disproportionately high percentage of risk factors within a community?**

I. INTRODUCTION

Current recommendations for reducing the risk of CVDs and heart disease are: smoking cessation, participating in physical activity, maintaining proper weight, reducing stress, eating a balanced diet, visiting healthcare providers, checking blood pressure regularly, and limiting the intake of caffeine and alcohol. Yet, despite ongoing public health education efforts, Illinois has a higher prevalence of the risk factors of high cholesterol, obesity, poor nutrition, and excessive alcohol use compared to other states and the overall national average.

To better understand the high CVD death rates

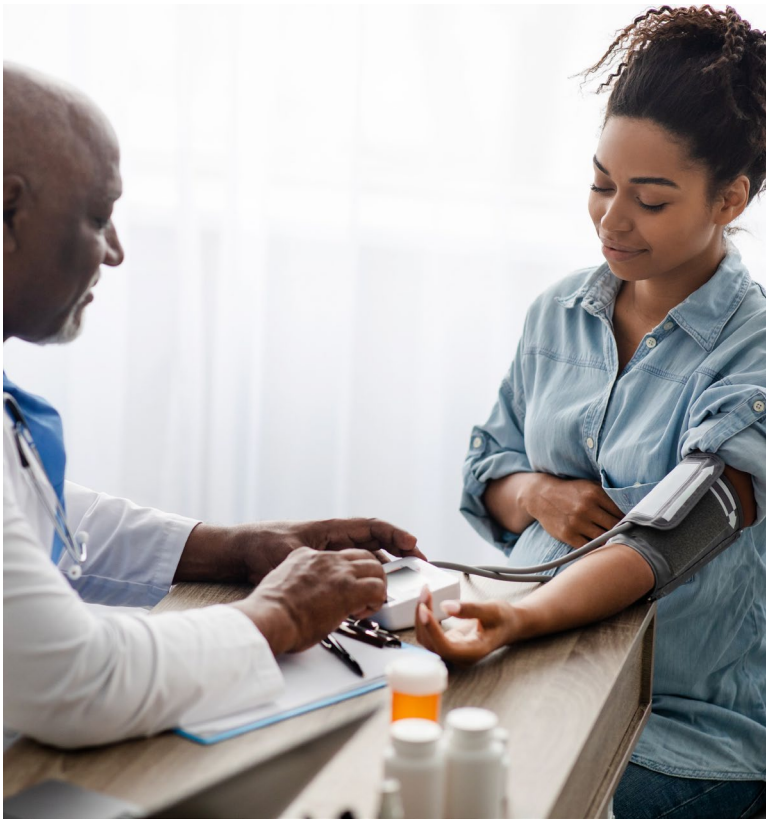
- Among populations of the 6th District and southern Cook County, health needs must be framed through a perspective that centers the historic racial inequalities of the U.S., Illinois, and Cook County.
- It has been documented that in Chicago,

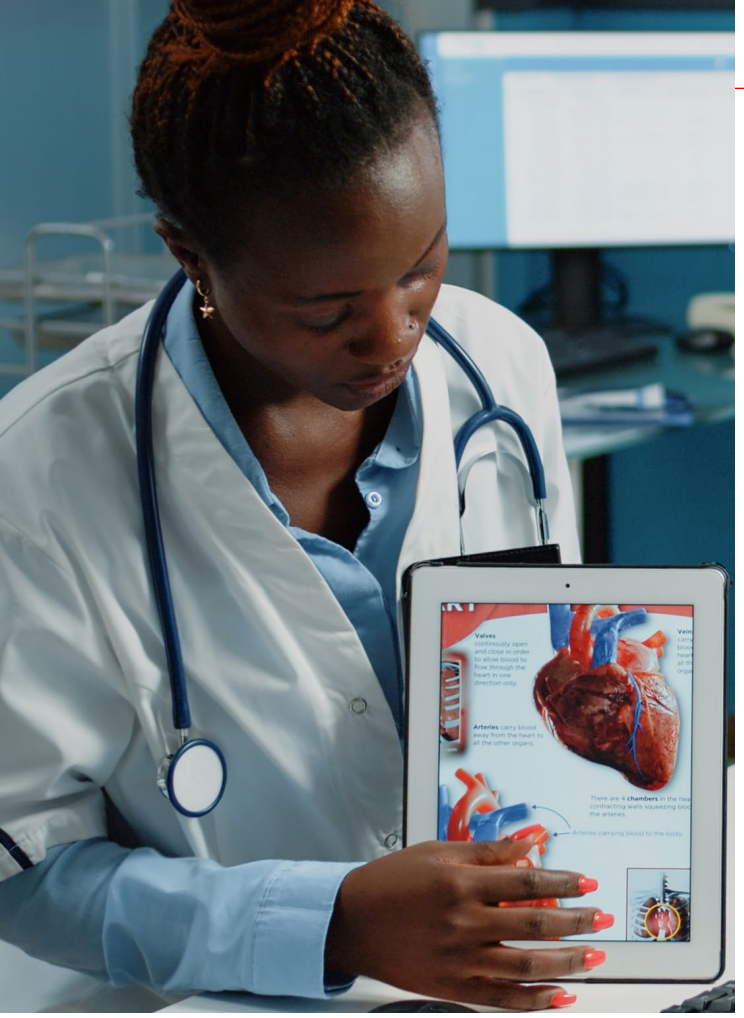
Black Chicagoans live **8.8 years** fewer than their white counterparts,

with 4.3 of those **8.8 years** attributed to (CCDPH, 2020) **chronic disease.**

It can be hypothesized that patterns similar to Chicago will also materialize within the district and the county as a whole. These important data points illustrate how imperative it is to share with 6th District residents how this data impacts our communities.

The **6th District** has historically consisted of the south and southwest suburbs of the City of Chicago. Most of the census tracts with low educational attainment and low food access are located in the southern portion of Cook County, which has a high concentration of minority communities (U.S. Census Bureau, 2021). The Alliance for Health Equity found in their 2019 *Community Needs Assessment for Suburban Cook County* that socioeconomic conditions in neighborhoods of concentrated poverty, which are predominantly Black and Latino, make it more difficult for people in these communities to live healthier, longer lives.





These chronically high mortality rates call upon us to address community needs through a health equity perspective. The World Health Organization defines health equity as the "absence of unfair and avoidable or remediable differences in health among social groups". (WHO, 2021) Furthermore, health calls for just opportunities, conditions, resources, and power for all people to be as healthy as possible. This requires the elimination of obstacles to health, such as poverty, discrimination, and their consequences, including perceived and real powerlessness and lack of access to good jobs with equitable pay, good quality education, housing, safe neighborhoods, and high quality and safe health care that is easily accessed.

Beyond location within the district, we also examined the death rates due to CVD by race and ethnicity. A fundamental cause of health inequality associated with the imbalances in political power throughout society is structural racism

Structural racism functions to normalize and legitimize cultural, institutional, and personal hierarchies and inequity that routinely advantage whites while producing cumulative and chronic adverse health outcomes for people of color. Structural racism perpetuates residential segregation, concentrated poverty, disinvestment in neighborhoods, and targeting neighborhoods for toxic waste—all issues related to serious health outcomes. (NACCHO 2016).

Health equity is synonymous with racial equity and by aggressively tackling cardiovascular health through a deliberate and well-resourced strategy, the 6th District and the county residents will foster far healthier communities.

II. THE CHALLENGE

Cardiovascular diseases disproportionately affect people of color compared to their white counterparts in Cook County. The set of questions below was used to address this historic health inequality within the 6th District region, specifically regarding cardiovascular disease.

HOW

- **How does location impact an individual's CVD survival rate**
- **How can Cook County's government and health system work together to help close the cardiovascular health disparity?**

WHAT

- **What subpopulations, in terms of race/ethnicity, are disproportionately at risk of high CVD death rates?**
- **What resources currently exist to combat cardiovascular diseases within Cook County and the 6th District, and what specific areas should we be investing in further to benefit our community's overall health?**

This analysis utilized existing reports on health and health equity including CCDPH's WePlan2020, Alliance for Health Equity's Community Assessment of Chicago & Suburban Cook, American Medical Association's Equity Strategic Plan, and Cook County Health's Impact 2023 Strategic Plan to champion and advocate for the creation of a plan surrounding cardiovascular health as an integral part of its overall health equity strategy.

In pursuit of a more healthy and equitable community, we seek to find tangible ways to readdress root causes of structural racism, class injustice, and other fundamental causes of health inequality by analyzing our communities' cardiovascular health.

To accomplish this, we must first begin to eliminate the narrative within our government and our communities that health is an individual problem and consequently, the exclusive result of one's own actions. This paper will examine the cardiovascular disease patterns within the 6th District as a way to readdress and correct the root causes of cardiovascular health inequalities and the lacking existing systems of policy, practice, and public education.

III. THEORY OF CHANGE

Cardiovascular health will improve when access to high-quality healthcare, food security, and access to safe outdoor/indoor spaces for physical activity are addressed at the local level through a trauma-informed health equity policy.

Cook County government must work diligently with community partners to study the strengths, resources, and cardiovascular health knowledge of our communities through an anti-racist, trauma-informed lens.

> **"Research demonstrates that neighborhood conditions—the quality of public schools, housing conditions, access to medical care and healthy foods, levels of violence, availability of exercise options, and exposure to environmental degradation—powerfully predict who is healthy, who is sick, and who lives longer."**
>
> *(Joint Center for Political and Economic Studies Health Policy Institute, 2012, p.2)*

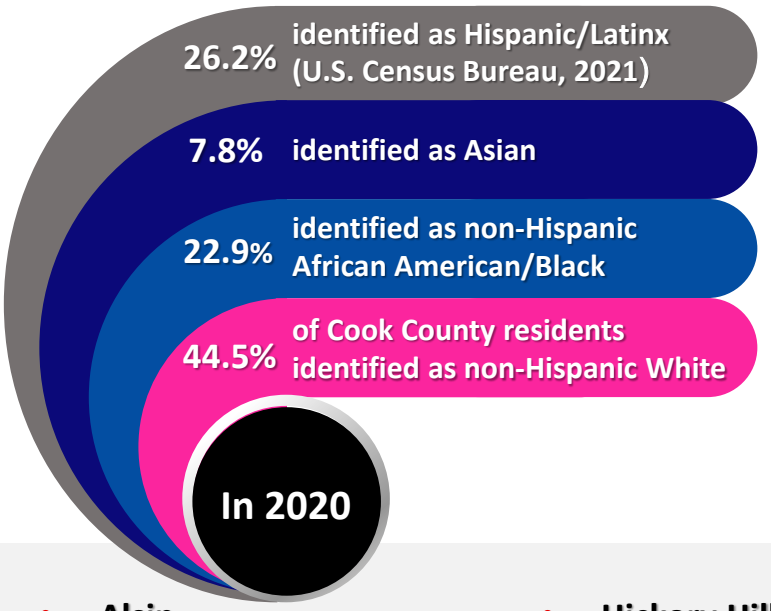
Accordingly, data analysis and resulting policy decisions need to be formed through trauma-informed, community-driven frameworks of understanding structural racism, class disparity and injustice, and other fundamental causes of health inequalities.

The trauma-informed framework incorporates the science of early adversity and promotes thriving for individuals' families, communities, and systems. Trauma may result from a single event, a series of events, or a set of circumstances experienced by an individual as physically or emotionally harmful, therefore overwhelming one's ability to cope. It has been found to have lasting adverse effects on an individual's functioning and its impacts on mental, physical, and social-emotional well-being across one's lifespan (IL ACES Response Collaborative). In addition, trauma is a universal experience affecting all groups, but it also disproportionately burdens historically marginalized groups. When the burden of trauma remains unaddressed, existing disparities widen and groups that experienced historical trauma are exposed to new traumatic events.

Cook County government must collaborate with vulnerable communities to build trauma-informed policymaking to successfully address disparities and promote a more equitable society without retraumatizing (IL ACES Response Collaborative). In working to close the pronounced cardiovascular health disparity, we also must be motivated to address historical trauma while promoting resilience through community-based initiatives.

IV. OVERVIEW

As of 2020, the U.S. Census Bureau estimated a total population of 12,812,508 for Illinois. 61.4% of the population identified as White/alone and 14.1% of Illinois residents identified as Black/alone (U.S. Census Bureau, 2021).



~13 million

people, **5,275,541** were estimated to be **Cook County residents.**

Bordering parts of Will County, the 6th District consists of approximately 300,00 residents and roughly 119.73 square miles of Cook County; It contains the following South and Southwest suburban municipalities:

- Alsip
- Bedford Park
- Blue Island
- Bridgeview
- Chicago Heights
- Chicago Ridge
- Country Club Hills*
- Crestwood
- Dolton
- Flossmoor
- Ford Heights*
- Frankfort*
- Glenwood
- Hickory Hills
- Homewood
- Justice
- Lansing
- Lynwood
- Matteson
- Midlothian
- Oak Forest
- Oak Lawn
- Orland Hills
- Orland Park
- Palos Heights
- Palos Hills
- Park Forest
- Richton Park
- Sauk Village
- South Chicago Heights
- South Holland
- Steger
- Thornton
- Tinley Park
- University Park
- Worth

* Municipalities within 6th District that are primarily occupied by Cook County Forrest Preserves with Minimal populations.

It is well-documented how Chicago and the surrounding suburbs have historically been segregated by race and class. The population patterns of the 6th District consistently mirror this narrative. The South and Southwest suburbs—often referred to as the "Southland"—are home to much of the region's Black suburban population, with the overwhelming majority residing along and east of Interstate 57. The south suburbs are also home to the highest Black homeownership rates in the country, with five of its communities ranked in the top ten in 2018 (Chicago Southland Chamber of Commerce). In addition, the region is home to significant Polish, Lithuanian, Palestinian, and Mexican populations.

Within the Southland, the northernmost parts consist of a predominantly white population (see Figure 1). As the district moves further south the Black population grows exponentially. The 6th District consists of eight townships and 36 municipalities. Of the 36 municipalities, 32 have large enough populations for demographic analysis. With respect to the racial makeup of the communities, within the 6th District, 18 out of the 32 municipalities represented have predominantly white populations and 11 municipalities have a predominantly Black population.

Over 40%

White (Non-Latinx)

Alsip, Bridgeview, Chicago Ridge, Crestwood, Hickory Hills, Homewood, Justice, Midlothian, Oak Forest, Oak Lawn, Orland Hills, Orland Park, Palos Hills, Palos Heights, Steger, Tinley Park, Thornton, Worth

Between 30%- 40%

White & Black Populations

Blue Island, Lansing, South Chicago Heights

Over 40%

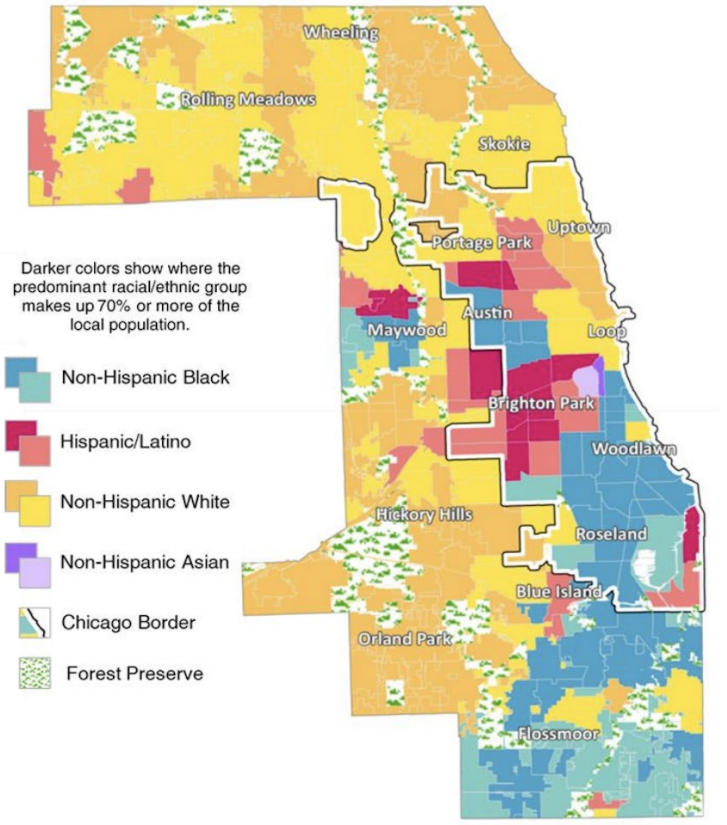
Black (Non-Latinx):

Dolton, Flossmoor, Glenwood, Lynwood, Matteson, Park Forest, Richton Park, Robbins, Sauk Village, Chicago Heights, South Holland

FIGURE 1

Predominant racial and ethnic groups in Cook County, IL (2016, 5-year estimates)

Provided via Alliance for Health Equity



U.S. Census Bureau, American Community Survey, 2016 5-year estimates

As the population shifts from the Cook County Department of Public Health's (CCPH) Southwest jurisdiction to its South jurisdiction, there is a noticeable increase in the Black population, now representing over 50%, and a corresponding decrease in the White population (below 50% of the population).

Since 2000, Cook County has experienced a population trend of Black households moving to suburbs and small cities. Between 2000-2010, the Black population in Chicago decreased by over 15% and increased 18% in suburban Cook County (SCC). With this shift, a trend of the suburbanization of poverty has emerged (Alliance for Health Equity, 2019).

V. METHODS OF RESEARCH

This paper examined data collected by the Cook County Medical Examiner (CCME)[1] and the Cook County Department of Public Health (CCDPH) to determine what areas within the 6th District have high death rates due to cardiovascular diseases and how this corresponds with the racial demographics of the district. We planned to use the data provided to further pinpoint where the County and its partners should be designating resources and how we can best achieve a healthier and more equitable community.

During our research, we targeted three main factors to observe:

Type of CVD | **Location** | **Race/Ethnicity**

To maintain a controlled universe directly representative of the 6th District, townships, and municipalities outside of the district were removed from our data universe, including Chicago and the rest of Suburban Cook County. Furthermore, all primary causes unrelated to cardiovascular health were removed, as well as any deaths with COVID-19 as a contributing factor. Only deaths classified as "Natural" with a cardiovascular-related primary cause were included. By creating a smaller data universe, we were able to eliminate other contributing factors of health to the 6th District and isolated a way to look directly at the impact of location and race on cardiovascular survival.

Moreover, our research must take into account the risk of those in the dataset. People of color are historically at risk of being undercounted within the census data, so we must take into account how a population breakdown based on race probably undercounts the actual racial/ethnic breakdown of the 6th District and the individual townships and municipalities within. Additionally, the data provided by the Office of the Cook County Medical Examiner lacks uniformity in disease classification, making it more difficult to study results by primary cause, particularly the attributing specific cardiovascular disease. Death data overall tells less of a story of health inequality, because survival rates and the racial makeup of those results appear inconclusive.

ME database represents the cases referred to and accepted by the 6th District office. It does not represent all deaths that have occurred in Cook County. For example, the 6th District staff handled 16% of all Cook County deaths in 2019.

Also, we are left questioning what resources were provided for survival and where exactly those resources were previously designated. The CCME database represents the cases referred to and accepted by their office. It does not, however, represent all deaths that occurred in Cook County. For example, in 2019 the Medical Examiner's office handled 16% of all Cook County deaths. Based on this, we must look at the underlying factors that contribute to a case initially being sent to the CCME and consider the overall reach of health inequality.

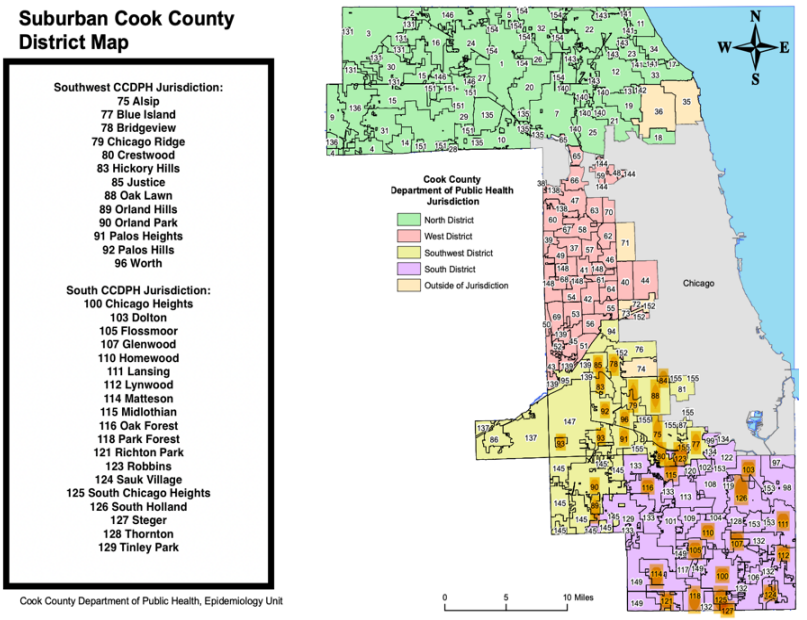
Health inequalities are systemic and result from the unjust distribution of underlying determinants of health, including access to health care. Racism structures opportunity and assigns value based on how a person looks resulting in conditions that unfairly advantage some and unfairly disadvantage others (American Public Health Association, 2019). The CCME is given jurisdiction to investigate any human death within a broad range of categories such as criminal violence, suicide, accident, and sudden deaths under apparent good condition; however, there is no requirement for the investigations to descriptively represent the racial/ethnic make-up of Cook County. In 2019, there were 41,317 deaths in Cook County and of that 13,758 were investigated by the Office of the CCME. Therefore, the role of race and ethnicity should be considered to have a profound impact on care at all levels, including in death.

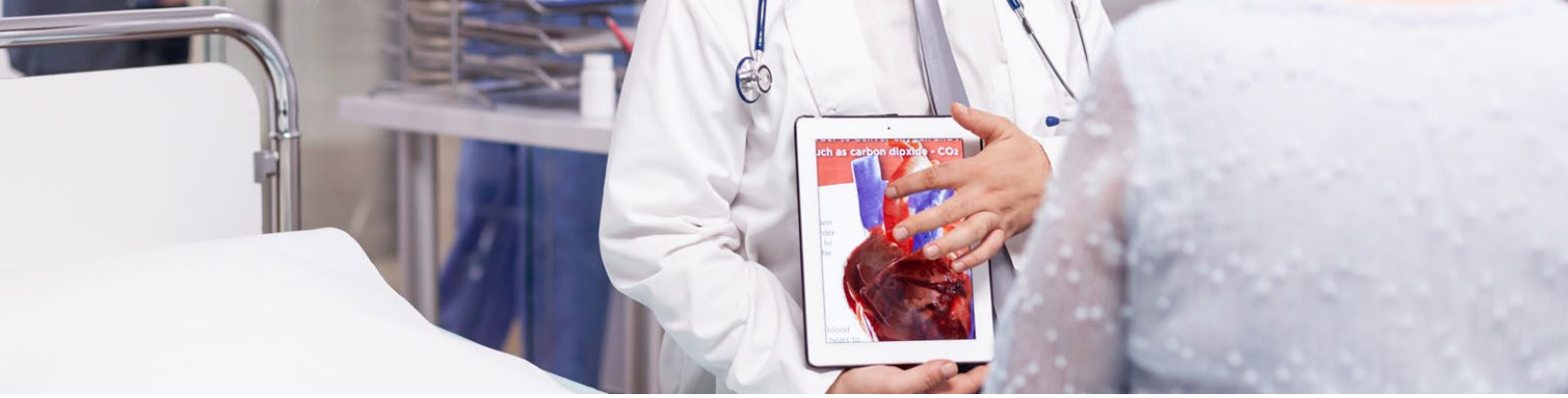
According to the census, 44.5% of Cook County residents identify as non-Hispanic white, while about a third of that, 22.9%, identify as non-Hispanic black (U.S. Census, 2021). The data provided by the CCME's office reported a total of 5,107 deaths in suburban Cook County due to cardiovascular diseases between 2014 to 2021.

Of the cases reported to the CCME's office, 3,659 (71.6%) of total deaths attributed to CVDs were identified as white and 1,141 (22.3%) were identified as Black. This trend mirrors the general race population trends of Cook County—with the CCME data's white population 20%+ from the census and the Black population within one percentage point. Of the 5,107 deaths attributed to CVDs, 1,550 of those deaths were individuals who lived within the townships/municipalities that comprise the 6th District (approximately 30%). Of those 1,550 deaths, 67.68% of individuals were white and 30.97% of deaths due to cardiovascular disease were Black. The Black death rate is approximately 8% higher in the 6th District compared to the county.

FIGURE 2

Map of Suburban Cook County



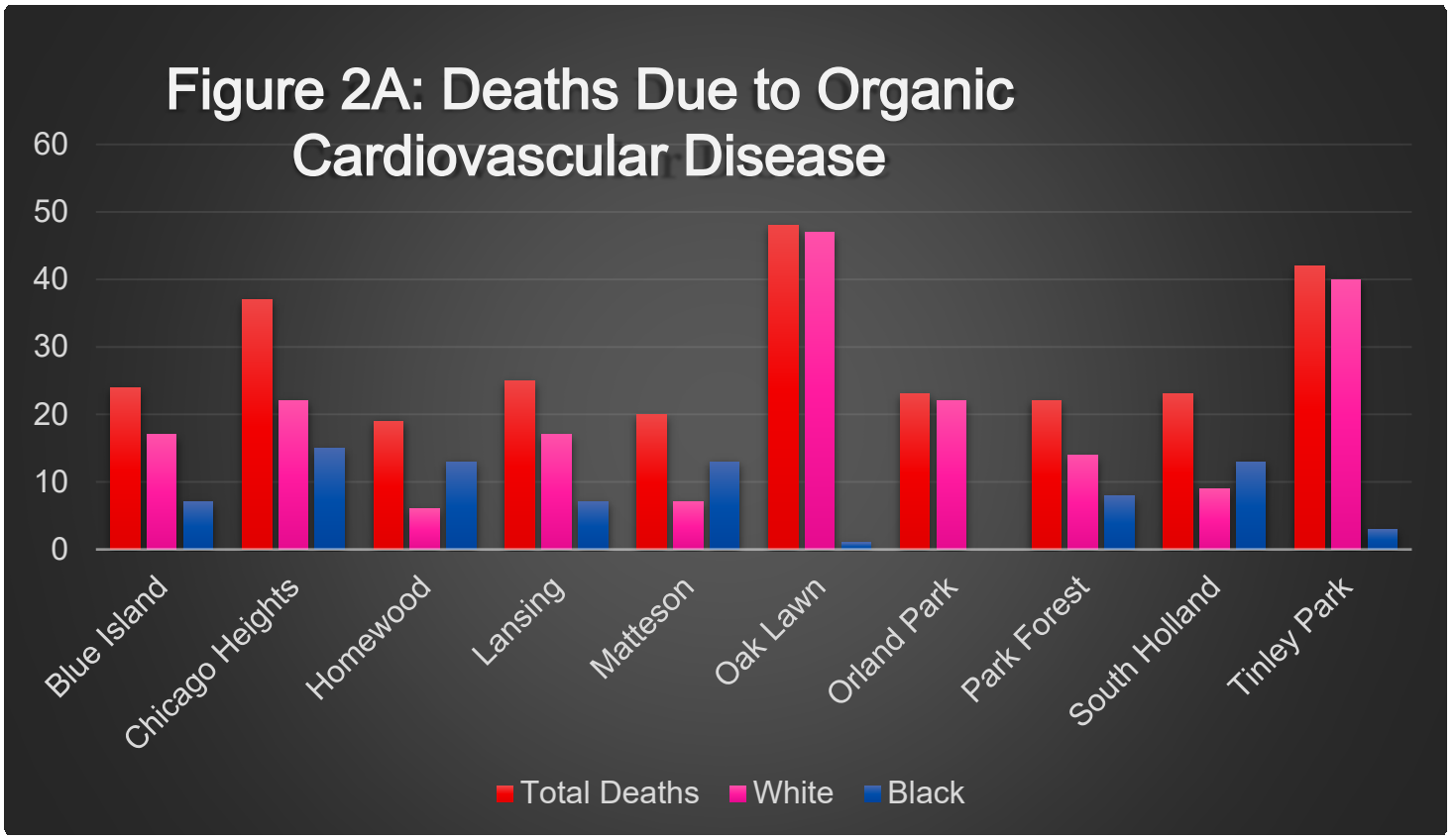


We then identified the number of deaths attributed to cardiovascular diseases (CVDs) in each township/municipality that is in the 6th District and focused further on the areas where over 3% of cardiovascular deaths occurred. Higher CVD deaths were attributed to:

Alsip	Blue Island	Chicago Heights	Homewood	Justice	Lansing	Matteson
3.2%	(5%)	(6%)	(3.16%)	(3%)	(3.26%)	(3.6%)

Oak Lawn	Orland Park	Park Forest	South Holland	Tinley Park
(7.9%)	(5.7%)	(3.7%)	(3%)	(5.7%)

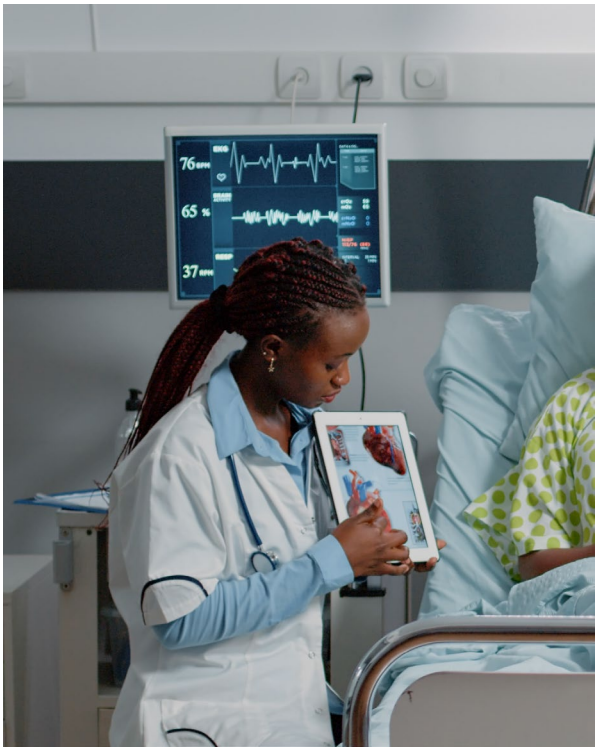
All represent the areas within the 6th District with the highest CVD death rates. These findings directly correspond to townships/municipalities with the largest populations in the 6th District.



Data provided via Cook County Medical Examiner Case Archive, 2014 to 2021

V. METHODS OF RESEARCH

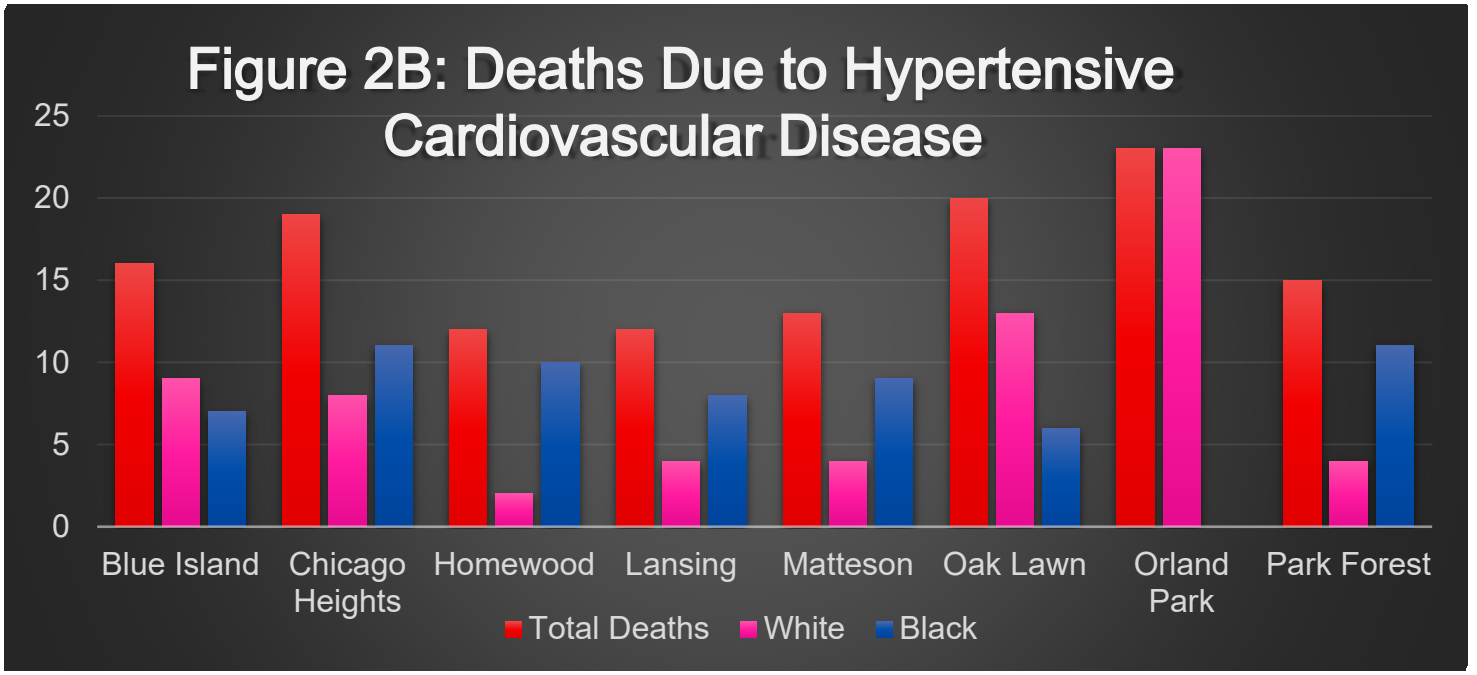
Next, we further broke down the data provided by the CCME and examined the patterns of location and race/ethnicity on cardiovascular death through three distinct cardiovascular diseases – Organic Cardiovascular Disease, Hypertensive Cardiovascular Disease, and Hypertensive-Arteriosclerotic Cardiovascular Disease, to examine if there are race trends within individual diseases. Within our CCME data examination, these three primary causes were selected due to their high prevalence. We selected distinct areas within the 6th District to analyze based on the highest numbers of deaths contributing to the primary cause.



More trends appear upon further breakdown of death due to primary cause. We again chose to look at trends within a smaller population pool; in this case, we looked at townships/municipalities that account for 4+% of the total deaths due to each primary cause within the district. Figure 2A demonstrates the breakdown of deaths due to Organic Cardiovascular Disease by race. It should be noted, for almost all the townships/municipalities the death rate for African Americans is substantially higher than the percent of the population they represent. We notice a higher rate of white death amongst the largest populations that are substantially white (i.e., Oak Lawn, Orland Park, and Tinley Park).

The remaining 7 populations with the highest death rates are predominantly Black or have Black and white populations that hover around the same percentage. Notably, Homewood is an area with a close Black-white population (37% and 51%, respectively). Of the 19 deaths that occurred between 2014-2021 that were attributed to Organic Cardiovascular Disease African Americans accounted for 68.42% of the deaths.

Figure 2B illustrates that this trend is not distinct for Organic Cardiovascular Disease. In a breakdown of deaths attributed to Hypertensive Cardiovascular Disease, we see a substantially higher black death rate compared to the national average. Again, two of the primary white neighborhoods with substantially large populations are present (Orland Park and Oak Lawn), but again the remaining 6 townships/municipalities account for heavily Black areas or mixed Black-white areas.



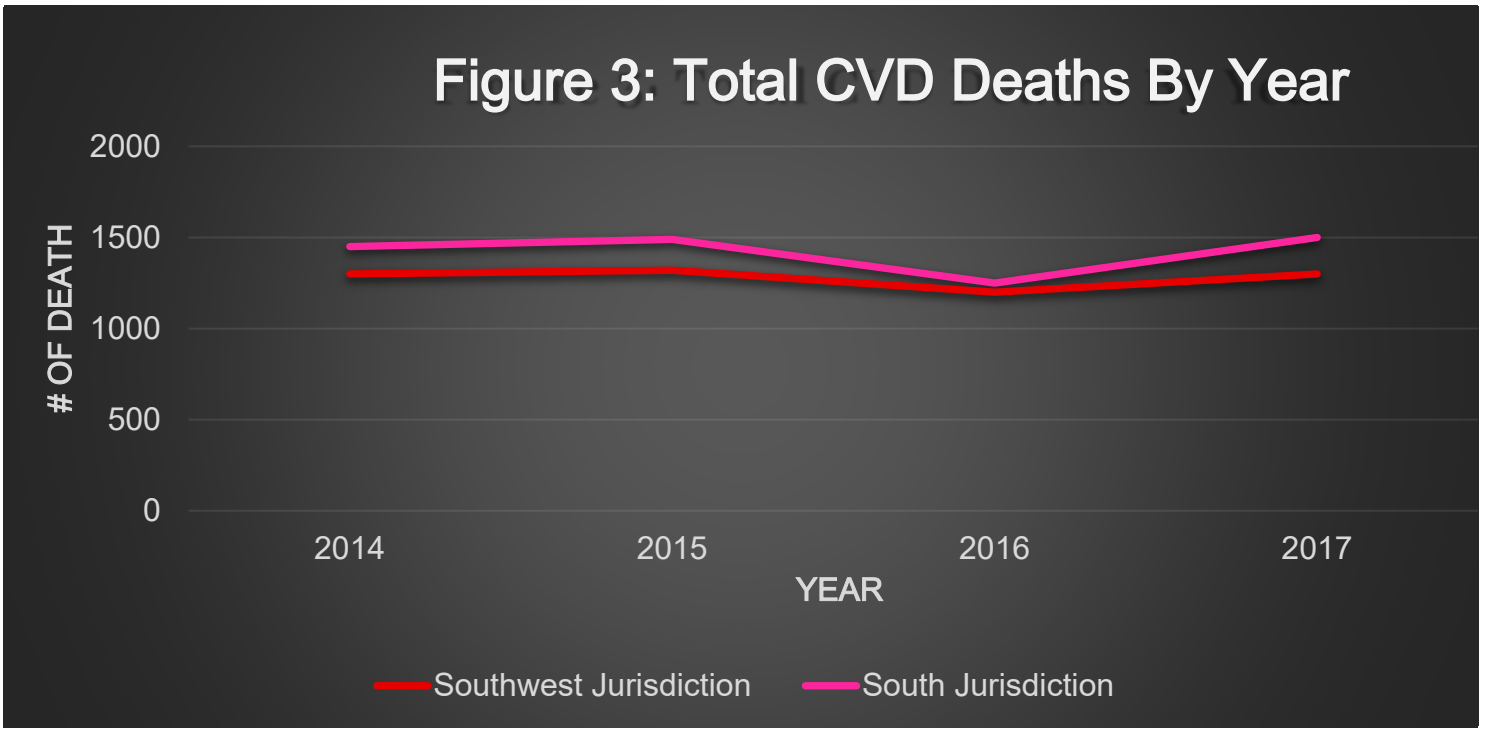
Data provided via Cook County Medical Examiner Case Archive, 2014 to 202

It is important to note that the white population within the 6th District and Cook County is approximately 3-times larger than the Black population. To establish a pattern of cardiovascular death, we must initially look at the overall population trends of the district. While at first glance it appears that the white population is more susceptible to cardiovascular death; however, the percentage amounts do not allow for comparison because the Black population is much smaller and their death rates remain higher.

These initial findings are far from painting a complete picture. According to Figure 3, more deaths occur within the southernmost parts of the district where historically most of the Black residents live. Those predominantly white areas that experience a high percentage of cardiovascular death are within close geographic proximity to heavily Black populated townships/municipalities.

V. METHODS OF RESEARCH

We then examined CCDPH data for additional location and race/ethnicity trends across cardiovascular disease deaths. The 6th District is comprised of the CCDPH's South & Southwest jurisdictions (see Figure 2). Figure 1 shows the Southwest jurisdiction of Cook County as a whole and the 6th District individual municipality/township trends all demonstrate a large White population (non-Latinx), while the South jurisdiction has a large NH Black population (non-Latinx) comparatively. We then looked at the available CVD death statistics and found that from 2014 to 2017 total CVD deaths, as well as deaths due to stroke and heart disease, occurred in a greater quantity in the South jurisdiction yearly compared to the Southwest jurisdiction. When the deaths are viewed concerning race, Black and white populations throughout the 6th District have higher numbers of cardiovascular deaths in areas with large black populations or that are in close proximity to them.



Data provided via Cook County Department of Public Health, 2014 to 2017

Within the 6th District, our townships/municipalities are overwhelmingly racially segregated with a high-density white population within the Southwest CCDPH jurisdiction and a high-density Black population within the South CCDPH jurisdiction. The data provided by the Cook County Medical Examiner's office as well as the Illinois Department of Public Health (IDPH) illustrates that overall CVD deaths—and within primary cause analysis as well—occur in higher numbers in the South jurisdiction yearly than within the Southwest jurisdiction. It can be concluded that, overall, jurisdictions with predominantly Black residents experience higher death rates due to CVDs than predominantly white populations.

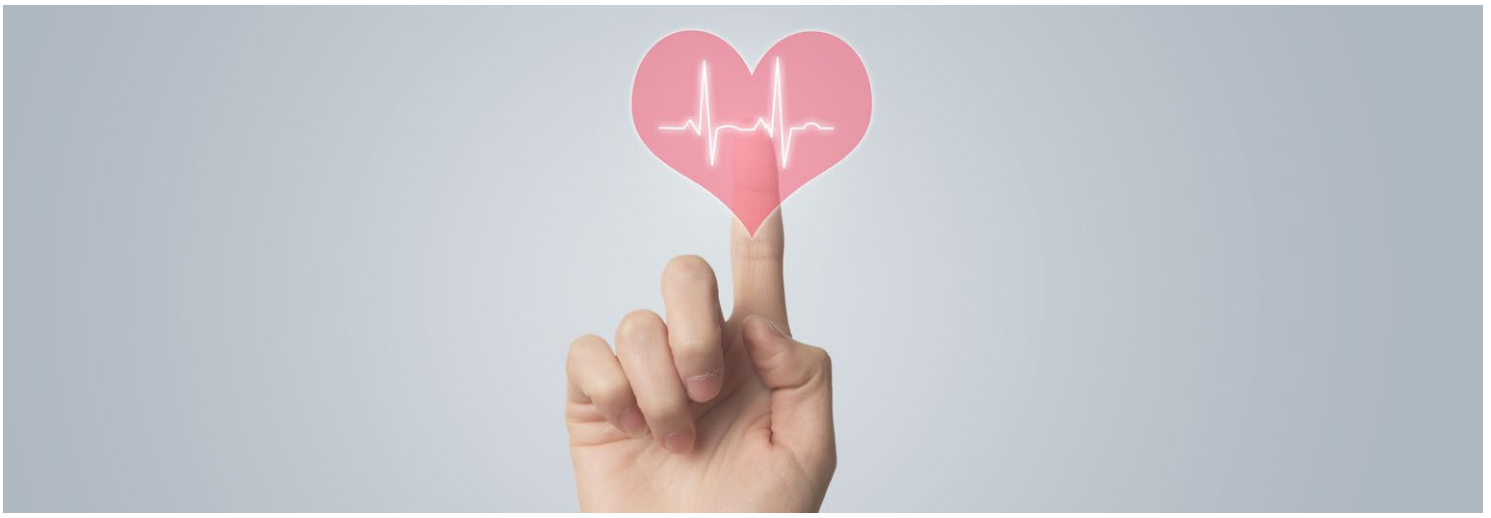
V. METHODS OF RESEARCH

To further reaffirm our investigation, research conducted by the Cook County Department of Public Health found that Black residents of Suburban Cook County (SCC) experience “a mortality rate for cardiovascular disease (297.2 per 100,000) that is over 40% higher than the rate for all of SCC (211.0 per 100,000). This pattern of disparity is repeated for Blacks regarding other chronic diseases, including stroke” (CCDPH, 2016, p.57).

Within the 6th District, we feel a compelling responsibility to work with the Cook County government, and community-based organizations (CBOs) not only to close the racial gap but to also reduce the total number of deaths due to cardiovascular diseases.

The following section offers recommendations to improve the overall health of our community.

VI. FACTORS OF HEALTH

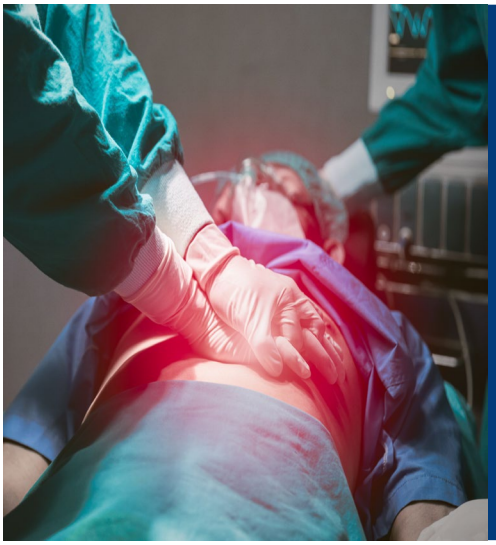


To maximize the impact of the current work of IDPH, CCDPH, Cook County Health (CCH), and the many other CBOs in the region, through health equity policies, we must collectively target improving cardiovascular health by providing our community with access at the local level to such social determinants of health as high-quality healthcare, food security, and safe outdoor/indoor spaces for physical activity.

We must also look directly at the factors that determine health to understand the full extent of racial inequality, specifically that which exists within the Cook County Health Ecosystem. By reviewing and updating the structural determinants of socioeconomic/political context, i.e.,

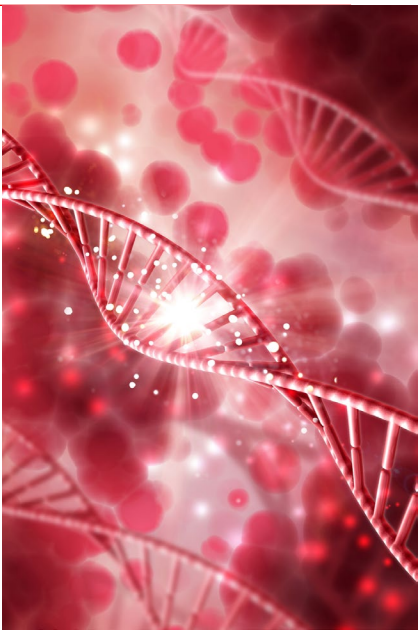
Governance **Institutions** **Policies**

we can directly improve social determinants and therefore create healthier and more equitable communities throughout all of Cook County (CCDPH, 2016).



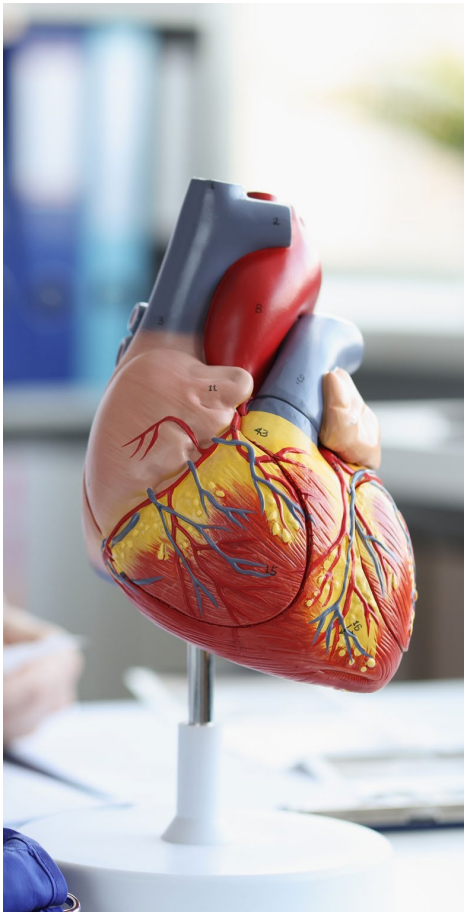
To address the high death rates due to cardiovascular diseases within the 6th District, we framed health through the socio-economic category of race and ethnicity. The social determinants of health impacted by the socioeconomic and political contexts of governance include access to healthcare, housing, neighborhood amenities, occupation/ work environment, income, and education (CCDPH, 2016). The 6th District will need to specifically focus on accessibility to services, neighborhood conditions, and health literacy to address and ultimately lower the high death rates existing within the community.

VI. FACTORS OF HEALTH



The underlying social determinants of health inequities operate through a set of intermediary determinants of health to shape health outcomes. The main categories of intermediary determinants of health are: material circumstances, which include factors such as housing and neighborhood quality; consumption potential (e.g., financial means); and the physical work environment. The other primary category of intermediary determinants of health is behavioral and biological factors including nutrition, physical activity, tobacco consumption, and alcohol consumption, which are distributed differently among different social groups. Biological factors also include genetic factors. (WHO,2010)

As a result of past and current policies and discrimination, many minorities are relegated to communities with high levels of poverty concentration, economic neglect, and political marginalization—even those with middle- and upper incomes. (AMA, 2020). Differences in neighborhood conditions are a powerful predictor of who is healthy and who is sick. Due to patterns of residential segregation, these differences are the fundamental causes of health inequities among different racial, ethnic, and socioeconomic groups. These communities are much more likely than wealthier, whiter communities to face health risks including environmental degradation, food insecurity, higher levels of violence, and minimal access to educational opportunities.



To address these prevalent factors that highly affect the community, we believe cardiovascular health will improve when access to high-quality healthcare, food security, and access to safe outdoor/indoor spaces for physical activity are addressed at the local level through health equity policy.

Working intimately with CBOs to study the strengths, resources, and knowledge of communities, we will ensure that they are examined through an anti-racist, trauma-informed lens. Pre-existing research demonstrates that neighborhood conditions such as the quality of public schools, housing conditions, access to medical care and healthy foods, levels of violence, availability of exercise options, and exposure to environmental degradation—all powerfully predict who ultimately lives longer.

To improve the cardiovascular health and overall well-being of our community, the 6th District will work closely with the county government, health system, and CBOs to approach health through an anti-racist, trauma-integrated approach—centered by the voices and ideas of those who historically have been most marginalized within our community.

VII. NEXT STEP RECOMMENDATIONS

With a new focus on addressing high CVD rates through a health equity lens, Cook County should plan to develop a new community-interactive, educational approach focused on improving community health through access to high-quality care, safe outdoor/indoor space for physical activity, and food security.

Improve Built Environment and Increase Active Transportation

Violence may occur in all communities, but it is primarily concentrated in low-income communities of color. Research has conclusively established that exposure to violence significantly impacts physical and mental well-being. Additionally, exposure to violence in childhood has been linked to trauma, toxic stress, and an increased risk of poor health outcomes across one's lifespan (Alliance for Health Equity, 2019). Violence in communities directly correlates with less investment in community resources such as parks and recreational facilities that promote healthy activity (Prevention Institute, 2011).

Moreover, individuals who have been exposed to interpersonal or community violence have a greater chance of developing negative health behaviors associated with the development of cardiovascular diseases, including smoking and decreased physical activity. People who have perceived their neighborhood as unsafe are four times more likely to have overweight children than those parents who perceive their neighborhood as safe (Burdette et. al, 2006). And people who have described their neighborhood as unsafe are nearly three times more likely to be physically inactive compared to those who find their neighborhood extremely safe (Johnson et al, 2009). Because physical activity is a direct way for individuals to improve their health, without safe spaces we are inhibiting our community's ability to engage in healthy practices.

Additionally, many communities in south suburban Cook County do not have the adequate infrastructure (e.g., lack of jobs, sidewalks, and identified bikeways) that readily enables active living, which in turn has led to a higher prevalence of chronic diseases there.

To curb cardiovascular disease deaths through a health equity framework the county and state must directly invest in improving the built environment, increasing active transportation, and expansion of physical activity spaces that prioritize community safety to further develop healthier community habits (CCDPH, 2016).

VII. NEXT STEP RECOMMENDATIONS

With Cook County's FY2021 budget commitment to investing $38.7 million in Community Access Investments, with $30.2 million of that now permanently designated for Fair Transit Demonstration, the following changes are recommended to improve the built environment and encourage healthier activities:

01 Promote multi-jurisdictional community planning that promotes a healthy, sustainable built environment by increasing the number of and ensuring alignment of municipal comprehensive plans that integrate an active transportation plan (CCDPH, 2016)

02 Support improvements in transit access and make the Forest Preserves of Cook County accessible to everyone in SCC through public transit

03 Boost funds for safe biking and walking routes to and from school (CCDOTH, 2020)

04 Reduce barriers to access in recreation space for safe physical activity through a comprehensive and coordinated plan with community leaders to proactively address violence

05 Support Community-Based Organizations (CBOs) in improving the quality and quantity of outdoor and indoor exercise facilities; and

06 Establish bike routes and bus and train services that bring individuals directly to Cook County Health services. Expand CCH services to far south suburbs, such as a CCH Integrated Clinic with Behavioral and Primary Healthcare services.

Access to Healthy Foods

To further ensure healthy communities throughout Cook County and to address the high number of deaths due to CVDs, it is recommended that Cook County reframes the need for food security through a health equity scope.

Food security is a household-level social and economic condition of limited or uncertain access to adequate food (U.S. Department of Agriculture, 2018). It has long been accepted that the combination of poor nutrition and stress can make individuals more susceptible to developing chronic diseases and make the management of those diseases far more difficult.

VII. NEXT STEP RECOMMENDATIONS

> Predominantly Black communities in suburban Cook County are low food access areas where high-calorie, high-fat processed foods overwhelmingly fill the shelves of a minuscule number of retail stores. Many community environments do not support equitable access to and availability of high-quality, nutritious, and affordable food. According to CCDPH's WePlan2020, the current regulatory environments of SCC do not support farmer's markets, the development of urban farms, limited production of locally grown food, or address the lack of economic incentive for large retail stores with high costs for fruits and vegetables. (The Illinois Local and Organic Food Farm Task Force, 2009)

Access to healthy food is an essential factor that directly impacts cardiovascular disease prevention. Research indicates that communities with better access to healthy foods and limited access to convenience stores have healthier diets and lower rates of obesity (N. Larson et al, 2009). Low-income communities of color are less likely to have access to healthy foods and supermarkets and find a higher density of fast-food restaurants.

Programs such as the Supplemental Nutrition Assistance Program (SNAP), local food pantries, summer meal programs, school meal programs, shelters, and food banks remain important in the assistance of low-income individuals and their families in the struggle to access healthy food. And yet, our community needs far greater support.

With $3.4 billion of FY2021 being committed to public health, we argue that access to healthy foods should be incorporated under that policy banner. Another source of funding for food security projects exists within the new $20 million dedicated to expanding economic and community development. Development opportunities can rise directly out of engaging the community with their health and providing residents with a genuine sense of ownership while simultaneously building their healthier futures.

VII. NEXT STEP RECOMMENDATIONS

We recommend the following changes to enhance our community's access to healthy foods, improve their overall health and decrease the risk of CVDs:

01 Implement a public financing program to provide financial "seed money" to stimulate healthy food retail in neighborhoods with low food access (community partnerships) (CCDPH, 2016)

02 Create regulatory environments that support farmers' markets, development of urban farms; limited production of locally grown food (e.g., few farmers in the area); lack of economic incentive and concerns about safety for large retail stores; and cost of fruits and vegetables, which are expensive or at least perceived to be (CCDPH, 2016; The Illinois Local and Organic Food and Farm Task Force, 2009).

03 Reduce household food insecurity by further investing and expanding access to food pantries, emergency meals, and school programs throughout the district

04 Educate a broad range of food retail outlets, including small stores, co-ops, and nonprofit enterprises dedicated to providing healthy foods and access to available federal funding opportunities for SCC, including the Community Development Block Grant (CDBG) program and the American Rescue Plan Act; and

05 Promote the development of a variety of small and large innovative retail projects at the county level that invests in community economic development with an emphasis on creating and scaling minority-owned businesses (CCDPH, 2016)

Overall, these recommendations highlight the importance of supporting the community's food sovereignty. The voices and aspirations of neighborhood residents need to be reflected in local solutions to hunger and poor nutrition. Efforts to organize and inform residents are essential so that they have the tools to make informed decisions about food system failures.

Access to High-Quality Health Care

Research shows that access to medical professionals and facilities can improve prevention, risk reduction, and management of cardiovascular diseases and their symptoms (i.e., heart attack, stroke). Each Commissioner's District should be fully aligned with Cook County's vision of healthy communities through improving access and integration of high-quality responsive healthcare and information (Cook County Policy Roadmap, 2018).

VII. NEXT STEP RECOMMENDATIONS

With $40 million in extra public health funding earmarked to suburban Cook County and an expressed emphasis on additional opportunities for Southland communities, this data analysis offers several notable recommendations for improving access to quality healthcare and decreasing deaths due to CVDs. The AMA's Equity Strategic Plan recommends an upstream approach to addressing determinants of health related to the root cause of racism within the systems of power. "Upstream refers to acknowledging and addressing the structural, societal, community and individual-level factors that influence health to act against systemic generators of health inequality" (AMA,2020, p.19). Consequently, the Cook County government and its partners must work with available health care providers to confront and dismantle the root causes of inequality, and not just apply reactive, rescue-based approaches to confronting bad health outcomes. We recommend that the Cook County government pledges to work with community organizations and health services to take accountability to "the cause of causes" related to cardiovascular health equity must also be embedded into all aspects of health in order to counter long-dominant and inaccurate narratives about cardiovascular health, as well as to build trust and reconciliation between medical professionals and the community. It is imperative that prevention, risk reduction, and management of CVDs must be reassessed through an equity-focused perspective free of racial bias.

VII. NEXT STEP RECOMMENDATIONS

It is recommended that the County, as well as CCH, uptake the following measures to reassess prevention, risk reduction, and management of CVDs through a health equity focus:

01 Host programming for health care professionals that prioritizes the inclusion of equity, anti-racist and trauma-informed care related to cardiovascular health

02 Implement community-based programs on heart attack intervention; expand virtual and in-person CPR & AED training to businesses and other community-based organizations

03 Initiate a dialogue with area doctors and health care professionals to create uniform information with consistent language that can be shared with the community (e.g., how minimum physical activity is needed to keep good heart health)

04 Create tools and materials for public education campaigns for healthcare professionals and systems to educate community members on risk factors and preventative care related to cardiovascular health

05 Establish timely systematic follow-up and assessment tailored to the severity of CVD condition with coordination of care across settings and professionals with effective community resources (CCDPH, 2016)

06 Create a formalized system of linking patients from healthcare settings to community preventive and assistance programs, while enhancing strategic partnerships with public health community organizations

07 Develop specific strategies and implementation plans related to the “quality pillars” (patient experience, readmission, safe processes of care, etc. (CCH, 2019)

08 Further, build upon existing partnerships with hospitals and healthcare providers through the Health Impact Collaborative of Cook County (HICC). “Focusing directly on community health through the use of community benefit investments and advocacy” (AMA, 2020, p.69)

09 Identify gaps of continuous care and improve transitions of care from healthcare services to community-based organizations

10 Promote Medicaid, the Affordable Care Act, and other public insurance opportunities for evidence-based community preventive services such as cessation services or programs in tandem with grassroots campaigns encouraging enrollment

11 Identify gaps in CCH accessibility. Expand CCH services to far south suburbs, such as a CCH Integrated Clinic with Behavioral and Primary Healthcare services.

Investment in Research

Throughout the analysis of cardiovascular health inequalities within the 6th District, we observed a lack of uniform and population-representative data. This division in data created a challenge in how to analyze the provided information within the lenses of designated factors including data by race, location, and primary cause. This lack of uniformity impaired the ability to further identify greater trends of cardiovascular health relative to socioeconomic status. To properly understand and study the effects of identity demographics on CVD survival, the county must innovate how data is collected, organized, and analyzed.

In societies marked by racial discrimination and exclusion, belonging to a marginalized racial/ethnic group affects every aspect of one's status, opportunities, and trajectory throughout the life-course (WHO, 2010, p.34). To combat the pervasive narratives that exist within health, the World Health Organization advocates for communities to invest in the development of a system to correctly measure and understand the scope of disparity within cardiovascular health.

To properly track inequalities related to CVDs and other chronic diseases, we recommend that the Cook County Department of Public Health, Cook County Medical Examiner's Office, and other public health institutions create a uniform way of capturing cardiovascular health data that is readily available and digestible for the public. Currently, data is entered into the system under the discretion of the assigned individual. The data that currently exists cannot be carried across counties or easily across the district.

Consequently, we urge establishing a new system of data entry where definitions and requirements for data input are strictly regulated and choices for primary cause and other factors may be selected from a comprehensive list. To further develop health narratives, the County must also expand the use of population and epidemiologic data to identify upstream drivers of CVDs. A suburban Cook County dashboard should also be established with the support of hospitals within the county to create a more reflective way of tracking the overall patterns of cardiovascular health and other chronic diseases.

Reinvest in Cook County's Healthy Hearts Project

The **Healthy Hearts Project** was created by the Illinois Department of Public Health to prevent cardiovascular disease in communities across the state. The project encourages heart disease and stroke prevention efforts coupled with effective disease management through focusing on the ABCS of heart health – aspirin use, blood pressure management, cholesterol management, and smoking cessation. The groundwork has been established for a county-wide program directly related to CVDs. We encourage reinvestment in the project through a health equity frame.

VIII. CONCLUSION

Suburban Cook County has deeply rooted historical experiences with segregation and inequality permeating all aspects of its residents' daily lives, including cardiovascular health. Throughout our analysis, we have proven that a high prevalence of death due to cardiovascular diseases correlates to areas within the 6th District with larger Black populations when compared to predominantly White populations. While Black residents account for a smaller portion of the population, they still have disproportionately higher death rates due to cardiovascular diseases than their white neighbors.

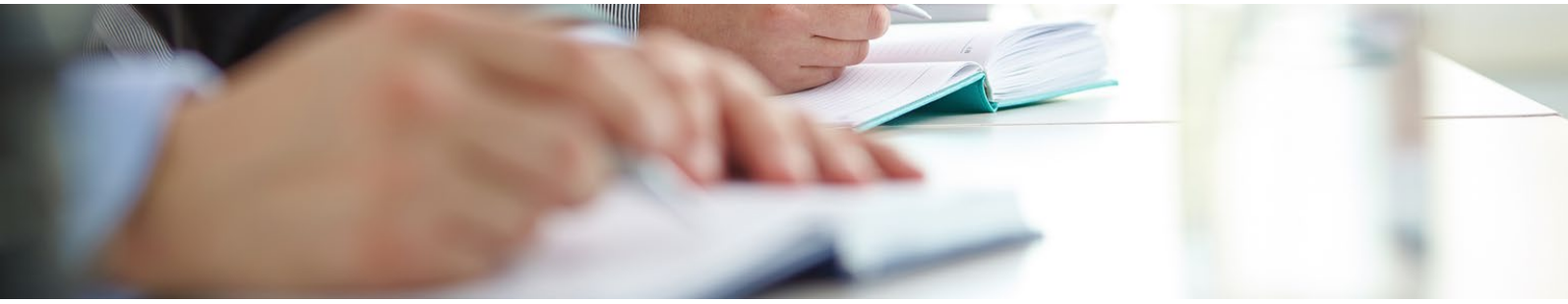
The COVID-19 pandemic has disproportionately affected historically disadvantaged groups, widening inequality. The pandemic has exacerbated existing cardiovascular health disparities and its disproportionate impact on Black Americans.

To close the cardiovascular health gap and to diminish the overall number of deaths due to CVDs, WHO policy action recommendations urge Cook County to establish robust, targeted programs for minority populations and address the social health gradient across the whole population to improve the health of our entire community. (WHO, 2010, p.7)

In addition, future policy work related to cardiovascular health will need to incorporate strategies that address context, but that also take intersectoral action and encourage social participation and empowerment.

Finally, for true health equity to exist, we must focus sharply on developing specific issue areas and work tirelessly on removing obstacles to healthy lifestyles. The data demonstrates that the 6th District should be strongly committed to addressing cardiovascular health inequalities through access to built space and transportation, healthy foods, and high-quality healthcare.

As a community, we must continually work to shift focus away from attributing cardiovascular health primarily to individual responsibility—and instead recalibrate our policies and public investments on social and collective responsibility.



GLOSSARY

American Rescue Plan Act of 2021: $1.9 trillion coronavirus rescue package designed to facilitate the United States' recovery from the devastating economic and health effects of the COVID-19 pandemic.

Anti-Racism: Anti-Racism is defined as the work of actively opposing racism by advocating for changes in political, economic, and social life. Anti-racism tends to be an individualized approach and set up in opposition to individual racist behaviors and impacts.

Cardiovascular Diseases (CVDs): a group of diseases of the heart and blood vessels, including coronary heart disease, stroke, heart failure, heart arrhythmias, and heart valve problems. Several risk factors lead to the development of cardiovascular disease, including high blood pressure, high blood cholesterol, tobacco use, and diabetes.

Chronic Disease: Conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both. Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States.

Community Development Block Grant (CDBG): A program that supports community development activities to build stronger and more resilient communities. To support community development, activities are identified through an ongoing process. Activities may address needs such as infrastructure, economic development projects, public facilities installation, community centers, housing rehabilitation, public services, clearance/acquisition, microenterprise assistance, code enforcement, homeowner assistance, etc.

CPR & AED Training Resolution: Unanimously passed a resolution by the Cook County Board of Commissioners requesting the development of a countywide CPR & AED training awareness campaign for all Cook County employees as well as expanded access to training programs.

Equality: As a process means providing the same amounts and types of resources across populations. Seeking to treat everyone the "same".

Ethnicity: A social construct that divides people into smaller social groups based on characteristics such as shared sense of group membership, values, behavioral patterns, language, political and economic interests, history, and ancestral geographical base.

Food Insecurity: A set of circumstances where an individual lacks consistent access to enough food, affordable food, or healthy food.

Health: a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, and a fundamental human right.

Health Care Quality: a broad term that encompasses many aspects of patient care. Quality health care is care that is safe, effective, patient-centered, timely, efficient, and equitable.

Health Disparities: Simply differences in health outcomes with no political implications. Health inequalities, by definition, involve issues of social justice.

Health Equity: The absence of unfair and avoidable or remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.

Healthy Hearts Project: Illinois Department of Public Health (IDPH) program supported by the Association for State and Territorial Health Officials, the Centers for Disease Control and Prevention and endorses the Million Hearts® initiative designed to a nationwide initiative to focus, coordinate, and enhance cardiovascular disease prevention activities across the public and private sectors.

Heart Disease: Heart disease describes a range of conditions that affect your heart. Heart diseases include Blood vessel diseases, such as coronary artery disease, Heart rhythm problems (arrhythmias), Heart defects you're born with (congenital heart defects), Heart valve disease, Disease of the heart muscle, and Heart infection.

Hypertension (or High Blood Pressure): when your blood pressure, the force of your blood pushing against the walls of your blood vessels, is consistently too high.

Hypertensive-Arteriosclerotic Cardiovascular Disease: a condition that involves a build-up of deposits that form plaques in the wall of the arteries. This build-up can eventually constrict or occlude the artery and reduce blood flow.

Institutional Racism: Occurs in an organization. These are discriminatory treatments, unfair policies, or biased practices based on race that result in inequitable outcomes for whites over people of color and extend considerably beyond prejudice. These institutional policies often never mention any racial group, but the intent is to create advantages.

Intermediary Determinant of Health: socioeconomic positions that shape specific determinants of health status. The main categories are material circumstances; psychosocial circumstances; behavioral and/or biological factors; and the health system itself as a social determinant.

Justice: A state where the dismantling of structural and systemic inequalities (and the laws and policies that sustain them) is not only achieved but new structures and systems are instituted to reinforce their elimination.

Medicaid: provides health coverage to millions of Americans, including eligible low-income adults, children, pregnant women, elderly adults, and people with disabilities. Medicaid is administered by states, according to federal requirements. The program is funded jointly by states and the federal government.

Myocardial Infarction (Heart Attack): occurs when the flow of blood to the heart is blocked. The blockage is most often a buildup of fat, cholesterol, and other substances, which form a plaque in the arteries that feed the heart (coronary arteries).

Preventative Care: Routine health care that includes screenings, check-ups, and patient counseling to prevent illnesses, disease, or other health problems.

Race: A socially constructed category that refers to physical differences that groups and cultures consider socially significant.

Racism: a belief that race is a fundamental determinant of human traits and capacities and that racial differences produce an inherent superiority of a particular race.

Social Determinants of Health: Conditions in which people are born, grow, work, live, and age and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems.

Stroke: A disease that affects the arteries leading to and within the brain. It is the 5th cause of death and a leading cause of disability in the United States.

Structural Racism: the overarching system of racial bias across institutions and society. These systems give privileges to white people resulting in disadvantages to people of color.

Trauma-informed Care: an approach in the human service field that assumes that an individual is more likely than not to have a history of trauma. Trauma-Informed Care recognizes the presence of trauma symptoms and acknowledges the role trauma may play in an individual's life- including service staff.

Upstream: Acknowledging and addressing the structural, societal, community, and individual-level factors that influence health.

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Appendix

Appendix Table 1: 6th District Racial Demographics by Municipality/Township

Southwest Jurisdiction South Jurisdiction

Place	Total Population	NH Black #	NH Black %	NH White #	NH White %
Alsip	19,302	3,854	20%	10,537	55%
Blue Island	22,446	6390	28%	4378	20%
Bridgeview	16,511	566	3%	11,942	72%
Chicago Heights	30,292	12747	42%	6502	21%
Chicago Ridge	14,338	1,552	11%	10,551	74%
Crestwood	10,959	819	7%	9165	84%
Dolton	23,091	20,675	90%	966	4%
Flossmoor	9,440	5203	55%	3623	38%
Glenwood	8,809	6031	68%	1,837	21%
Hickory Hills	13,852	442	3%	11221	81%
Homewood	19,252	7109	37%	9,766	51%
Justice	12,973	2401	19%	7904	61%
Lansing	28,308	11039	39%	12,273	43%
Lynwood	9,357	6638	71%	1622	17%
Matteson	19,277	15822	82%	2,495	13%
Midlothian	14,809	1145	8%	9484	64%
Oak Forest	28,027	1470	5%	21,677	77%
Oak Lawn	56,754	3709	7%	38960	69%
Orland Hills	7,226	586	8%	5,154	71%
Orland Park	58,842	1,957	3%	48,429	82%
Palos Height	12,545	253	2%	11,260	90%
Palos Hills	17,540	750	4%	14,362	82%
Park Forest	18,662	12,102	65%	4,663	25%
Richton Park	13,661	11,510	84%	1,459	11%
Robbins	5,203	4,617	89%	263	5%
Sauk Village	10,572	7,018	66%	2,022	19%
South Chicago Heights	4,139	611	15%	1,377	33%
South Holland	21,991	17,247	78%	3,174	14%
Steger	4,102	653	16%	2,456	60%
Thornton	2,565	379	15%	1,801	70%
Tinley Park	49,617	2,075	4%	38,233	77%

Source: U.S. Census Bureau: American Community Survey 2013-2017 estimates

Appendix Table 2A: Death Due to Organic CVD by Township/Municipality & Race

City	Total	White	Black	White %	Black %
Blue Island	24	17	7	70.83%	29.17%
Chicago Heights	37	22	15	59.46%	40.54%
Homewood	19	6	13	31.58%	68.42%
Lansing	25	17	7	68.00%	28.00%
Matteson	20	7	13	35.00%	65.00%
Oak Lawn	49	48	1	97.96%	2.04%
Orland Park	23	22	0	95.65%	0.00%
Park Forest	22	14	8	63.64%	36.36%
South Holland	23	9	13	39.13%	56.52%
Tinley Park	43	40	3	93.02%	6.98%

Data provided via Cook County Medical Examiner Case Archive, 2014 to 2021

Appendix Table 2B: Death Due to Hypertensive CVD by Township/Municipality & Race

City	Total	White	Black	White %	Black %
Blue Island	16	9	7	56.25%	43.75%
Chicago Heights	19	8	11	42.11%	57.89%
Dolton	12	2	10	16.67%	83.33%
Homewood	12	4	8	33.33%	66.67%
Matteson	13	4	9	30.77%	69.23%
Oak Lawn	20	13	6	65.00%	30.00%
Orland Park	23	23	0	100.00%	0.00%
Park Forest	15	4	11	26.67%	73.33%

Data provided via Cook County Medical Examiner Case Archive, 2014 to 2021

APPENDIX

Appendix Table 3A: Total CVD Deaths

Year	Location	Total Deaths	Deaths NH Black	Deaths NH White
2014	South Jurisdiction	1,413	600	749
2014	Southwest Jurisdiction	1,254	97	1,101
2015	South Jurisdiction	1,483	679	740
2015	Southwest Jurisdiction	1,276	98	1,110
2016	South Jurisdiction	1,290	605	640
2016	Southwest Jurisdiction	1,172	112	1,002
2017	South Jurisdiction	1,478	711	701
2017	Southwest Jurisdiction	1,246	212	62

Data Provided by Cook County Department of Public Health

Appendix Table 3B: Cerebrovascular (Stroke) Deaths

Year	Location	Total Deaths	Deaths NH Black	Deaths NH White
2014	South Jurisdiction	222	97	112
2014	Southwest Jurisdiction	202	24	169
2015	South Jurisdiction	250	115	121
2015	Southwest Jurisdiction	217	12	194
2016	South Jurisdiction	238	130	95
2016	Southwest Jurisdiction	204	22	173
2017	South Jurisdiction	308	157	138
2017	Southwest Jurisdiction	212	26	177

Data Provided by Cook County Department of Public Health

Appendix Table 3C: Heart Disease Deaths

Year	Location	Total Deaths	Deaths NH Black	Deaths NH White
2014	South Jurisdiction	1,076	463	570
2014	Southwest Jurisdiction	955	65	845
2015	South Jurisdiction	1,133	514	571
2015	Southwest Jurisdiction	973	80	840
2016	South Jurisdiction	951	417	503
2016	Southwest Jurisdiction	903	87	773
2017	South Jurisdiction	1,068	502	516
2017	Southwest Jurisdiction	935	83	806

Data Provided by Cook County Department of Public Health