Community Health
COLLABORATIVE

Backbone Support Organizations:

Rockford Regional Health Council

Winnebago County Health Department

VOL I: COMMUNITY HEALTH STATUS ASSESSMENT

2020 HEALTHY COMMUNITY STUDY

PREPARED BY REGION 1 PLANNING COUNCIL FOR THE ROCKFORD REGIONAL HEALTH COUNCIL

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EXECUTIVE SUMMARY

This document provides an overview of the findings from the 2020 Healthy Community Survey commissioned by the Rockford Regional Health Council, in conjunction with the Regional Health Collaborative, and conducted by Region 1 Planning Council. The report includes an overview of the general demographics of the region and the survey sample as well as a detailed analysis of the survey findings related to the Rockford Regional Health Council's Key Focus Areas. The complete 2020 Healthy Community Study is available at www.rockfordhealthcouncil.org. The report's target area includes the Rockford Region, comprised of Winnebago and Boone Counties.

ROCKFORD REGIONAL HEALTH COUNCIL

The Rockford Regional Health Council (RRHC), (formerly known as the Rockford Health Council) was founded in 1982 as the Rockford Council for Affordable Health Care, a 501(c)(3) nonprofit organization whose purpose is to promote better health for the residents of North Central Illinois. The mission of the RRHC is to improve community health in our region, through data gathering and analysis, education, action and advocacy. The Rockford Regional Health Council's vision is to be a catalyst for collaboration to assure a healthy community with access and quality care for all. In support of this mission and vision, the RRHC is tasked by its members with the following key activities:

- Provide a community forum where members address health issues through multi-sector collaboration.
- Coordinate the Healthy Community Study to define the community's needs and priorities.
- Support its priorities with well-defined goals and measurable outcomes.
- Have a realistic financial plan for long-term financial stability.

RRHC also spotlights the importance of social and economic factors that influence health and works with partners throughout the community to identify health inequities wherever they exist, promoting improved health outcomes for all.

2020 HEALTHY COMMUNITY SURVEY

The 2020 Healthy Community Survey received 1,677 responses from all of the survey samples combined. The survey had a mixed methodology design that included a

random sample survey sent by email and a paper survey distribution that sampled the following:

Figure ES1: Paper Survey Distribution Sites

Schools (3rd Grade Classrooms)	Public Housing Providers	"Pop-Up Event" Locations
Harlem School District	Rockford Housing Authority	Crusader Clinic (4 sites in Winnebago County)
Belvidere School District	Winnebago County Housing Authority	Northern Illinois Food Bank's Mobile Food Pantry in Winnebago County
	Zion Development	KFACT

The survey was also distributed via Facebook when the survey design plan was interrupted by the COVID-19 pandemic, which precluded us from continuing to conduct the remaining in-person "pop-up events" as scheduled. This is discussed in more detail in Section 1's Introduction and in Appendix B- Methodology.

REGION 1 PLANNING COUNCIL

Region 1 Planning Council (RPC) is a special-purpose, regional government agency providing cross-jurisdictional, government-to-government collaborative planning services across Northern Illinois. The regional planning model provides an efficient means for promoting a well-informed, comprehensive dialogue that holistically addresses regional issues by fulfilling the needs of government entities for long-range planning, securing and managing grant funding, and analyzing and providing data in support of regional projects and initiatives.

Region 1 Planning Council (RPC) responded to a Request for Proposals (RFP) published by the Rockford Regional Health Council and was ultimately selected to serve as the research partner for the project. The research partner's role was to conduct the Rockford Regional Health Council's 2020 Healthy Community Survey (HCS) as part of the overall 2020 Healthy Community Study and, due to it's reputation for exceptional analytical and community planning, RPC has convening authority in Northern Illinois and the capacity to collect and analyze large amounts of information. In addition to being a core function of the Rockford Regional Health Council, this project was aligned with RPC's strategic direction, in that it advances an improved community understanding of health data and goals, which will improve the community's planning capacity in other areas and facilitate more cohesive and collaborative community planning and development.

STRENGTHS

- Although we would like to see more Hispanic participation in future surveys, in the majority of health indicators, their scores were similar to those of white respondents, indicating less disparity between these two ethnic groups than in others, such as black or multiracial respondents.
- Only about 10% of adults categorize themselves as obese
- Over half of all people reported that they

had no limitations in their daily activities due to mental or physical health problems.
- Nearly 70% of people had seen a doctor for a checkup within the last 12 months
- Nearly 60% of people had seen a dentist within the last year
- 80 - 90% of respondents reported that they were able to get medical care (score of ***4*** or ***5***) when they needed it
- 75% of people in the region reported never having a problem getting their prescriptions because they couldn't afford it
- 80% of people say they can get medical information easily
- Three out of 4 people trust the information they get from their healthcare providers
- In the last 12 months, 85% of people in the region said that they never had to reduce the size of their meals or skip meals due to food insecurity

WEAKNESSES

- The survey was dramatically impacted by COVID-19. This reduced our survey responses from designated locations in the community, and we had to strategically adapt the survey design to increase participation
- White respondents were more likely to be able to access care (84%) compared to their minority counterparts
- White respondents rated their health more favorably than black respondents when asked to assess their own general health status
- Nearly half of all respondents rated themselves as ***overweight***
- About 30% of people said they do not have dental insurance and almost half say they don't have mental health/ substance abuse coverage
- Nearly 20% of people did not know if they had mental health/substance abuse insurance or not
- Only half of people in the region reported being able to access mental health/ substance abuse care
- Blacks and Hispanics report being able to access medical care less easily than whites
- One in 10 people in the region said that being unable to find a provider that takes Medicaid prevented them from getting needed healthcare
- Blacks in the region have more trouble understanding medical information than any other single race or ethnicity (multiracial people reported the highest rates)
- About 60% of black residents in the region do not trust the health/medical information they receive from their provider
- A total of 13% of people under the age of 18 in the region have been told they have asthma at some point in their lives.
- Nearly half of adults age 45 – 64 have been diagnosed with chronic digestive or stomach disorders (such as GERD, reflux or Crohn's Disease)
- The survey was also available in Spanish as part of an effort to increase the response rate of Hispanic individuals in the community, and the data was integrated with data from the other

surveys. However, Hispanic response rates were still low across all manner of survey collection

OVERALL FINDINGS

Understanding local context and history, it was anticipated that the residents of the region identifying as white in the Report Area would have more access to and options for healthcare. The results of the data analysis reinforced this expectation: there is a racial divide in the report area in terms of access, quality, options, and opinion of care. Looking at the data in aggregate, even accounting for the survey population demographics, the white population clearly has greater access to and options for care.

One of the most consistent trends we saw throughout the survey was the correlation of education level with adverse health outcomes. The relationship was generally inverse, meaning that lower levels of education were associated with higher levels of disease or poor outcomes, but in many of the relationships, the level of correlation was different in those with an associate's degree or higher than the level of correlation in those with some college, but no degree or less. Income had a similar correlation in most areas, most likely because income is correlated with education. For the purposes of this report, we focused on education since education has been proven to result in people getting higher paying jobs.

CHRONIC DISEASE

According to the CDC, chronic disease is defined as, "Chronic diseases are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both." The chronic conditions and diseases most prevalent in our community were determined through the survey to be as follows:

1. *High blood pressure, hypertension (20%)*
   Demographic trends include:
   a. Men
   b. Whites and Asians
   c. Adults age 45 and older, especially those age 45 - 64
2. *High cholesterol (15%)*
   Demographic trends include:
   a. Men
   b. Whites and Asians; Hispanics more than blacks
   c. Adults age 45 and older, especially those age 45 - 64
3. *Arthritis or rheumatism (14%)*
   Demographic trends include:
   a. Men
   b. Asians > Whites > Blacks > Hispanics
   c. Adults age 45 and older
4. *Obesity (12%)*
   Demographic trends include:
   a. Whites & Hispanics
   b. Men & Women
   c. Adults age 45 - 64
5. *Chronic back pain/disc disorders (10%)*
   Demographic trends include:
   d. Men
   e. Asians & whites
   f. Adults age 45 – 64 years of age

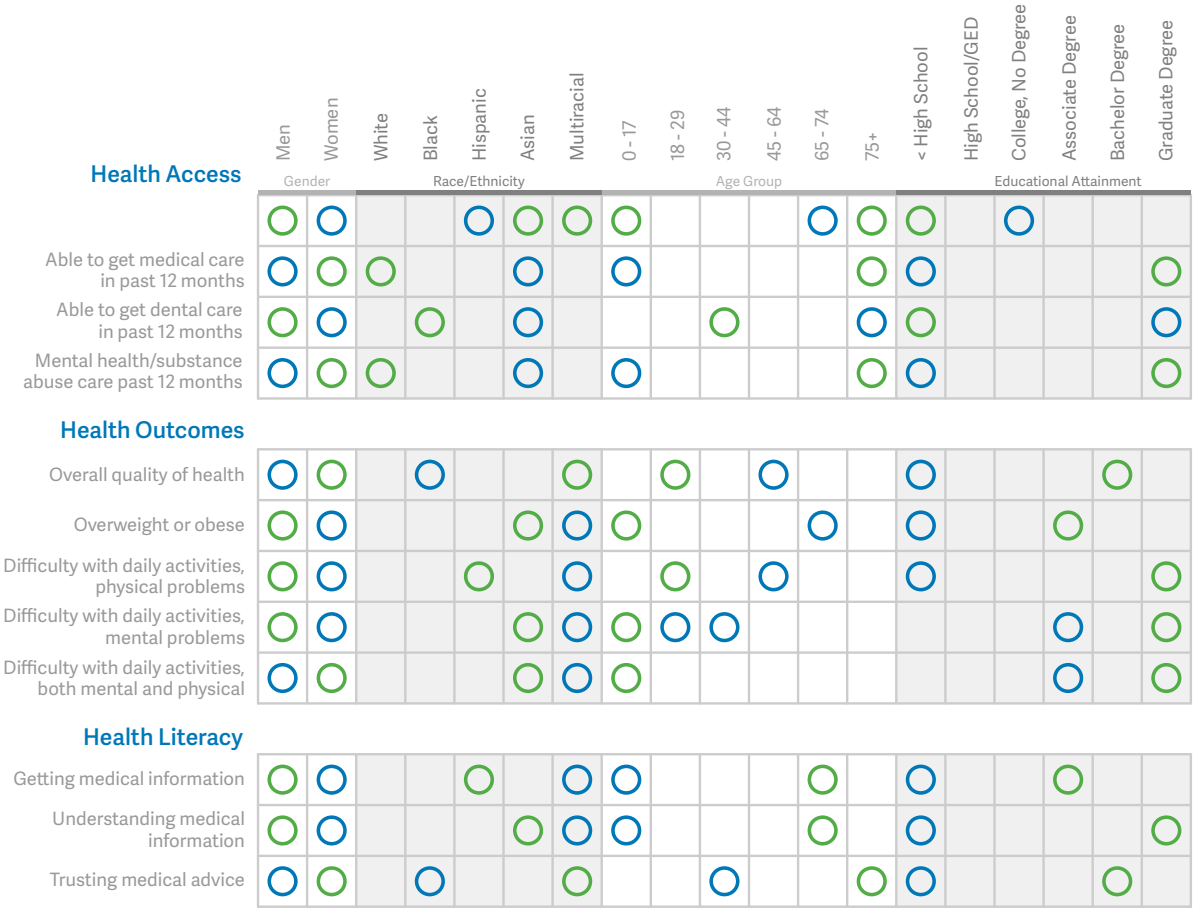
BEHAVIORAL HEALTH

Approximately 60% of survey respondents answered the survey questions about mental and behavioral health. We observed that the self-reported zip codes reported by respondents who answered these questions were varied, indicating that there is not a clear tie between neighborhood, and willingness to discuss mental or behavioral health concerns. However, self-reported drug and alcohol use were higher in 61104, 61102 and 61115-all communities known to have lower median household incomes and lower levels of education. This suggests that there may be a relationship between behavioral health and one of the characteristics prevalent in all of these areas.

Interestingly, there was a trend in skipping certain questions; white respondents selected *prefer not to answer* far less frequently on questions related to substance use than all other racial groups. Additionally, those with less than a high school degree and women reported prescription drug use more often.

Figure ES2: Summary Table: Comparison of Findings Between Demographic Groups

This chart shows the demographic group with the highest and lowest performing scores in each of the survey items listed below. Blue indicates lowest performing score and green indicates best performing score. Where two or more groups within a demographic category share the highest or lowest score, both are filled in.



INTRODUCTION

PURPOSE AND SCOPE

PURPOSE

The mission of the Rockford Regional Health Council (RRHC) is to improve community health in our region, through data gathering and analysis, education, action and advocacy. To address this mission, RRHC conducts a Healthy Community Study at least every five years. The study gathers, analyzes and reports information about the needs of the community and what capacities are available to meet those needs. The study captures trends and changes in the community demographics and healthcare needs. Data analysis identifies community demands and provides the foundation for realistic planning to develop, target and deliver vital prevention and primary care services for the Rockford Region. The Healthy Community Survey gathers and provides data that enables local governments, nonprofit and private entities to leverage funding for programs and services that are most needed in the Rockford Region.

SCOPE

Available on paper and digitally, in English and in Spanish, the survey was available from February 2, 2020 to March 31, 2020.

Data gathered includes demographics; community assets, issues, and concerns; healthcare access; healthcare literacy; chronic conditions and diseases; and behavioral and mental health. Survey respondents are residents of Boone and Winnebago counties and come from a wide, random cross section of the region's population.

IMPACTS OF COVID-19 ON THE REGION & SURVEY

The 2020 Healthy Community Study's planning period (which began at the end of 2019) and implementation overlapped with one of the most significant events of our lifetime. The COVID-19 pandemic, also known as the coronavirus pandemic, refers to the global outbreak of coronavirus disease 2019, or COVID-19, an illness caused by a virus known as "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).[1] First identified in Wuhan, China, in December of 2019,the virus spread quickly, and after almost 8,000 cases were confirmed in 19

countries, the World Health Organization (WHO) declared the outbreak a public health emergency of international concern on January 30, 2020.[2] Only two months later, in the span of 2 weeks, we saw a 13-fold increase in the number of cases outside China, and the number of affected countries tripled, leading the WHO to declare COVID-19 a global pandemic on March 11th.[3] As of this printing, there have been more than 5.9 million cases of COVID-19 reported in nearly 190 countries and territories worldwide, resulting in over 364,000 deaths.[4]

In assessing the epidemiological threat posed by an infectious disease, 2 of the most important questions to answer are:

- How contagious is it (or, put another way, how easily is it spread?)? and,
- How deadly is it (or, of all the people infected, how many die as a result?)?

COVID-19's level of transmissibility has been difficult to measure, since many people that become infected are asymptomatic or presymptomatic carriers, meaning they have no symptoms, but they can still spread the virus. The most recent data estimates that of all cases (whether diagnosed or not), between 5 – 80% are asymptomatic.[5]

Further complicating the matter, testing has been an issue, particularly in the U.S. National testing got off to a slow start, first by defective federal test kits, then a lack of federal approval for non-government test kits, next, by restrictive eligibility criteria that limited access to testing, all of which obscured the extent of the outbreak.[6] These are just a few of the factors that have made an accurate count of cases impossible to obtain, without which, we can only estimate the extent of infection in the population. The preferred measure for doing so is an estimate of the basic reproduction number (or R_0, pronounced "R-Naught") of COVID-19, which essentially tells us the expected number of cases that will be spread from one case, assuming no one in the population is immune. Figure IN1 shows the estimated R_0's of some well-known infectious diseases.

The most contagious transmissible virus ever discovered, Measles, is shown at the top; it remains infective for up to 2 hours in an airspace and is so contagious that if one person has it, 90% of nearby non-immune people will also become infected. Smallpox is in the middle, and is moderately contagious, spread through inhalation, usually of droplets from sneezes or coughs, within 6 feet of an infected person, and through direct

2 "Novel Coronavirus(2019-nCoV): Situation Report-10" . (January 30, 2020). (PDF). Retrieved May 25, 2020.
3 "WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020". World Health Organization. Retrieved May 20, 2020
4 "COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)". ArcGIS. Johns Hopkins University. Retrieved May 30, 2020.
5 Heneghan C, Brassey J, Jefferson T (April 6, 2020). "COVID-19: What proportion are asymptomatic?" Centre for Evidence-Based Medicine. Retrieved May 17, 2020.
6 Whoriskey P, Satija N (March 16, 2020). "How U.S. coronavirus testing stalled: Flawed tests, red tape and resistance to using the millions of tests produced by the WHO". The Washington Post. Retrieved May 27, 2020.

contact with infected fluids or contaminated objects. Influenza subtype H1N1 (a subtype of influenza A whose best known strains were responsible for both the deadly 1918 Spanish Flu pandemic and the 2009 swine flu pandemic) is at the bottom, as the least contagious (relatively). Much like COVID-19, the circumstances such as failure to acknowledge the magnitude of the threat and population travel patterns, contributed to the spread of the virus. As contagious as it was, it still falls below COVID-19 on the R0 scale which, studies indicate, has an R0 of 5.7.[7]

Establishing an exact rate of death for COVID-19 has been impossible due to the vast number of asymptomatic and presymptomatic carriers who contract and spread the disease but, since they never know they have it, don't seek medical attention and thus, are not counted in

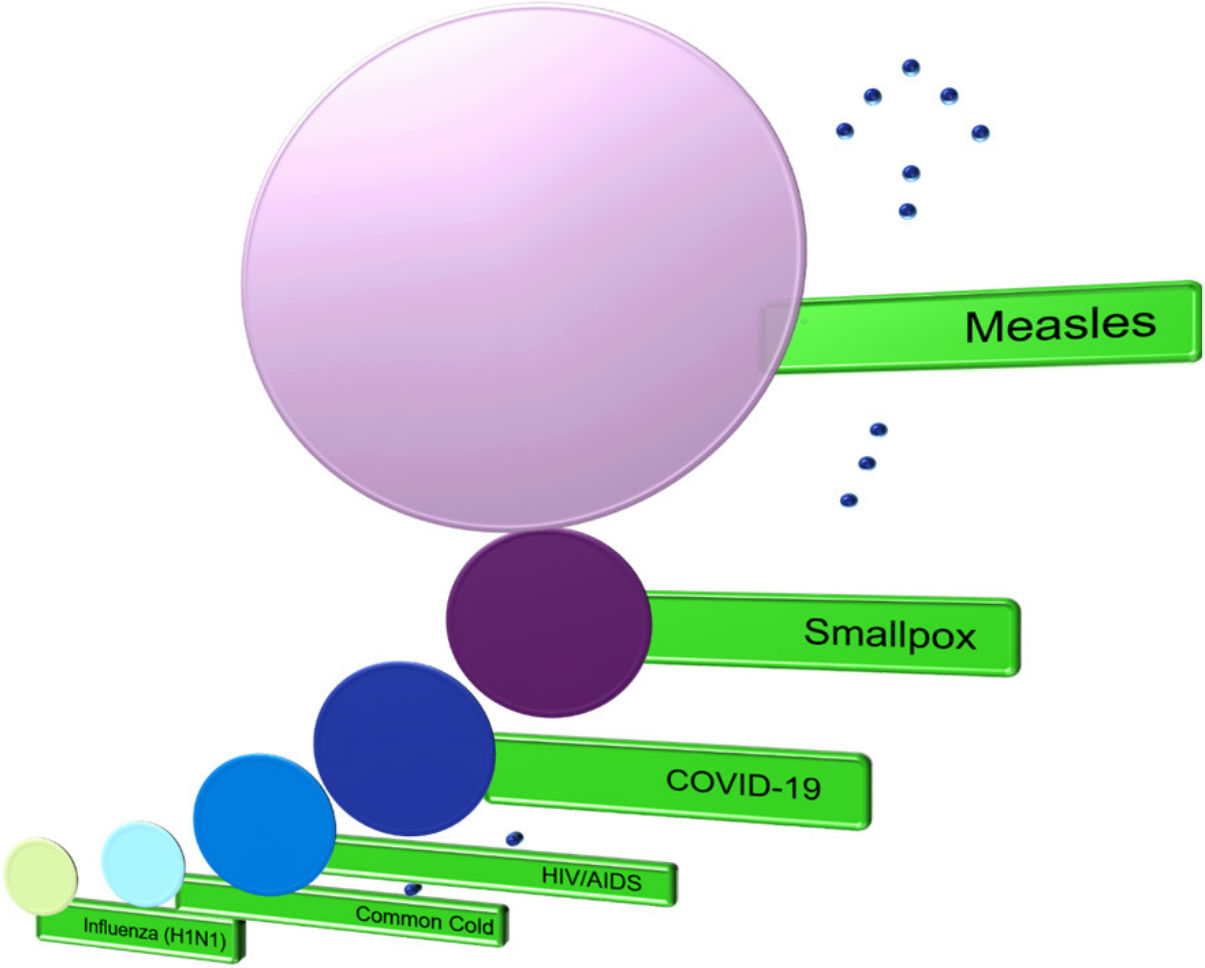


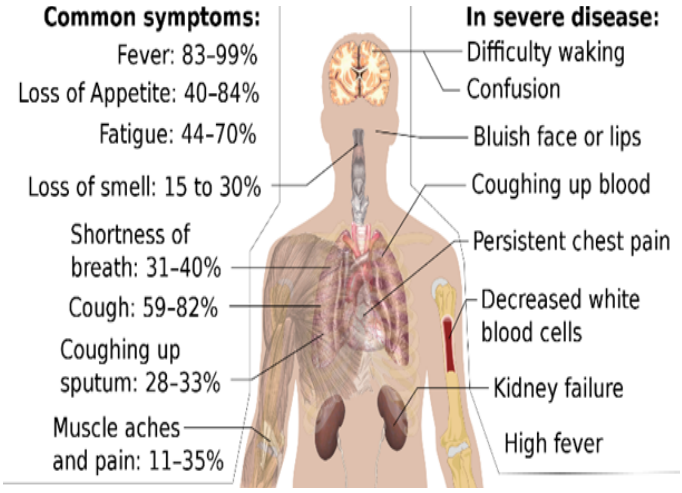
Figure IN1: R0 of Commonly Known Diseases Compared to COVID-19

7 Sanche S, Lin YT, Xu C, Romero-Severson E, Hengartner N, Ke R (April 2020). "High Contagiousness and Rapid Spread of Severe Acute Respiratory Syndrome Coronavirus 2". Emerging Infectious Diseases. 26 (7).

the total count of cases. However, best estimates based on Johns Hopkins University statistics put the global death-to-case ratio at 6.1%.[8] Although the disease is not particularly deadly compared to diseases like Ebola, which has a case fatality ratio of 67%,[9] it does produce extremely severe symptoms for many that have it.

The 2 most common symptoms are fever and dry cough, but can also include many other symptoms (see Figure IN2), further complicating our ability to accurately determine the number of cases. Of those that do develop symptoms, 1 in 5 become more seriously ill. These symptoms include difficulty breathing, chest pain/pressure and can later include pneumonia, acute respiratory distress syndrome, sepsis, septic shock, and kidney failure.[10]

Figure IN2: COVID-19 Symptoms



COVID-19 may not pose the threat of death to most who get it, but it poses a great threat to society. In any pandemic, there are many risks, both on the individual level and on a societal level. The number of inpatient hospital beds in any community is limited, even in those with the best healthcare providers. Since there is no vaccine or cure for COVID-19, it is estimated that 20 – 80% of the population will be infected by the time the pandemic runs its course. Even conservatively estimating (40%), that would be almost 100 million Americans, 20 million of whom would probably be hospitalized, over 4 million of whom would need ICU care. If no actions were taken to slow the spread, the pandemic would have spread like wildfire through the population in 3 – 6 months. Even if hospitals could free up half of their beds by cancelling elective procedures, we would still need between 200 – 500% of the beds we have to meet that need.[11][12] This would cause a collapse in our medical system and result in a drastically higher rate of mortality. In order to avoid this, we have had to take non-pharmaceutical interventions (NPIs) to do what is called "flattening the curve" in order to buy the healthcare system time to "raise the line" (shown in Figure IN3). NPIs are used to reduce the speed of disease spread

8 "COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)". ArcGIS. Johns Hopkins University. Retrieved May 31, 2020.

9 "Ebola Survivors Experience Increased Mortality Risk in Year Following Recovery". Contagion Live. September 9, 2019. Retrieved May 28, 2020.

10 "Coronavirus Disease 2019 (COVID-19)". U.S. Centers for Disease Control and Prevention (CDC). February 11, 2020. Retrieved May 28, 2020.

11 "American Hospital Capacity And Projected Need for COVID-19 Patient Care, " Health Affairs Blog, March 17, 2020

12 Ferguson N, Laydon D, Nedjati-Gilani G, et al. "Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand". Imperial College London (March 16, 2020). Retrieved May 28, 2020.

in pandemics to allow researchers time to develop a cure or vaccine and include things like hand washing, wearing face masks, self-isolation of those who may be exposed, and what is known as social distancing (also called physical distancing). Social distancing refers to a set of NPIs that aim to reduce the spread of infection through a community-level effort to maintain at least 6 feet of distance between people and reduce the number of physical contacts people have with others. To work, these measures must be done community-wide, by everyone and consistently.

The first case was confirmed on January 20th. Although the federal government declared a public health emergency January 31st, the only nationwide NPI implemented at the time was a limited travel ban from certain countries. Confusion only further facilitated the spread as some federal officials told the media that there was little chance of the virus spreading through the community, while officials from many states where they were seeing indications that it already was, (including Illinois, where the 2nd U.S. case was confirmed)[13] attempted to sound the alarm, pleading with residents to implement NPIs like social distancing before the disease spread uncontrollably.

Unfortunately, the U.S. did not heed this warning and in March, got a preview of how steep the climb in cases could be without the entire country implementing protective measures. On March 9, after confirming it's 11th case, the Governor of Illinois announced a statewide disaster proclamation.[14] Two days later, that number had more than doubled, marking the start of a number of event cancellations, and after 2 more days, it had doubled again, prompting a 2 week statewide closure of schools and

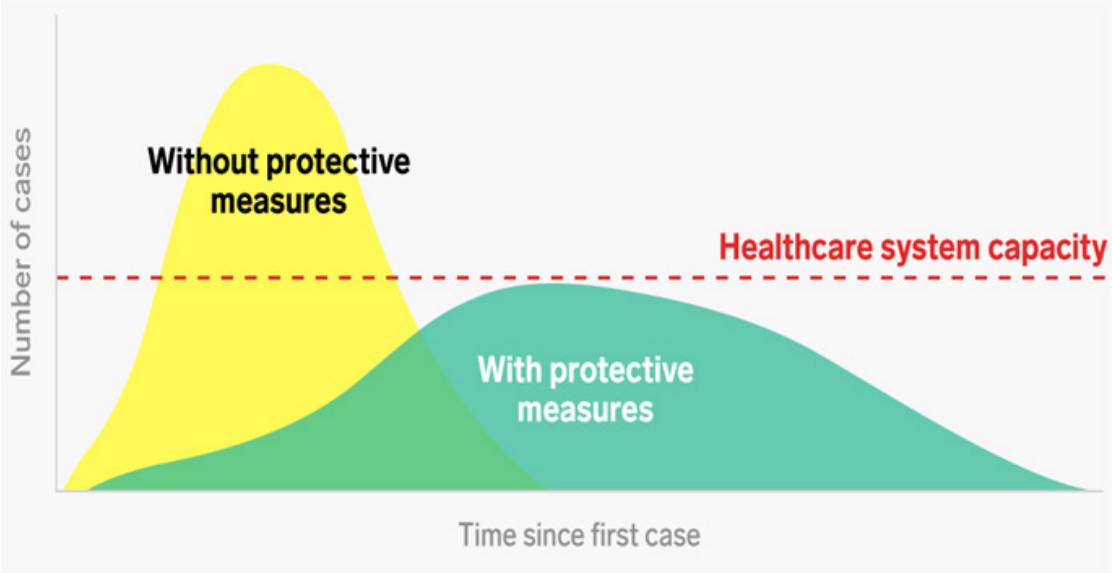


Figure IN3: Spread of COVID-19 With and Without Protective Measures

13 Ghinai, I (March 13, 2020). "First known person-to-person transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the USA". The Lancet. 395 (10230): 1137–1144. Retrieved May 29, 2020.

14 "Pritzker says Illinois coronavirus tally hits 11, declares state of emergency". Chicago Sun Times. March 9, 2020. Retrieved May 29, 2020.

casinos. Winnebago County confirmed its first case on March 15th, 1 of 93 in the state, the same day the Governor restricted public gatherings to 50 people or less, while some businesses across the country began closing and moving to telework.[15] Two days later, COVID-19 claimed its first life in Illinois. Unfortunately, not everyone took the pandemic this seriously and continued to ignore the recommendations made to slow the spread. By March 21st, just over a week later, as the state totals continued to soar to over 750 cases and 6 deaths, the Governor issued the first executive order (referred to as the "stay at home order") requiring all Illinoisians to remain in their homes except for "non-essential travel", shutting down all non-essential workplaces (except telework). 5 days later, the U.S. number of confirmed cases rose to over 82,000, more than any other country on the planet, with 2,538 of these in Illinois and 9 deaths.[16] In those 5 days alone, Illinois's new daily case confirmations went from over 100, to 200, then 300, then 600.

On April 11, 2020, the U.S. became the country with the highest official death toll for COVID-19, with over 20,000 deaths.[17]By then, Illinois On April 30, the Governor extended the lockdown for an additional month. Although other countries that have controlled the disease and even brought the number of new cases near zero have done so through four main strategies- early and decisive action, national lockdowns, clear communication and information sharing, and widespread community-wide testing, including for those without symptoms. Unfortunately, the U.S. has failed on all of these and, while testing criteria have become a bit better, we're still not testing nearly enough, and the federal government has not reported any plans to do so. This means that this will be one of the (if not the) most significant health concerns of at least the next year, and will influence the health care and public health systems in almost every way possible. While the survey did not include questions about the issue, due to the intervals of the HCS survey (since it wasn't included in this one and may not be in the next, depending on how long it persists and the survey timing), the authors felt it important to include an overview of the events: even if the pandemic's resurgences have ended by the time the next survey is conducted, we thought we would be remiss not to include it and emphasize the importance of using all of this as context when viewing the results of the survey, particularly when using them for policy decisions over the next 1 – 2 years (at minimum).

COVID-19 has impacted the planned implementation of the 2020 Healthy Community Survey primarily by lowering the expected survey response rate. Residents in the Report Area were less eager to complete public surveys for several reasons, whether due to general fear of contracting the illness

15 "Coronavirus in Illinois updates: Gov. J.B. Pritzker orders gatherings of 50 or more to be canceled as state's total COVID-19 cases reach 105". Chicago Tribune. March 16, 2020.

16 Caspani, Maria; Trotta, Daniel (March 26, 2020). "As of Thursday, U.S. had most coronavirus cases in world". Reuters. Retrieved May 28, 2020

17 Shumaker, Lisa (April 11, 2020). "U.S. coronavirus deaths top 20,000, highest in world exceeding Italy: Reuters tally". Reuters. Retrieved May 28, 2020.

through close contact with others causing reluctance to fill out surveys in person), or from factors related to job loss, caring for sick or at-risk loved ones or school-age children, or from, increased working hours for essential goods and service providers, to name a few.

Additionally, a number of key staff were needed to assist with the emergency response efforts throughout the region. While project team members worked long hours to ensure that the survey remained a top priority in addition to the pandemic response, this resulted in a serious strain on resources. This strain, when compounded with the other COVID-19-related disruptions to the original work plan, necessitated both project design alterations and the scaling down of certain planned portions of the survey and report, in order to ensure that the project could still be completed by the original deadline.

However, RPC was able to attain the intended response rate from the original scope nonetheless by rapidly adjusting our collection tactics. This was primarily achieved by 2 revisions:

- Incentivizing survey participation with $5 gift cards to Wal-Mart, McDonalds, or Walgreens
- Increasing awareness of the survey by "boosting" the survey through a post on Region 1 Planning Council's Facebook page

Boosting the Facebook post was particularly useful after the shelter-in place order was implemented, preventing further in person survey collection. Residents stuck at home without work or working from home had more time to engage with social media platforms, and were actively thinking about health and health care providers as national, state, and local media remind viewers of the increasing toll COVID-19 had and is continuing to take on the community. This aspect likely made the public more predisposed to engage with health-system related content. Ultimately, a very minor financial investment in this Facebook post resulted in over 22% of all survey responses.

We will probably never know how much COVID-19 impacted survey collection and the resulting data from the 2020 Healthy Community Study; however, by acting quickly and making adjustments to the survey design based on public sentiment at the time, we believe we were still able to successfully conclude the survey despite the unprecedented circumstances that many thought would be insurmountable.

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ORGANIZATION OF DOCUMENT

This document is organized into 8 sections and includes 9 appendices. They are:

Executive Summary: This section is an overview of the survey, ideal for professional and general audiences who will benefit from a detailed summary of the 2020 Healthy Community Survey. A table of key findings is included.

Chapter 2: Introduction: This section provides an overview of the purpose and scope of the document, discusses the organization of the document, describes the survey and analysis methodology, and includes a discussion on the Social Determinants of Health, with an accompanying Disparity Index to describe the differences between health outcomes in minority groups and whites.

Chapter 3: Community Profile details the demographics of Boone and Winnebago counties. Demographics of survey respondents are also included here. Demographics discussed include gender identification, age group, race/ethnicity, zip code, income level, employment status, living arrangements and education level.

Chapter 4: Community Assets, Issues, and Concerns provides information about people's' perceptions and prioritization of resources available in the community and neighborhood safety.

Chapter 5: Access and Utilization of Insurance and Healthcare provides details about where and when people seek healthcare, ease of access, and payor information.

Chapter 6: Health Care Literacy & Public Aid demonstrates how confident people are about the healthcare information they receive from providers and how well they believe they understand the information received.

Chapter 7: Chronic Conditions and Diseases highlights common chronic conditions and diseases and their prevalence in the Rockford Region. For certain conditions, the underlying factors that influence the pervasiveness of the conditions are also analyzed using demographics.

Chapter 8: Behavioral and Mental Health conditions in the community are discussed, including tobacco, alcohol, and non-prescribed drug use. In addition, 11 behavioral and mental health concerns are examined and trends are discussed.

Appendices

A. List of Abbreviations
B. Survey Methodology
C. Survey Respondent Demographics
D. Comments
E. Community Assets, Issues and Concerns
F. Health Status & Access to Care
G. Access and Utilization of Insurance and Healthcare
H. Chronic Conditions and Disease
I. Behavioral and Mental Health
J. Survey Instrument
K. Comments

METHODOLOGY

Methodology includes surveys distributed on paper and digitally. The paper and digital versions of the survey were available in English and Spanish. Respondents included a wide cross section of residents in Boone and Winnebago counties. This cross section includes residents of units operated by the Rockford Housing Authority, Winnebago County Housing Authority and Zion Development; parents/guardians of students in the Harlem School District and Belvidere District 100; a purchased list of email and physical addresses for 13,000 residents of Boone and Winnebago Counties; clients of Crusader Clinic and Northern Illinois Food Bank; and people who learned about the survey on social media platforms.

Please see Appendix B for a full description of survey methodology.

SOCIAL DETERMINANTS OF HEALTH & HEALTH EQUITY

The purpose of the 2020 Healthy Community Survey is to collect information and use the resulting analysis to accurately describe the current state of health for residents of Winnebago and Boone counties, but also to assess residents' perceptions of well-being. However, the status of a person or community's health is determined by more than just whether or not an illness is present. A truly comprehensive health assessment must also examine the policies, social factors, health services (or lack thereof), environmental and economic factors impacting a community, as well as the individual behavior and genetics of its members. The interrelation between all of these factors can affect an individual's health and even the health of an entire population. These factors are examples of what are now known as the social determinants of health (SDOH).

The Center for Disease Control's (CDC's) Healthy People 2020 strategy defines the **social determinants of health** as "conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks". Understanding the role of the SDOH is an integral part of assessing the health of a community because as modern public health theory has evolved over the years, we have come to learn that the social determinants of health are the primary drivers responsible for health inequities. Health inequities are the unfair, preventable differences in population-level health status seen within and between communities. Health inequities impact entire communities and individual people all at the same time and typically are less influenced by physical or geographical factors but instead, primarily depend on the non-physical factors that are shaped by the distribution of money, power and resources at global, national and local levels and combine to make up an individual's or community's life circumstances.[1]

By understanding and addressing these

[1]https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

social factors, we can increase our chances of resolving issues over the long term by addressing their root causes. Healthy People 2020 has developed a "place-based" organizing framework, identifying five key areas of SDOH. Those areas are:

- Economic Stability
- Education
- Social and Community Context
- Health and Health Care
- Neighborhood and Built Environment

Each of these five areas is comprised of a number of key issues that make up the underlying factors of the SDOH . These issues include the following:

- Economic Stability
  - Employment
  - Food Insecurity
  - Housing Instability
  - Poverty

- Education
  - Early Childhood Education and Development
  - Enrollment in Higher Education
  - High School Graduation
  - Language and Literacy

- Social and Community Context
  - Civic Participation
  - Discrimination
  - Incarceration
  - Social Cohesion

- Health and Health Care
  - Access to Health Care

  - Access to Primary Care
  - Health Literacy

- Neighborhood and Built Environment
  - Access to Foods that Support Healthy Eating Patterns
  - Crime and Violence
  - Environmental Conditions
  - Quality of Housing

Resources and interventions that enhance quality of life for individuals or communities can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins. Other considerations include population distribution by age and race or ethnicity; education level achieved, proportion of children living below the poverty level,

number of single-parent families, causes of death and infant mortality. An accurate assessment of the social determinants of health in a community also examines health behaviors, such as the number of adults who are obese, the number of smokers, and the healthcare spending, both at an individual and community level. Finally, the social determinants of health look at the community's perception of its quality of life.[2]

In order to integrate the social determinants of health into a comprehensive community health promotion and protection strategy, we must ensure that the strategy encompasses the many moving parts and partners that influence the SDOH. Effective public health strategies based on a full assessment of the SDOH create a health equity lens through which we can see the root causes of what ails the community in order to positively move the dial on negative health outcomes in the population. By viewing the community through a health equity lens, we can begin to minimize avoidable disparities in health and the related determinants that have led to the long-standing trends of inequity and inequality in the community. We can then develop new programs and change policies as a means of increasing inclusion and narrowing gaps, allowing us to care for individuals at a community or societal level that focuses on equity.

In order to work toward addressing the SDOH, the 2020 Healthy Community Study now includes a Disparity Index, in order to incorporate a cross-indicator summary of the study's findings. The Disparity Index is comprised of disparity ratios for the 39 indicators that had race/ethnicity information, comparing non-Hispanic blacks to non-Hispanic whites, and also comparing Hispanics to non-Hispanic whites. The disparities are defined as the ratio of rates or percentages for each of two groups.

The method of calculation for the disparity ratios is included in the footnote[3]. For example, a disparity ratio of 3 means that one group has a rate 3 times higher than the other group; a disparity ratio of 1.5 means that one group has a rate 1.5 times higher than the other group. The Disparity Index is divided into issues and displayed in the figures that follow. The full Disparity Index tables for black and Hispanic versus white comparisons are included in Appendix B..

[2] https://ctb.ku.edu/en/table-of-contents/analyze/analyze-community-problems-and-solutions/social-determinants-of-health/main

[3] Black-white disparity ratio = rate or percent in non-Hispanic blacks divided by rate or percent in non-Hispanic whites; Hispanic-white disparity ratio = rate or percent in Hispanics divided by rate or percent in non-Hispanic whites.

Figure IN5: Disparity Index, Alcohol Use

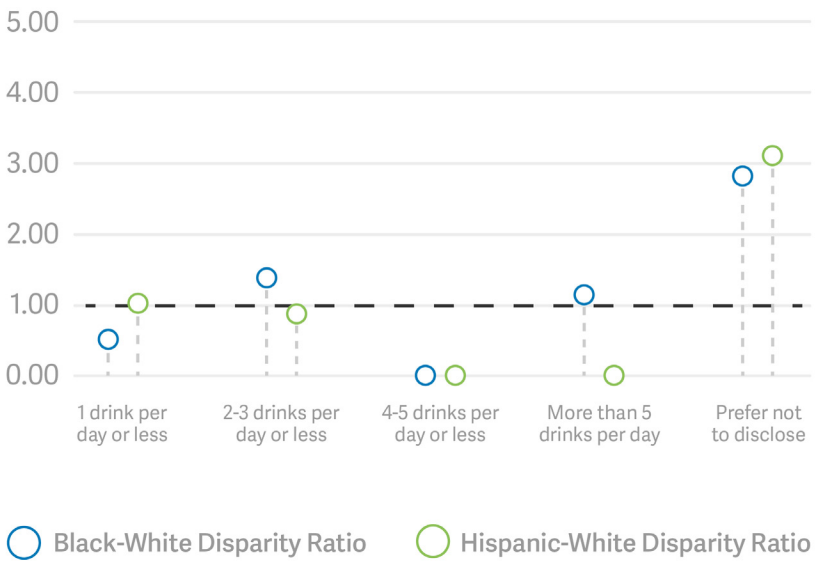


Figure IN6: Disparity Index, Drug Use

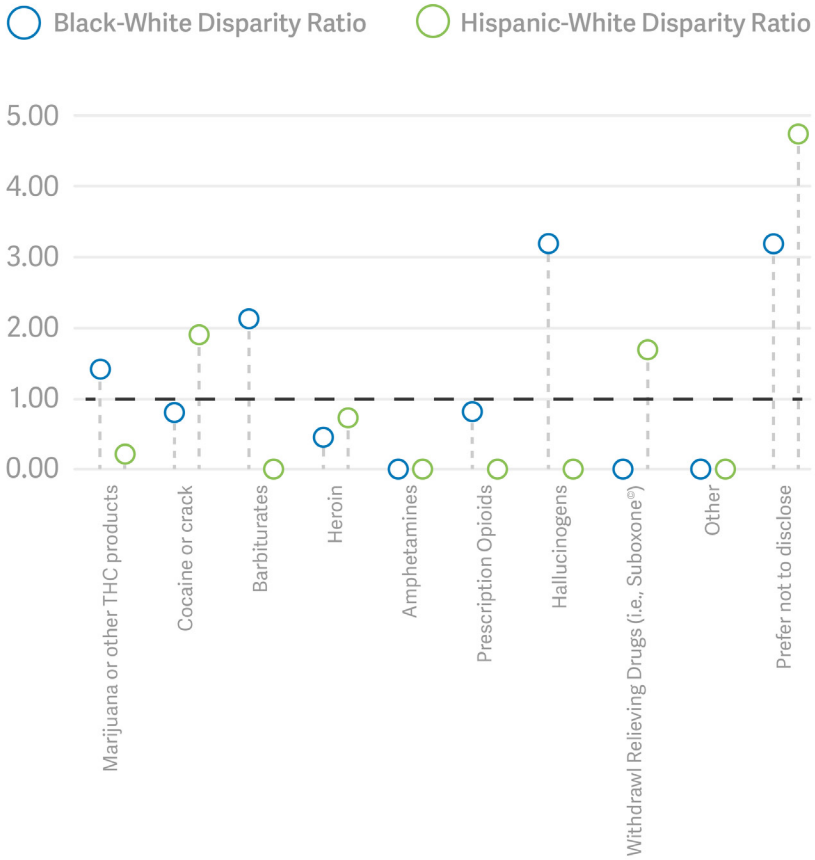


Figure IN7: Disparity Index, Chronic Disease

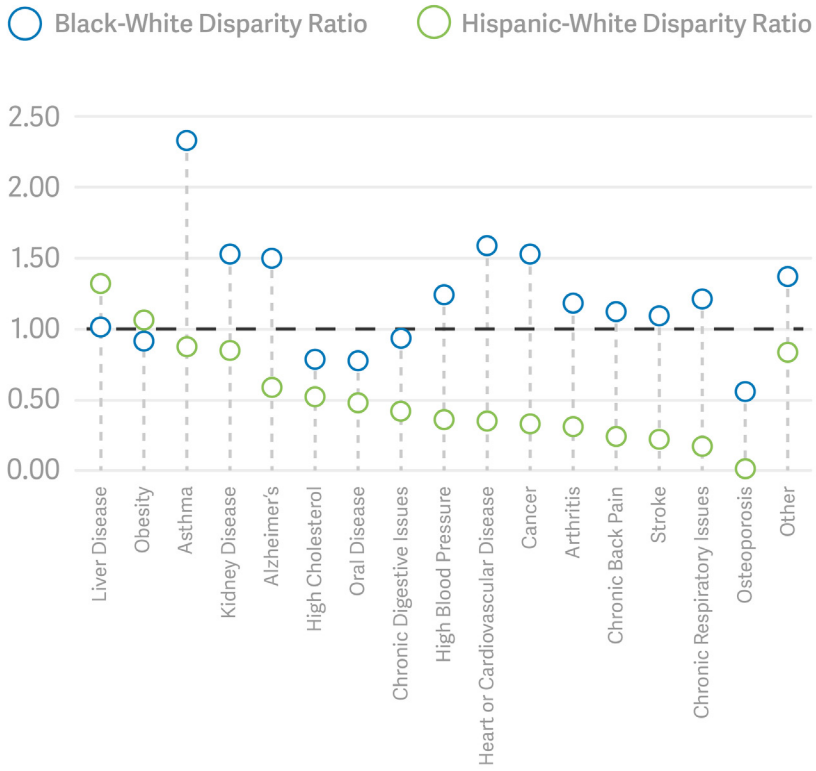
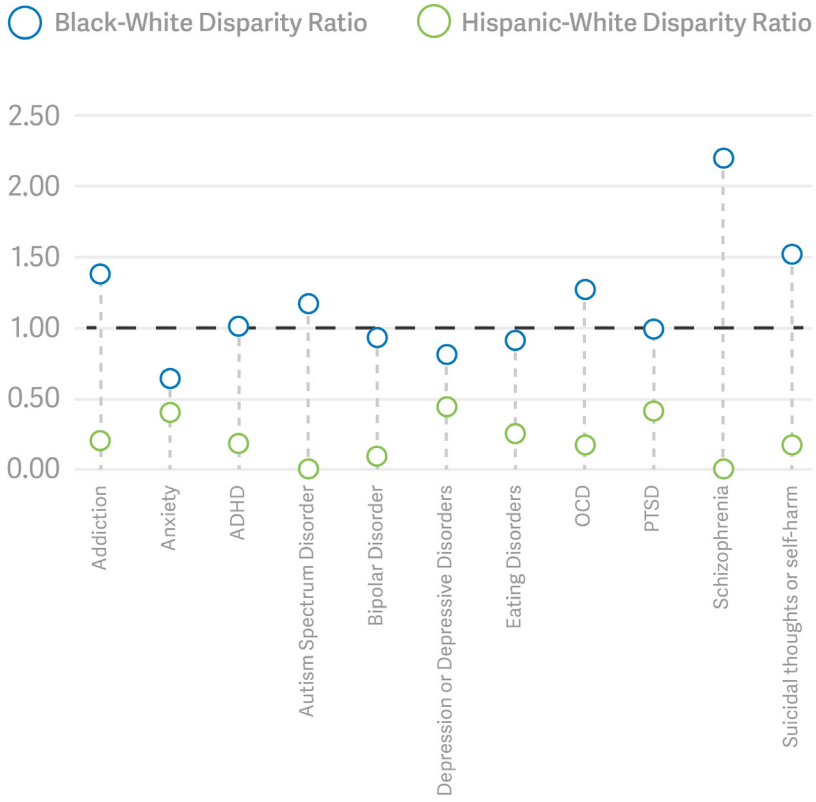


Figure IN8: Disparity Index, Mental Health



COMMUNITY PROFILE

INTRODUCTION

The Rockford Region (the Region), Illinois, and the United States (U.S.) have experienced dramatic changes in recent decades. The Region and the U.S. are experiencing a trend of aging populations similar to what is occuring in cities across the country. At the same time, population centers are shifting as more and more people flee the congested urban areas of the Midwest and Northeast, opting instead to move South, to cities such as Austin, Charlotte, and Atlanta; and West, to cities such as Portland, Seattle, and San Diego. Unfortunately, this leaves historical population centers in the Midwest and Northeast, such as Chicago, Detroit, and Buffalo, left in financial and social insolvency.

As population and demographic groups diversify and relocate, the U.S. is also experiencing a period of globalization, political strife, economic and social instability, and concerns surrounding the omnipresence of technology in modern life. Further, a number of economic recessions; multiple, multi-billion dollar, natural and man-made disasters, and; numerous other geopolitical concerns seem to be an ever-present stress on modern life. Financial, environmental, and social instability can create strains on the mental and physical health of the population as people have mounting concerns over the future. As such, community health is more important than ever as the U.S. combats rising rates of mental and physical stress, as a result of these bio-psychosocial stressors.

The demographic information included below provides a baseline of information for Winnebago and Boone counties (the "Report Area"). Understanding current and future trends in demographic information are key to planning, programming, and evaluating the investment of resources into an area. It also plays a vital role in, assisting in the decision-making process for stakeholders and local policy leaders when making decisions in support of communities. The following section provides a comprehensive overview of the Report Area, providing information including population, income, age, poverty, housing, education, and transportation.

The data sources used for this section include national, state, and local resources, including the U.S. Census Bureau (USCB), the Illinois Department of Employment Security (IDES), the Illinois State Board of Education (ISBE), the US Bureau of Labor Statistics (BLS), the Centers for Disease Control and Prevention (CDC), the U.S.

Department of Health & Human Services (DHHS), and the U.S. Department of Agriculture (DOA). The information and data included in this section is representative of the most current and widely available data year (2017). Further information on any data can be referred back to the originating resource for additional details.

The information included below provides a high level overview of current demographics in Winnebago and Boone Counties, it is not all encompassing. There are many other indicators as well as more detailed data and information than what is provided below. While the authors strive to provide the best information possible, the Region 1 Planning Council (RPC) does not make any representations or warranties, either express or implied, concerning the accuracy, completeness, reliability, or suitability of the information included in this plan. Readers are invited to contact the authors with proposed corrections or additions; as well as refer to the primary source of information for any further research.

WINNEBAGO COUNTY

Founded in 1836, Winnebago County was named for the Winnebago/Ho-Chunk tribe of Native Americans. It is located between Stephenson County, to the East, DeKalb to the South, and Boone County to the West. Winnebago County is bordered by Rock County (Wisconsin) to the North.

The County has experienced rich industrial growth thanks, in part, to the development of the railroad, as well as its proximity to the Chicago Metropolitan Statistical Area (MSA). Thanks to a flood of Irish and Swedish immigrants from Chicago, the Rockford Region grew rapidly throughout the 1900s. The population boom exploded during the postwar boom of the World War II era during the 1940s and 1950s. Today Winnebago County has retained its industrial and manufacturing roots, even as many companies shuttered during economic recessions in previous years. Winnebago County is now an aerospace, manufacturing, logistics, and robotics hub due to long-term investment from the private sector. The County's seat, Rockford, is also where the majority of the population is concentrated. The County is also home to nine other incorporated areas: The Cities of Loves Park and South Beloit; and the Villages of Cherry Valley, Durand, Machesney Park, New Milford, Pecatonica, Rockton, Roscoe, and Winnebago, which are dispersed throughout the County. The County's strategic location along the I-39/I-90 corridor offers access to a wealth of opportunities afforded by its proximity to the Rockford MSA and the Chicago MSA.

BOONE COUNTY

Founded in 1837, Boone County is located along the Northern Illinois-Wisconsin border. It is located between Winnebago County to the East, DeKalb County to the South, and McHenry County to the West. Boone County is bordered by Rock and Walworth Counties (Wisconsin) to the North. Boone County's rich agricultural and rural heritage dates all the way back to its founding. However, like many other counties in Northern Illinois, it

has experienced periods of industrialization, urbanization, and rapid population growth over the decades. Today's Boone County has held steadfast to its agricultural roots, and the majority of the land is still utilized for agricultural purposes; further, the County remains relatively rural in comparison to surrounding counties. The County's seat, Belvidere, is where the majority of the population is located. The County is also home to four other incorporated areas: the Villages of Caledonia, Poplar Grove, Capron, and Timberlane are dispersed throughout the County. The City of Loves Park and the Village of Cherry Valley also extend slightly from the Eastern part of Winnebago County into the Western part of Boone County. Similar to Winnebago County, the County's strategic location along the I-39/I-90 corridor provides a wealth of opportunities thanks to the Rockford and the Chicago MSAs.

POPULATION

Illinois, like many states in the Midwest and Northeast, is currently experiencing a period of population loss, the likes of which had not been seen since the 1980s. More and more people are moving to the South and West in droves; leaving behind ailing cities in the Rust Belt, such as Detroit, Pittsburgh, Syracuse, and Rockford. The total population of the Report Area is 341,150. Winnebago

Figure 1A: WInnebago/Boone County Population Change from 1930 to 2017

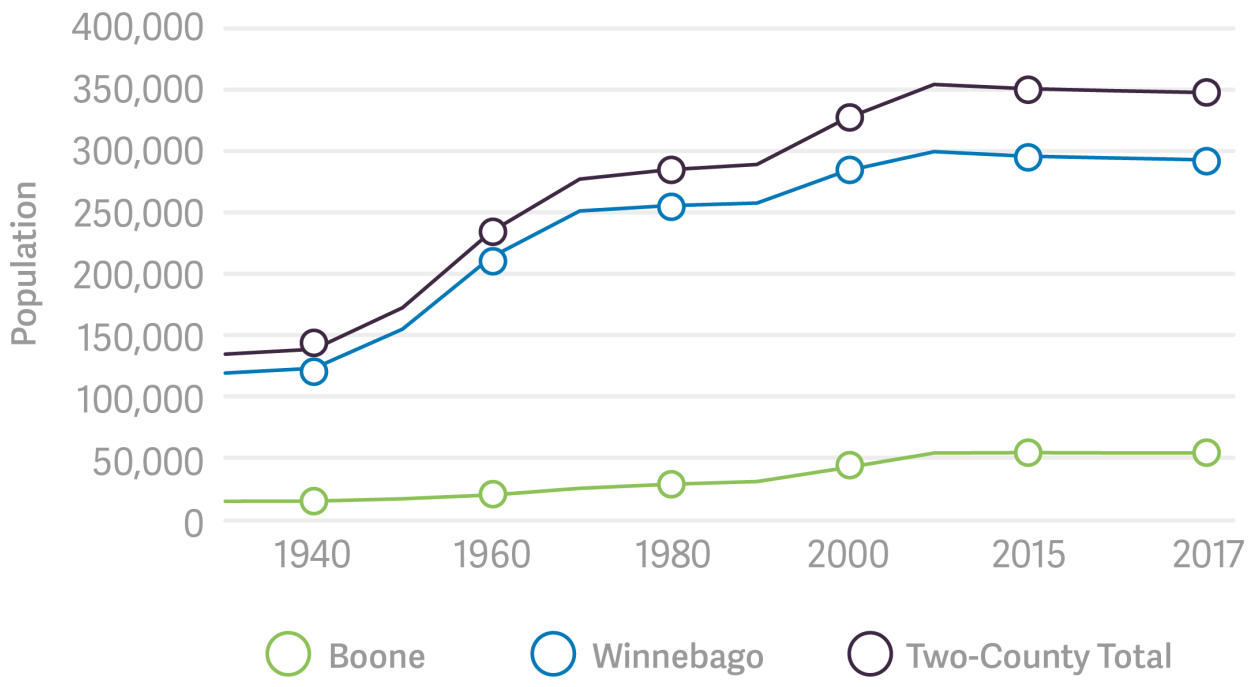
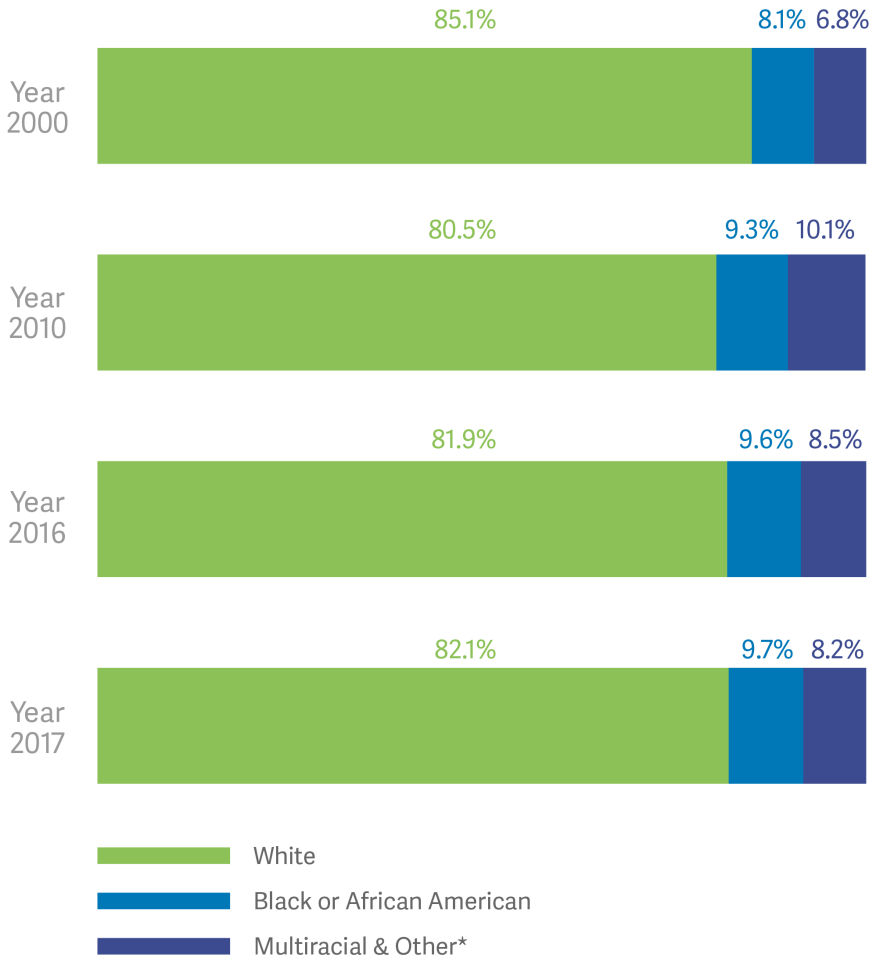


Figure 1B: Racial Breakdown of the Report Area



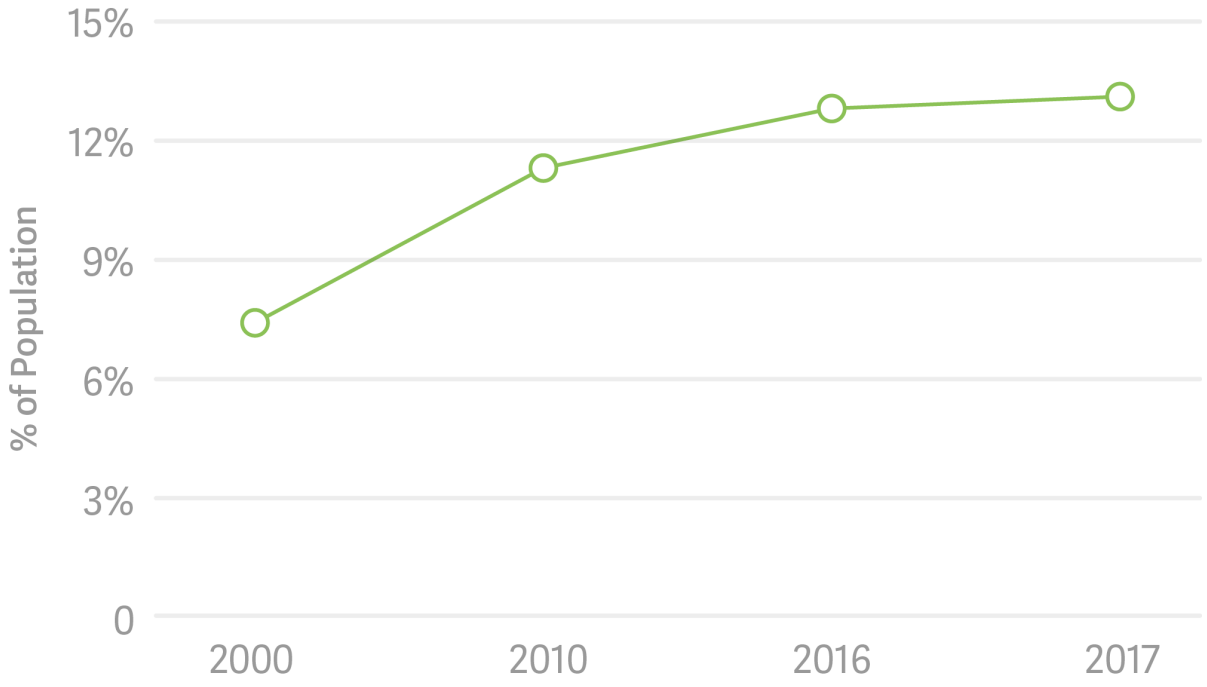
** Asian, American Indian & Alaska Native, Two or More Races, Some Other Race*

County has 287,512 people and Boone County has 53,638 people. The Rockford MSA makes up the bulk of this, with 288,891. Winnebago and Boone Counties population has risen and fallen at different rates from 1980 to 2017 (Figure 1A). Significant shifts in population totals have had an impact on healthcare, the economy, and the social fabric of a community (e.g. necessary services, hospital access, total population on public assistance programs).

POPULATION BY RACE

Racially, the Report Area is predominantly white; however, the margin of white residents versus non-white residents is shrinking (Figure 1B). As more white residents leave the Report Area, an uneven distribution of persons of color are moving in – these are predomninantly Hispanic and Latino and Asian persons.

Figure 1C: Growth in the Hispanic and Latino Populations in the Report Area



In other words, the Report Area has diversified immensely from 2000 to 2017. While the area is still predominantly white, Hispanic and Latino residents now make-up the fastest-growing minority group in the Report Area (Figure 1C). The total Hispanic and Latino population for the Report Area was 46,318, with nearly 1 in 3 of those living in Boone County. Over recent decades, there has been continued growth in the Hispanic and Latino communities, while other communities have either shrunk or experienced little to no growth.

POPULATION WITH DISABILITIES

Disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers. The percentage of the total civilian non-institutionalized population with a disability is slightly higher in Winnebago County (14%) than the State (11%); comparatively, Boone County (11 %) it is the same.

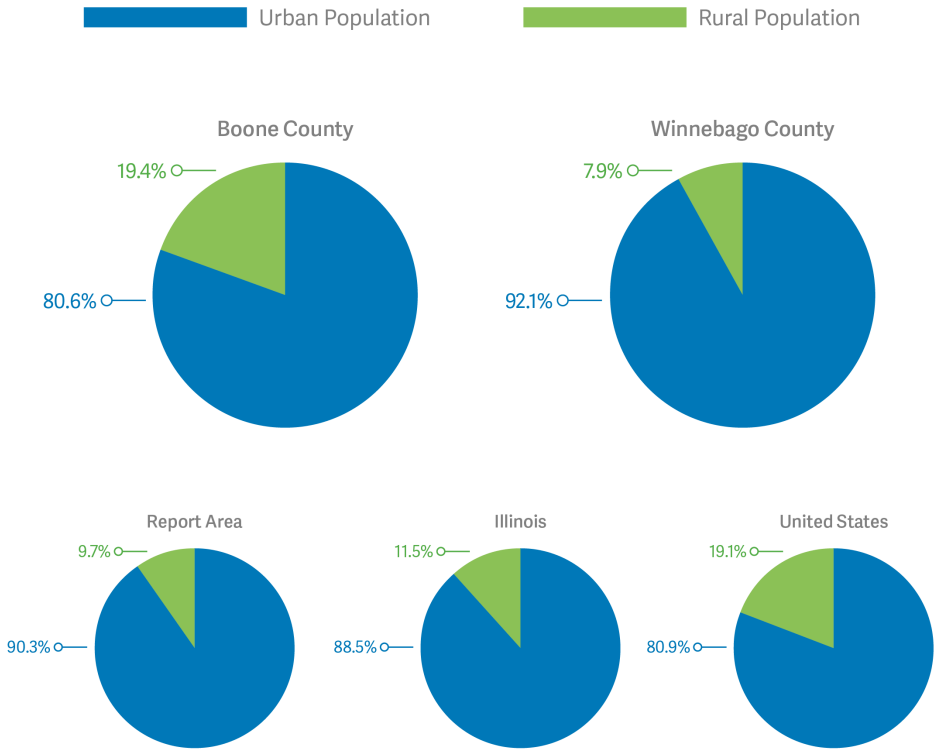
POPULATION WITH LIMITED ENGLISH PROFICIENCY

The population age 5 and older who speak a language other than English at home and speak English less than ***very well*** is relevant because an inability to speak English adequately creates barriers to healthcare access, provider communications, and health literacy/education. The percentage of the population age 5 and over who speak

Figure 1D: Breakdown in Hispanic Origins for Report Area[4]

[4]As of 2017, there were no Native Hawaiian or Other Pacific Islander located in the Report Area

Figure 1E: Urban vs. Rural Population



English ***very well*** at home is slightly higher in Boone County versus Winnebago County; this is likely attributed to the higher rate of non-white households relative to the total population.

URBAN VERSUS RURAL POPULATIONS

Overall the Report Area is 90.3% urban and 9.7% rural, which is slightly more urbanized than the state (88.5% urban, 11.5% rural). There is a substantial difference between Winnebago and Boone Counties in this measure. Boone County is nearly 20.0% rural while Winnebago County is less than 8.0% rural (Figure 1E). The Census definition of "urban" areas consists of built up areas that are linked together, or urbanized, using population density. Understanding the makeup of urban versus rural populations is important because their needs and access vary drastically. A 2017 report found that rural access to health care was approximately 55.1 primary care physicians (PCP) per 100,000 residents in 2013; compared to 79.3 PCP per 100,000 in urban areas[5]. Not only are there often less doctors in rural areas, but access to hospitals and specialty clinics is often nonexistent. That same report found that some rural residents have to drive more than 200 miles for care.

INCOME & RELATED INDICATORS

[5]Data gathered from a 2017 report by the North Carolina Rural Health Research Program (NC RHRP) of UNC Chapel Hill; Rural Health Snapshot found at https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2017/05/Snapshot2017.pdf

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

PER CAPITA INCOME

Per capita income for the Report Area was $28,163 in 2017, which was below both state ($32,924) and national ($32,397) values. This includes all reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. The per capita income in this Report Area is the average (mean) income computed for every man, woman, and child in the specified area. Per capita incomes for Boone County and Winnebago County were within $2,000 of each other.

MEDIAN HOUSEHOLD INCOME

In 2017, median household income (MHI) in Boone County was $62,701 and in Winnebago County it was $51,110. Winnebago County's MHI is below the state MHI ($61,229). Conversely, Boone County's MHI is slightly higher than both the state and national MHI ($62,372) benchmarks. Married couples with or without children and single men without children had higher median incomes while single men with children and single women regardless of the presence of children had lower median income.

PUBLIC ASSISTANCE

The percentage of households receiving public assistance income includes Supplemental Security Income (SSI), cash public assistance income, Food Stamps/ SNAP in the past 12 months, and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. In 2017, approximately 1 in 3 of all households (34.17%) in the Report Area received some form of public assistance income, which was higher than state (26.54%) and National (26.26%) rates. Boone County's (26.20%) rate was on par with the state and national rate while Winnebago County's (35.71%) rate was slightly higher.

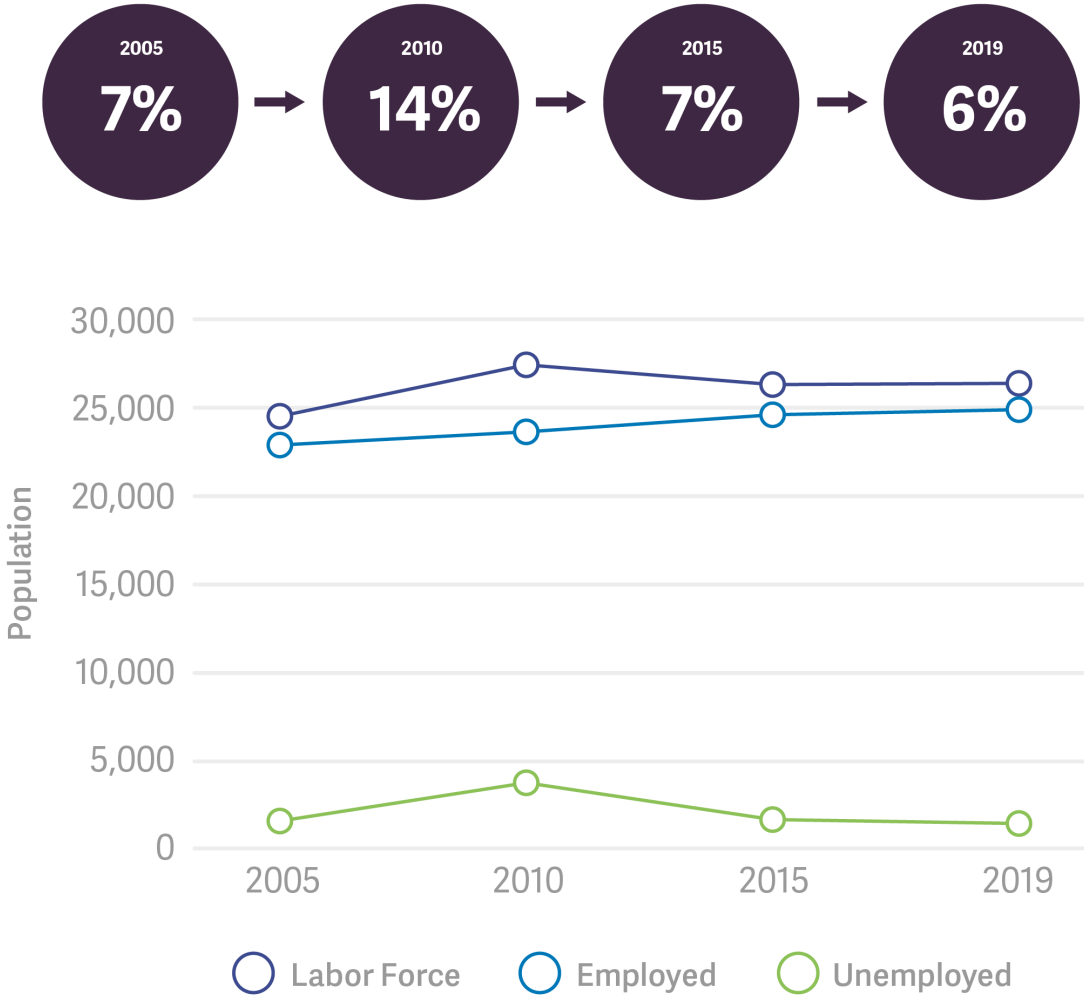
INCOME INEQUALITY

The Gini coefficient is a statistical measure of the income (in)equality of an area. Values range from zero (meaning the area has perfect income equality) to 1 (meaning all the area's wealth belongs to a single person). In 2018, Boone County had a coefficient of 0.44 and Winnebago County had a coefficient of 0.45, both slightly below the state value of 0.48 (which is also the national value), meaning there is slightly more income equality in the Report Area than there is statewide or nationally.

UNEMPLOYMENT

The unemployment rate indicator is relevant because unemployment is one of the main social determinants of health (SDOH),

Figure 1F: Employment Trends from 2005 to 2019, Boone County

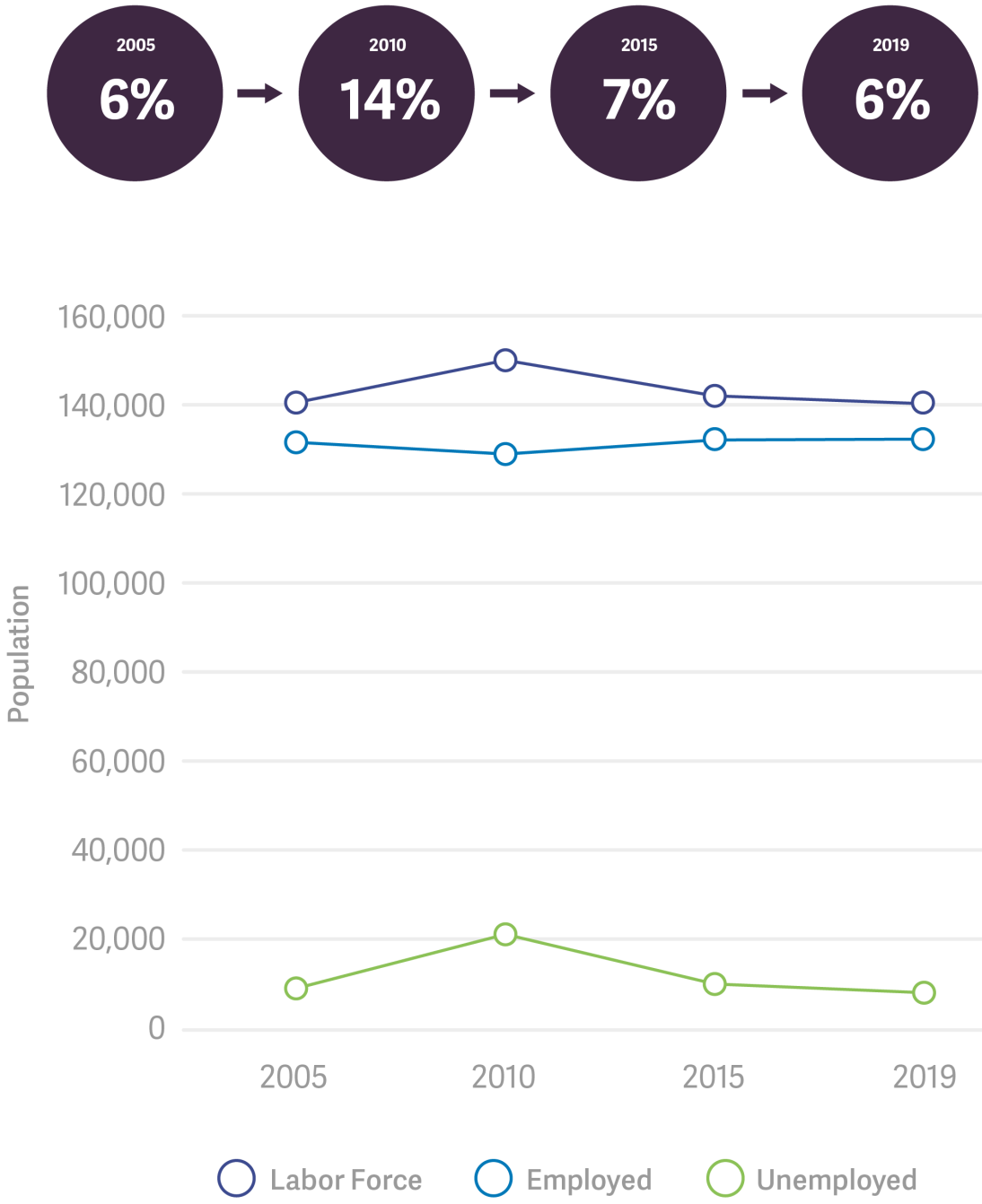


and creates financial instability and barriers to health access including lack or loss of insurance coverage, health services, fresh food, and other determinants of good health. Generally, a natural rate of unemployment in the national economy is accepted to be around 3.5 to 4.5 percent. This rate represents the "rate of unemployment arising from all sources except fluctuations in aggregate demand." In other words, it is the rate at which the U.S. economy is considered balanced. The U.S. Congressional Budget Office (USCBO) and Federal Reserve Bank (USFRB) define this acceptable rate of unemployment[6].

The unemployment rates in both Boone (5.32%) and Winnebago Counties (6.48%) are higher than the state (4.8%) and the national rates (4.13%) in 2017. Overall the rates are lower than two years prior in 2017. On an annual basis, the region continues to improve from the unemployment rate of nearly 15.0% at

[6]Information from U.S. Congressional Budget Office, Natural Rate of Unemployment (Long-Term) [NROU], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/NROU, April 29, 2020.

Figure 1G: Employment Trends from 2005 to 2019, Winnebago County



the height of the recession in 2009 so the area is continuously heading towards full employment, just a little slower than the national average (Figures 1F & 1G).

AGE

The median age in Boone County is 38.3, and in Winnebago County is 39.6. Both counties populations are slightly older than the Illinois median age of 37.7 and national age, 38 years. Boone County has the highest proportion of school-aged children (under 18), while Winnebago County has higher proportions in the older age groups, especially over the age of 55 (Figure 1H). Age diversity often impacts socioeconomic factors as well as health needs (e.g. social services, long-term care facilities, specialty services).

POVERTY

Poverty is considered a key driver of health status and an important SDOH. Poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status. In the Report Area, approximately 9,573

Figure 1H: Breakdown by Age Group for Boone, Winnebago Counties; Report Area Total (2017)

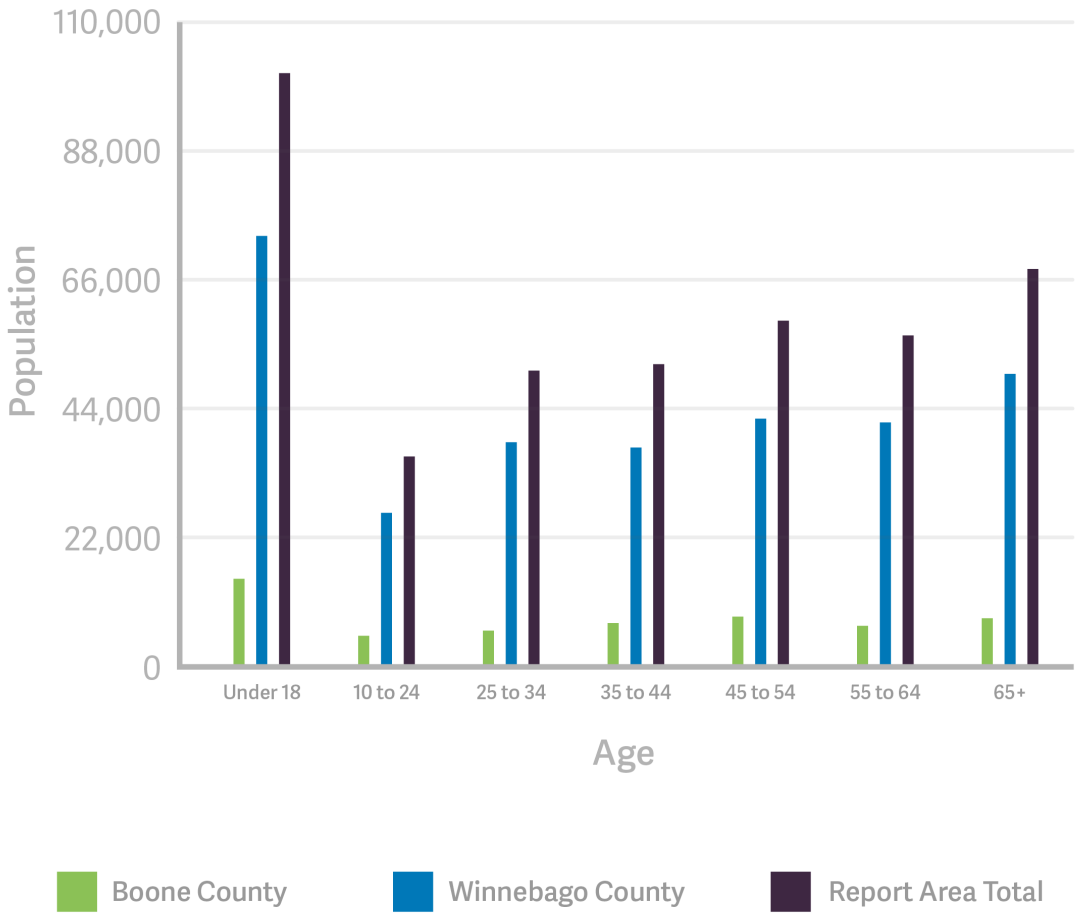
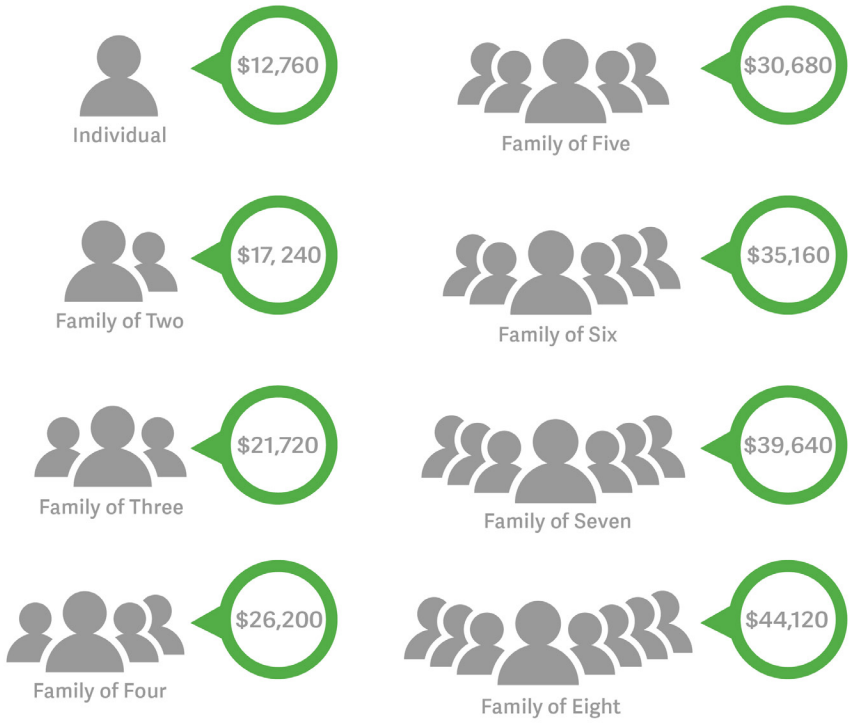


Figure 1J: 2020 Federal Poverty Guidelines, Federal Poverty Level (FPL) Income (Max)[7]



families are living in poverty (10.8%, prior to the onset of COVID-19). If a household's income is below a level set by the federal government then that household is eligible for public assistance programs (e.g. SNAP, TANF, Medicare, Medicaid, CHIP, Marketplace Health Insurance). These income guidelines vary depending upon the household size and are updated each year. The levels vary depending upon the specific program requirements as well as the federal poverty level for that year. For example, the Emergency Food Program is eligible to households earning less than 185% of the federal poverty guidelines, while the Low Income Home Energy Assistance Program (LIHEAP) is available to households earning less than 150%.

POVERTY GUIDELINES

The 2020 (Federal) poverty guidelines are updated periodically in the Federal Register by the U.S. Department of Health and Human Services (US DHHS) under the authority of 42 U.S.C. 9902(2). The 2020 FPL income numbers (Figure 1J) are used to calculate eligibility for public assistance programs. Poverty guidelines are updated each year and only apply to programs for that year.

Poverty thresholds, different from poverty guidelines, are used by the USCB to determine the number of Americans living in poverty each year. Poverty guidelines are the federal standards required to establish

an individual or household's eligibility for federal assistance programs.

In the Report Area, 14.5% of individuals are considered to be living in poverty; this is slightly higher than the State rate (13.5%). Winnebago County's (15.3%) accounts for much more of this, as it's rate is considerably higher than Boone County's (10.6%).

SUSTAINABLE WAGE

The Poverty Guidelines do not necessarily reflect the reality of the true costs to support the basic necessities of living. The Massachusetts Institute of Technology[8] has created a Living Wage Calculator in order to determine the minimum level of wages necessary to meet their basic needs, based upon a set realistic expenses that would be required to support a household (e.g. housing, food, healthcare) (Figure 1K). Childcare is also a consideration if there are children in the household. The Poverty Wage is the hourly wage needed to just reach the poverty threshold. If a single adult were making $5/hour it would be less than half what would be needed to sustain a household. The sustainable wage for a household with just 1 child is, in the best scenario, $5/hour above the current minimum wage (for a household with 2 adults working for minimum wage), and in the worst, triple the minimum wage (for a single parent). This means that a single parent with 1 child would need to make nearly $25/hour to support their household at above the poverty level standard of living. Winnebago and Boone Counties have the same level of sustainable wage.

HOUSING

Safe, affordable housing is an essential human need. Housing is influential in the development of safe, healthy, economically and socially balanced communities. Lack of access to safe, affordable housing contributes to poverty, instability, poor health outcomes, and even death. Housing needs vary based on type; for example, whether a home is owned or rented can influence needs such as access to transportation, employment, healthcare, and grocery stores. Housing opportunities for both owner and rental-occupied units necessitate the provision of a wide variety of housing opportunities for all ages, incomes, and abilities.

Housing represents all the different types of structures that people choose to live in (e.g. single-family (attached and detached), multi-family or other); whether that is a house, mobile home, townhome, apartment building, or other type. In the Report Area, there are 133,200 households; Winnebago County (114,491) has more than Boone County (18,709). The average household size is approximately 2.5 persons/household.

HOUSE-BURDENED HOUSEHOLDS

The USCB defines "house burdened" households as those that spend in excess of 30% of their income on housing.[9] According to the Harvard University Joint Center for

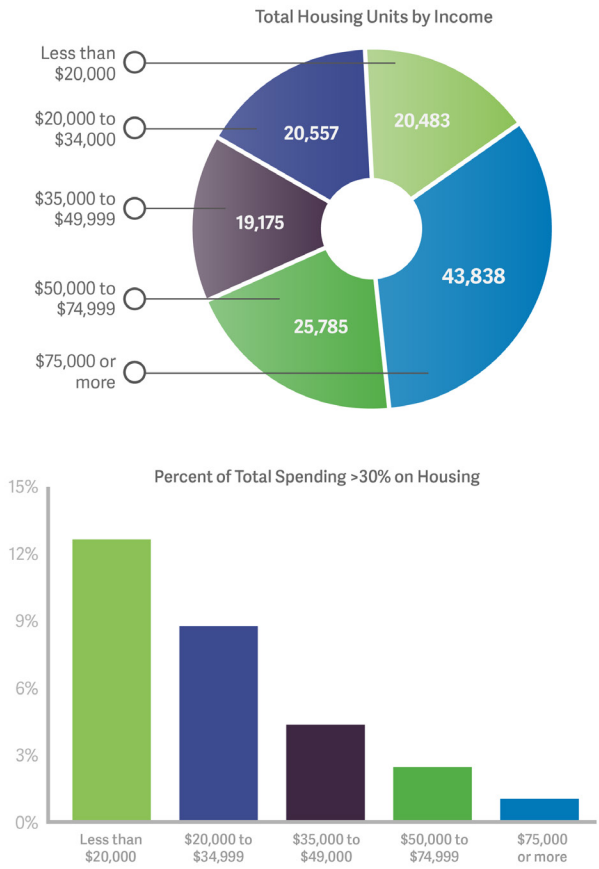
[8]More information can be found here: https://livingwage.mit.edu/pages/about
[9]Information from the USCB at: https://www.census.gov/housing/census/publications/who-can-afford.pdf

Figure 1K: Winnebago, Boone County Sustainable Wages

Housing Studies (JCHS), approximately 15% of households in the Report Area are considered to be "severely burdened" (meaning they spend in excess of 50% of their income on housing).[10] The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

In 2017, approximately 3.41% of households in the Report Area making above the MHI were considered "house burdened" (see Figure 1L). The percentage of cost burdened households increases dramatically as their income range drops. For example, only 1,318 households making $75,000 or more (<1%) are considered house burdened; compared to 16,592 households making less than $20,000 (12.73%) (see Figure 1L).

Figure 1L: House Burdened Households by Income & >30% of Income Spent on Housing



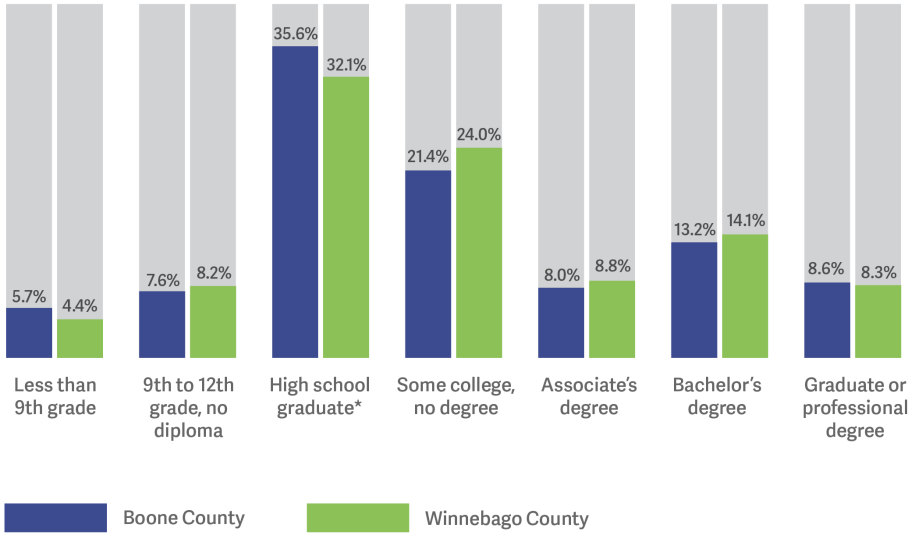
EDUCATION

Educational attainment has been linked to positive health outcomes. The population without a high school diploma or GED is highest in Boone County 's population has the highest rate of people with less than a high school diploma or GED, at 13.2% versus 12.6% in Winnebago County. The national percentage is also 12.6% and the state rate is 11.5%, lower than both counties. The largest proportion of the population in both Boone and Winnebago Counties are those that have only a high school diploma, at 35.6% and 32.1% respectively (Figures 1M).

Residents having at least an associate's degree total 10,348 in Boone County (29.8%) and 60,911 in Winnebago County (31.3%). Residents having at least a bachelor's degree total 7,561 in Boone County (21.7%) and 43,697 in Winnebago County (22.4%). A total of 125,540 residents or 54.7% in the Report Area have at least some college (Figures 1M, 1N).

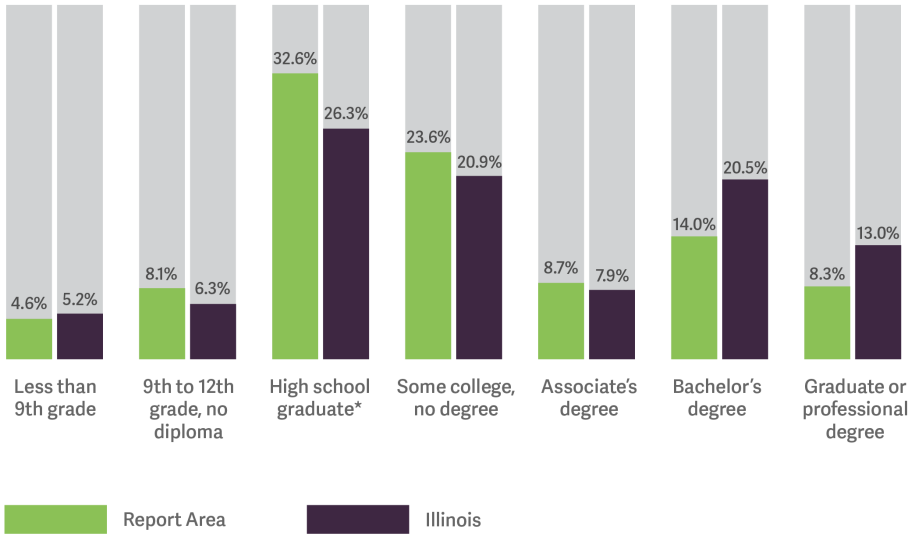
[10] Information from the Harvard University JCHS at: https://www.jchs.harvard.edu/son-2019-cost-burdens-map

Figure 1M: Educational Attainment by Type, Boone and Winnebago County



*includes equivalency

Figure 1N: Educational Attainment by Type, Report Area and Illinois



*includes equivalency

TRANSPORTATION

Equitable and efficient access to transportation can often be a significant benefit to individuals and communities. Understanding how people commute to work and levels of access to private vehicles can help plan for programs and services for disabled populations; understand access to grocery stores, hospitals, and parks; understand levels of employment and housing discrimination, and; plan for emergencies, such as natural disasters (like the COVID-19 pandemic).

TRAVEL MODE TO WORK

Vehicle mode choice for travel to work is often heavily dependent upon living situation. For the Report Area, 83.68% of households drove alone. This is higher than the State (73.32%) and National (76.44%) rate (Figure 1O).

ACCESS TO VEHICLES

In 2017, 7.7% of households in the Report Area have no access to a motor vehicle (Figure 1P). This rate is not even across counties: in Boone County, the rate (4.3%) is much lower than Winnebago County's (8.3%). Both the County and Region's rates were lower than the state rate of 10.78% and the national rate of 8.57%.

Figure 1O: Vehicle Mode Used to Travel to Work, Report Area and Illinois

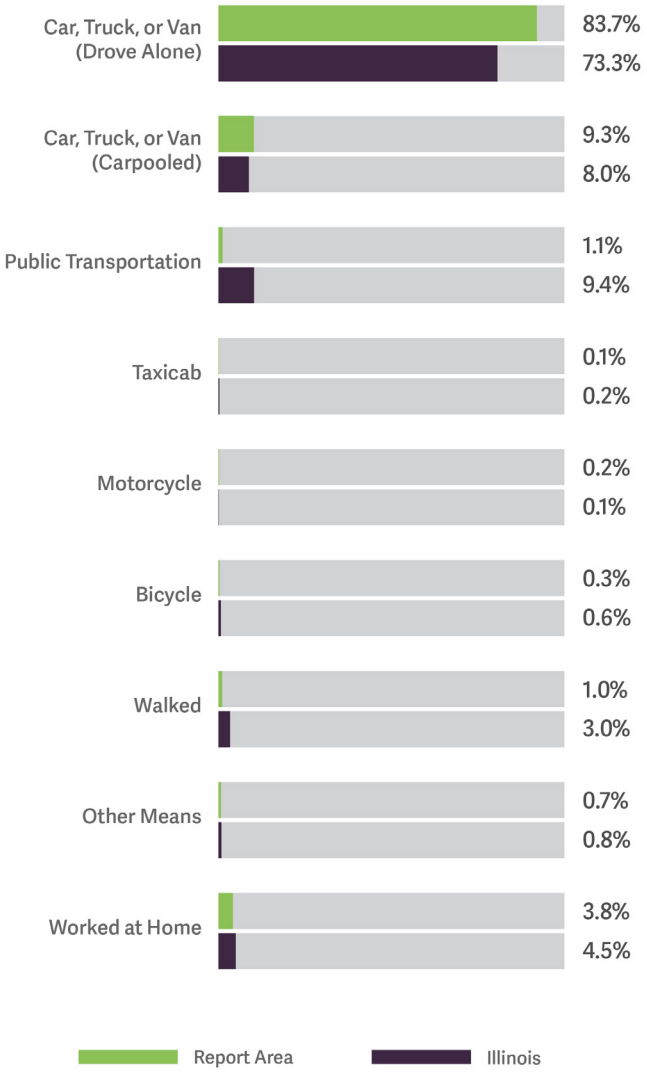
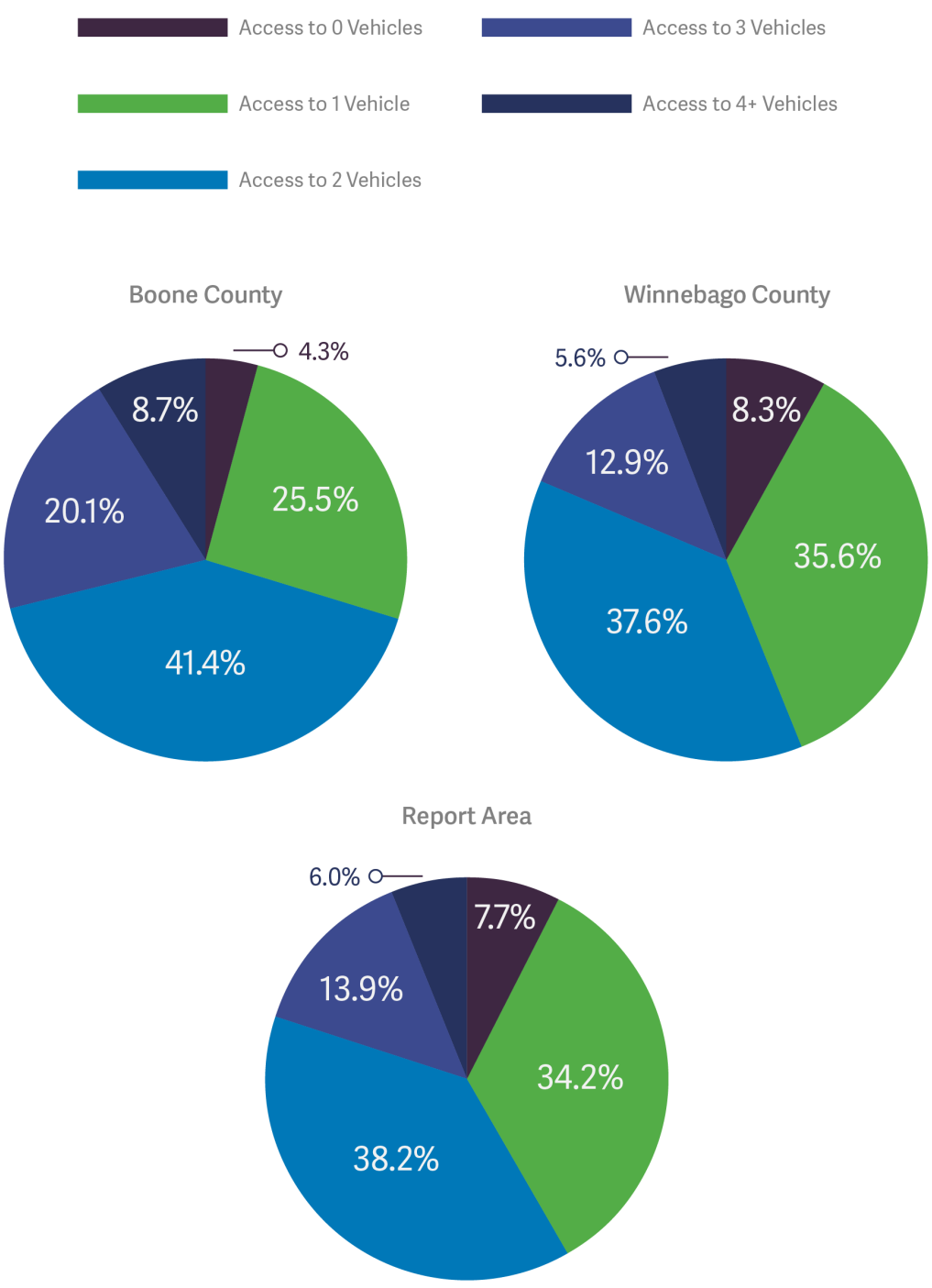


Figure 1P: Access to Vehicles by County and Report Area



SURVEY RESPONDENT DEMOGRAPHICS

Age

- 31% (30 to 44)
- 38% (46 to 64)
- 18% (65 to 74).

Race

- 46% (White)
- 33% (Other)
- 15% (Black or African American).

Education

- 20% (high school diploma or GED)
- 26% (graduate or professional degree).

Living Situation by Type)

- 28% (married couple)
- 21% (single person, living alone)
- 21% (married couple with children).

Annual Household Income

- 11% (Less than $10,000)
- 16% ($50,001 - $75,000)
- 14% ($100,001+)

Housing by Type

- 44% (own)
- 29% (rent)
- .5% (homeless).

Employment Status by Type

- *Self*
  - 9% (self-employed)
  - 21% (full-time job)
  - 14% (not employed, not looking for work)
- *Others*
  - 9% (self-employed)
  - 28% (full-time job)
  - 4% (not employed, not looking for work)

Zip codes with highest response rates

- Belvidere (61008)
- Rockford (61107)
- Rockford (61103)

COMMUNITY ASSETS, ISSUES, & CONCERNS

While the purpose of this survey was to collect community data on health-related behaviors, status, conditions, and use of services, the collection of answers regarding community perceptions and interactions with the community are particularly useful to inform health-related programs and goals.

This brief section of the survey asked a few questions about community assets and issues, as well as ratings of community characteristics. The section also asked a question about making Rockford a "Top 25 Community", which is an opportunity to support the work of Transform Rockford, as the nonprofit uses these metrics to advocate for community programs.

The questions and options were developed at the suggestion of the Rockford Regional Health Council.

MOST IMPORTANT COMMUNITY ASSETS

This question asked respondents to make three selections from a list of community assets representing those they believe are most important to the region. When the survey samples were combined, many of the assets were chosen at similar rates, without one asset greatly standing out. ***Activities for seniors*** (15%) had the highest selection rate, followed by ***programs to create a safe, healthy, clean environment*** (13%) (Figure 2A). ***Help coping with death*** (4%) had the lowest selection rate, and while it may be important, did not appear to be a priority among respondents.

MOST IMPORTANT COMMUNITY ISSUES

A similar question for the most important community issues showed that those surrounding violence were the concerns of highest importance. ***Gangs*** (7%), ***Violence*** (8%), and ***Neighborhood Safety*** (7%) were among the most frequently selected issues. ***An Unhealthy Environment*** (8%) and ***Obesity*** (7%) were also similarly frequently selected, however, these were picked at a much higher rate among the Facebook sample (see Appendix D). ***Literacy*** (4%), ***School Graduation Rates*** (3%), and ***Economic Discrimination*** (3%) were the picked at lowest frequency (Figure 2C).

MAKING THE ROCKFORD REGION A TOP 25 COMMUNITY

One question on the survey asked which of the following would help to make Rockford a "Top 25 Region", a community goal led by the work of Transform Rockford. ***Good Jobs and Health Economy*** (17%) was the characteristic selected at the highest rate. ***Less Violent Crime*** (14%) and ***Better Schools*** (12%) were also often selected. Perhaps surprisingly, certain selections such as ***Faith-based Services*** (1%), ***Early Childhood Services*** (1%), and ***Health-related Education*** (1%) were rarely selected (Figure 2D).

HOW DO YOU BUY YOUR FRESH FRUITS AND VEGETABLES?

The survey asked respondents how they got to the stores where they bought their fruits and vegetables. The majority of respondents stated they drive a personal vehicle (39%) to get their produce (Figure 2A). There were differences in the survey samples, likely due to income and neighborhood differences. **Delivery** and **biking** were far more common in the Random and Facebook samples, while getting a ride from someone and taking public transit were more common in the Outreach sample. These differences were great enough to flatten what would have been an overwhelming trend toward towards driving a personal vehicle.

Figure 2A: How Do You Buy Your Fresh Fruits and Vegetables?

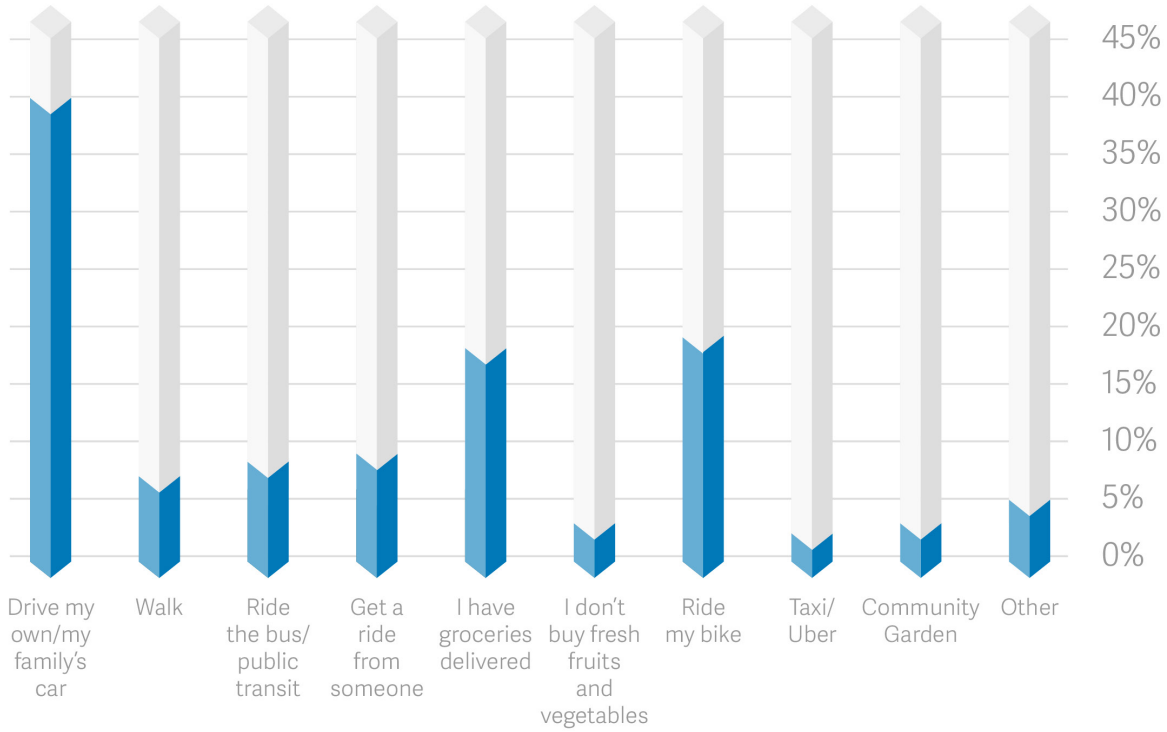


Figure 2B: Most Important Community Assets

1. Activities for Seniors
2. Programs to Create a Safe, Healthy, Clean Environment
3. Special Education for Children
4. Substance Abuse/Mental Health Services
5. Support for Caregivers, Elderly, Disabled
6. Sservices for People or Famililties in Crisis
7. Activities for Teens
8. Job Training, Retraining
9. Services for Developmental Disabilities
10. Help Coping with Death
11. Other

Figure 2C: Most Important Community Issues

1. Neighborhood Safety
2. Unhealthy Environment
3. Gangs, Delinquency, Youth Violence
4. Violence, Guns
5. Obesity
6. Crime
7. Child Abuse
8. Mental Health
9. Substance Abuse
10. Domestic Violence
11. Homelessness
12. Need for Affordable Housing
13. Racial Discrimination
14. Literacy, Ability to Read
15. School Graduation Rates
16. Economic Discrimination
17. Teen Pregnancy
18. Other

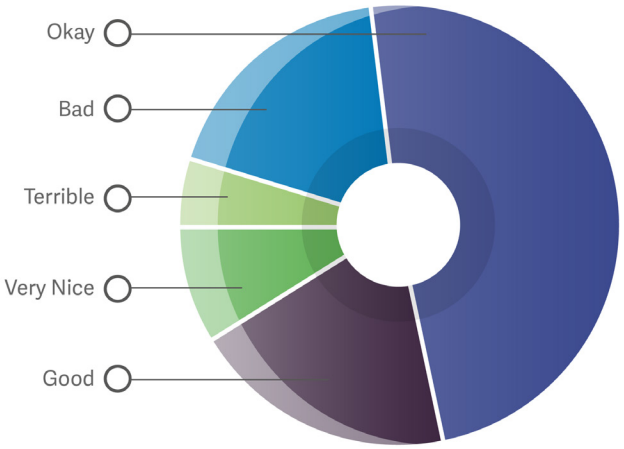
Figure 2D: Making the Rockford Region a Top 25 Community

1. Good Jobs and Healthy Economy
2. Less Violent Crime and Safer Neighborhoods
3. Better Schools
4. Access to Healthcare
5. Clean Environment
6. Police, Fire, and Emergency Services
7. Affordable Housing
8. Walkable, Bikeable Communities
9. Homelessness Services
10. Services for Seniors
11. Parks and Recreation
12. STEM Education
13. Arts and Culture
14. Reduce Bullying
15. Public Transportation
16. Other
17. Faith-Based Services
18. Early Childhood Services
19. Health-Related Education

OVERALL, HOW WOULD YOU RATE THE COMMUNITY AS A PLACE TO **WALK**, WITH 1 BEING A BAD PLACE TO WALK, AND 5 BEING GREAT?

When asked a question about walkability, nearly half of all respondents reported a 3, which is about average. Ratings of 2 and 4 were nearly equal (Figure 2E).

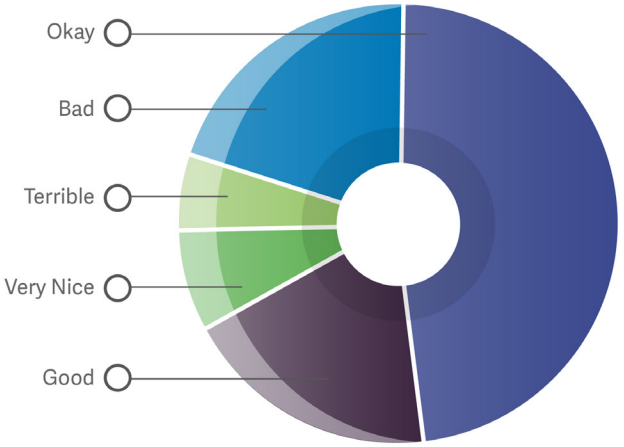
Figure 2E: Ratings of Community Walkability



OVERALL, HOW WOULD YOU RATE THE COMMUNITY AS A PLACE TO **RIDE A BIKE**?

Our bikeability question had similar distribution to the walkability question. Nearly half of respondents see the community as average for a bicyclist, while nearly a quarter each, believe the community to be either below average or above average (Figure 2F).

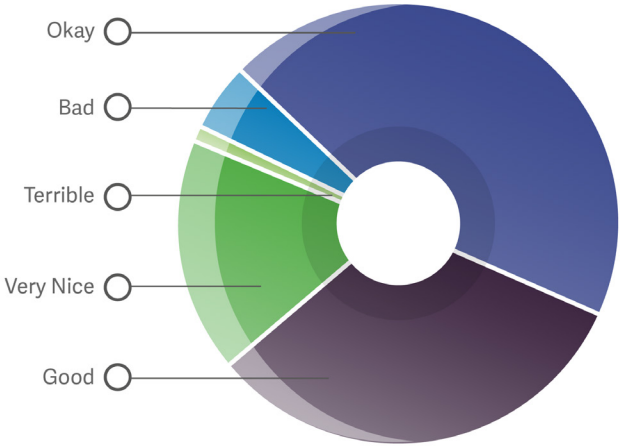
Figure 2F: Ratings of Community Bikeability



IN GENERAL, WOULD YOU SAY THAT THE PEOPLE YOU KNOW IN THE COMMUNITY ARE...?

Respondents were asked the question above to rate their opinions of the people in their community, with ***1*** meaning ***Terrible***, ***5*** meaning ***Very Nice***. Ratings, when combined into a total sample, tended to be average or higher, with few rating their fellow community members as a ***1*** or ***2***. This was particularly true in the Random sample. The Outreach sample had 58% of respondents rating the people in their communities as about average (Figure 2G).

Figure 2G: Ratings of People in the Community



HEALTH STATUS AND ACCESS TO CARE

DESCRIPTION OF HEALTH STATUS

The survey sought to determine the general health status of residents throughout the region by asking survey respondents to rate their own health. Overall, the highest percentage of respondents across all survey samples (23%) described their health as ***okay***, or a ***3*** out of ***5*** on a simple Likert scale. Only 11% described their health as ***excellent***. Less than 1% of the total sample described their health as ***poor***, regardless of race, income, or education level. In fact, 6 of the 8 (75%) groups surveyed had no respondents who described their health as ***poor***.

DESCRIPTION OF WEIGHT

Another measure of the region's health that was used was a self-assessment of participant weight. Across all samples, ***overweight*** was the most common answer given by respondents and made up 44% of the total. Within the total sample, 51% of the Random sample rated themselves as ***overweight***. Of the total sample, 40% of respondents reported their weight as ***just about right***.

According to the CDC, the prevalence of obesity is significantly higher among adults living in rural counties (34%) than among those living in metropolitan counties (29%). The findings held true for adults in most sociodemographic categories, including age, sex, and household income. While this finding does not correlate directly with the Rockford Region, there are similarities. Urban, suburban, and rural groups with a wide range of income levels comprise the Rockford Region's population as well.

The region is not unlike the U.S. as whole in regard to weight. Only 10% of the total sample identified as ***obese***. While ***overweight*** and ***obese*** both mean having more body fat than is considered healthy, ***obese*** refers to a higher amount of body fat than ***overweight***. This percentage does not correlate with national data available from the CDC. Nationally, 42% of the population was considered obese in 2017-2018. This indicates obesity may be under-reported by the RRHC survey sample. Among other reasons, we believe that obesity is actually higher, as, the fitness opportunities available from community resources such as park districts, forest preserve districts, and YMCA branches in Boone and Winnebago

counties are not always widely utilized by all segments of the population.

Just 3% of the total sample described themselves as ***underweight***. This is the same percentage as those who have a high school diploma or GED. This could indicate a relationship, or it could be tied to housing status or income. 10% of those within the total sample that reported being underweight also reported an income of $10,001-$15,000 and 5% of these were renters. 29% of those who said they were underweight also reported being they were homeless. These respondents do not have easy access to food at all, let alone a healthy diet.

DIFFICULTY WITH DAILY ACTIVITIES

The survey sought to determine difficulties residents reported with daily activities due to physical and behavioral health. ***Walking or climbing stairs*** was the most common daily activity associated with physical health problems, with 26% of the total sample reporting this as a problem. This could be related to the percentages of those who self-reported as ***overweight*** (44%) or ***obese*** (10%) as well as other factors such as age and specific health conditions.

At 23%, ***exercising*** was the next most common daily activity linked with health problems. Again, this could be related to age, specific health problems, or simply a lack of regular, physical activity and the largely sedentary lifestyle of the regional and national population.

Over half (53%) reported they ***did not have difficulty with daily activities due to mental health or substance abuse***.

FREQUENCY OF CARE

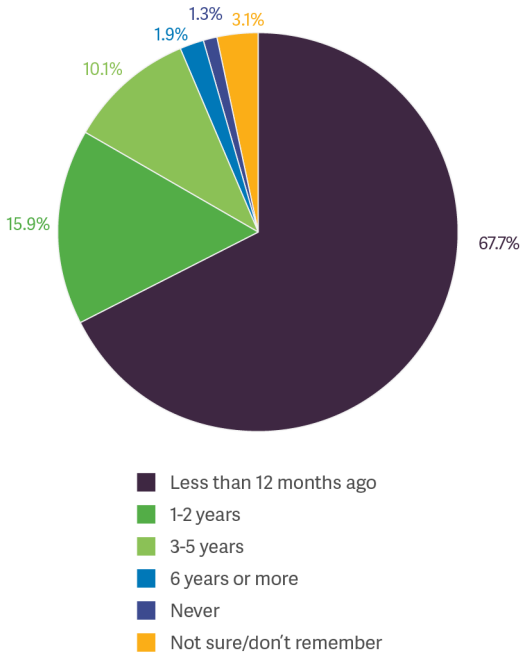
ROUTINE MEDICAL CARE

The survey also measured the frequency of self-reported routine medical care. Most respondents (68%) reported that they had seen a doctor for a check-up i***n the last 12 months***, demonstrating that overall, residents in the region have good access to regular medical care, regardless of factors such as income, race, or education level.

ROUTINE DENTAL CARE

Frequency of routine dental care was

Figure 3A: Frequency of Last Medical Checkup

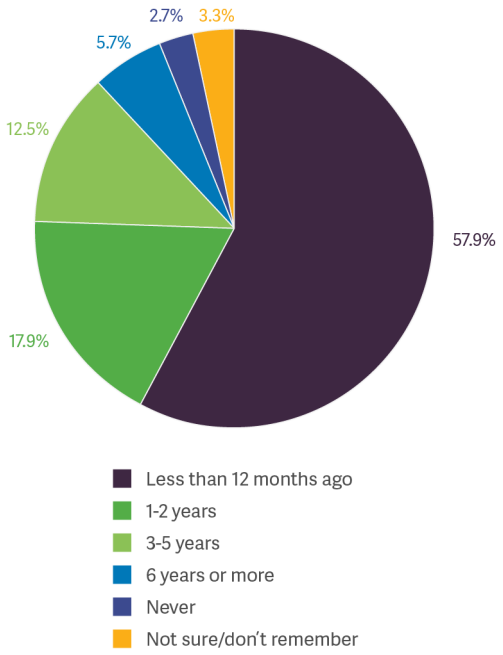


measured as well. Most people (58%) reported seeing a dentist for a check-up ***in the last 12 months***. The next highest percentage (18%) said they had seen a dentist ***in the last 1 – 2 years***.

Though over half of the sample had seen both a doctor and a dentist for routine care within the last 12 months, a lower percentage had seen a dentist, indicating a gap in affordable dental care and/or insurance. Furthermore, some dental care covered under private insurance is not covered under public insurance at the same level, and may result in some people going without regular care.

The gap between those who had seen a dentist ***in the last 2 years*** and those who had seen one ***in the last 3 -5 years*** was smaller; 13% said they had seen a dentist ***within the last 3-5 years***.

Figure 3B: Frequency of Last Dental Checkup



HEALTHCARE LITERACY & PUBLIC AID

EASE OF OBTAINING MEDICAL INFORMATION

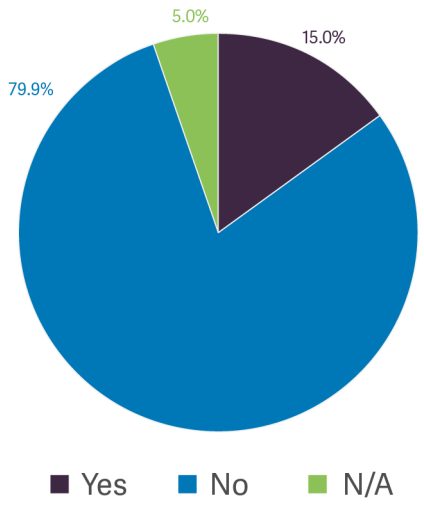
The survey included questions designed to assess health literacy in the region as well as utilization of public aid. There were several questions on the survey which were asked in order to assess the ability of adults in the region to obtain and understand health information. The 3 questions, all designed as simple ***yes***, ***no***, or ***not sure*** (referred to below as ***N/A***) responses, were:

- ***Do you have a hard time getting medical information?***
- ***Do you have a hard time understanding medical information?***
- ***Do you trust the health/medical information that you get from doctors, nurses, and dentists?***

The adults more likely to have difficulty obtaining information about health or medical topics if they need it are:

- Black
- Less educated
- Unmarried

Figure 4A: Ease of Obtaining Medical Information



The majority (80%) of the respondents across all of the samples reported that they are able to get medical information without difficulty (Figure 4A). However, 15% of respondents said that they did have a hard time getting medical information; and 5% of respondents were not sure.

DEMOGRAPHIC FACTORS INFLUENCING ATTAINMENT OF HEALTH INFORMATION

Race/Ethnicity: When examining the differences in responses between different racial and ethnic groups, we see that black and Hispanic adults have difficulty accessing medical information slightly more frequently than whites do. Non-whites also report being ***not sure*** about their ability to get medical information more often than whites. Although the survey's Asian and Multiracial sample size was small, we observed that Asian respondents skipped this question more frequently than other respondents. In addition, Multiracial respondents most frequently reported having difficulty obtaining health/medical information.

Age Group: When looking at people's ability to get medical information by age group, minors (ages <17) tended to have the greatest difficulty, though this is likely attributed to their dependence on adult caretakers. Adults (ages 30-44) also responded ***yes*** more often than the other age groups.

Education Level: Adults with less than a high school diploma and those with a bachelor's degree reported having more difficulty obtaining medical information than those at other education levels. Those with a high school diploma or GED and those with less education more frequently declined to answer the question. Those with a graduate or professional degree reported having the least frequent difficulty.

Living Situation by Type: Married and single persons tended to have similar rates of difficulty obtaining medical information. Single parents and unmarried persons reported difficulty getting medical information with similar frequency, more often than married and single persons.

Income Level: There did not appear to be any observed significant relationship between income level and access to medical information. However, those with household incomes between $20,001 - $35,000 most frequently answered ***yes*** to the question. Also, those with the highest income (over $100,000) had the least difficulty getting medical information and were nearly unanimous in saying that they had ***no difficulty getting medical information***.

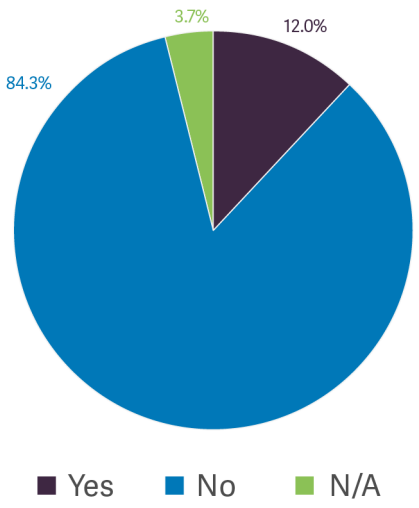
Housing Arrangements by Type: When looking at housing arrangements, individuals who rent or live rent free skipped the question more frequently, but also reported having difficulty getting medical information, slightly more frequently than homeowners. Of all of the cohorts, homeless respondents reported having the most difficulty getting medical information.

COMPREHENSION OF HEALTH/ MEDICAL INFORMATION

The survey also assessed an individual's ability to understand the information they were able to access. To assess this, the survey asked, ***do you have a hard time understanding medical information?*** as a ***yes*** or ***no*** question with a ***not sure*** option

(Figure 4B). About the same percentage of people reported difficulty ***understanding*** medical information as reported having difficulty ***getting*** medical information.

Figure 4B: Comprehension of Health/Medical Information



DEMOGRAPHIC FACTORS INFLUENCING COMPREHENSION OF HEALTH INFORMATION

Race/Ethnicity: When examining race/ethnicity and people's understanding of medical information, whites and Hispanics showed the greatest understanding of the medical information they received. In contrast, blacks reported having trouble understanding medical information nearly twice as often as whites and three times as often as Hispanics. Asians had the highest rates of understanding health information none of the Asian respondents polled from any sample reported difficulty understanding this information. Although the percentage of the sample identifying as Asian was slightly lower than the region's rate, the percentage of all samples without the Facebook survey was within 1% of the regional rate, so the results should be generalizable. The multiracial response rate was lower than the regional rate, but a third of these respondents reported having ***difficulty understanding medical information***, indicating that while multiracial people may be slightly underrepresented in the survey, this issue is most likely still a problem.

Age: Comprehension of medical information tended to vary by age group. Minors, as we see in other sections, answered ***yes*** more often than other age groups, possibly due to a lack of independence. Adults (age 30 to 44 and 45 to 64) tended to indicate ***difficulty understanding medical information*** more often than people in other age groups. This is similar to the trend seen among the same age groups related to their ability to get medical information, indicating that age may be a common thread between these health literacy factors. This is indicative of a potential opportunity to improve regional health literacy, by focusing on residents in this age group.

Education Level: People's comprehension of medical information and their education level appeared to be correlated. There is a noticeable trend with those with the lowest education levels having the most difficulty understanding medical information and those with the highest levels of education having the least difficulty understanding. For example, less than 5% of those with a graduate or professional degree answered

yes, while a quarter of those with less than a high school diploma answered the same.

Household Composition/Marital Status: Much like the trend identified in this population's ability to get medical information, there is a divide between single persons versus parents, and married versus unmarried persons (Appendix E - Figure 4C). The relationship may not be significant, but the difference between those who live together and those who do not live together is noteworthy.

Income Level: Income trends' relationship with comprehension of health information was similar to the trend between comprehension and education level, though not to the same extent. With the exception of the small $15,001 to $20,000 response group, individuals with lower incomes tended to respond ***yes*** more often to this question. Comparatively, individuals with higher incomes usually did not have any issue understanding medical information.

Housing Situation by Type: When comparing housing situation by type to whether or not a respondent has a hard time understanding medical information, there was a divide between renters and owners. Renters responded ***yes*** to this question twice as often as those who own. Additionally, the homeless response was split equally between ***yes*** and ***no*** responses.

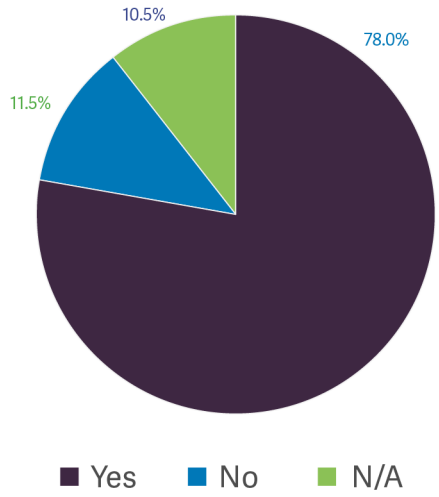
Trust in Health/ Medical Information

The survey also assessed people's trust in the information they were given by doctors, nurses, and dentists (Figure 4C). To assess this, the survey asked ***do you trust the information you receive from your doctor, nurse, or dentist?*** as a ***yes*** or ***no*** question with a ***not sure*** option. 78% of respondents stated that ***yes***, they trusted health/medical information they received, 12% responded ***no***, they did not trust the health/medical information they received, and 11% answered ***not sure***. This is less than those that responded ***yes***, they understood the health/medical information they received; and lower than those that responded ***yes***, they had ease accessing medical information. This suggests that even individuals who *do* have access to and understand medical information may still be hesitant to trust it.

DEMOGRAPHIC FACTORS INFLUENCING PEOPLE'S TRUST OF HEALTH/MEDICAL INFORMATION

Race/Ethnicity: There were some variations when comparing race and ethnicity with an individual's trust in the health/medical information they received. Whites and the multiracial response group most often

Figure 4C: Trust in Health/Medical Information



stated that they trust health/medical information they received. Blacks, Asians, and Hispanics stated they don't trust health/medical information far more than the other groups, with almost a third of blacks responding ***yes*** 62% of the time. However, overwhelmingly, individuals from all racial/ethnic backgrounds trusted the information they received from their medical professional.

Age : The relationship between trust of health/medical information and age groups had varied results. Generally, the oldest age group, 75+ trusted health/medical information the most often, while adults age 30 to 44 responded that they trust health/medical information the least. However, overwhelmingly, individuals of all ages trusted the information they received from medical professionals.

Education: Educational level appeared to be related to trust of medical information. Generally, educational levels above an associates answered that they trust health/medical information more than those with less education. Nevertheless, individuals of all educational levels trusted the information they received from their medical professional.

Household Composition/Marital Status: Like the other questions in this section, household composition/marital status appeared to impact trust in health/medical information. Those who are married tended to trust medical information more often than single parents and single persons. Overall, individuals of all household compositions/marital statuses trusted the information they received from their medical professional.

Income: Those with higher incomes ($50,000 or more) tended to trust health/medical information more often than those with lower incomes ($20,000 or less). The $20,001 to $35,000 group appeared to be an outlier, trusting medical information even more so than those with incomes above $50,000. Around 1/3 of respondents in the three lowest income groups ($20,000 or less) said that they did not trust health/medical information . Overall, individuals of all income levels trusted the information they received from their medical professional.

Housing Type: Housing type seemed to vary and had unexpected results when asked if they trust medical information. Owners tended to answer ***yes*** most often, and renters did not trust medical information 14% of the time. The homeless population did not often answer this question, but of those that did, only 57% of respondents said that they trust medical information. Overall, individuals of all housing types trusted the information they received from their medical professional.

USE OF PUBLIC ASSISTANCE PROGRAMS

The survey also assessed an individual's access to public aid (Figure 4D) and how they perceive their neighborhood. To assess this, the survey asked ***Have you or anyone in your household had any public assistance in the past year?*** as a ***yes*** or ***no*** question

with a ***not sure*** option. 36% of respondents stated that ***yes***, they had received public assistance, 63% responded ***no***, they had not received public assistance, and 2% answered ***not sure***.

Public Aid Survey Questions

- *Have you or anyone in your household had any public assistance in the past year?*
- *In the last 12 months, did you or anyone in your household have to reduce the size of your meals or skip meals?*
- *If yes, (to previous question): How often does this happen?*
- *Which of the following food assistance programs, if any, have you or the people in your household, used in the past year? (Please select all that apply)*

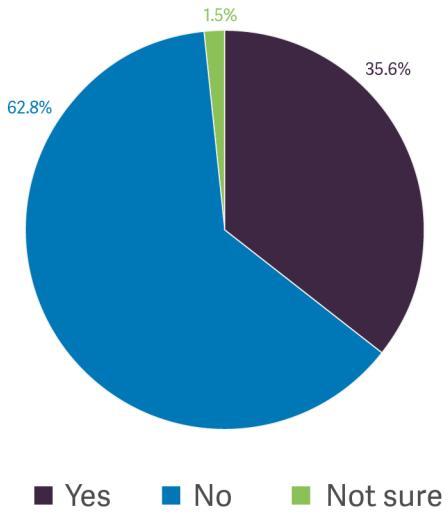
Have you or anyone in your household had any public assistance in the past year?

We asked survey respondents whether they had received any type of public assistance in the past year (Figure 4D). This figure represents the total sample, which included our Random survey, Outreach event sample, and Facebook sample. The use of public assistance programs is still common than one might think, and any health policy planning should take this into account.

In the last 12 months, did you or anyone in your household have to reduce the size of your meals or skip meals?

We asked this question to assess community food security (Figure 4E). 16% of people reported that they did have to reduce the size of or skip their meals and 84% stated that no, they ***did not have to reduce the size of or skip their meals***. This signifies that food security remains a significant issue in the region. Nutrition is a building block of proper health and should be taken into account by healthcare and other organizations working to improve health, as this can be an underlying factor for numerous chronic diseases.

Figure 4D: Household Usage of Public Assistance in the Past Year



If you did have to reduce meals, how often does this happen?

We asked survey respondents who reported having to skip or reduce the size of their meals how often this typically happened. We found that, of these, over half (52%) did so at least once a month (Figure 4F). This highlights the issue that a significant portion of people in the region experience food insecurity on a regular basis. This kind of meal skipping and reduction can lead to nutritional and physical deficiencies and eventually, higher rates of morbidity from numerous chronic diseases in adults and children.

Figure 4E: Households Reporting Reduction or Skipping of Meals

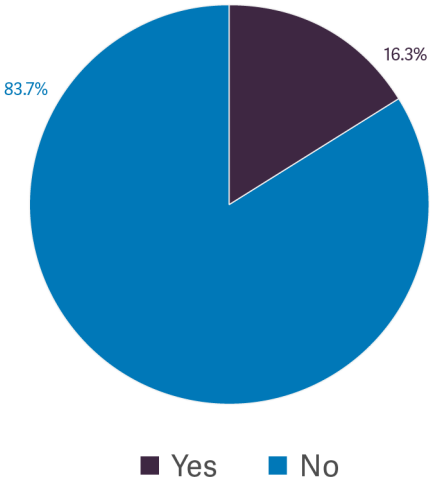
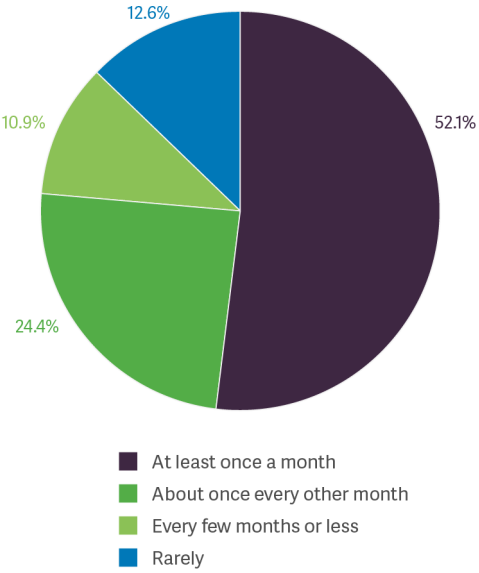


Figure 4F: Frequency of Meal Reduction



Which of the following food assistance programs, if any, have you or the people in your household, used in the past year?
We asked survey respondents if their household was receiving food assistance and if so, from which program (e.g. SNAP, Food Pantries, CSFP) (Figure 4G). We found that almost half of everyone asked was receiving some type of food assistance program (41%); more than 1 in 4 (27%) responded that they received SNAP and more than 1 in 10 (14%) utilized food pantries. Free school lunch was the next most frequently utilized.

PERCEPTION OF NEIGHBORHOOD SAFETY

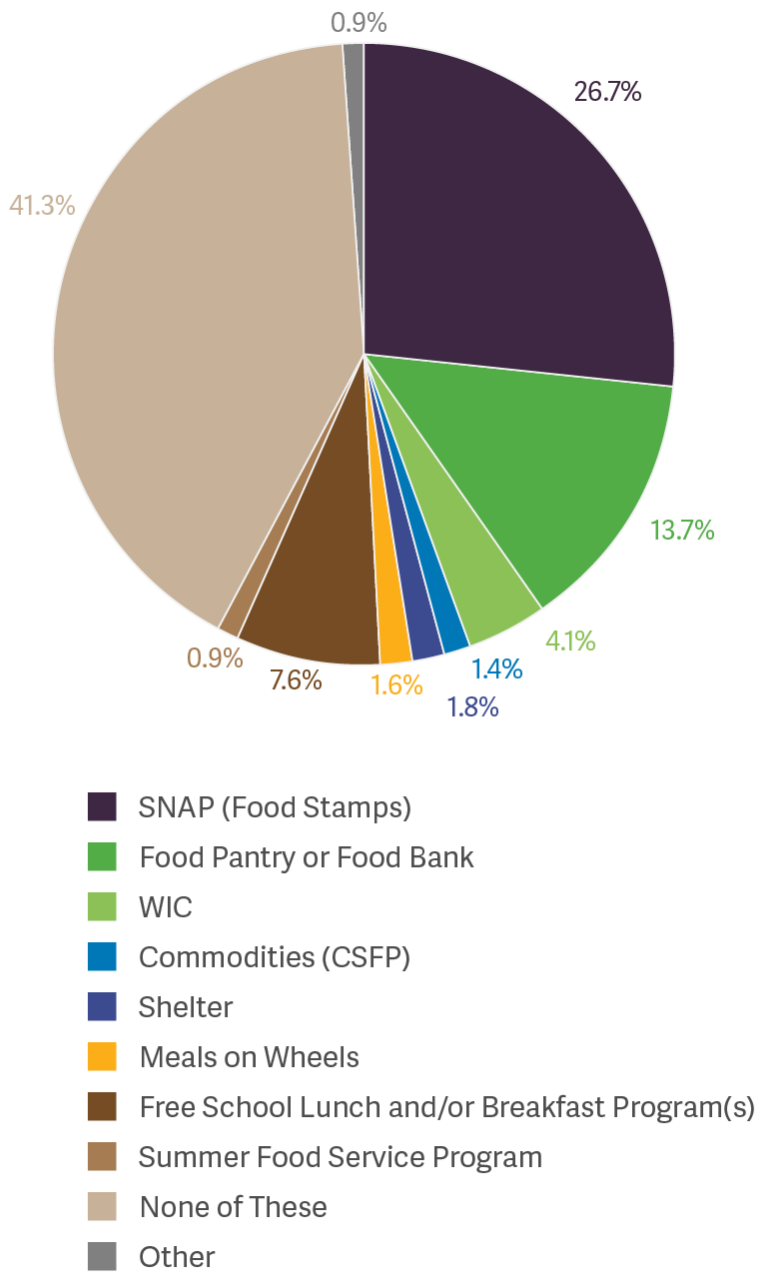
Perception of Neighborhood Safety Survey Questions

- *People in my neighborhood can be trusted.*
- *There is a lot of crime in my neighborhood.*
- *My neighborhood is safe.*

People in my neighborhood can be trusted

We assessed perceptions of safety by asking people if they trust their neighbors. This question aimed to get firsthand opinions on an individual's perception of their neighborhood. in addition to what was asked in the **Community Assets** section (Figure 4H). The question asked people to rate the trustworthiness of their neighbors, with ***5*** being ***trustworthy*** and ***1*** being ***untrustworthy***. Ratings of ***3 and above*** were the most common answers, with ***4*** being the most common response.

Figure 4G: Food Assistance Programs Used in the Past Year



A tenth of respondents (10%) rated their neighbors' trustworthiness at below a ***3***.

There is a lot of crime in my neighborhood

We asked survey respondents if they believed there was a lot of crime in their neighborhood, with ***5*** meaning there is ***a lot of crime***, and ***1*** meaning there is ***no crime*** (Figure 4I). There was a broad distribution among responses, with 31% of respondents stating that their neighborhood crime level was a ***3***. Of all respondents, 19% said there was ***no crime***, and 11% of respondents said there was ***a lot of crime***. Just under half of respondents rated the level of crime in their neighborhood below a ***3***.

My neighborhood is safe

We asked survey respondents to rate the safety of their neighborhood, with ***5*** being ***very safe*** and ***1*** being ***not safe at all*** (Figure 4J). Of the survey respondents, more than half (58%) rated their neighborhood above a ***3***, whereas 5% of respondents gave their neighborhood the lowest safety rating. Roughly a quarter of respondents (27%) rated their neighborhood safety as ***average***.

Figure 4H: People in My Neighborhood Can be Trusted

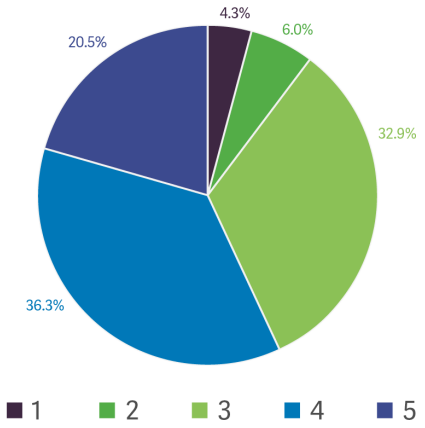


Figure 4I: There is a Lot of Crime in My Neighborhood

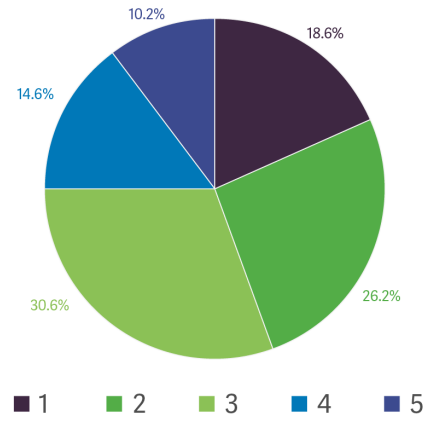
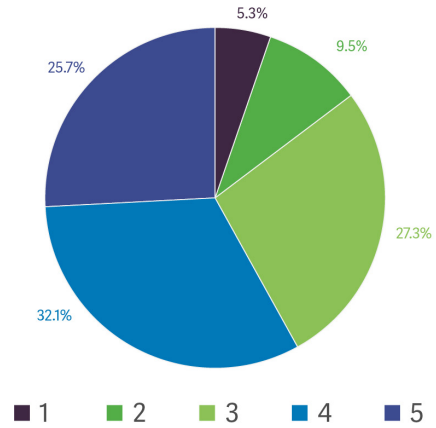


Figure 4J: My Neighborhood is Safe



CHRONIC CONDITIONS AND DISEASES

SUMMARY AND ANALYSIS

Survey respondents were asked to report whether they had ever been diagnosed with any of 16 different conditions, in addition to an "other" option. Further analysis of responses regarding the 5 diseases and/or conditions most prevalent in the region's total population (all ages), in descending order, are:

1. High blood pressure, hypertension (20%)
2. High cholesterol (15%)
3. Arthritis or rheumatism (14%)
4. Obesity (12%)
5. Chronic back pain or disc disorders (10%)

Respondents were not only asked about their own health and behaviors, they were asked about diseases/conditions and behaviors among all members of their household, including any children. When analyzing survey responses, the 5 conditions with the highest rates of occurrence were the same among adults as they were among the total population (including those under the age of 18). However, the rates of prevalence were higher among adults than the overall population. This is not surprising, since the prevalence of most of these conditions is lower among children than adults. The conditions with the 5 highest rates of prevalence among adults in the region were:

1. High blood pressure, hypertension (25%)
2. High cholesterol (18%)
3. Arthritis or rheumatism (17%)
4. Obesity (13%)
5. Chronic back pain or disc disorders (12%)

There was a direct relationship between the age of the population group and the prevalence of disease: in other words, the older the group being measured, the higher the prevalence of the condition or disease. This was true for all 16 diseases/conditions being observed except one: asthma. The prevalence of asthma across age groups was highest in those under the age of 18, at about 3%. Among everyone with asthma, out of all 4 age groups, the one with the highest rate of asthma was 0 – 17 year olds: 13% of everyone under the age of 18 was diagnosed with asthma. One-third of everyone in the region diagnosed with asthma was under the age of 18.

BODYWEIGHT AND OBESITY

Body weight was assessed in two different ways. One way was a subjective measure that prompted survey respondents to assess their own weight by asking, ***in general, how would you describe your weight?*** The other measure was more objective, and that asked them whether they, or anyone else in their household, had ever been told that they were obese by a medical professional. Since a trained professional would have an understanding of the diagnostic criteria for obesity, we believe this would be a valid measure for prevalence of obesity.. Since weight is a sensitive topic that many people do not feel comfortable discussing and a very subjective characteristic, and a person's perception of their own weight can vary greatly from one person to the next, asking about this both ways provides a way to cross-reference responses to assess the level of variance between the types of assessment. The subjective measure was asked first and gave respondents 4 options to classify their weight: ***underweight***, ***about the right weight***, ***overweight***, and ***obese***, as well as a fifth option, ***prefer not to answer*** for those that were not comfortable sharing this information. Approximately half of all respondents classified their own weight as either ***overweight*** or ***obese***.

The second measure of body weight, the number of people that have been told by a doctor that they meet the criteria for obesity, also asked for the ages of any people characterized as obese. This was expected to be considerably lower than the rate of people that self-identified as overweight or obese, as the criteria were far more narrow. In total, around 13% of people had been told that they were obese by a doctor at some point. Of those that said yes, nearly half were between 45 – 64 years old. An additional 1 out of 5 that said yes were 65 or older, and another 1 out of 5 were 18 – 44 years old. The rates observed both differ from the statewide rates, which were split roughly into thirds, between ***obese***, ***overweight***, and ***normal*** weight people, with a small percentage (less than 2%) classified as ***underweight***. The differences can mostly be attributed to a higher rate of people classifying themselves as ***overweight*** instead of ***obese*** with the remainder of the difference coming from those classifying themselves as ***about the right weight***, (***normal***) instead of ***overweight*** or ***obese***.

The adults in the region that are ***obese*** are usually:

- Women
- Generally more highly educated

The adults in the region that are ***overweight*** are usually:

- Women
- Less educated

This is interesting, specifically because of the trends in education level. While the trend among obese adults is less clear and similar to that seen between behavioral health and education level, among overweight adults , there is a clear inverse relationship.
Overweight and obese adults also tend to report higher rates of certain adverse health

conditions and comorbidities, including:

- Activity limitations
- Asthma, COPD, emphysema and chronic bronchitis
- Fair or poor physical health
- Heart attack, angina or coronary heart disease, or stroke
- Kidney disease

DEMOGRAPHIC ANALYSIS OF CHRONIC CONDITIONS AND DISEASES

Each of the conditions and diseases of interest was correlated with one or more different demographics and characteristics. The following relationships were observed with each condition and/or disease:

Alzheimer's, dementia, or severe memory impairment
- Whites
- Men
- Adults age 65 and older

Arthritis or rheumatism
- Men
- Asians > Whites > Blacks > Hispanics
- Adults age 45 and older

Asthma
- Blacks
- Children/people under the age of 18
- Adults age 45 – 64 years old

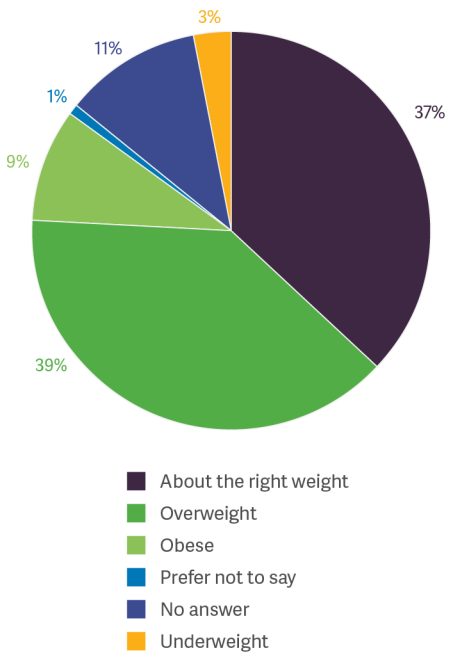
Cancer or malignant neoplasms
- Both men and women
- Asians & whites
- Risk and prevalence increases with age; greatest among adults age 65 and older

Chronic back pain or disc disorders
- Men
- Asians & whites
- Adults age 45 – 64 years of age

Chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchitis, & other respiratory problems
- Men
- Whites
- Adults age 45 – 64 years of age (affects almost half of people in this age range)

Chronic digestive or stomach disorders (such as gastroesophageal reflux disease (GERD), reflux or Crohn's disease)
- Men
- Whites & blacks

Figure 5A: Responses to Question, "In General, How Would You Describe Your Weight?"



- Adults age 45 – 64 years of age (affects almost half of people in this age range)

Heart attack, angina or coronary heart disease
- Men
- Adults age 45 and older

High blood pressure, hypertension
- Men
- Whites and Asians
- Adults age 45 and older, especially those age 45 - 64

High cholesterol
- Men
- Whites and Asians; Hispanics more than blacks
- Adults age 45 and older, especially those age 45 - 64

Kidney disease
- Men
- Asians
- Risk and prevalence increases with age; greatest among adults age 65 and older

Liver disease
- Men
- Hispanics
- Adults age 18 – 64, especially those between the ages of 45 - 64

Obesity
- Whites & Hispanics
- Men & women
- Adults age 45 - 64

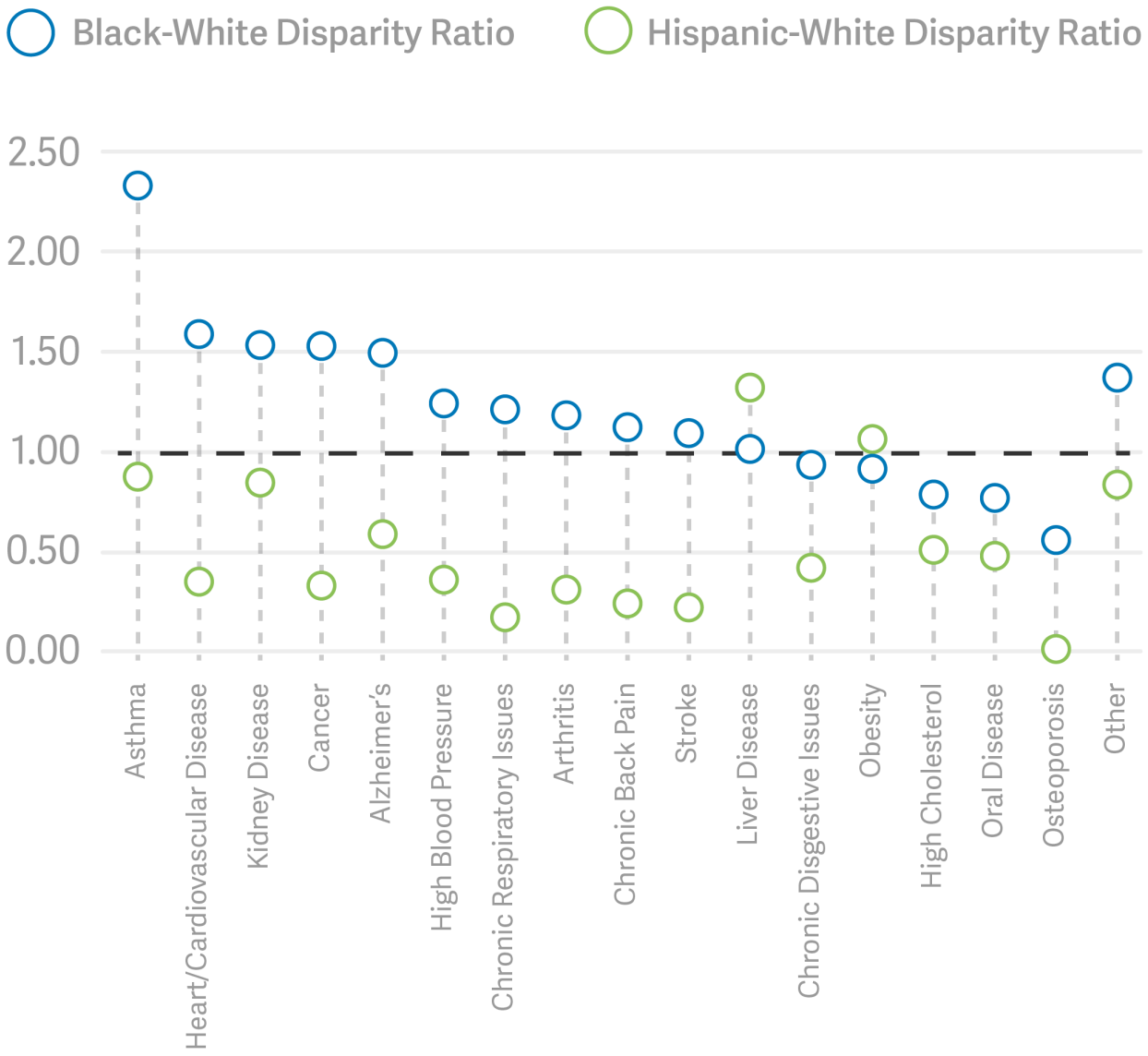
Stroke
- Men
- Adults age 65 and older

CHRONIC DISEASE DISPARITY INDEX

The relationships between race/ethnicity and chronic disease can be observed by using the Disparity Index. The Disparity Ratios demonstrate the long-term impacts of the social determinants of health (SDOH) by showing the differences in rates of disease between blacks and whites or Hispanics and whites, respectively. For example, a Black:White Disparity Ratio for cancer equal to 1 indicates that the rates of cancer are equal between races. A Black:White Disparity Ratio for cancer equal to 2 would indicate that blacks experience cancer at a rate that is double the rate of whites in the region. A Black:White Disparity Ratio for cancer equal to 0.5 would indicate that blacks in the region experience cancer at half the rate of whites. The Disparity Index for Chronic Diseases below is a simple way to compare these rates and is organized in order of greatest to least amount of disparity.

The disparities between whites and Hispanics are clearly not as stark as those between blacks and whites. This indicates that blacks experience more disparity when it comes to chronic disease outcomes than other races/ethnicities.

Figure 5B: Chronic Disease DIsparity Index



BEHAVIORAL HEALTH

MENTAL HEALTH STATUS

Of the respondents, just over 60% answered the behavioral and mental health questions. Of the total population:

- A quarter (27%) reported at least 1 mental illness or behavioral health issue
- 30% of respondents were male and 70% were female[11]

The region's rates are comparable to State and National findings, which show that 1 in 5 adults have been diagnosed with depression or a related disorder. Of those that responded, the disorders with the highest rates among adults of all ages were:

- Anxiety (19%)
- Depression (17%)
- Post-traumatic stress disorder (PTSD) (7%)
- Attention-deficit disorder (ADD)/ Attention-deficit hyperactivity disorder (ADHD) (6%)
- Bipolar disorder (manic- depressive) (6%)

IMPACT OF SOCIAL DETERMINANTS ON MENTAL HEALTH

As discussed in the Introduction, the social determinants of health (SDOH) impact not only physical health outcomes, but mental health outcomes as much well. Figure 6A[12] illustrates the myriad of factors that influence mental health outcomes, from those that can cause or prevent certain conditions to those that can treat or exacerbate illness. The variances in mental health related to these factors are discussed in further detail below.

AGE AND MENTAL HEALTH

The prevalence of most mental illnesses and conditions is inversely related to age, meaning that prevalence increases as age decreases. The rates by age group among adults for almost all disorders are highest

[11]Of respondents that disclosed their gender

[12]Shim, R., Koplan, C., Langheim, F.J.P., et. al. (2014). The social determinants of mental health: An overview and call to action. Psychiatric Annals; 44(1): 22-26.

Figure 6A: Social Determinants of Mental Health

in the 18 - 44 year old age group and get progressively lower as age increases, and are typically lowest among those 65 and up. Figure 6B shows that:

- For anxiety disorders:
  - About 50% of people with anxiety disorders are age 18 – 44,
  - About 40% of people with anxiety disorders are age 45 – 64,
  - About 10% of people with anxiety disorders are age 65 or older

- For bipolar disorder (formerly known as manic depressive):
  - about 40% are 18 – 44,
  - 55% are 45 – 64, and,
  - Less than 5% are 65 or older

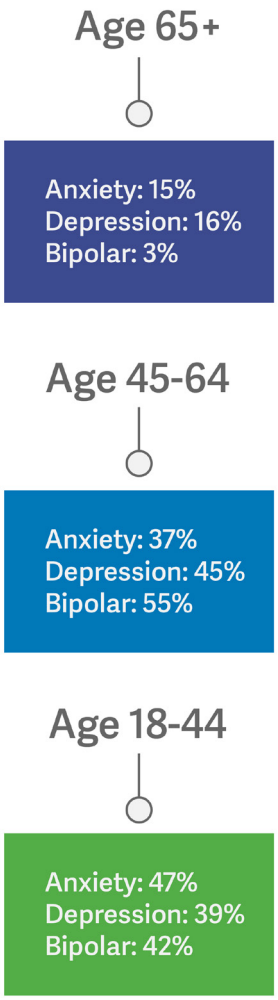
- Depression demonstrates a similar trend with the exception that the proportion of 45 – 64 year olds is a bit higher than that of 18 – 44 year olds

The disorders that are exceptions to these general trends include attention deficit disorder (ADD or ADHD) and suicidal or self-harming impulses. In both of these conditions, a significant proportion of children (ages 0 – 17) are also diagnosed, making up the same percentage as those 65 and older.

GENDER AND MENTAL HEALTH

One of the differences found in the regional data and national data is that the rate of anxiety is higher than that of depression. However, the rate of women with depression in the region is three times the rate of men (30% versus 11%, respectively), which lowered the overall rate substantially.

Figure 6B: Region's 3 Most Common Mental Illnesses - Distribution of Cases by Age Group



These trends extend beyond just depression, with 30% of women diagnosed with anxiety versus 13% of men and 11% of women having PTSD versus 4% of men. In general, women are diagnosed with most mental health disorders far more frequently than men.

There are a number of social determinants that put women at higher risk of mental illness than men. Generally women generally

earn less than men, even when performing the same work. Specifically, this translates to women earning a quarter less than men annually. The Rockford Region is no exception to this trend and as a result, women experience poverty at a higher rate than men. Women are also victims of violence more often than men. This is a major concern in the Rockford Region.

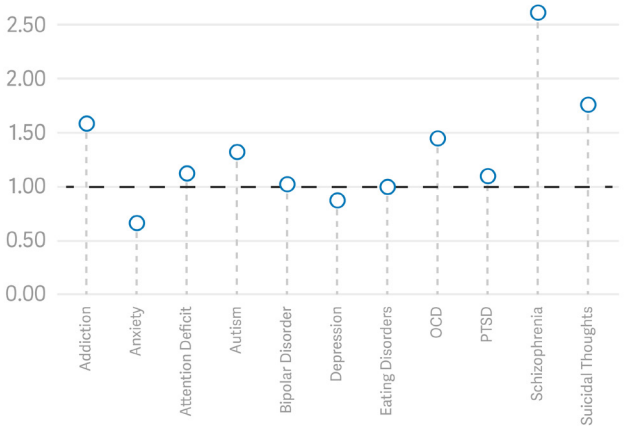
Despite regional efforts to address domestic violence and violent crime, in the City of Rockford's first quarter, 53% of aggravated assaults, 67% of simple assaults and 38% of intimidation reports were all domestic related. This adds up to more than 13 domestic violence-related incidents per day in the City alone.[13] Since women are far more likely to be the victims in these incidents, survivors are left with lasting mental wounds long after the physical ones heal. PTSD and anxiety disorders are just a few of the mental health conditions frequently linked to violence. Although it is important to ensure that resources are available to treat these conditions, without addressing these underlying social determinants, the region will not be able to improve the overall mental health of the community.

RACE/ETHNICITY AND MENTAL HEALTH

Most racial/ethnic minority groups overall have similar—or in some cases, fewer—mental disorders than their white counterparts. However, although rates of anxiety and depression are lower in blacks (17% and 16%, respectively) and Hispanics (16% and 14%, respectively) than in whites (33% and 27%, respectively), the symptoms in blacks and Hispanics are likely to be more persistent.[14]

Our survey found that blacks were diagnosed with schizophrenia around 1.5 times as often as whites. Differences in how blacks express symptoms of emotional distress may contribute to more frequent misdiagnosis.[15] The exception to these trends related to race/ethnicity is in multiracial people. People who identify as being two or more races are more likely to report almost 3/4 of mental illness within the past year than any other race/ethnic group.[16] Multiracial people have the highest rates of addiction, ADD/ADHD, autism, PTSD,

Figure 6C: Black-White Disparity Index for Mental Illness



[13]https://www.wifr.com/content/news/Rockfords-2019-crime-numbers-show-less-crime-but-more-domestic-violence-508182161.html
[14]Budhwani H, Hearld K, and Chavez-Yenter D. Depression in Racial and Ethnic Minorities: the Impact of Nativity and Discrimination. Racial Ethn Health Disparities. 2015. 2(1):34-42.
[15]Bell C, et al. "Misdiagnosis of African-Americans with Psychiatric Issues-Part II." J Natl Med Assoc. 2015. 107(3):35-41. http://www.journalnma.org/article/S0027-9684(15)30049-3/pdf
[16]American Psychiatric Association. https://www.psychiatry.org/psychiatrists/cultural-competency/education/mental-health-facts

MENTAL HEALTH BARRIERS FOR MINORITIES

CULTURAL BARRIERS TO DIAGNOSIS

- Language barriers
- Stigma of mental illness among minority groups
- Cultural presentation of symptoms

CULTURAL BARRIERS TO TREATMENT

- Lack of insurance, underinsurance
- Mental illness stigma, often greater among minority populations
- Lack of diversity among providers
- Lack of culturally competent providers
- Distrust in the health care system
- Concerns about family privacy
- Lack of knowledge regarding available treatments
- Denial of mental health problems
- Concerns about stigma, medications
- Not receiving appropriate information about services

schizophrenia, and suicidal thoughts/self harming behaviors of all racial/ethnic groups within the region (not including the "other" option).

The Disparity Index shows that for many mental illnesses, the Black-White Disparity Ratio is close to 1. A Disparity Ratio of 1 means that both races have exactly the same rates of disease incidence for the condition specified. Attention-deficit disorder, bipolar disorder, depression, eating disorders, and post-traumatic stress disorder (PTSD) all have Black:White Disparity Ratios near 1. Addiction and suicidal thoughts are both notably greater than 1, meaning that blacks experience the condition at greater rates than whites, and schizophrenia has a Disparity Ratio of more than 2, meaning blacks are diagnosed with schizophrenia at over twice the rate of whites. As previously mentioned, this is consistent with national trends and the the social determinants of health are believed to be the most significant factors influencing the inequality we see here.

SUBSTANCE USE AND ABUSE

PREVALENCE OF CIGARETTE SMOKING

A quarter of adults in the region are current smokers, an increase from the last time the region was surveyed, but only 3% are regular smokers (smoke every day). Most of the smokers that responded chose not to specify how often they smoke. Almost three-quarters of people (71%) said that they have never smoked.

The rate of adults in the region who currently smoke cigarettes is higher than the state and national findings, which only shows 15% of the population being current smokers. The ratesof Winnebago County adults and Boone County adults who currently smoke cigarettes are similar.

The majority of smokers are:

- White
- More educated (Figure 6D)

PREVALENCE OF ALCOHOL USE

Slightly more than half (53%) of adults in the region are current drinkers (drank at least one alcoholic beverage in the past month) and 42% are non-drinkers (drank no alcoholic beverages in the past month). The percentage of adults in the region who are current drinkers is more favorable than the state rate (61%) and is similar to the national rate (56%). The adults in the region more likely to be current drinkers are:

- Male
- White or Hispanic
- Higher income
- More educated (Figure 6F)

Men in the region tend to be more frequent drinkers than women, but the difference is relatively small. Of the adult population in the region, 3% binge drink (have 4 or more (women)/5 or more (men) drinks on any single occasion during the past month) and 48% do not (49% declined to answer). Women binge drink more than men (5%), with only 2% of men binge drinking. So while we found that men drink more often, women drink more heavily on the occasions they do drink.

DRINKING AND RACE/ETHNICITY

When comparing drinking patterns between racial and ethnic groups, the relationship is not straightforward. First, there are more whites and Hispanics that say they drink than whites and Hispanics that don't. (Figure 6G)

Figure 6D: Smoking by Education Level

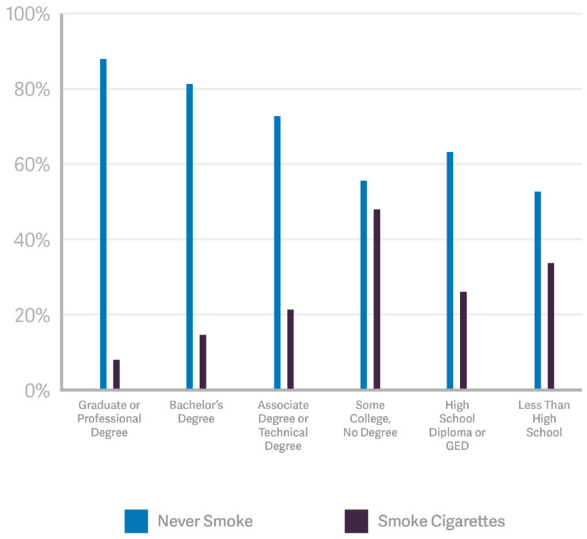


Figure 6E: Black-White Alcohol Use Disparity Index

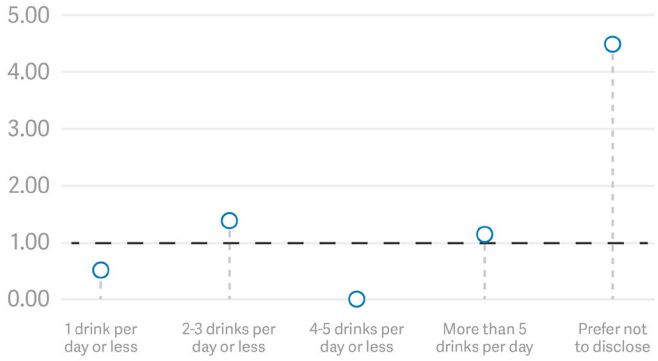


Figure 6F: Alcohol Use and Education Level

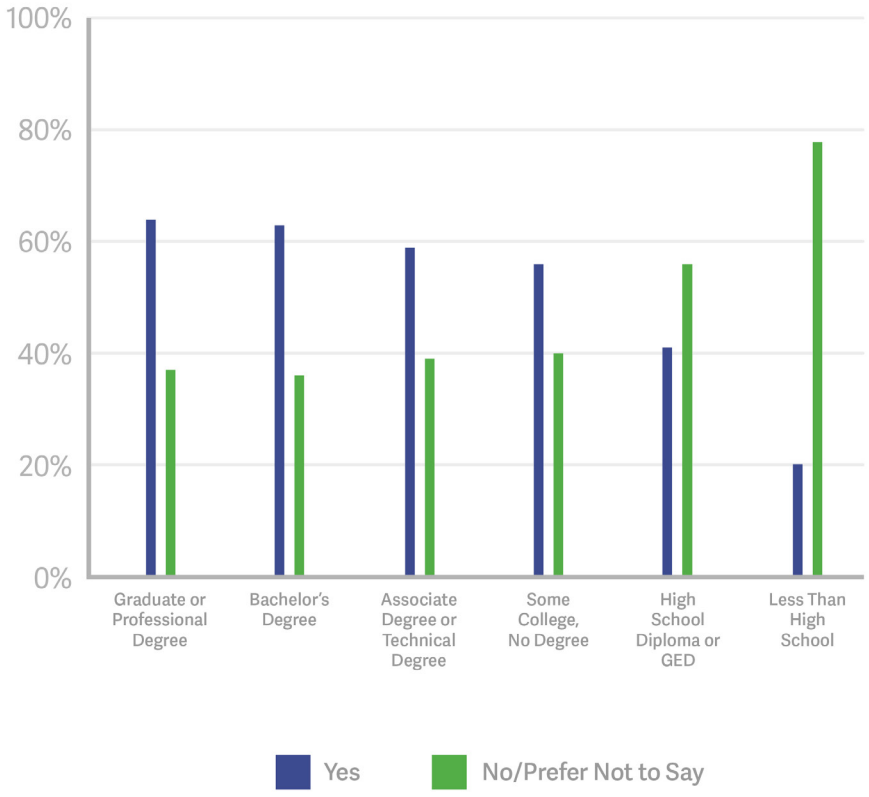
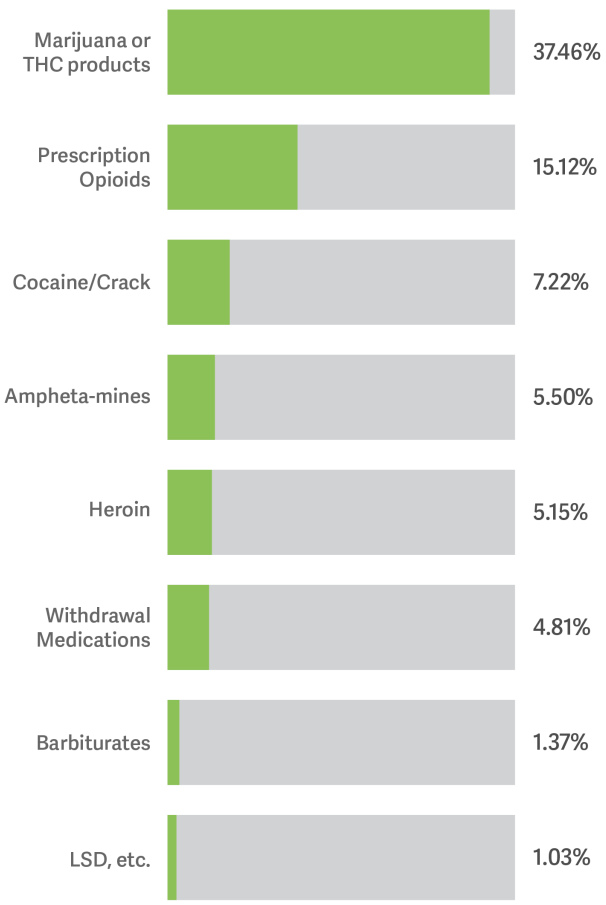


Figure 6G: DIsparity Index: Drinks per Day

Figure 6H: Rates of Substance Use among Question Respondents

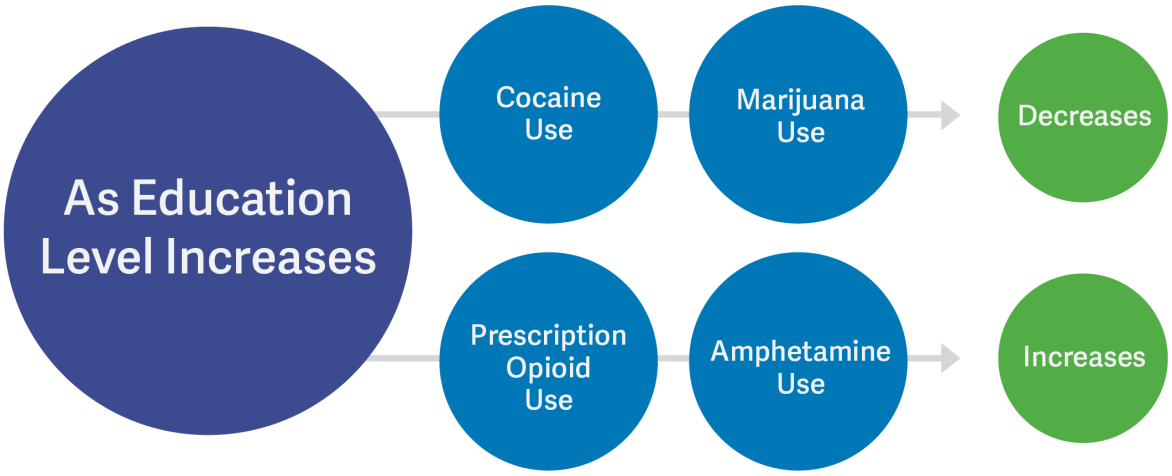


Conversely, there are more blacks that say they don't drink than blacks that do. When it comes to the number of drinks consumed in each instance, the Disparity Index shows that whites typically have fewer drinks on the days they drink than blacks, and the blacks that drink are more frequently heavy drinkers (***drink 4 or more drinks per day***). However, it is difficult to say how reliable the statistics regarding black drinking rates are because the refusal rate for this series of questions is so high. Of all of the black respondents, over 15% skipped the question or chose ***prefer not to answer*** (only 3% of whites and 7% of Hispanics did the same).

PREVALENCE OF DRUG USE

The percentage of adults in the region that report using drugs is fairly low, around 27%, consistent with the state rate.[17] Of those that report using substances, the rates among adults are represented in Figure 6H.

Figure 6I: Educational Attainment and Substance Use Trends



[17]https://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2009-2010/StateSpecificTables/NSDUHsaeIL2010.pdf
[18]Of people that disclose

DRUG USE AND GENDER

Of the adults in the region:

- Women are more frequently willing to disclose substance use than men
- Women more frequently report use of marijuana than men[18]
- Women report using prescription opioids and withdrawal relieving products about twice as frequently as men
- Men report use of heroin slightly more than women

DRUG USE BY ZIP CODE, INCOME, AGE

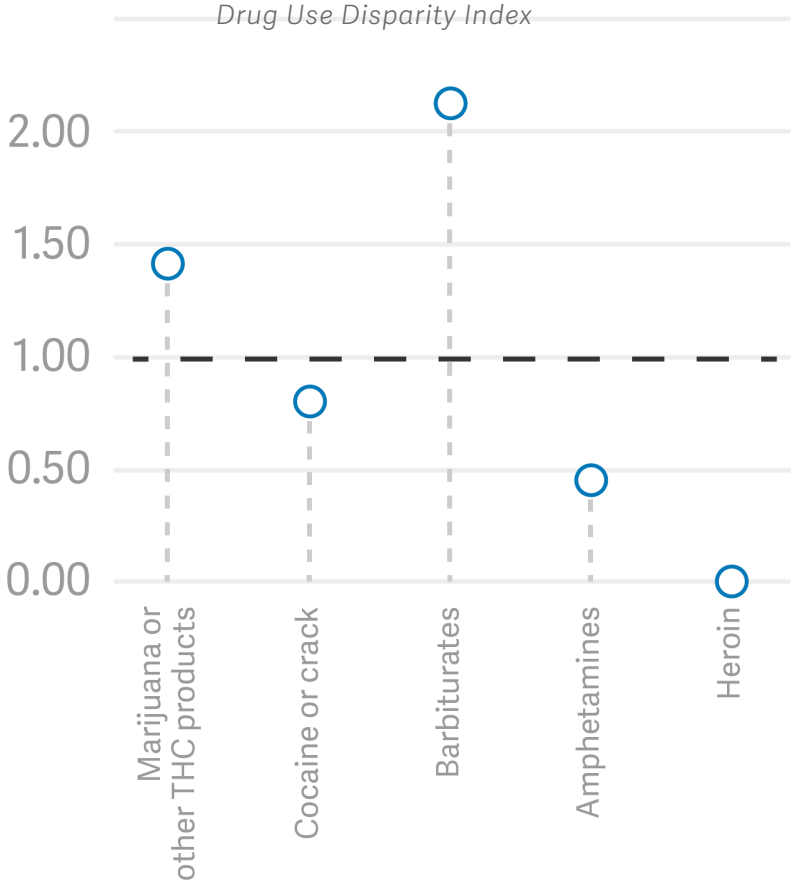
Adults in 61104 reported a much higher rate of marijuana use, 17% compared to rates between 3% and 6% in other zip codes of significance. The only other zip code with rates anywhere near this was in 61115, where the rate was just under 10%.

Adults 65 or older (8%) and those with annual household incomes of less than $25,000 (8%) are more likely to have used prescription narcotics ***every day*** in the past month.

DRUG USE BY LEVEL OF EDUCATIONAL ATTAINMENT

It appears that those with lower levels of education have higher levels of substance use for almost all substances with a few exceptions:

Figure 6J: Black-White Drug Use Disparity Index



- People with less than a high school diploma/GED had higher than expected levels of cocaine/crack use (the highest rate of use), rates that did not fall within the expected trend line of education and cocaine use. They also had higher than expected levels of amphetamine use, which fell outside the trend line of education level and use.

- Those with graduate/professional degrees did not conform to the trend that other educational levels had for marijuana use (12%)

- Hallucinogen use did not appear to be associated with education level

APPENDIX A

List of Abbreviations

ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
District 100	Belvidere School District 100
BLS	US Bureau of Labor Statistics
CDC	US Centers for Disease Control
CHIP	Children's Health Insurance Program
COPD	Chronic Obstructive Pulmonary Disorder
COVID-19	Corona Virus Disease 2019 (caused by the Novel Coronavirus)
DBAs	Doing Business As,
DHHS	US Department of Health & Human Services
DOA	U.S. Department of Agriculture
EDD	Economic Development District
FPL	Federal Poverty Level
FQHC	Federally Qualified Health Center
GED	General Education Diploma
GERD	Gastroesophageal Reflux Disorder
H1N1	Influenza strain H1N1 (Hemagglutinin Type 1 and Neuraminidase Type 1), commonly called swine flu and spanish flu
Harlem	Harlem School District 122
HCS	Healthy Community Study
HP 2020	CDC's Healthy People 2020 Strategy
IDES	Illinois Department of Employment Security
ISBE	Illinois State Board of Education
JCHS	Harvard University Joint Center for Housing Studies
LIHEAP	Low Income Home Energy Assistance Program
MHI	Median Household Income
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area

N/A.....Not Applicable
NPIs.....Non-Pharmaceutical Interventions
PCP.....Primary Care Physicians
PTSD.....Post-Traumatic Stress Disorder
R_0.....Basic Reproduction Number
RFP.....Request for Proposals
Rockford Region.....Winnebago and Boone Counties
RHA.....Rockford Housing Authority
RPC.....Region 1 Planning Council
RRHC.....Rockford Regional Health Council
SARS-CoV-2..... Severe Acute Respiratory Syndrome Coronavirus 2
SDOH.....Social Determinants of Health
SNAP.....Supplemental Nutrition Assistance Program
STEM.....Science, Technology, Engineering and Math
TANF.....Temporary Assistance for Needy Families
USDHHS.....U.S. Department of Health and Human Services
USCB.....U.S. Census Bureau
USCBO.....U.S. Congressional Budget Office
VA.....Veteran's Affairs
W/.....With
WCHA.....Winnebago County Housing Authority
WCHD.....Winnebago County Health Department
WHO.....World Health Organization
Zion.....Zion Development Corporation

APPENDIX B

SURVEY METHODOLOGY

SURVEY DESIGN

The survey was conducted using a mixed methodology design with 3 distinct distribution modalities. The first modality was email/physical mail. Initially, the survey was planned to be conducted primarily as an electronic survey sent to a random sample of emails matched with physical addresses. The list of survey recipients was purchased from a third-party data vendor, which was selected based on the richness of the dataset offered. The vendor is an original source for data, generating information through proprietary websites and websites of its trusted partners (Acxiom being the primary single source). The core demographic information used to cull the list to match regional demographics is overlaid from the major credit and service bureau agencies and the data was derived from a multitude of sources, including the following:

- Magazine and newspapers subscriptions
- Software registration
- Municipal directories
- Internet connections
- Telephone and machine hookups
- Memberships
- Internet connections and searches
- Attendee registers
- Website registrations
- DBAs
- Incorporations
- Yellow page and business white page
- Directories
- Internet searches
- Most recent government records
- Postal service information
- County courthouse records
- National change of address
- Secretary of State data
- ZIP+4 carrier route
- Licensing boards
- Delivery sequence files[1]

The sample was culled to mirror the demographics of the region and to intentionally oversample minority groups in order to compensate for the known differences between races/ethnicities in their propensity to complete surveys. The survey was initially sent out at the beginning of February with weekly followup reminders to those that had not responded. The initial distribution of the survey sample was sent to 12,960 email recipients. The survey link was resent three times, and ultimately,

[1] Personal communication, ExactData- email with P. Green, dated March 13, 2020

3,147 of these were unable to be delivered, primarily because of the spam filters of the recipients. Unfortunately, due to the large number of emails sent, the only practical way to send the mailing was by using a third party system, whose emails are frequently sent to recipients' "junk" folders. This is evidenced by the open rate of the messages, which differed with each mailing and ranged between 183 and 1,080. To encourage response rates, an incentive was added to the project to provide $5 in an e-gift card or Paypal payment to the respondent, and a reminder postcard was sent to the physical addresses on file, highlighting the incentive available. Ultimately, throughout the entire survey period, which was open from the beginning of February until the end of March, 468 responses were received, 84 of which were partially completed.

On the same timeline, the second modality, in-person distribution of paper surveys were given to 3 different cohorts: households of third grade students, households of public housing residents, and households of participants in "pop-up events", targeted activities in which researchers set up tables in public areas known to have high-traffic of hard-to-survey populations, such as patients of Crusader Clinic, the region's Federally-Qualified Health Center (FQHC). The totals for each of these cohorts are included in Appendix C. Incentives were used during these activities as well.

The sample referred to as the "Outreach sample" or "Pop-up sample" includes responses from events from the following pools of respondents:

- Crusader Clinic patients (Broadway, West State, Brookside, and North 2nd Street locations)
- KFACT volunteers
- Northern Illinois Food Bank, Mobile Food Pantry event in Winnebago County

Paper surveys were distributed to the first cohort, the families of all third grade students in two school districts in the region, Harlem Unit School District 122 (in Winnebago County), and Belvidere School District 100 (in Boone County). These surveys were sent home with students from each class, along with an introductory letter that explained the survey and included instructions. Teachers were also given paper reminders that were to be sent home with students halfway through the survey period to encourage more parents to participate.

The second cohort, participating housing authorities, included Rockford Housing Authority (RHA), Winnebago County Housing Authority (WCHA), and Zion Development. The surveys were distributed by staff at each housing organization with simultaneous "pop up events" planned, in which research staff were available to assist respondents in filling out surveys and offered incentives including $5 gift cards and refreshments. This did seem to be an effective strategy when working with housing staff and including incentives at the events. Use of incentives was done at the recommendation of the housing authority staff, and was implemented after doing a trial at a couple of different sites with no incentives. As predicted by housing authority staff, there was little to no response or willingness from

residents to participate without incentivizing the survey. The events all offered, in exchange for a completed survey, an entry into a drawing with a chance to win a Visa Gift card. Participation from this population was vital to the survey design, as it was one of the major methods of oversampling minority and low-income populations to ensure the survey was representative of the demographics of the region and included those that typically are hard-to-survey.

The largest events planned were multiple survey collection events planned during Rockford Housing Authority's mandatory resident meetings, at which all scattered site (Section 8) residents were required to attend. This would have provided a captive audience and allowed researchers to explain the benefits of completing the survey, which we believe would have increased the response rate dramatically. Unfortunately, days before the events were set to occur, the global Coronavirus pandemic began to cause deaths in exponentially increasing numbers, and the state's "Stay-at-Home" order, which included a ban of gatherings larger than 10 people was enacted, resulting in the meetings (and pop up events) being cancelled. This resulted in a massive decrease in the participant pool. At the same time, Governor Pritzker also ordered the cancellation of school throughout the state. This was just prior to the planned collection date of the school cohort's paper survey. Again, this caused a major disruption in the survey, resulting in a drastically reduced response rate from school participants.

It was at this time, in order to obtain enough responses to conduct a generalizable analysis, the project design was changed to include a Facebook promotion of the survey, open to any participants with a link. The link was shared through the Region 1 Planning Council page, the Rockford Regional Health Council page, and the personal pages of researchers and associates. Researchers also opted to use Facebook's "boost post" option, which prioritizes the post when displaying individual's News Feeds, moving the post toward the top of the feed to increase the likelihood that the post will be seen by potential participants. The cost was negligible, around $30. Incentives were used for this sample as well, with a $5 reward offered to any participant who finished the survey. Interestingly, only a small fraction of the nearly 1,300 Facebook participants that took part in the survey (less than 100) completed the email process to claim the incentive. Ultimately, these sampling methods produced:

- Random sample: 468 responses
- Housing authority samples: 165 responses
- School sample: 124 responses
- Pop-up event sample: 191 responses
- Facebook sample: 729 responses[2]

Given the difficulties encountered while gathering responses and the unprecedented

[2] The full total of Facebook responses was 1,226, but a number of responses were determined to be invalid, as they were "bot" responses completed by a non-local apparently automated source. These responses were excluded from the sample.

barriers involved, we believe the number of responses gathered was an excellent response.

ANALYSIS

Before being able to analyze any survey data, individual surveys had to be consolidated within our survey system, SurveyGizmo. Our random online sample and Facebook sample were done directly within SurveyGizmo by respondents, but any paper surveys collected at outreach events or through the housing authorities required manual data entry to convert the surveys into the online system. This resulted in three separate samples of hundreds of responses. Survey data for analysis was exported in two ways

1. Through the SurveyGizmo services, which was largely a report of response counts
2. Exported as raw data into an excel file, with each row being a response, and each column being a question or portion of a question.

For basic descriptive statistics of counts and averages, the first method of reporting response counts was used. For any demographic analysis, or analysis that required the comparison of responses (see **Survey Analysis – Demographic Observations**), the raw data had to be used. However, when exporting into raw data, only completed surveys were able to export, whereas the response count report exported all answers, including answers from partial surveys. For this reason, sample sizes varied slightly between questions depending on the type of export We did find a work-around for this issue for certain types of questions, allowing for responses from partially-completed surveys to be included, so certain questions, specifically those relating to chronic and behavioral health conditions, have a different sample size (n). Further, for certain questions, respondents were asked for information pertaining to themselves as well as the other members of their households. For these questions, there are 2 different n's: one of respondents, one of households. In these instances, when discussing these results, we specify which n we are referring to. In our analysis, we focused primarily on reporting percentages of recorded responses for the respective sample size, to avoid confusion. In both cases, survey samples were combined into spreadsheets for analysis.

DESCRIPTIVE DATA

The type of analysis for each survey question was dependent on the type of question being analyzed. For many questions, for which results could be shown by simple descriptive statistics, tables of responses and percentages of those responses as a portion of the total was sufficient. Some questions which had few responses such as ***yes*** or ***no*** questions were better shown as pie-charts and other figure types. This analysis was similar to past Healthy Community Surveys and made the most sense for ease of understanding and analysis.

DEMOGRAPHIC OBSERVATIONS

Working with R1PC, RRHC identified certain questions that were a priority to them and other health partners for analyzing

demographic trends.. These questions and the responses therein were deemed useful to policy discussions regarding social determinants of health in our community (discussed elsewhere in this report). In order to examine these questions and compare them to demographic groups self-reported by respondents, survey data on complete responses were exported as raw response data from our survey system (SurveyGizmo), and cross tabulations of demographic data for each identified question were created using conditional sorting formulas. Tests of significance were run on this data. By and large, education, age and income were the most significant results.

This analysis was time consuming and required additional preliminary cleaning of the data. Additionally, while this data is the most vulnerable to issues of external validity, our survey demographics were fairly representative of the community, with a slight oversample of minority and low-income communities through our Pop up event group.

APPENDIX C

SURVEY RESPONDENT DEMOGRAPHICS

Figure C1

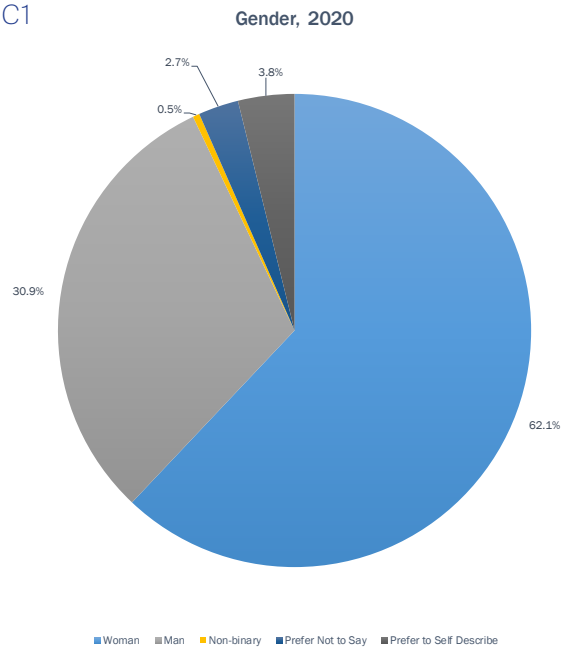


Figure C2

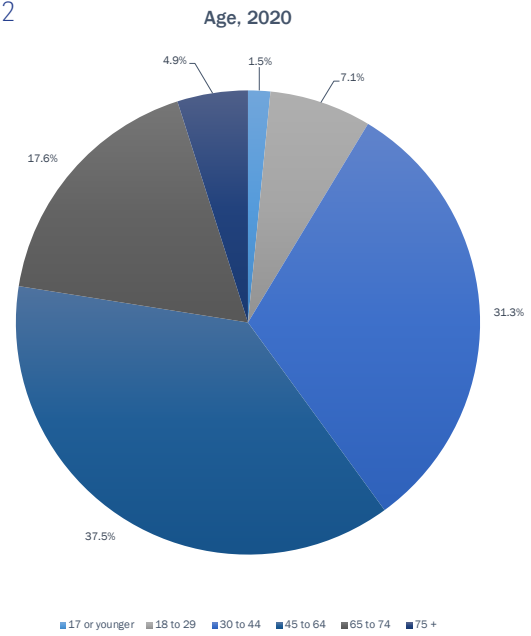


Figure C3

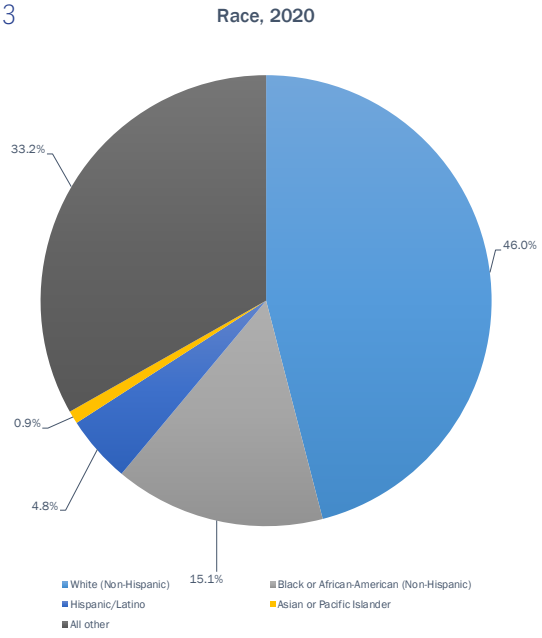


Figure C4

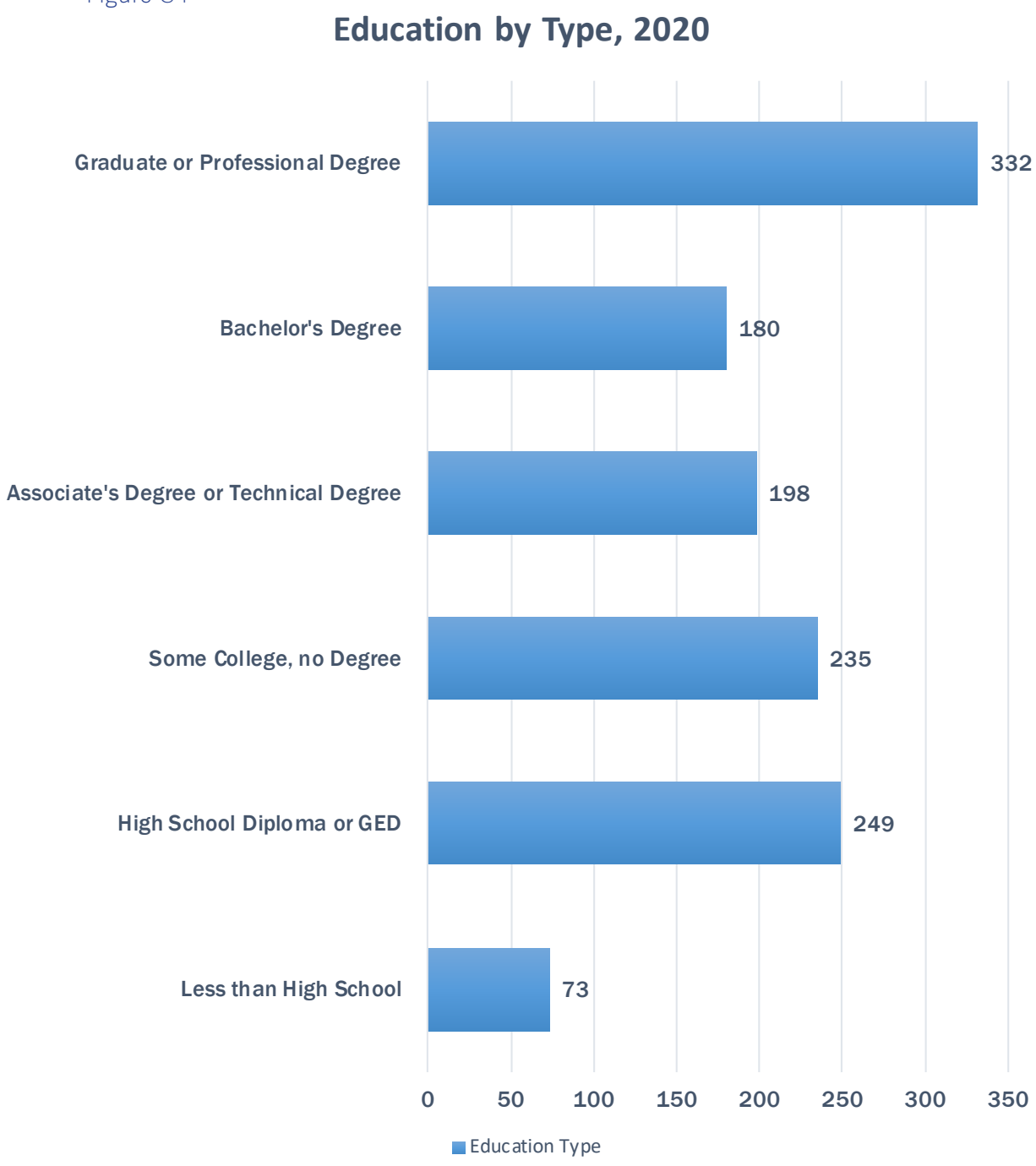

Education by Type, 2020
Graduate or Professional Degree
332
Bachelor's Degree
180
Associate's Degree or Technical Degree
198
Some College, no Degree
235
High School Diploma or GED
249
Less than High School
73
0
50
100
150
200
250
300
350
Education Type

Figure C5

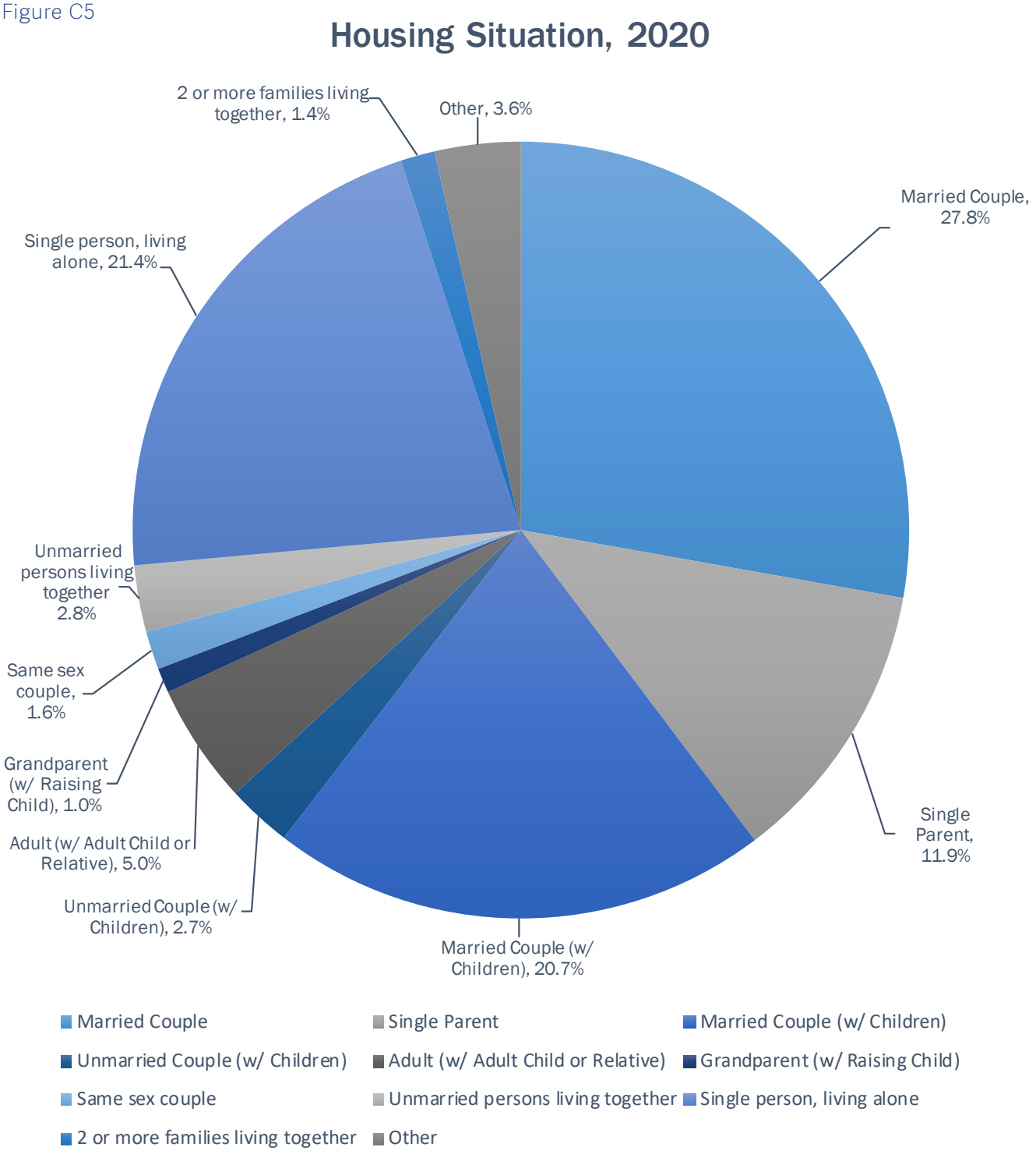

Housing Situation, 2020
2 or more families living together, 1.4%
Other, 3.6%
Married Couple, 27.8%
Single person, living alone, 21.4%
Unmarried persons living together 2.8%
Same sex couple, 1.6%
Grandparent (w/ Raising Child), 1.0%
Adult (w/ Adult Child or Relative), 5.0%
Unmarried Couple (w/ Children), 2.7%
Married Couple (w/ Children), 20.7%
Single Parent, 11.9%
Married Couple
Single Parent
Married Couple (w/ Children)
Unmarried Couple (w/ Children)
Adult (w/ Adult Child or Relative)
Grandparent (w/ Raising Child)
Same sex couple
Unmarried persons living together
Single person, living alone
2 or more families living together
Other

Figure C6

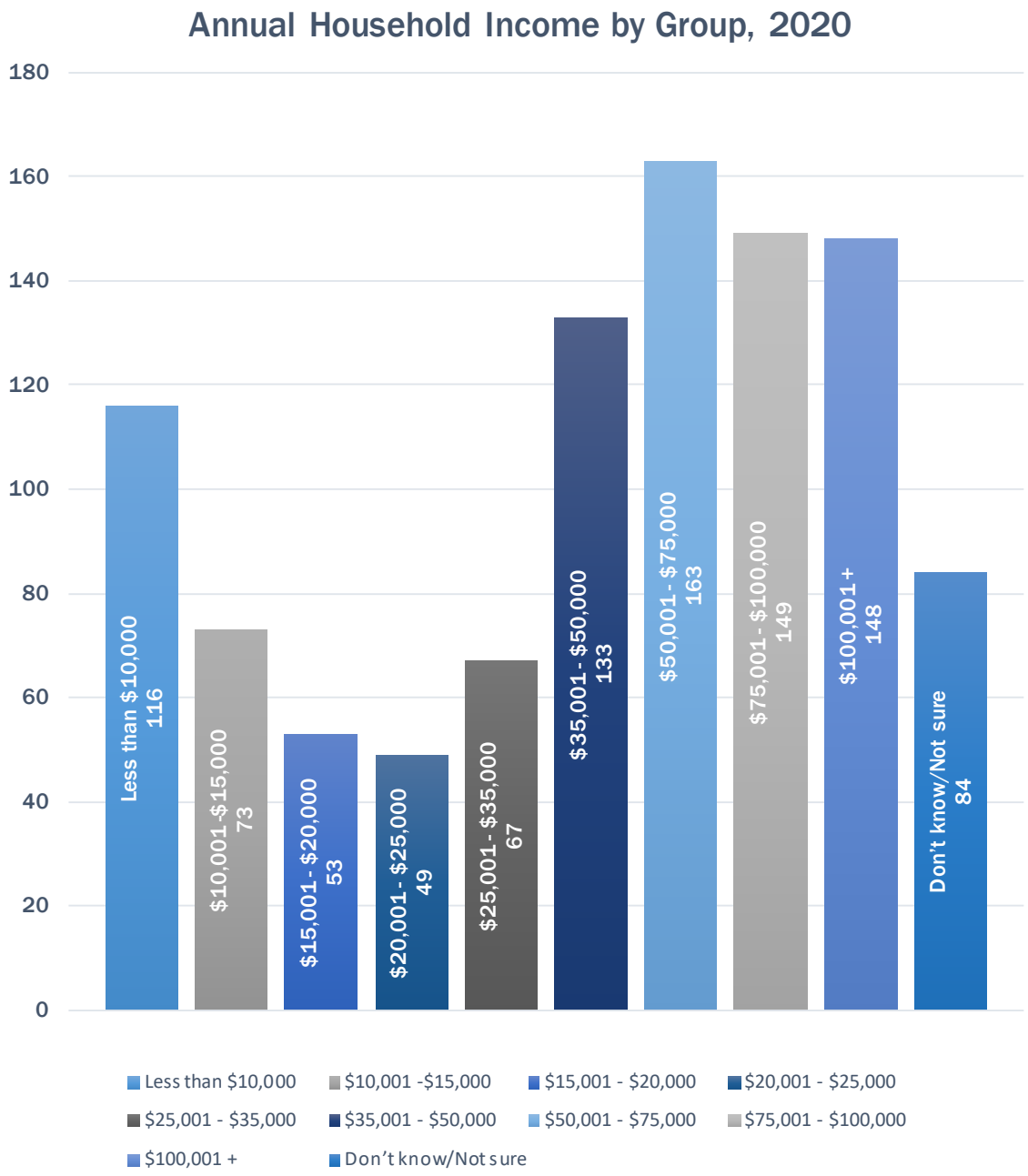

Annual Household Income by Group, 2020
180
160
140
120
100
80
60
40
20
0
Less than $10,000 116
$10,001 -$15,000 73
$15,001 - $20,000 53
$20,001 - $25,000 49
$25,001 - $35,000 67
$35,001 - $50,000 133
$50,001 - $75,000 163
$75,001 - $100,000 149
$100,001 + 148
Don't know/Not sure 84
Less than $10,000
$10,001 -$15,000
$15,001 - $20,000
$20,001 - $25,000
$25,001 - $35,000
$35,001 - $50,000
$50,001 - $75,000
$75,001 - $100,000
$100,001 +
Don't know/Not sure

Figure C7 **Housing Situation by Type, 2020**

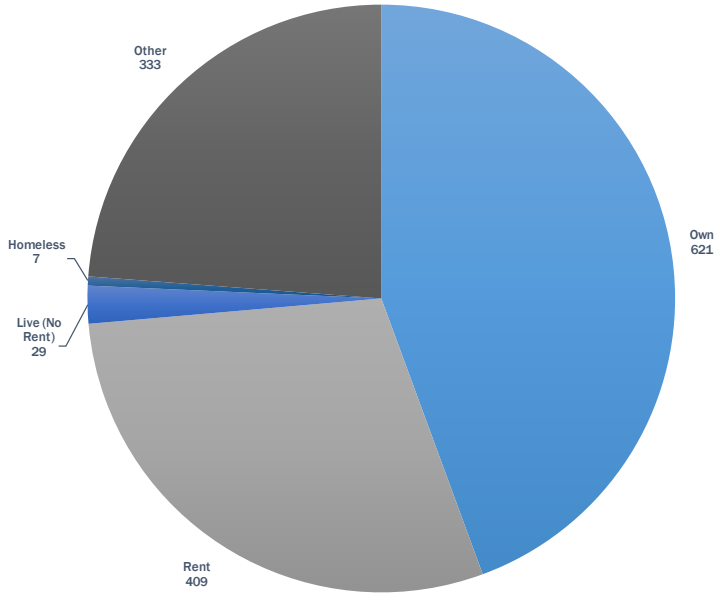


Figure C8

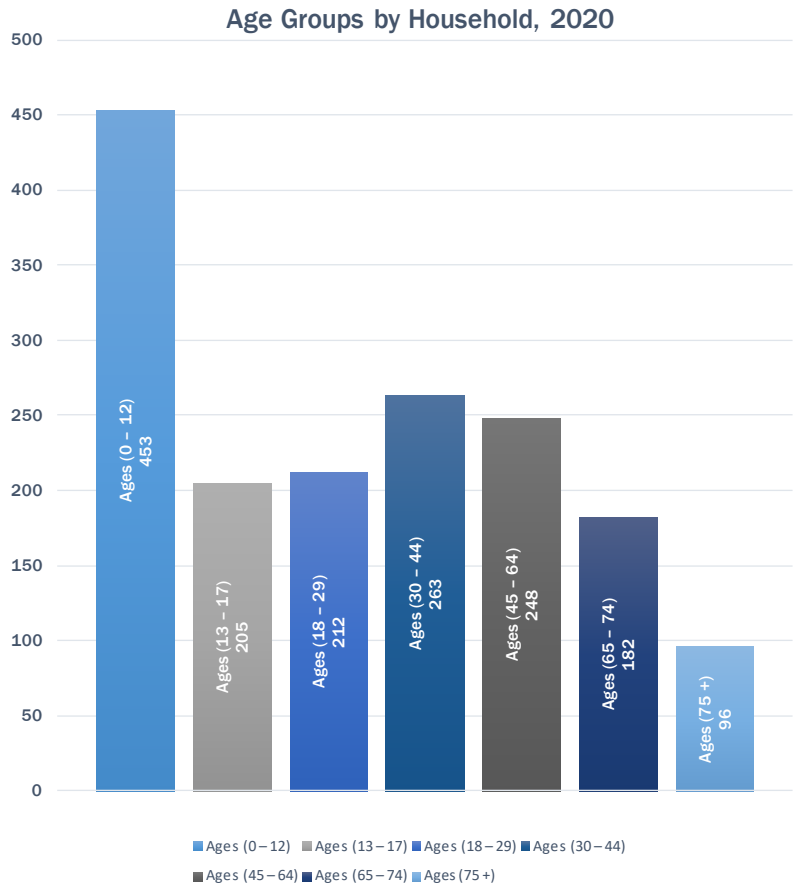


Figure C9

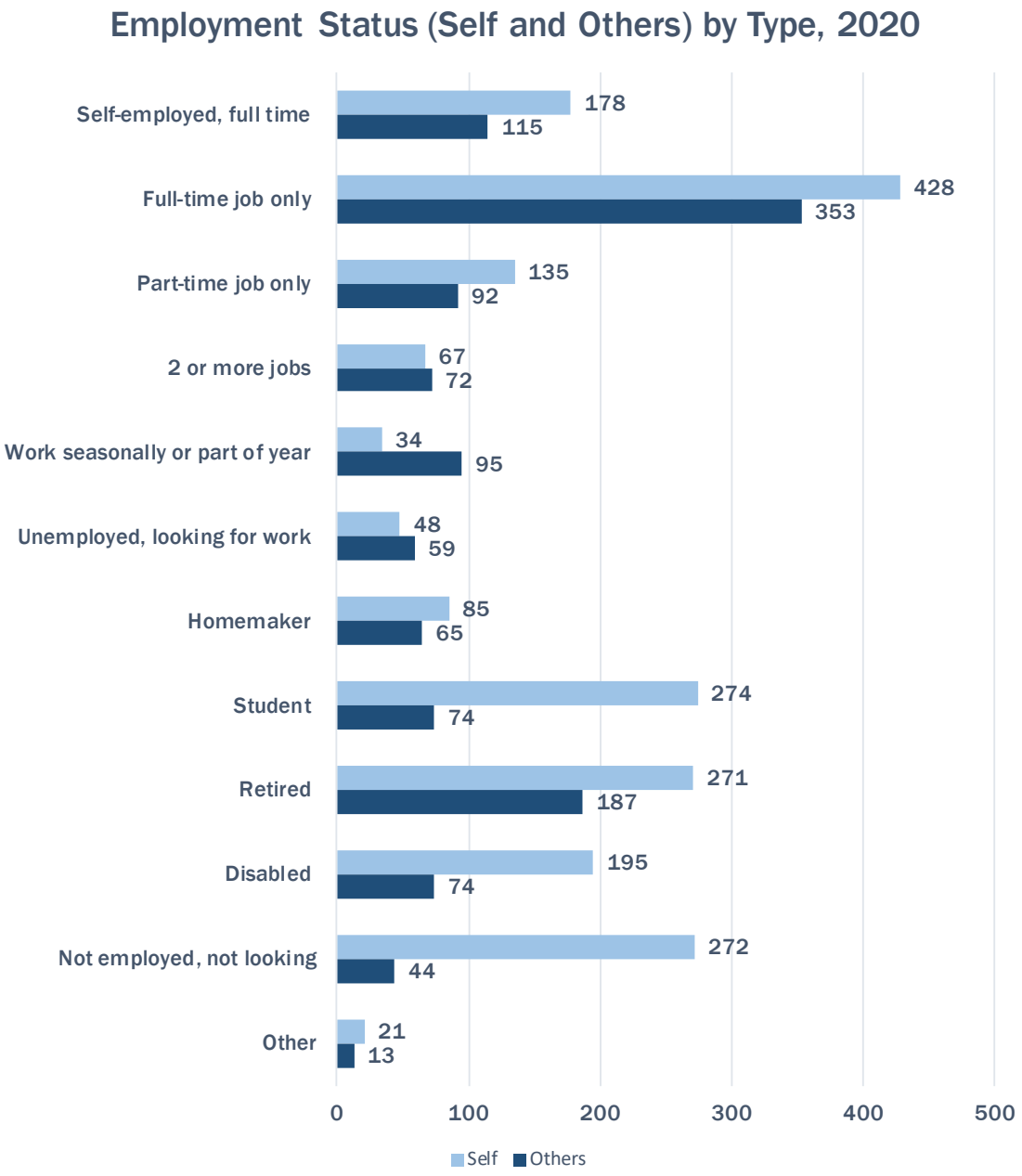

Employment Status (Self and Others) by Type, 2020
Self-employed, full time
178
115
Full-time job only
428
353
Part-time job only
135
92
2 or more jobs
67
72
Work seasonally or part of year
34
95
Unemployed, looking for work
48
59
Homemaker
85
65
Student
274
74
Retired
271
187
Disabled
195
74
Not employed, not looking
272
44
Other
21
13
0
100
200
300
400
500
Self
Others

Figure C10: Map of Survey Respondents by Zip Code with Cities

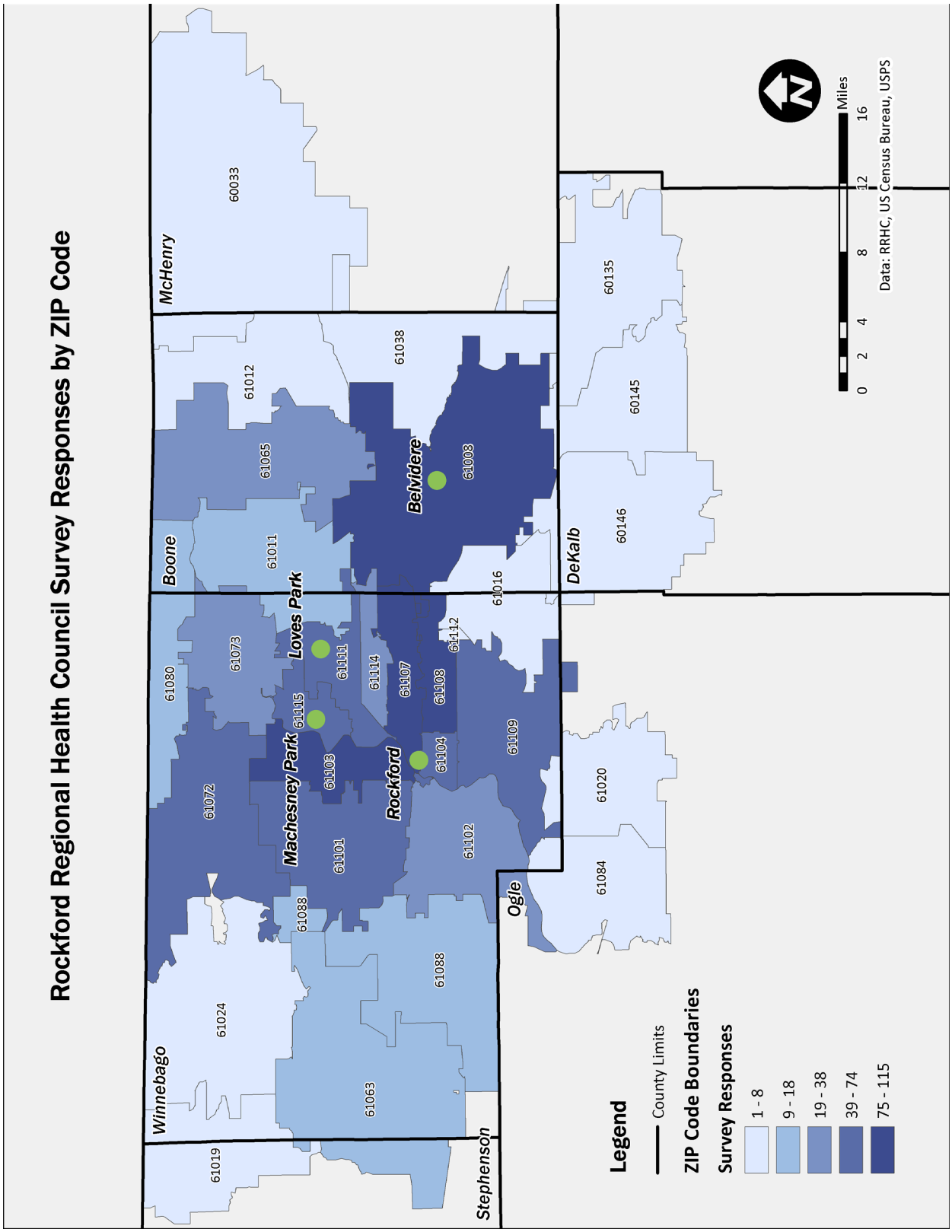
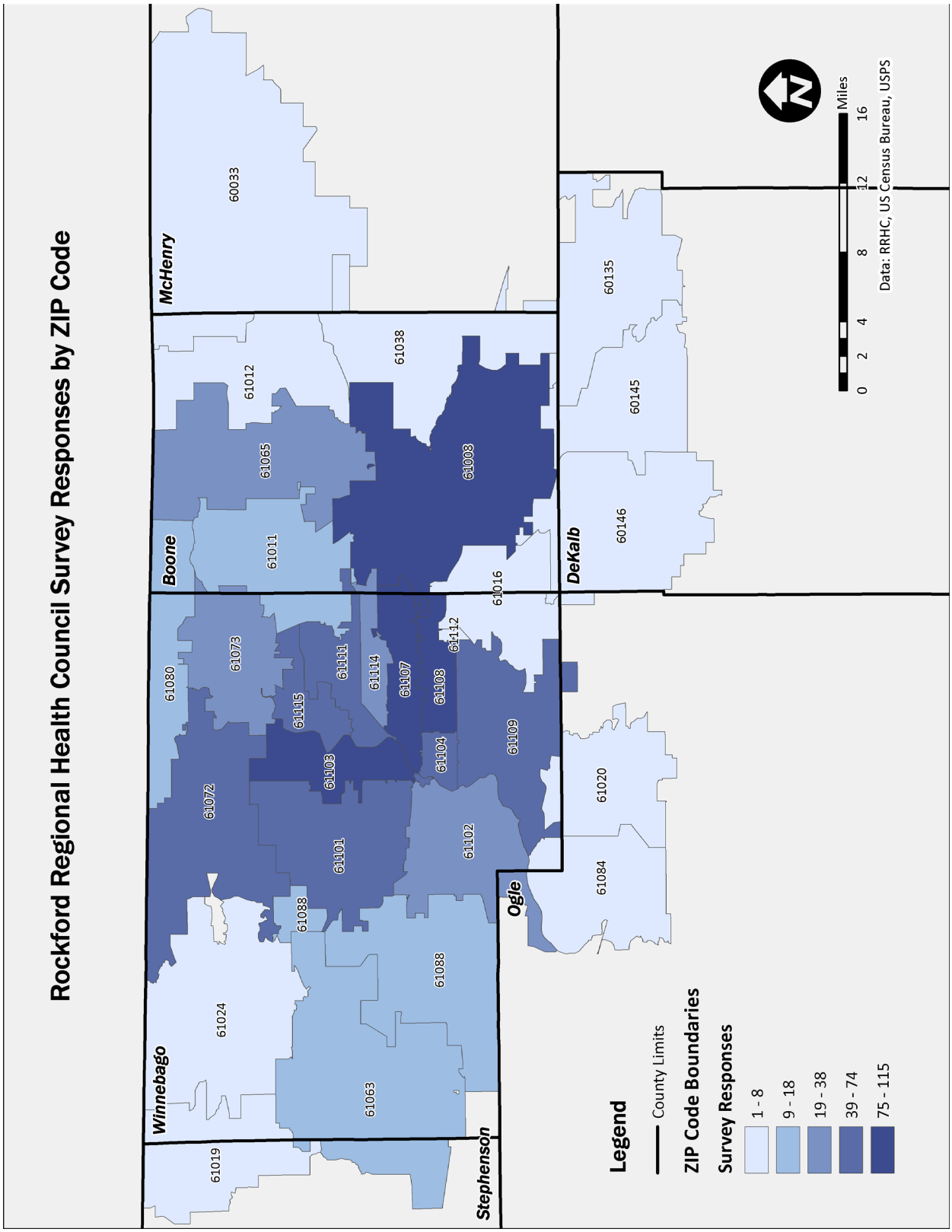


Figure C11: Map of Survey Respondents by Zip Code



APPENDIX D

COMMUNITY ASSETS, ISSUES & CONCERNS

TABLE D1: RESPONSES TO QUESTION- *WHICH COMMUNITY ASSETS ARE MOST IMPORTANT TO YOU?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Activities for seniors	14.50%	9.60%	11.40%	22.60%
Activities for teens	9.30%	9.00%	10.30%	8.70%
Help coping with death	3.50%	2.80%	5.70%	2.30%
Job training, retraining,	9.30%	10.50%	9.70%	7.70%
Substance abuse/mental health services	11.80%	13.30%	12.40%	9.70%
Services for people or families in crisis	10.60%	11.70%	13.00%	7.20%
Services for developmental disabilities	6.80%	7.80%	8.70%	4.00%
Special education for children	12.10%	7.50%	9.70%	19.40%
Support for caregivers, elderly, disabled	10.70%	11.40%	12.40%	8.30%
Programs to create a safe, healthy, clean environment	13.00%	14.90%	14.40%	9.70%

TABLE D2: RESPONSES TO QUESTION- *WHICH COMMUNITY ISSUES AND CONCERNS ARE IMPORTANT TO YOU?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Child abuse	6.90%	7.70%	7.90%	4.40%
Obesity	7.20%	4.50%	3.50%	16.50%
Gangs, delinquency, youth violence	7.40%	8.30%	6.80%	6.80%
Substance abuse	6.60%	7.20%	6.40%	5.80%
Violence, guns	7.40%	7.10%	7.50%	7.80%
Need for affordable housing	5.20%	4.50%	7.20%	3.40%
Neighborhood safety	7.70%	8.30%	8.60%	5.40%
Domestic violence	5.70%	6.60%	6.10%	4.00%
School graduation rates	3.40%	3.80%	3.50%	2.80%
Teen pregnancy	2.80%	2.70%	3.50%	2.00%
Homelessness	5.70%	6.20%	6.60%	3.50%
Economic discrimination	3.30%	3.60%	3.30%	3.00%
Crime	7.10%	7.70%	8.10%	4.80%
Racial discrimination	4.90%	5.10%	5.40%	4.00%
Unhealthy environment (e.g. poor air quality)	7.60%	4.30%	4.60%	17.00%
Mental health	6.70%	7.20%	6.40%	6.20%
Literacy, ability to read	3.80%	4.70%	4.00%	2.30%

TABLE D3: RESPONSES TO QUESTION- *WHICH 3 THINGS SHOULD WE WORK ON TO MAKE THE ROCKFORD REGION ONE OF THE TOP 25 COMMUNITIES IN THE UNITED STATES?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Access to healthcare	7.60%	6.90%	11.10%	4.10%
Police, fire and emergency services	6.20%	5.50%	5.70%	7.90%
Clean environment	7.10%	4.50%	7.80%	9.90%
Better schools	11.50%	15.10%	9.80%	8.70%
Arts and culture	2.60%	1.80%	1.20%	5.50%
Walkable, bikeable communities	5.00%	3.50%	3.20%	9.50%
Parks and recreation	3.20%	2.90%	3.30%	3.40%
Good jobs and healthy economy	16.60%	17.30%	12.30%	21.10%
Reduce bullying	2.60%	2.40%	3.20%	2.10%
Faith-based services	1.40%	1.80%	1.70%	0.70%
Public transportation	2.10%	1.50%	3.40%	1.40%
Less violent crime and safer neighborhoods	13.70%	18.70%	11.70%	9.50%
Affordable housing	5.60%	3.20%	9.90%	3.20%
Science, Technology, Engineering, and Math (STEM) education	3.20%	3.10%	1.10%	6.10%
Early childhood services	1.30%	1.90%	1.20%	0.60%
Services for seniors	3.40%	3.10%	4.10%	2.70%
Health-related education	1.10%	1.30%	1.60%	0.40%
Homelessness services	4.00%	4.10%	5.30%	2.40%
Other (please write-in)	1.70%	1.50%	2.50%	0.90%

TABLE D4: RESPONSES TO QUESTION: *OVERALL, HOW WOULD YOU RATE THE COMMUNITY AS A PLACE TO WALK? WOULD YOU SAY IT IS...?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Terrible (1)	4.80%	4.30%	7.90%	0.00%
2	18.50%	18.70%	16.30%	22.10%
Okay (3)	48.60%	47.10%	55.90%	37.90%
4	19.40%	23.60%	9.60%	29.70%
Very Nice (5)	8.80%	6.30%	10.40%	10.30%

TABLE D5: RESPONSES TO QUESTION: *OVERALL, HOW WOULD YOU RATE THE COMMUNITY AS A PLACE TO RIDE A BIKE? WOULD YOU SAY IT IS...?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Terrible (1)	5.50%	3.20%	10.70%	0.00%
2	20.30%	23.80%	20.00%	14.80%
Okay (3)	47.60%	48.40%	50.70%	40.30%
4	18.90%	18.60%	9.60%	36.70%
Very Nice (5)	7.70%	6.10%	9.00%	8.20%

TABLE D6: RESPONSES TO QUESTION: *IN GENERAL, WOULD YOU SAY THAT THE PEOPLE YOU KNOW IN THE COMMUNITY ARE? WOULD YOU SAY IT IS…?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Terrible (1)	0.90%	0.30%	1.90%	0.00%
2	5.20%	4.70%	7.00%	3.00%
Okay (3)	44.40%	31.20%	58.80%	41.30%
4	32.00%	40.60%	18.40%	41.80%
Great (5)	17.50%	23.20%	13.90%	13.90%

TABLE D7: RESPONSES TO QUESTION: *HOW DO YOU BUY YOUR FRESH FRUITS AND VEGETABLES?*

	Total Sample	Random Sample	Outreach Sample	Facebook Sample
Drive my own/my family's car	39.10%	83.30%	44.10%	15.90%
Walk	5.40%	2.30%	9.80%	4.50%
Ride the bus/public transit	6.10%	0.90%	12.40%	5.00%
Get a ride from someone	7.70%	2.30%	17.40%	4.90%
I have them delivered	17.00%	3.30%	2.40%	31.30%
I don't buy fresh fruits and vegetables	1.30%	1.20%	2.60%	0.70%
Ride my bike	17.70%	0.50%	1.60%	34.50%
Taxi/ Uber	0.90%	0.50%	1.80%	0.70%
Community garden	1.20%	1.60%	1.80%	0.80%
Other (please describe)	3.50%	6.30%	4.20%	1.80%

APPENDIX E

ANALYSIS OF HEALTH STATUS & ACCESS TO CARE

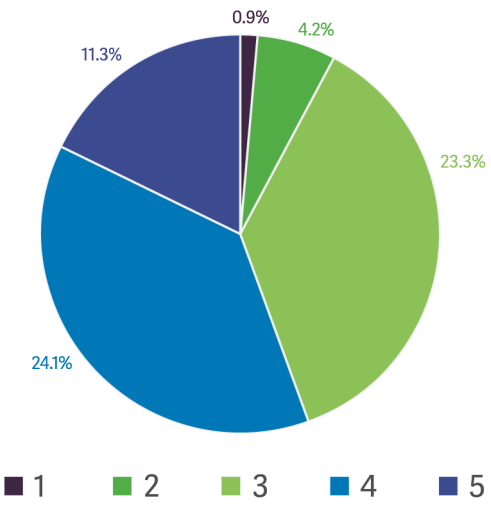
HEALTH STATUS

IN GENERAL, HOW WOULD YOU DESCRIBE YOUR HEALTH?*

Survey takers were asked to rate their general health, with ***1*** being in ***poor*** health, and ***5*** being in ***excellent*** health (Figure E1). About 40% of the sample rated their health a ***1*** or a ***2*** with another 23% rating themselves at a ***3***, or ***okay***. However, these totals were dramatically skewed by the Facebook sample, where 78% of the sample rated themselves at a ***2***. The combined total sample without the Facebook cohort rated their health significantly higher, with over 50% of respondents rating their health at a ***4*** or a ***5***. Only a small portion (10%) of this cohort reported their health being below average.

A question designed as a self-assessment of health was included to analyze differences between cohorts of respondents sharing selected demographic characteristics, in order to examine the effects of social determinants of health. These self-assessments of health were part of a multivariate analysis comparing the differences between groups based on ethnicity, age group, education, household by type, income level, and living situation by type.

Figure E1: In general, how would you describe your health?



Health Status & Race/Ethnicity

White respondents appeared to rate their health more favorably than black respondents, with the most frequent rating being a ***4*** versus a ***3***, respectively (Table E1). Additionally, while the proportion of black respondents rating their health a ***5*** was similar to that of whites and Hispanics, black respondents were most likely to rate their health at a ***1*** or ***2***. Lastly, while the overall Hispanic response rate was low, the responses in their sample closely resembled those of white respondents.

Table E1: General Health Status by Race/Ethnicity

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
White	0.80%	5.20%	30.40%	38.40%	15.40%	9.90%
Black	4.30%	8.00%	41.30%	18.80%	16.70%	10.90%
Hispanic	0.00%	4.90%	31.10%	39.30%	14.80%	9.80%
Asian	0.00%	0.00%	40.00%	10.00%	40.00%	10.00%
Multiracial	0.00%	11.10%	11.10%	66.70%	0.00%	11.10%

Health Status & Age Group

There did not appear to be a clear correlation between health ratings and age group (Table E2). However, respondents aged 45 – 74 appeared to rate their health lower than the younger age groups. Additionally, the older groups were more likely to not answer the question, or select ***prefer not to answer***. Ratings of ***5***, or ***excellent*** health were fairly similar among age groups, with the youngest age group choosing that rating at the highest frequency.

Health Status & Educational Attainment

There appeared to be a direct relationship between education and health ratings in the survey sample (Table E3). This relationship may coincide with the relationship between health status and age, as older respondents tend to be more likely to have a higher education level. That being said, those with a higher level of education more frequently rated their health at or above a ***4***. At each interval measured, the proportion of respondents rating their health at a ***4*** or ***5*** was observed to be higher than the interval below it. Furthermore, the respondents with higher education levels less frequently rated their health as a ***1*** or ***2***.

Health Status & Living Situation by Type

When comparing self-rated health status among cohorts of respondents based on their household composition, (Tables E4 & E5) single parents and single persons tended to rate themselves at a ***2*** more often than respondents from other household classifications. Married person rated their health highest of the cohorts, more commonly rating their health in the ***4*** and ***5*** range than the other household types.

Table E2: General Health Status by Age Group

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
18 to 29	0.00%	1.40%	31.90%	43.50%	21.70%	1.40%
30 to 44	0.40%	4.00%	28.50%	45.40%	14.90%	6.80%
45 to 64	2.40%	8.30%	34.80%	29.80%	12.40%	12.40%
65 to 74	0.70%	5.90%	34.60%	32.00%	13.70%	13.10%
75+	0.00%	4.00%	28.00%	28.00%	32.00%	8.00%

Table E3: General Health Status by Educational Attainment

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
Less than High School	5.80%	7.70%	44.20%	9.60%	23.10%	9.60%
High School or GED	0.50%	7.90%	43.00%	24.30%	14.00%	10.30%
Some College, No Degree	2.20%	7.70%	36.50%	32.60%	11.00%	9.90%
Associates Degree	0.00%	4.50%	31.10%	43.90%	7.60%	12.90%
Bachelors Degree	0.00%	5.10%	17.30%	45.50%	25.00%	7.10%

Table E4: Health Ratings Above and Below Average by Educational Attainment

	Health Rating of 1 or 2	Health Rating of 4 or 5
Less than High School	13.50%	32.70%
High School or GED	8.40%	38.30%
Some College, No Degree	9.90%	43.60%
Associates Degree	4.50%	51.50%
Bachelors Degree	5.10%	70.50%
Graduate or Professional Degree	2.30%	67.20%

Table E5: General Health Status by Type of Living Situation

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
Married	1.00%	2.60%	26.50%	41.10%	18.20%	10.60%
Single Parent	1.00%	9.50%	43.80%	23.80%	12.40%	9.50%
Unmarried Persons	0.00%	5.70%	37.70%	47.20%	3.80%	5.70%
Single Person	2.50%	8.10%	43.90%	21.20%	15.70%	8.60%

Table E6: General Health Status by Income Level

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
Less than $10,000	3.20%	8.50%	51.10%	16.00%	13.80%	7.40%
$10,001 to $15,000	4.60%	15.40%	40.00%	18.50%	7.70%	13.80%
$15,001 to $20,000	0.00%	13.30%	40.00%	20.00%	15.60%	11.10%
$20,001 to $35,000	2.60%	15.40%	53.80%	15.40%	5.10%	7.70%
$35,001 to $50,000	1.00%	5.10%	30.60%	37.80%	15.30%	10.20%
$50,001 to 75,000	0.00%	2.20%	34.50%	46.00%	12.90%	4.30%
$75,001 to $100,000	0.00%	6.30%	14.30%	50.90%	17.00%	11.60%
$100,001 or more	0.00%	0.00%	15.20%	47.20%	25.60%	12.00%

Table E7: Health Rating and Income Level - Below Average and Above Average

	1 & 2	4 & 5
Less than $10,000	11.70%	29.80%
$10,001 to $15,000	20.00%	26.20%
$15,001 to $20,000	13.30%	35.60%
$20,001 to $35,000	17.90%	20.50%
$35,001 to $50,000	6.10%	53.10%
$50,001 to 75,000	2.20%	59.00%
$75,001 to $100,000	6.30%	67.90%
$100,001 or more	0.00%	72.80%

Table E8: General Health Status by Housing Type

	Poor (1)	2	Okay (3)	4	Excellent (5)	N/A
Own	0.40%	4.40%	22.60%	43.50%	17.40%	11.60%
Rent	2.70%	8.30%	47.20%	21.90%	13.60%	6.30%
Rent-free	0.00%	0.00%	56.00%	20.00%	8.00%	16.00%
Homeless	0.00%	28.60%	28.60%	14.30%	14.30%	14.30%
Other	14.30%	0.00%	42.90%	42.90%	0.00%	0.00%

Health Status & Income

Self-rated health status and income (Table E6) displayed trends similar to those seen in the analysis of health status and education level. The income groups (aside from the ***$10,001 - $15,000*** and ***$20,001 - $35,000*** group) generally showed a direct correlation with health status, with higher income groups selecting ***4*** & ***5*** more frequently than lower income groups and with lower income groups rating themselves ***1*** & ***2*** more frequently than higher income groups.

Health Status & Housing Type

When comparing respondents housing by types with their self health rating (Table E8), it was observed that homeowners rated their health as a ***4*** nearly twice as often as renters, while renters answered ***2*** and ***3*** nearly twice as much as homeowners. The sample population did include a small number of homeless individuals (7), and while none of them rated their health as a ***1***, a quarter of them (28%) described their health below average, as a ***2***.

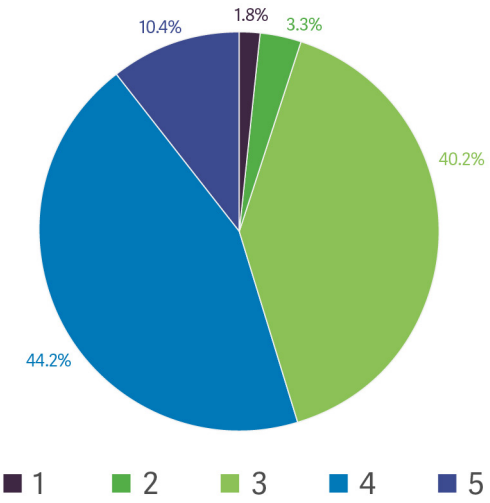
IN GENERAL, HOW WOULD YOU DESCRIBE YOUR WEIGHT?*

Like the health self-rating, the survey also asked respondents to describe their weight (Figure E2). Most respondents described themselves as ***overweight*** (44%) or ***about the right weight*** (40%). 10% described themselves as ***obese***.

Weight & Race/Ethnicity

Responses were similar between races/ethnicities and showed only small variances between cohorts (Table E9).

Figure E2: In general, how would you describe your weight?



Weight & Age Group

There only appeared to be small variances between the age groups and self-reported weight descriptions (Table E10). Those in the older age groups, age 45 to 74, tended to respond ***overweight*** more frequently, and the younger age groups (age 18-44) tended to report being ***about the right weight*** more often. The 75 or older age group of respondents had the highest rate of ***about the right weight*** responses.

Weight & Educational Attainment

There were not many clear trends between respondents' assessment of their own weight and level of education (Table E11). However, those with ***less than a high school education*** more frequently reported being ***underweight*** than respondents in other educational cohorts. They also reported being ***obese*** less frequently than most of the other cohorts.

Table E9: Weight Description by Race/Ethnicity

	Underweight	About the Right weight	Overweight	Obese	N/A
White	2.20%	38.70%	45.60%	11.10%	2.40%
Black	7.20%	40.60%	34.80%	8.70%	8.70%
Hispanic	1.60%	39.30%	44.30%	9.80%	4.90%
Asian	0.00%	100.00%	0.00%	0.00%	0.00%
Multiracial	11.10%	22.20%	55.60%	11.10%	0.00%

Table E10: Weight Description by Age Group

	Underweight	About the Right weight	Overweight	Obese	N/A
18 to 29	1.40%	52.20%	31.90%	11.60%	2.90%
30 to 44	2.80%	45.40%	37.30%	12.00%	2.40%
45 to 64	3.80%	32.40%	49.30%	9.40%	5.00%
65 to 74	3.30%	33.30%	49.00%	13.10%	1.30%
75+	0.00%	58.00%	36.00%	0.00%	6.00%

Table E11: Weight Description by Educational Attainment

	Underweight	About the Right Weight	Overweight	Obese	N/A
Less than High School	11.50%	51.90%	28.80%	5.80%	1.90%
High School or GED	3.30%	39.70%	43.00%	4.70%	9.30%
Some College, No Degree	2.80%	34.30%	50.30%	10.50%	2.20%
Associates Degree	3.80%	33.30%	46.20%	15.20%	1.50%
Bachelors Degree	1.90%	46.20%	39.10%	12.80%	0.00%
Graduate or Professional Degree	0.00%	41.40%	44.50%	12.50%	1.60%

Table E12: Weight Description by Type of Living Situation

	Underweight	About the Right Weight	Overweight	Obese	N/A
Married	1.70%	40.70%	47.40%	8.60%	1.70%
Single Parent	6.70%	49.50%	31.40%	4.80%	7.60%
Unmarried Persons	5.70%	34.00%	41.50%	17.00%	1.90%
Single Person	2.00%	35.90%	43.90%	12.60%	5.60%

Weight & Household Composition

There did not appear to be any clear trends between respondents' assessment of their own weight and household composition (Table E12). The most notable observation was that single parents much less frequently reported being ***obese*** than other household composition cohorts.

Weight & Income

Income had a few patterns in our total sample (Table E13). Those with higher incomes tended to respond that they were ***about the right weight***, but so did those who earn ***less than $10,000***. Those earning ***less than $10,000*** to ***$15,000*** tended to have higher rates of responding that they were ***underweight***. Selections of ***overweight*** and ***obese*** seemed distributed fairly evenly across income levels.

Weight & Housing Status

Those who ***own***, those who ***rent***, and those who ***don't pay rent*** appeared to have similar responses when asked to describe their weight (Table E14). However, the homeless sample more frequently reported being either ***underweight***, or ***overweight*** more often than the other cohorts.

DIFFICULTY PARTICIPATING IN DAILY ACTIVITIES

IN THE LAST 30 DAYS, DID PHYSICAL OR MENTAL HEALTH PROBLEMS MAKE IT HARD TO PARTICIPATE IN YOUR NORMAL DAILY ACTIVITIES?*

The majority (53%) of respondents answered that they ***do not have any difficulty with daily activities due to physical health***. There were also a high percentage of respondents who skipped the question (15%). However,

Table E13: Weight Description by Income Level

	Underweight	About the Right weight	Overweight	Obese	N/A
White	2.20%	38.70%	45.60%	11.10%	2.40%
Black	7.20%	40.60%	34.80%	8.70%	8.70%
Hispanic	1.60%	39.30%	44.30%	9.80%	4.90%
Asian	0.00%	100.00%	0.00%	0.00%	0.00%
Multiracial	11.10%	22.20%	55.60%	11.10%	0.00%

Table E14: Weight Description by Housing Status

	Underweight	About the Right weight	Overweight	Obese	N/A
18 to 29	1.40%	52.20%	31.90%	11.60%	2.90%
30 to 44	2.80%	45.40%	37.30%	12.00%	2.40%
45 to 64	3.80%	32.40%	49.30%	9.40%	5.00%
65 to 74	3.30%	33.30%	49.00%	13.10%	1.30%
75+	0.00%	58.00%	36.00%	0.00%	6.00%

a significant percentage of respondents (25%) reported that they ***have some sort of problems with their daily activities*** due to issues with their ***physical health*** (Figure E3).

When asked if ***problems with mental health interfered with their daily activities***, a larger percentage of respondents answered ***no*** or skipped the question (59% and 22%, respectively), when compared to the same question about daily activities and ***problems with physical health*** (Figure E4). 13% of respondents said that ***mental health*** did make ***participating in daily activities difficult***.

DO YOU HAVE DIFFICULTY WITH ANY OF THE FOLLOWING BECAUSE OF HEALTH PROBLEMS?

Survey respondents that reported having ***problems participating in their daily activities due to physical health problems*** were asked to select from an array of activities that were problematic for them (Figure E5). Nearly a quarter of respondents that had problems with activities due to physical problems reported that ***walking or climbing stairs*** was ***difficult***. Similarly, ***exercising*** was ***difficult*** for about a quarter of respondents. ***Keeping a job*** and ***dressing*** were the responses selected with the lowest frequency.

Difficulty with Activities & Race/ Ethnicity

When looking at demographics and the question of difficulty with activities due to health problems, the percentage of those who did not answer seemed to have significant variation. A majority of white and Hispanic respondents ***did not***

Figure E3: Difficulty with Daily Activities (Physical)

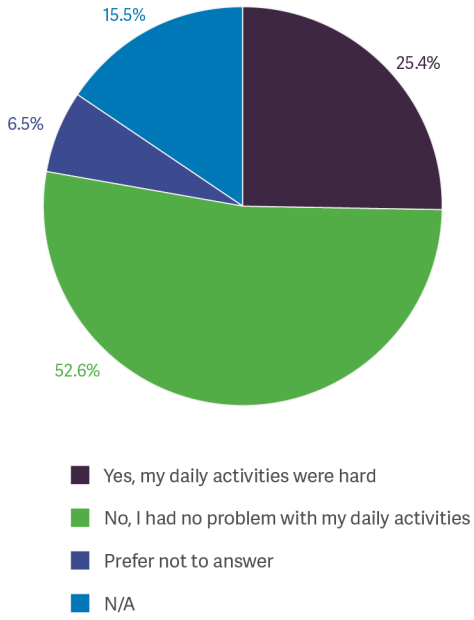


Figure E4: Difficulty with Daily Activities (Mental Health/Substance Abuse)

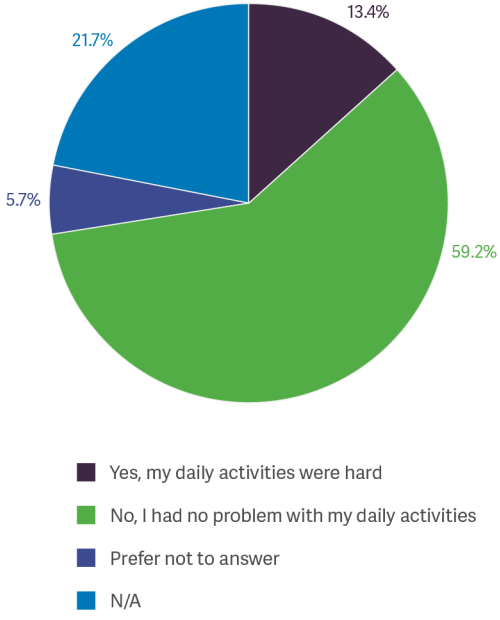
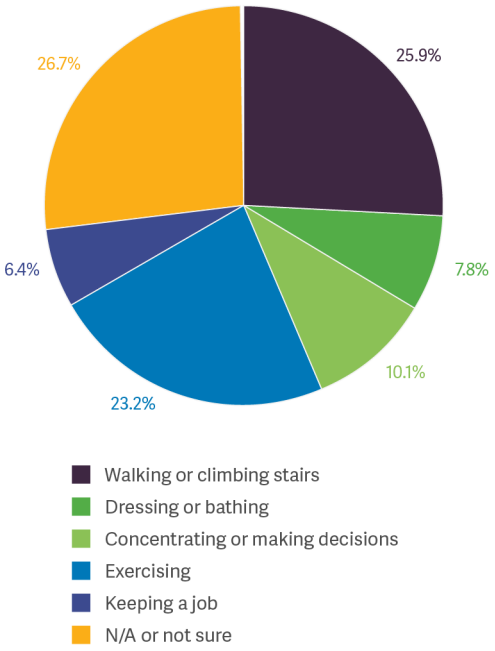


Figure E5: Activities that Respondents Find Difficult



have difficulties, while only 38% of black respondents ***did not have difficulties***. Additionally, the frequency of black responders who said that ***walking or climbing stairs*** was difficult is nearly double that of white respondents (Table E15).

Difficulty with Activities & Age

There was a slight correlation between age group of respondents and reporting of difficulty with daily activities (Table E16). Those age 45 - 74 more frequently responded that they did have difficulty with activity because of health problems and that the difficulty involved ***walking or climbing stairs***. However, somewhat surprisingly, the cohort of respondents that were ***75 years old or older*** reported having issues less frequently than other age groups. However, this cohort only had around 1/3 the number of respondents as the ***65 – 74 year old*** cohort, which was only half the size of the ***45 – 64 year old*** cohort (the largest group), so it is possible that this explains the difference in rates. Another interesting observation was the frequency with which respondents in the ***18-29 year old*** group reported having difficulty ***exercising***. The rate of respondents in this age group that selected this response was nearly twice that of respondents in all of the age groups above it. This is especially interesting, given that this age group did not demonstrate an outsized number of low self-health ratings or ratings of ***overweight*** or ***obese***. Having difficulty with ***concentration or making decisions*** also seemed to be more of an issue for the younger age groups.

Difficulty with Activities & Education

When looking at correlation between ***walking or climbing stairs*** and ***exercising*** and education level, it appears that the variables were inversely related, with respondents in the ***bachelor's*** or ***master's degree*** cohorts reporting these difficulties the least (Table E17). Nearly half of those with ***less than a high school education*** that reported having difficulty with any activities reported that they had difficulty walking or climbing stairs.

Difficulty with Activities & Living Situation by Type

The majority of ***married*** people (3 out of 4) said they had ***no difficulties with daily activities*** due to their health (Table E18). ***Single*** persons that most frequently had difficulty with activities reported that they had problems with ***walking*** or ***climbing stairs***, as did ***single parents***.

Table E15: Activity Difficulty by Race/Ethnicity

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
White	23.50%	6.30%	2.20%	0.30%	4.20%	63.50%
Black	46.40%	8.00%	1.40%	2.90%	3.60%	37.70%
Hispanic	8.20%	6.60%	3.30%	1.60%	4.90%	75.40%
Asian	30.00%	10.00%	0.00%	0.00%	10.00%	50.00%
Multiracial	33.30%	11.10%	11.10%	0.00%	11.10%	33.30%

Table E16: Activity Difficulty by Age Group

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
18 to 29	8.70%	11.60%	5.80%	1.40%	8.70%	63.80%
30 to 44	14.50%	6.00%	4.00%	1.60%	7.60%	66.30%
45 to 64	36.30%	5.90%	0.90%	0.90%	3.50%	52.50%
65 to 74	33.30%	6.50%	0.00%	0.00%	0.70%	59.50%
75+	20.00%	6.00%	0.00%	0.00%	2.00%	72.00%

Table E17: Activity Difficulty by Educational Attainment

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
Less than High School	48.10%	11.50%	0.00%	1.90%	5.80%	32.70%
High School or GED	31.30%	10.30%	1.90%	2.30%	1.90%	52.30%
Some College, No Degree	29.30%	5.50%	0.60%	0.60%	7.70%	56.40%
Associates Degree	28.00%	6.10%	6.80%	0.80%	6.10%	52.30%
Bachelors Degree	16.00%	3.20%	3.20%	0.00%	4.50%	73.10%
Graduate or Professional Degree	15.60%	4.70%	0.00%	0.00%	2.30%	77.30%

Table E18: Activity Difficulty by Living Situation

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
Married	15.60%	7.90%	1.70%	0.70%	1.00%	73.20%
Single Parent	34.30%	7.60%	1.90%	1.90%	7.60%	46.70%
Unmarried persons	26.40%	3.80%	1.90%	0.00%	9.40%	58.50%
Single person	42.90%	7.60%	1.50%	1.00%	6.10%	40.90%

Table E19: Activity Difficulty by Income

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
Less than $10,000	53.20%	6.40%	0.00%	2.10%	7.40%	31.90%
$10,001 to $15,000	56.90%	3.10%	0.00%	0.00%	7.70%	32.30%
$15,001 to $20,000	31.10%	11.10%	6.70%	0.00%	4.40%	46.70%
$20,001 to $35,000	38.50%	5.10%	5.10%	0.00%	10.30%	41.00%
$35,001 to $50,000	17.30%	7.10%	4.10%	1.00%	3.10%	67.30%
$50,001 to 75,000	18.00%	9.40%	2.90%	1.40%	2.90%	65.50%
$75,001 to $100,000	20.50%	2.70%	1.80%	0.00%	4.50%	70.50%
$100,001 or more	6.40%	4.00%	0.00%	0.00%	1.60%	88.00%

These difficulties were reported much less frequently in the ***married*** cohort, with ***single parents*** and ***single persons*** (without children) reporting difficulties at double and triple the rate of ***married*** respondents, respectively. ***Concentrating or making decisions*** seemed to be less of an issue for ***married*** respondents than for respondents in all other groups.

Difficulty with Activities & Income

Income level and difficulty performing activities appeared to be inversely related, with those in the highest income levels having the lowest rate of difficulty with activities due to health problems (Table E19). The overall sample had a sizable cohort of respondents with a household income ***over $100,000***, and the vast majority of that group (88%) did not report having difficulty with activities as a result of health problems. Comparatively, around 70% of respondents whose household incomes were ***less than $10,000*** reported having some kind of difficulty with activity as a result of health problems. ***Walking and climbing stairs*** was difficult for over half of respondents in this group and for over half of those earning ***$10,001 - $15,000***.

Difficulty with Activities & Housing by Type

Homeowners and those who reported that they ***do not own a home*** and those that ***stay rent-free*** somewhere reported having difficulty performing activities due to health problems least frequently compared to ***renters***, ***homeless*** respondents, and those with ***other*** housing arrangements (Table E20). All of the respondents identifying as ***homeless*** reported having some kind of health-related activity limitations. Among all groups, ***walking or climbing stairs*** was the most common answer.

FREQUENCY OF MEDICAL CARE

ABOUT HOW LONG HAS IT BEEN SINCE YOU SAW A DOCTOR FOR A CHECKUP?

The survey assessed whether respondents were receiving preventive medical care by asking ***how long it had been since they had last seen a doctor for a checkup*** (Figure E6). The formatting of the question emphasized that the question was looking specifically at checkups, as opposed to seeking medical care due to an illness.

Table E20: Activity Difficulty by Housing Type

	Walking or Climbing Stairs	Exercising	Dressing or Bathing	Keeping a Job	Concentrating or Making Decisions	No Answer
Own	17.60%	5.80%	2.70%	0.00%	3.30%	70.60%
Rent	41.20%	6.60%	2.00%	2.30%	6.30%	41.50%
Rent-free	12.00%	12.00%	0.00%	0.00%	12.00%	64.00%
Homeless	57.10%	28.60%	0.00%	14.30%	0.00%	0.00%
Other	28.60%	28.60%	0.00%	0.00%	0.00%	42.90%

The majority of respondents (67%) reported having had a checkup ***less than a year ago***, while only about 1% of respondents reported not having had a checkup in ***6 years or more***. This rate was virtually identical to that of respondents who had ***never*** had a checkup (1.3%).

ABOUT HOW LONG HAS IT BEEN SINCE YOU SAW A DENTIST FOR A CHECKUP?

Respondents were also questioned about whether or not they utilized preventive dental care and if so, how frequently. The item read, ***About how long has it been since you saw a dentist for a checkup?*** (Figure E7), and responses included ***never***, ***1 – 2 years***, ***3 – 5 years***, ***6 years or more***, and ***not sure/don't remember***. People reported having seen a dentist ***in the past year*** at a lower frequency than the same question pertaining to having seen a doctor (58%). Additionally, there were significantly more respondents that reported not seeing a dentist for ***6 years or more*** (6% versus 2%) or ***never*** seeing a dentist (3% versus 1%) than they did when asked the same question about seeing a doctor.

Figure E6: Frequency of Most Recent Medical Checkup

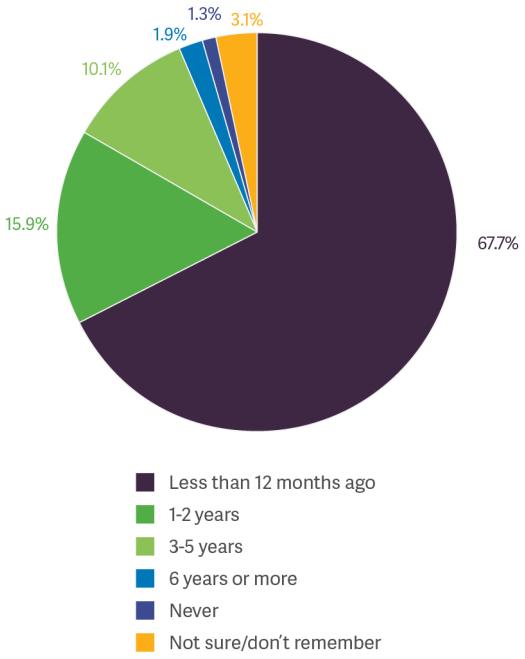
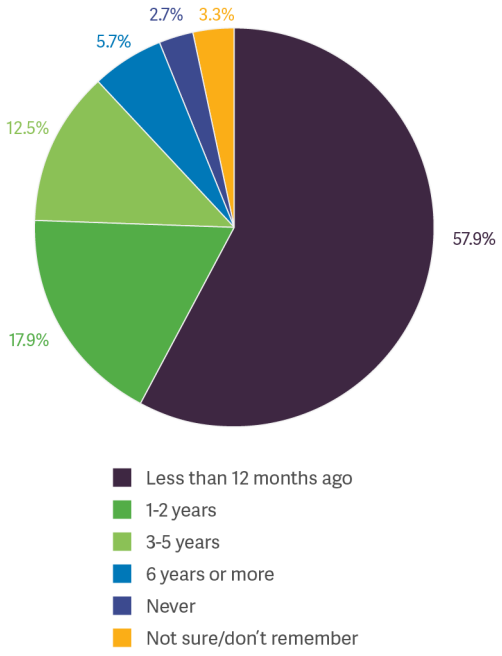


Figure E7: Frequency of Most Recent Dental Checkup



APPENDIX F

Access to and Utilization of Insurance and Healthcare

SOURCE OF PRIMARY CARE

Respondents were asked to identify the primary place they go to receive health care services. The question asked ***Is there a certain person or place that you usually go to for health care?*** and gave 9 multiple choice options (Table F1) and asked respondents to select one, . It also offered a tenth ***other*** selection with a write-in option. While ***a doctor's office or private clinic*** was the most frequently chosen answer (64%), the three samples had differing demographics, so responses among them varied greatly. For example, Crusader Clinic was reported as the primary provider for 60% of respondents in the Outreach sample, but in only 5% of the Facebook sample and 2% of the Random sample. This is not surprising, given that many of the outreach events were conducted at Crusader Clinic sites. (Table F1). Essentially no respondents of any race/ethnicity reported utilization of virtual healthcare providers, which could either represent a lack of virtual healthcare options, a difference in access to internet and equipment needed to use virtual healthcare, a lack of awareness of the option to use virtual healthcare options, or a preference for in-person healthcare. This is an issue that merits further exploration in future iterations of the survey, especially for certain specialty areas of practice that have limited provider resources in the region, such as behavioral health providers (psychiatrists, especially child psychiatrists, substance abuse clinicians) and certain programs, such as long-term care for people with severe mental illness.

Table F1: Primary Healthcare Provider Comparisons

A doctor's office or private clinic	63.50%
County Health Dept	2.20%
Crusader Clinic	16.80%
Veteran's Affairs (VA) Hospital or clinic	1.90%
Urgent/immediate care or hospital emergency room	4.00%
Hospital emergency room	5.70%
Retail clinic (Walgreens, Wal-Mart, etc.)	0.60%
Virtual healthcare provider	0.50%
No, I don't have a regular doctor or clinic	1.40%
Other (please write-in)	3.10%

This was a question that showed clear differences in responses between demographic groups. The differences seen between these groups' responses to this question may be related to some of the other trends seen in the health outcome/status questions. This makes sense, since a person's access to primary care (as opposed to only seeking healthcare in the event of an illness) has been positively associated with better health outcomes. Many of these results were statistically significant and can be helpful for informing local programming decisions. For the sake of clarity and brevity, because the greatest differences were between the rate of respondents selecting ***a doctor's office or private clinic*** and ***Crusader Clinic***, we have focused on those in this analysis.

SOURCE OF PRIMARY CARE AND RACE/ETHNICITY

In the combined survey sample, a comparison of responses grouped by race/ethnicity revealed that about ***3*** out of every ***4*** respondents identifying as white get their healthcare at ***a*** (private) ***doctor's office or clinic***, while only about half or fewer minority respondents reported the same (Table F2). ***Crusader Clinic*** was the most common source of regular primary care among minority respondents.

SOURCE OF PRIMARY CARE AND AGE GROUP

In the combined sample, the respondents in the younger age groups (under 30) less frequently utilized ***a doctor's office or private clinic*** less frequently than those in the older groups. Respondents in these younger age groups more frequently utilized ***Crusader Clinic*** than older groups (Table F3). This trend became less prominent at each increasing age interval.

One other notable difference among the age groups was in the ***18 – 29 year old*** cohort: they reported using the ***hospital emergency room*** as their primary source of healthcare at a considerably higher rate than any other group, which is not surprising, considering that many young adults tend to believe that they are in better health and are less susceptible to disease than their older counterparts (and thus don't seek medical care unless they have obvious symptoms of illness). Furthermore, young adults often have jobs with less robust or no employer-based healthcare. This age group has traditionally been overlooked in the establishment of preventive health guidelines, creating uncertainty about what care is appropriate and when. When considered in addition to the difficulty many young adults experience transitioning from pediatric care under parental direction to adult care.

Table F2: Comparisons of Top 2 Sources of Primary Care by Race/Ethnic Group

Race/Ethnicity	A Doctor's Office or Private Clinic	Crusader Clinic
White	75.10%	10.30%
Black	43.50%	34.10%
Hispanic	39.30%	47.50%
Asian	40.00%	50.00%
Multiracial	55.60%	22.20%

Table F3: Comparisons of Top 2 Sources of Primary Care by Age Group

Age	A Doctor's Office or Private Clinic	Crusader Clinic
18 to 29	43.50%	44.90%
30 to 44	61.40%	18.90%
45 to 64	69.90%	16.50%
65 to 74	79.10%	7.20%
75+	74.00%	6.00%

Table F4: Comparisons of Top 2 Sources of Primary Care by Educational Attainment

Educational Attainment	A Doctor's Office or Private Clinic	Crusader Clinic
Less Than High School	42.30%	42.30%
High School or GED	49.10%	29.40%
Some College, No Degree	65.20%	21.50%
Associates Degree	72.70%	12.90%
Bachelors Degree	78.20%	5.10%
Graduate or Professional Degree	86.70%	3.10%

Table F5: Comparisons of Top 2 Sources of Primary Care by Income Level

Household income	A Doctor's Office or Private Clinic	Crusader Clinic
Less than $10,000	43.60%	34.00%
$10,001 to $15,000	61.50%	21.50%
$15,001 to $20,000	51.10%	26.70%
$20,001 to $35,000	48.70%	38.50%
$35,001 to $50,000	63.30%	23.50%
$50,001 to 75,000	77.00%	7.20%
$75,001 to $100,000	79.50%	4.50%
$100,001 or more	89.60%	0.80%

Table F6: Comparisons of Top 2 Sources of Primary Care by Housing Type

Housing	A Doctor's Office or Private Clinic	Crusader Clinic
Own	80.70%	6.60%
Rent	46.50%	34.60%
Stay Somewhere Without Paying Rent	44.00%	28.00%
Homeless	42.90%	57.10%
Other	42.90%	28.60%

All of these circumstances contribute to an environment that leaves many young adults sorely lacking in healthcare that could prevent the onset of or allow for earlier detection of disease that, without preventive care, often progresses until it is less easily treatable (or untreatable).

By improving primary care and promoting prevention among young adults, we could change the trajectory of a number of chronic health conditions that are currently not detected or treated until these individuals are older. This could be a long-term strategy to create population-level improvements at a relatively low cost, improving quality of life and decreasing costs (direct and indirect, both financial and otherwise) to individuals and the healthcare system that would otherwise result from later detection and treatment of preventable diseases.

SOURCE OF PRIMARY CARE AND EDUCATION

In the overall survey sample, there appeared to be a strong positive correlation between level of education and utilization of a ***doctor's office*** or ***private clinic*** as the usual source of healthcare (Table F4). Similarly, there appeared to be a clear inverse relationship between level of education and utilization of ***Crusader Clinic*** as the primary source of healthcare.

SOURCE OF PRIMARY CARE AND HOUSEHOLD INCOME

Similar to the trend seen in level of education, utilization of a private doctor's office or clinic demonstrated a direct correlation with income groups at or above the interval starting at $35,001 (Table F5); the higher the income level, the stronger the correlation. At the ***$100,001 and above*** level, there is a nearly perfect positive correlation with 9 of 10 respondents receiving their care from a private practice. A similar but far weaker correlation can be seen between income level and use of ***Crusader Clinic*** as the primary provider. The 2 levels between ***$20,001 - $35,000*** do not follow this linear progression as expected, but the next interval (***$35,001 - $50,000***) represents a wider range than the 2 groups below it (the range represents $15,000 compared to the 2 levels below it that are each only $5,000). When these 2 cohorts are combined into one, the resulting trend is more in line with the expected rate (32%).

SOURCE OF PRIMARY CARE AND HOUSING BY TYPE

Homeowners overwhelmingly reported having a ***private doctor or clinic*** as their primary care provider (80%), while few reported going to ***Crusader Clinic***, or any other alternative provider. Those with other housing circumstances reported going to ***Crusader Clinic*** or other alternative providers at much higher rates, at least 4 times that of ***homeowners*** or more. (Table F6)

Figure F1: Reported Medical Insurance Coverage Across All Survey Samples

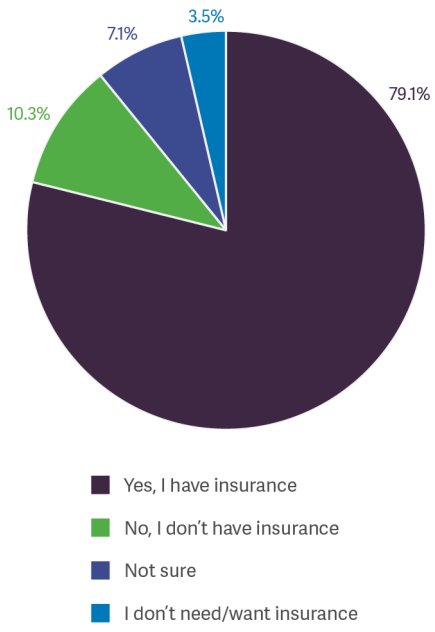
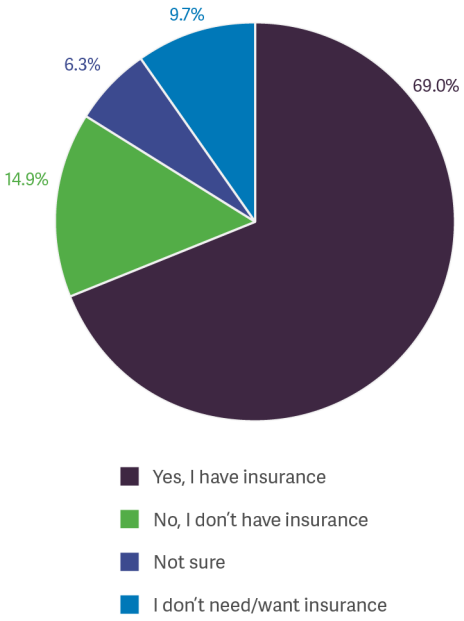


Figure F2: Reported Dental Insurance Coverage Across All Survey Samples



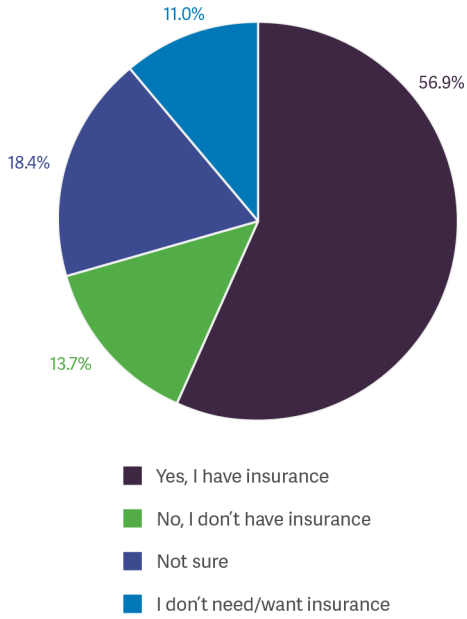
HEALTH INSURANCE COVERAGE

The survey included items designed to assess the adequacy of medical, dental, and behavioral health insurance coverage throughout the region. Specifically, the survey included a 2-part question, for which the first part read ***Do you have insurance that pays all or some of your health care costs?***. Responses were divided into 3 columns, medical, dental, and mental health/substance abuse costs.

Respondents were asked to select one choice in each column from the following responses: ***Yes, I have insurance***, ***No, I do not have insurance***, ***Not sure***, and ***I don't need/want insurance***. For this part of the question, 79% of respondents from all samples stated that they have some kind of medical insurance (Figure F1), whereas only 69% reported having dental insurance (Figure F2).

Interestingly, mental health/substance abuse insurance coverage levels were lowest among all samples, with only 57% reporting that they had coverage. Further, 18% of respondents reported that they were not sure if they had mental health/substance abuse insurance coverage, compared to only 7% of respondents that were unsure about their dental or medical

Figure F3: Reported Mental Health/Substance Abuse Insurance Coverage (All Survey Samples)



coverage. (Figure F3).

This finding is significant because as of 2014, most individual and small group health insurance plans, including plans sold on the national "Marketplace" or "Exchange" are required to cover "essential health benefits" under the Affordable Care Act. This rule extends to Medicare, Medicaid and Medicaid Alternative Benefit Plans.[1] Additionally, these plans must meet what is known as "parity requirements", as set forth in Mental Health Parity and Addiction Equity Act (MHPAEA). The MHPAEA requires that insurance coverage for mental health and substance abuse services cannot be more restrictive than coverage for medical and surgical services. Knowing this, the survey responses suggest that there may be a significant portion of people in the region that have behavioral health insurance coverage but are not aware of it. These responses could also suggest that there are plans in the region that are not compliant with the MHPAEA.[1]

It's also possible that people are attempting to use their health insurance for behavioral health services but are being incorrectly told by providers that their insurance does not cover services or that there is a waiting list for publicly funded insurance coverage, like Medicare or Medicaid. Since we know that there is very limited capacity for behavioral health treatment (when compared to the need/demand) in the region, it is possible that although many people have insurance coverage for these services, they still can't access care, which is causing confusion, leading them to think that they're not covered. Additional analysis of behavioral health needs and services is included in *Section 7: Behavioral and Mental Health*.

When comparing the differences in responses between sample sources, the Outreach sample reported having coverage more frequently than the other samples, while the Facebook sample respondents reported having insurance least frequently. The rates of coverage for each sample were generally the same between medical, dental, and mental health/substance abuse questions, but rates of coverage for dental and behavioral health insurance was consistently lower than medical. This

Table F7: Source of Medical Insurance Provider (All Samples)

Private medical plan through work	33.40%
Private medical – individual plan	10.60%
Medicaid (Public Aid) / Family Care / All Kids	20.70%
Private Plan and Family Care / All Kids	4.20%
Medicare only	7.90%
Medicare with supplement	17.30%
Military (Veteran's Affairs (VA) / TRICARE)	2.70%
I don't know	2.00%
Other	1.30%

Table F8: Source of Dental Insurance Provider (All Samples)

Private medical plan through work	43.00%
Private medical – individual plan	9.00%
Medicaid (Public Aid) / Family Care / All Kids	18.10%
Private Plan and Family Care / All Kids	6.20%
Medicare only	6.60%
Medicare with supplement	11.60%
Military (Veteran's Affairs (VA) / TRICARE)	1.70%
I don't know	2.60%
Other	1.20%

Table F9: Source of Mental Health/Substance Abuse Insurance Provider (All Samples)

Private medical plan through work	40.60%
Private medical – individual plan	7.20%
Medicaid (Public Aid) / Family Care / All Kids	15.30%
Private Plan and Family Care / All Kids	4.40%
Medicare only	4.60%
Medicare with supplement	12.60%
Military (Veteran's Affairs (VA) / TRICARE)	3.90%
I don't know	10.10%
Other	1.40%

could be related to the fact that employer-sponsored health insurance does not include dental coverage, as it is often made available as an optional plan. However, this still does not explain the 11% of respondents in the Outreach sample or the 27% of Facebook respondents that were unsure if they had insurance that covered mental health and/or substance abuse treatment.

SOURCE OF INSURANCE COVERAGE

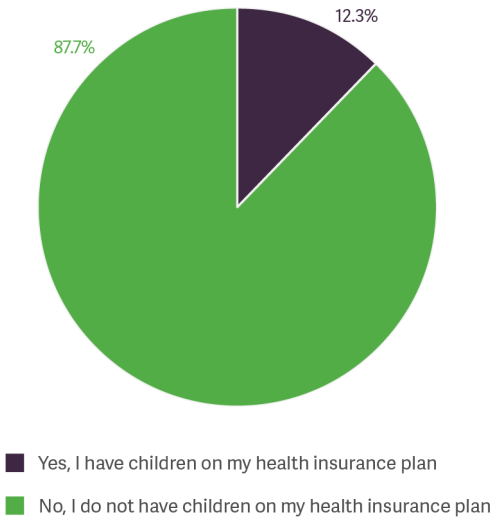
The survey also aimed to determine what the source of insurance coverage was for respondents that said they had insurance coverage.

This was determined through the second part of the above-referenced 2-part question that asked respondents who had answered ***yes*** to the question of whether they had insurance coverage what the source of that coverage was. Again, respondents were presented with 3 columns, one for Medical, one for Dental, and one for Mental Health/ Substance Abuse coverage and asked to select from a number of options. Those options included: ***Private medical plan through work*** ; ***Private medical – individual plan***; ***Medicaid (Public Aid)/ Family Care / All Kids***; ***Private Plan and Family Care/ All Kids***; ***Medicare Only***; ***Medicare with supplement***; ***Military (Veteran's Affairs (VA) / TRICARE)***; ***I Don't Know***, and; an ***Other*** option with a space to write in an answer. The most common response across samples reported having a ***private plan through work*** (33%) or an ***individual private plan*** (10%) (Table F7). ***Medicare with supplement*** was also common among all samples, although it was more common in the Total sample than in the Facebook sample, most likely due to a difference in the age demographics between Facebook users and the other sample sources.

While Outreach sample respondents were covered at a higher rate than the other survey samples, this coverage was usually through the state Medicaid program or another form of public aid. While public aid was far less frequently utilized among respondents in the Random sample, it still made up a sizable proportion of insurance among the whole population. More specific types of health insurance coverage, such as VA insurance, were not selected as frequently among samples, but were consistently present nonetheless.

These trends were similar for dental and mental health/substance abuse coverage (Tables F8 and F9). Again, respondents were

Figure F4: Young Adults on Parent's Healthcare Plan



more likely to be unsure of their coverage on these types of insurance.

INSURANCE COVERAGE FOR YOUNG ADULTS

The survey looked to assess insurance coverage among young adults in the region by asking respondents ***Do you have children between the ages of 18-26 that are covered by your health insurance? (Please include all children, including older children that don't live with you)***. The overwhelming majority of respondents (88%) reported that they did not have children between the ages of 18-26 on their health insurance (Figure F4).

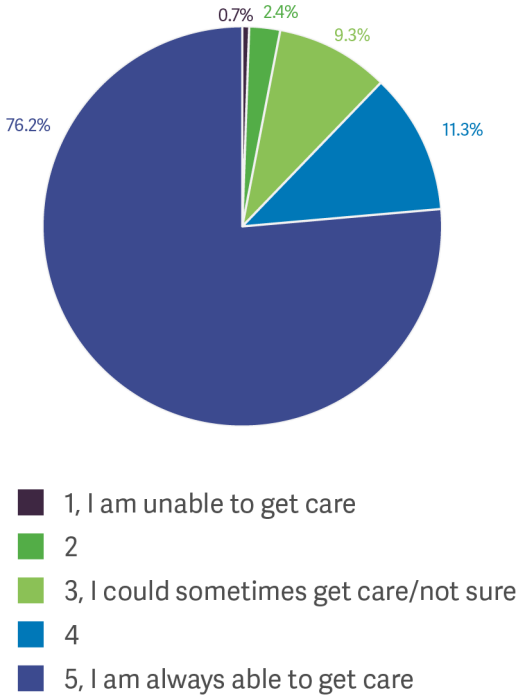
Despite that majority, across samples there is a consistent proportion of respondents that report having adult children of this age that are covered by their health insurance. The ability to add young adult children to a health insurance policy is a relatively new resource made available by a provision in the Affordable Care Act. The proportion of respondents that responded affirmatively to this question ranged from 9% to 22% between samples with the overall sample reporting about 12%, so it is clear that regardless of source, this is a valuable resource that is being utilized by residents in the region.

ACCESS TO HEALTHCARE

ABILITY TO ACCESS CARE WITHIN THE PREVIOUS YEAR

The survey examined the experiences of residents in the region and their ability to access healthcare when they needed it. To measure this, the survey posed the question ***In the past 12 months, have you been able to get medical care?***, along with the same question for dental care and mental health/ substance abuse care. Respondents were asked to rate their overall experience over the past year by making one selection from a Likert scale with options ranging from 1 – 5, with ***1*** representing ***I am unable to get care***, ***3*** being ***I could sometimes get care / Not sure*** and ***5*** being ***I am always able***

Figure F5: Ability to Access Medical Care Over the Past Year

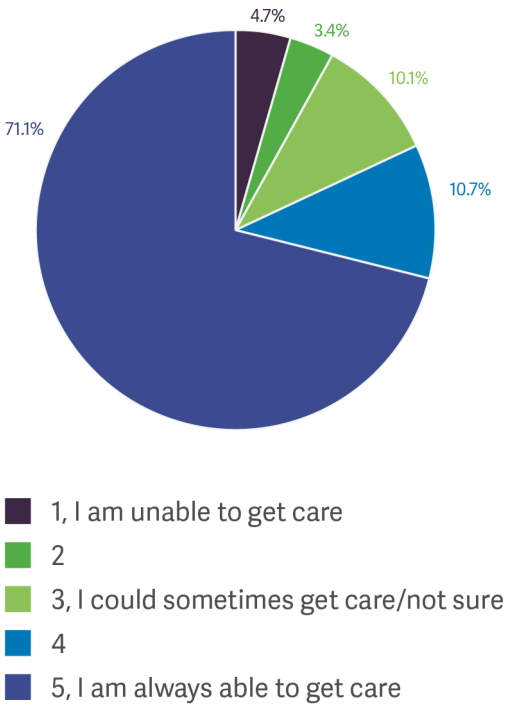


to get care. Responses were encouraging and suggested that residents in the region were able to access medical care when they needed it, with ***1*** being the least frequently chosen response across all samples. In fact, less than 1% of all respondents responded they ***could not get medical care***, regardless of sample source. Between 80 - 90% of respondents also reported that they ***were able to get care*** (score of ***4*** or ***5***) (Figure F5) when they needed it.

Although these results are generally positive and suggest that healthcare is available in the region, there did appear to be a difference in access to medical care between cohorts based on race/ethnicity, household income, and level of education. Upon closer examination, racial/ethnic minority groups reported having less access to medical care than white respondents. In fact, in comparison to all other race/ethnicities, whites selected ***1*** & ***2*** half as often as black or Hispanic respondents and selected ***4*** & ***5*** at least 10% or more frequently than other race/ethnic groups.

Education level was also correlated with access to medical care, as was income level. Respondents with any level of college education reported a consistently higher level of access to medical care (score of ***4*** & ***5***) than respondents without. Respondents with a ***bachelor's degree*** or higher reported consistently less frequent reports of ***not being able to access medical care*** (score of ***1*** & ***2***) than respondents without. Household income showed a similar relationship to medical care access, with the greatest differences seen between respondents with

Figure F6: Dental Care Access Over the Past Year



income levels at or above $75,000 and those with incomes below that. The only income cohort that did not align with this trend was the cohort of people between ***$35,001 - $50,000***. For some reason, this cohort appeared to have better access to medical care than would be expected based on the trends seen in other income groups.

Dental care proved to be less accessible than medical care for all samples. While the majority of respondents reported having ***access to dental care*** (over 80% answered ***4*** or ***5***), the percentage of respondents who said that they could not get dental care (score of ***1*** or ***2***) was higher than the percentage of respondents that could not get medical care (8% versus 3%,

respectively) (Figure F6). This difference could be related to the lack of availability of dentists in the region that accepts Medicaid/Medicare as a source of insurance. While finding a provider that accepts Medicaid/Medicare is an issue for all kinds of healthcare, the Rockford Region has far fewer dentists that accept public aid than doctors.

Unfortunately, mental health/substance abuse treatment had the lowest rate of respondents reporting that they were always able to get behavioral health care, a meager 50% (Figure F7) of all respondents. Even in the random sample, which reported the greatest ability to access healthcare, there were far fewer people that responded in the upper ranges in their ability to access mental health and substance abuse care than medical and dental care. Furthermore, 10% of the outreach sample reported being unable to get mental health/substance abuse care, a far higher rate than those unable to get medical or dental care.

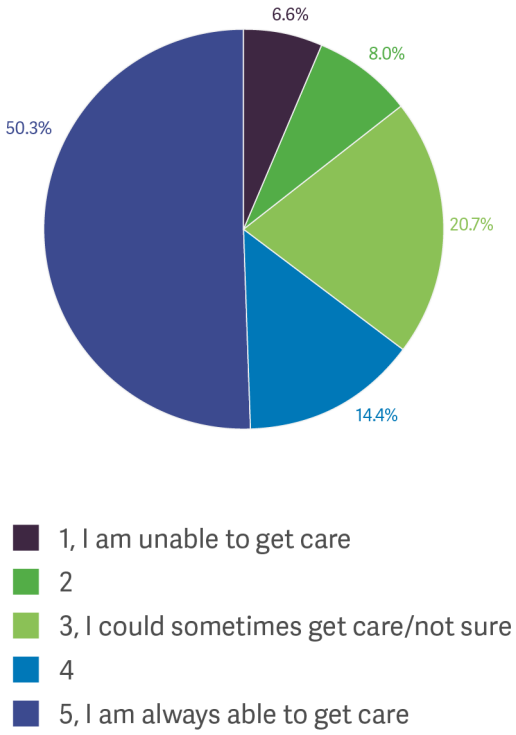
BARRIERS TO HEALTHCARE

In order to assess the region's barriers to healthcare access, the survey included an item that used question logic for respondents that selected a 3, 4, or 5 on a scale of 1 – 5 on the previous question that asked, ***In the past 12 months, have you been able to get medical, dental, and/ or mental health/ substance abuse care?***. If respondents met this criteria, they were shown a question that posited ***IF YOU SAID YOU COULD NOT GET CARE (IF YOU***

Table F10: All Samples Selections of Barriers to Medical Care

Cost of care	25.30%
Provider wouldn't take public aid	9.90%
No insurance	9.60%
No transportation	6.70%
Couldn't afford deductible / co-pay	12.80%
Could not find a doctor	5.80%
Couldn't find a specialist	7.10%
Long wait for appointment	9.60%
Didn't have child care	4.20%
Language barrier	3.20%
Discriminated against by provider	2.90%
Other	2.90%
Total	100.00%

Figure F7: Mental Health/Substance Abuse Care Access Over the Past Year



MARKED 3, 4, OR 5 ON Question 26) … Why couldn't you get medical, dental, and/or mental health care? and given a list of reasons in each of 3 columns (one for medical, one for dental, and one for mental health/substance abuse care), from which they could select as many as were applicable to indicate why they could not access care. The selections given were: ***Could not afford it, cost of care***; ***Doctor/dentist/provider would not take public aid***; ***No insurance***; ***No transportation***; ***Could not afford deductible or co-pay***; ***Could not find a doctor/dentist***; ***Could not find a specialist***; ***Long wait for appointment***; ***Did not have child care***; ***Language barrier, no interpreter***; ***Discriminated against by provider***, and; an ***Other*** selection with a write-in option.

Although rates of responses they selected differed slightly between samples, the most commonly chosen responses were consistent regardless of sample source (Table F10). All samples selected the two cost-related metrics – ***Cost of care*** and ***Could not afford deductible*** more frequently than any other option.

In addition to cost, a similar barrier that is related to cost, ***No insurance***, was a frequently cited barrier to dental and mental health care (Tables F11 and F12). ***Provider wouldn't take public insurance*** was more frequently selected as a barrier in the Outreach sample, which coincided with the higher number of respondents that rely on ***public aid*** as their health insurance.

Table F11: All Samples Selections of Barriers to Dental Care

Cost of care	25.30%
Provider wouldn't take public aid	9.90%
No insurance	9.60%
No transportation	6.70%
Couldn't afford deductible / co-pay	12.80%
Could not find a doctor	5.80%
Couldn't find a specialist	7.10%
Long wait for appointment	9.60%
Didn't have child care	4.20%
Language barrier	3.20%
Discriminated against by provider	2.90%
Other	2.90%
Total	100.00%

[5] https://www.consumerreports.org/drug-prices/the-shocking-rise-of-prescription-drug-prices/

The same was true for respondents that reported being ***Unable to find a doctor or specialist***.

ACCESS TO PRESCRIPTION MEDICATIONS

The survey sought to measure whether or not residents in the region were able to access prescription medications or if cost was preventing people from getting the medications they need. Given that a report from 2019 revealed that 30% percent of Americans who take prescription medicine say their out-of-pocket cost for a drug they regularly take has increased in the past year, we expected to see this as a barrier for residents of the Rockford Region as well.

This report went on to say that of those, that saw price increases, 12% said their drug costs went up by $100 or more. This is a significant issue that can influence health outcomes and has a direct link to the social determinants of health discussed earlier. Studies showed that when people saw spikes in their out-of-pocket costs for prescription medications, they were almost twice as likely to not fill a prescription, forgo other necessary medical treatments or tests, cut back on groceries, or get a second job.[5]

In order to assess the impact of the issue in the Region, HCS respondents were asked ***During the past 12 months, have you been unable to get or fill a prescription because you could not afford it?***.

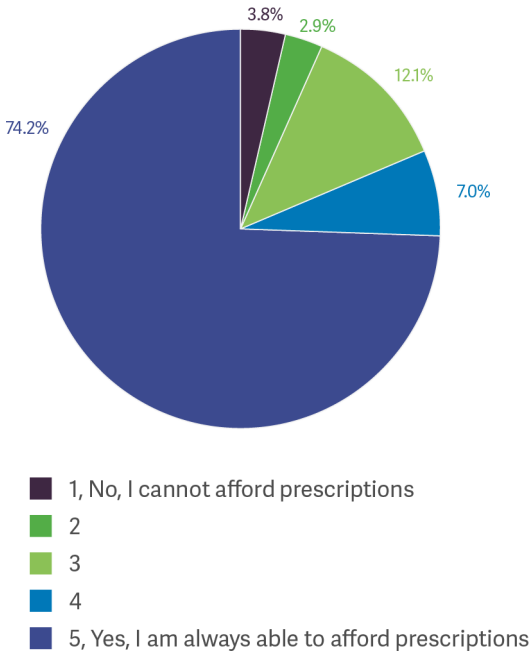
Table F12: Barriers to Mental Health/Substance Abuse Care (All Samples)

Cost of care	16.60%
Provider wouldn't take public aid	3.50%
No insurance	12.20%
No transportation	9.60%
Couldn't afford deductible / co-pay	18.30%
Could not find a doctor	4.80%
Couldn't find a specialist	11.40%
Long wait for appointment	11.80%
Didn't have child care	1.30%
Language barrier	0.40%
Discriminated against by provider	7.40%
Other	2.60%
Total	100.00%

The answers available were in the form of a 1 – 5 scale with ***1*** meaning, ***No, I cannot afford prescriptions*** and ***5*** meaning, ***Yes I am always able to afford prescriptions*** (Figure F8). Fortunately, the majority of respondents from all samples reported being able to access prescriptions. However, respondents in the Outreach and Facebook samples more frequently gave responses toward the lower end of the scale than those in the Random sample, which makes sense given the demographics of each sample showing that the Random sample respondents had a higher household income than the other samples. Even so, Options 1 and 2 were only selected about 10% of the time or less.

However, the middle response (***3***, ***I could sometimes get care/ Not sure***) was a relatively common response, particularly among the Facebook sample and the Outreach sample, being selected 22% and 17% of the time, respectively, suggesting that while cost is not always a barrier to accessing prescriptions, people in the region, (particularly groups with more low-income and minority respondents) are sometimes not able to get them.

Figure F8: Prescription Affordability



APPENDIX G

ANALYSIS OF REPORTED CHRONIC CONDITIONS & DISEASES

DISEASES & CONDITIONS OF RESPONDENTS

RESULTS OF OVERALL SAMPLE

Alzheimer's, dementia, or severe memory impairment

Around 1% of the respondents had been diagnosed with Alzheimer's, dementia, or severe memory impairment. As expected, the older age groups had the highest prevalence of these conditions, the youngest age groups (0 – 17 and 18 – 44) had the lowest incidence (around 1% each) and as groups progressed in age, they showed corresponding increases in their rates of these conditions (2% among people ages 45 – 64 and 4% among people ages 65 and older). Of all those diagnosed with Alzheimer's, dementia, and/or severe memory impairment, about half are 65 and older, and an additional 25% are between the ages of 45 – 64.

Arthritis or rheumatism

Arthritis occurred at higher rates among the older age groups, with about a quarter, or 1 in 4 people age 45 and older, having been diagnosed with arthritis. Among all adults, slightly less than 1 in 5 people had arthritis. Rates within individual samples varied between 6% of adult respondents in the School sample and 44% of adults in the Rockford Housing Authority (RHA) sample. Incidence was highest among 45 – 64 year olds in the RHA sample, with over 50% of respondents reporting having been diagnosed. In the total population, incidence was highest among people age 45 and older, with about 1 in 4 of these people having arthritis. Of everyone in the population with arthritis, about 80% are age 45 and older, split evenly between 45 – 64 year olds and those 65 and older. The total rate of adults with arthritis in the region is lower than the rate of adults with arthritis in the state.[6]

[6]IDPH, ICHS, 2017 Illinois BRFSS

Asthma

Just under 10% of the overall population have been diagnosed with asthma. Children/minors actually have a higher rate of asthma than the older respondents, with about 13% having asthma. People age 45 – 64 also have a higher rate than the rest of the population, with around 12% having asthma.

Among the different populations sampled, the rates ranged from around 2% of the School sample to around 20%, or 1 in 5, of the RHA sample having asthma. The highest age-specific rates of asthma are among 45 – 64 year olds in the Outreach sample and RHA sample, 19% and 23%, respectively, and among 0 – 17 year olds, in the Outreach sample and the Random sample, at 15% in each sample. Of the total population with asthma, about 1/3 are between 0 – 17 years old and another 1/3 are between 45 – 64 years old. The rate of adults with asthma in the region is lower than the rate of adults with asthma in the State of Illinois.

Cancer or malignant neoplasms

The rate of cancer or malignant neoplasms among the population of all ages in the region is about 4%. The rate among adults in the population is slightly higher, about 5%. About 1/3 of the total cases are comprised of 45 – 64 year olds and another 1/3 are comprised of people 65 and older. Not counting those under the age of 18, those proportions go up to about 40% of 45 – 64 year olds and 40% of those 65 and older. The rates in the different samples vary between 0% in the School sample and 10% in the RHA sample. The other samples fall in the middle at around 5% each. Within the larger samples, the Random sample and the Facebook sample, the rates are similar to the rates of the total regional population.

The rates of cancer within age groups in the Outreach sample is very similar to the rates within age groups for the State of Illinois. For the groups age 45 and older, the rates are almost the same or slightly lower. For the rates younger than this, the rates of cancer are slightly higher.[7] This same trend, of younger populations having rates slightly above statewide rates, holds true for the region as a whole as well. The rates of cancer among children age 0 – 17 being higher than those of the State is also evident in the Random sample. This suggests an issue worth investigating further, given the demographic differences between the 2 cohorts of individuals. If the trend holds true across all these different groups of people, it could be indicative of an issue impacting the region as a whole, regardless of age, sex, race, education level, or income.

Chronic back pain or disc disorders

The rate of chronic back pain or disc disorders in the overall population is about 10%. The rate of adults in the region with the condition is slightly higher, about 12%.

[7] IDPH, ICHS, 2017 Illinois BRFSS. http://www.idph.state.il.us/brfss/statedata.asp?xtabFile=cancer&area=il&yr=2017&selTopic=chronic&form=strata&show=xtab Accessed May 5, 2020.

Just under half of the adults with chronic back pain are between the ages of 45 – 64. About 1/3 of them are 65 and older.

Of all the samples, the rate of chronic back pain or disc disorders ranges from about 3% in the school sample to about 20% in the RHA sample. The Outreach sample and the Random sample both have rates around 15% and the Facebook sample rate is around 7%.

Chronic bronchitis, emphysema, Chronic Obstructive Pulmonary Disorder (COPD), or other respiratory problem

The rate of chronic bronchitis, emphysema, COPD, or other respiratory problems within the region is around 5% for both the total population and the adult population. This is similar to the rate within the State[8], overall. The rates by age are relatively similar to those of the state for people age 18 – 44, but the rate of people in the region age 45 – 64 with chronic bronchitis, emphysema, COPD, or other respiratory problems is slightly higher than that of the State (10% and 8%, respectively). The prevalence rates among adults in the different samples vary from 5% in the Random sample to 30% in the RHA sample. Higher rates are again seen in the age groups of 45 – 64 in the Outreach sample (16%), and the RHA sample (36%). The RHA sample's rate for adults age 65 and older is also higher than that of the State, at about 25%.

Chronic digestive or stomach disorders (such as gastroesophageal reflux disease (GERD), reflux or Crohn's disease)

The rate of chronic digestive or stomach disorders (such as GERD, reflux or Crohn's disease) in the region is about 7%, with the rate for adults being slightly higher at about 9%. About half of those with the disorders are ages 45 – 64 and of all the people in that age group, about 15% have a chronic digestive or stomach disorder. The rates among the different samples range from about 3%, in the school sample and the Facebook sample to about 12% in the Random sample. In the Outreach sample, almost 20% of people with a digestive or stomach disorder are under the age of 18. Overall, about 10% of everyone with a digestive or stomach disorder is also under the age of 18.

Heart or cardiovascular disease

The overall rate of heart or cardiovascular disease in the region is about 6%, considerably higher than the state rate of 4%. The rate of heart disease among adults in the region is slightly higher, about 7%. When examining rates by age, about 10% of people between the age of 45 – 64 have been diagnosed with heart disease, compared to only about 5% of the state's 45 - 64 year olds. Almost 12% of the people in the region over the age of 65 have heart disease, compared to only 10% of people of the same age in the state.

[8]Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed May 5, 2020]. URL: https://www.cdc.gov/brfss/brfssprevalence/ .

Aside from the school sample (which reported 0 cases of heart disease), the total rates of prevalence between samples ranges from about 5% of Facebook respondents to 20% of RHA respondents. Of note, 17% of Outreach sample respondents over the age of 65 and about ¼ of RHA respondents between the age of 45 - 64 have heart disease.

High cholesterol

The prevalence of high cholesterol in the region is lower than the state rate, only 15% versus 33%, respectively. The rate among adults is slightly higher, at 18%, but is still lower than the state rate.

The prevalence rate between the different samples varies significantly, between 3% of the School sample and nearly 40% in the RHA sample. Among the age groups in the samples. The highest rates of high cholesterol among 45 – 64 year olds and among people 65 and older are in the RHA sample, at 44% and 38%, respectively.

Kidney disease

The rate of kidney disease among people of all ages in the region is 4%, slightly higher than the 3% statewide. The rate among adults in the region is nearly 5%, significantly higher than the state rate and well above the upper limit of the 95% confidence interval.[9] Among all samples, the prevalence of kidney disease is equal to or greater than the rate of kidney disease for the State of Illinois. The prevalence rates among adults between the various samples range from 2% in the Facebook sample to 5% and 6% in the Random and Outreach samples, respectively. It appears that the larger proportion of people 65 and older with kidney disease are driving the higher numbers. The state's rate of kidney disease among those 65 and older is 6%, compared to the region's rate of kidney disease, 8%.

Further examining this, both the Random and Outreach samples' populations 65 and older were around 8%, and around 13% in the RHA sample.

Finally, the state rate of kidney disease among people 18 – 44 is 4%, while the same range in the Outreach and Random samples are 12% and 5%, respectively.

Stroke

The rate of stroke in the region is slightly lower than the State rate, 2% versus 3%, respectively. Although most of the prevalence rates by age within the different samples are equal to or less than the state rate, a few stand out as being notably different. First, the School sample reported no incidence of stroke among the population. The RHA sample, on the other hand, had a rate of about 8% among 45-64 year olds within that sample, compared to the state rate of only 4% in this population.

[9]Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed May 6, 2020]. URL: https://www.cdc.gov/brfss/brfssprevalence/.

In addition, the prevalence of stroke was 26% among RHA residents 65 and older, compared to the state rate of only 9%, a difference that indicates an issue that should be further investigated.

DISEASE VARIATIONS BY SAMPLE

As stated in the methodology section, the demographic characteristics of each sample varied, so some trends are generalizable to the region's corresponding subpopulations. The most prevalent characteristics in each sample are discussed further in *Appendix C* and can be used for the purposes of generalizability.

The RHA sample showed the highest disease burden, followed closely by the Random sample. For example, 44% of adults in the RHA sample report having arthritis or rheumatism and 62% report high blood pressure or hypertension, compared to only 17% and 25% of the population, respectively.

The Random sample has an arthritis/rheumatism incidence rate of 19% and a high blood pressure/hypertension rate of 27% among adults. This is an interesting finding, considering that the Random sample is largely made up of higher income, more educated respondents and the RHA sample is comprised of lower income, less educated, older respondents. This suggests that something else may be behind the higher than expected disease burden.

The samples showed differences of note in a number of areas. A detailed analysis of the trends within the largest samples, Random and Facebook, are included below. A full table with the rates of all diseases surveyed is included at the end of this section.

CHRONIC DISEASE IN THE RANDOM SAMPLE

The five conditions with the highest incidence in the Random sample were:

- High blood pressure/hypertension: 30%
- High cholesterol: 24%
- Arthritis/rheumatism: 19%
- Obesity: 16%
- Chronic back pain or disc disorders: 14%

Upon closer examination, certain age groups within this sample had a higher incidence of certain conditions. Those conditions include the following:

Arthritis/rheumatism

One in five 45 – 64 year olds in the Facebook sample reported having been diagnosed with arthritis/rheumatism. Among people age 65 and older in the Facebook sample, nearly 27% were diagnosed with arthritis/rheumatism.

Asthma

Asthma appeared to be most prevalent in children in the Random sample. Around 15% of 0 – 17 year olds in the sample reported having been diagnosed with asthma. This was twice the rate of 18 – 44 year olds or 45 – 64 year olds.

Cancer

Cancer rates were highest among respondents that were 65 or older (7%). Respondents 45 – 64 experienced slightly less, around 5%.

Chronic back pain or disc disorders

Back pain or disc disorders were most prevalent among 45 – 64 year olds, around 16%. Among those 65 and older, the rate was nearly as high, at around 15%.

Chronic digestive or stomach disorders

Among 45 – 64 year olds in the sample, almost 1 in 5 (19%) reported having been diagnosed with chronic digestive or stomach disorders (such as GERD, reflux or Crohn's disease). This was considerably higher than the other age groups, with those aged 18 – 44 and 65 and older only reporting around 7% with this condition.

Cardiovascular disease

Heart disease was of most concern for people 65 and older, with around 11% reporting having this diagnosis. People age 45 – 64 had a slightly lower prevalence, with about 8% having been diagnosed.

High Blood Pressure & Hypertension

High blood pressure & hypertension (HBP) was one of the conditions with the highest prevalence among the Random sample participants. Among the age groups, 15% of 0 – 17 year olds, almost 40% of 45 – 64 year olds, and 36% of those 65 and older reported being diagnosed with HBP.

High Cholesterol

Around 12% of respondents under 18 had been diagnosed with high cholesterol. Prevalence was highest among 45 – 64 year olds, at around 35% and was around 27% among those 65 and older.

Kidney Disease

Prevalence of kidney disease among Random sample respondents was higher than expected based on statewide BRFSS results from 2017 for all age groups.[10]

[10]Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Accessed May 4, 2020

Around 1% of 0 – 17 year olds and 18 – 44 year olds (compared to less than 1% in Illinois) had been diagnosed with kidney disease. 5% of 45 – 64 year olds, compared to between 2 – 4% of 45 – 64 year olds throughout Illinois, had kidney disease. In the Random sample, 8% of those 65 and older had kidney disease, compared to only 6% statewide.

CHRONIC DISEASE IN THE FACEBOOK SAMPLE

Although the Facebook sample is among the highest of the samples in terms of number of responses, we believe that chronic disease was underreported in this sample due to nonresponse bias. Although this may result in lower rates of disease reporting, the results are still extremely useful for comparing rates within the sample population, among other things. Within the Facebook sample, the five conditions with the highest incidence among adults were:

- *High blood pressure/hypertension: 12%*
- *Obesity: 10%*
- *Arthritis/rheumatism: 10%*
- *High cholesterol: 9%*
- *Chronic back pain or disc disorders: 6%*

Upon closer examination, certain age groups within the sample had a higher incidence of certain conditions. Those conditions include the following:

Arthritis/rheumatism

Almost 1 in 5 of all 45 - 64 year olds in the sample report having been diagnosed with arthritis/rheumatism. Surprisingly, this is higher than the rate for those age 65 and older.

Asthma

Asthma rates were highest among 45 - 64 year olds in the sample, at 7%. The rate among 0 - 17 year olds was nearly as high 6%.

Chronic back pain or disc disorders

Rates of chronic back pain or disc disorders were highest among 45 - 64 year olds, around 15%. Among those 65 and older, the rate was nearly as high, at around 15%.

Chronic bronchitis, emphysema, COPD, or other respiratory problem

About 2% of all adults in this sample were diagnosed with chronic bronchitis or other respiratory problems. The age group that future iterations of the survey, since this is crucial information in the

survey, it may be beneficial to put this series of questions at the beginning of the survey, right after the demographics. This will most likely improve the made up the largest portion of this was those 65 and older, representing almost 70% of all cases. Of all respondents 65 and older, almost 8% had been diagnosed with some kind of respiratory problem.

Cardiovascular disease

Almost 5% of adults in this sample had been diagnosed with heart disease. Of these, ¾ were 65 and older. Of everyone in this sample age 65 and older, almost 13% report having this diagnosis.

High blood pressure & hypertension

High blood pressure & hypertension (HBP) was the condition with the highest prevalence among this sample. Among the age groups, 17% of those 65 and older, had been diagnosed, along with nearly a third of 45 to 64 year olds. This is consistent with national rates.

High cholesterol

Around 12% of respondents under 18 had been diagnosed with high cholesterol. Prevalence was highest among 45 - 64 year olds, at around 35% and was around 27% among those 65 and older. These rates are very low when compared to national rates, most likely because of non-response bias for this and all chronic diseases reported.

This bias is most likely due to survey fatigue, since this and the question matrix asking about mental and behavioral health, made up the last page of the survey. In future iterations of the survey, since this is crucial information in the survey, it may be beneficial to put this series of questions at the beginning of the survey, right after the demographics. This will most likely improve the response rate for the question and reduce any nonresponse bias that may be present on this and previous iterations of the survey.

Obesity

Despite the suspected nonresponse bias, the rate of obesity among adults is still 10%, which is comparable to the rates among the other samples, which range from 12 - 16%. Given that this sample's rates are lower than most of the other samples for this entire question, this suggests that the Facebook sample's true obesity rate is likely toward the higher end of that range, if not higher.
demographics. This will most likely improve the response rate for the question and reduce any nonresponse bias that may be present on this and previous iterations of the survey.

High cholesterol

Of all adults in this sample, almost 10% have high cholesterol. Most of those with the disease were over 65 and an additional third are between 45 and 64. Examining the age groups, the rates for both 45 - 64 year olds and those 65 and older are about 15%.

Obesity

Despite the suspected nonresponse bias, the rate of obesity among adults is still 10%, which is comparable to the rates among the other samples, which range from 12 - 16%. Given that this sample's rates are lower than most of the other samples for this entire question, this suggests that the Facebook sample's true obesity rate is likely toward the higher end of that range, if not higher.

APPENDIX H

BEHAVIORAL AND MENTAL HEALTH RESPONSES

METHODOLOGY NOTES FOR BEHAVIORAL HEALTH DATA

The 2020 Healthy Communities Survey received 1,677 responses from all of the survey samples combined. Since behavioral and mental health remains a highly sensitive subject for people, due to the persistent stigma associated with mental illness, we expected that some people would not feel comfortable disclosing behavioral and mental health information, especially information about alcohol or drug abuse. With this in mind, the survey was constructed with a confidentiality statement, reiterating to participants that their responses were anonymous and that no one outside the research team would have access to the information. The statement reminded them that their responses did not include names or any other identifying information and that the information they provided would not be used to try to identify them or tie their identity to the answers they provided.

Despite the anonymity of their responses, survey respondents were not required to answer any of these (or any other) questions on the survey if they didn't feel comfortable doing so.

Of the respondents, just over 60% of those surveyed answered these questions. The survey asked people if they had ever been diagnosed with one of 11 behavioral health conditions, along with another category for "other", in which they could write in any conditions that were not listed. Of the total population, about a quarter of all people (27%) reported that they had at least 1 mental illness or behavioral health issue.

Of survey respondents that disclosed their gender and identified as male or female, 30% of respondents were male and 70% were female. This nearly mirrors the genders reported by all survey respondents, an indicator that the results are generalizable to the total survey population. Overall, about a quarter of men and of women reported that they had 1 or more behavioral health diagnoses.

The percentage of adults in the region that have been diagnosed with a mental

[6]IDPH, ICHS, 2017 Illinois BRFSS

or behavioral health disorder is consistent with both the state and national findings, but comparison data is not readily available for many mental health disorders . Fortunately, some comparison data is available. For example, Depression or Depressive

Disorders were the nation's most commonly diagnosed mental health conditions for many years and thus, are among the few mental health disorders that are measured consistently (and comparably) in national , state , and local assessments. In comparing these rates to the local rate, we see that across all samples, about 1 in 5 adults have been diagnosed with depression or a related disorder. Although the rest of the diagnoses that were measured do not have comparable rates, they still offer valuable insight into the region's health.

Of those that responded, the disorders with the highest rates among adults of all ages were:

» *Anxiety (19%)*
» *Depression (17%)*
» *Post-Traumatic Stress Disorder (PTSD) (7%)*
» *Attention-Deficit Hyperactivity Disorder (ADHD) (6%)*
» *Bipolar Disorder (Manic-Depressive) (6%)*

Table H1: Total Sample Rate of Drnking

Do you drink alcohol?				
	% Skipping Question		Yes	No/Prefer Not to Say
Total Sample	48%		52%	48%

Table H2: Rate of Drinking by gender

Do you drink alcohol?				
	% Skipping Question		Yes	No/Prefer Not to Say
Male	45.28%		54.72%	45.28%
Female	54.07%		45.93%	54.07%

Table H3: Rate of Drinking by Sample

Do you drink alcohol?				
	% Skipping Question		Yes	No
Random	7%		64%	36%
Schools	0%		67%	31%
Housing Authorities	4%		35%	56%
Pop Ups	7%		42%	51%
Facebook	3%		31%	68%
Total	3%		55%	42%

Behavioral Health Question Responses

RESPONSE DATA: ALCOHOL USE

Table H4:Daily Drinking Amount by Sample

	1 DRINK PER DAY OR LESS	2 - 3 DRINKS PER DAY	4 - 5 DRINKS PER DAY	MORE THAN 5 DRINKS PER DAY	PREFER NOT TO ANSWER	SKIPPED/ DIDN'T ANSWER
Total Population	39%	9%	1%	2%	2%	47.80%
Of People That Drink Alcohol	75%	17%	2%	3%	3%	9%
Random Sample	84%	17%	1%	1%	1%	1%
School Sample	85%	11%	--	--	3%	9%
Housing Authority Sample	70%	26%	--	--	5%	27%
Pop Up Sample	64%	14%	--	4%	18%	27%
Facebook Sample	61%	22%	7%	10%	2%	4%

Table H5: Daily Drinking Amount By Gender

GENDER						
Male	68.35%	24.46%	2.88%	2.16%	2.16%	45.28%
Female	77%	13%	1.27%	3.80%	4.64%	54.07%

Table H6: Daily Drinking Amount By Race/Ethnicity

RACE/ETHNICITY						
White	72.17%	15.29%	2.14%	3.36%	2.14%	4.89%
Black	36.54%	21.15%	0.00%	3.85%	9.62%	28.85%
Hispanic	73.33%	13.33%	0.00%	0.00%	6.67%	6.67%

Table H7: Drinking Frequency by Sample

	ONCE A MONTH	2 - 3 TIMES PER MONTH	ONCE A WEEK	A FEW TIMES A WEEK, BUT NOT DAILY	DAILY	PREFER NOT TO ANSWER	SKIPPED
Rates of People that Responded	34%	22%	12%	24%	7%	2%	N/A
Rates of Total Population	18%	12%	6%	13%	4%	1%	54%
Random Sample	26%	25%	12%	26%	10%	0.5%	0.1%
School Sample	47%	19%	13%	16%	3%	2%	8%
Housing Authority Sample	18%	--	14%	14%	--	5%	37%
Pop Up Sample	42%	14%	9%	18%	9%	9%	15%
Facebook Sample	29%	27%	11%	26%	5%	1%	2%

Table H8: Drinking Frequency by Race/Ethnicity

RACE/ETHNICITY							
White	72.17%	15.29%	2.14%	3.36%	2.14%	4.89%	
Black	36.54%	21.15%	0.00%	3.85%	9.62%	28.85%	
Hispanic	73.33%	13.33%	0.00%	0.00%	6.67%	6.67%	

Table H9: Drinking Frequency by Educational Attainment

EDUCATIONAL ATTAINMENT							
Less than high school	7.84%	5.88%	0.00%	1.96%	1.96%	82.35%	
High school diploma or GED	23.03%	6.06%	0.00%	0.61%	3.03%	67.27%	
Some college, no degree	32.96%	8.94%	0.56%	4.47%	2.23%	50.84%	
Associate degree or technical degree	42.31%	6.92%	3.08%	0.00%	1.54%	46.15%	
Bachelor's degree	48.61%	9.03%	1.39%	2.08%	0.69%	38.19%	
Graduate or professional degree	50.94%	11.32%	0.00%	0.00%	0.94%	36.79%	

Table H10: Drug Use by Sample

WITHIN THE LAST 12 MONTHS, HAVE YOU USED ANY OF THE FOLLOWING DRUGS?						
	Random	Schools	Housing Authorities	Pop Ups	Facebook	Total
Marijuana	10%	14%	9%	15%	20%	10%
Amphetamines	1%	--	--	2%	8%	1%
Prescription opioids	1%	2%	6%	1%	17%	3%
Cocaine or crack	--	--	2%	2%	9%	1%
Heroin	--	--	1%	1%	9%	1%
Withdrawl	1%	--	2%	3%	4%	1%
Barbituates	--	--	--	1%	1%	1%
LSD	--	--	--	1%	1%	1%
Prefer not to answer	1%	2%	4%	2%	29%	4%
Skipped	82%	78%	66%	73%	57%	72%

Table H11: Drug Use by Race/Ethnicity

WITHIN THE LAST 12 MONTHS, HAVE YOU USED ANY OF THE FOLLOWING DRUGS? (ROW PERCENT)										
	Marijuana	Cocaine or crack	Barbit-urates	Amphet-amines	Heroin	Opioids	LSD, etc	Withdrawal meds	Prefer not to answer	Skipped
White	37%	7%	1%	6%	7%	18%	1%	5%	14%	73%
Black	42%	5%	2%	2%	--	11%	2%	--	35%	69%
Hispanic	26%	11%		4%	--	--	--	7%	52%	69%
Other	50%	--	--	--	--	--	--	--	50%--	71%

Table H12: Drug Use by Educational Attainment

EDUCATIONAL ATTAINMENT										
Less than high school	18%	5%	0%	0%	5%	27%	0%	9%	14%	1%
High school diploma or GED	31%	4%	2%	4%	0%	6%	1%	2%	15%	4%
Some college, no degree	30%	5%	0%	2%	2%	19%	0%	4%	8%	5%
Associate degree or technical degree	21%	10%	3%	3%	5%	10%	0%	0%	24%	2%
Bachelor's degree	25%	3%	0%	8%	10%	3%	3%	5%	19%	2%
Graduate or professional degree	42%	0%	0%	5%	0%	5%	0%	5%	0%	1%

RESPONSE DATA: SMOKING/VAPING

Table H13: Total Sample Rates of Smoking

IN THE PAST 30 DAYS, DID YOU SMOKE CIGARETTES, CIGARS, CIGARILLOS OR ANY OTHER TOBACCO PRODUCTS?	
Yes	26%
No, never	73%
Prefer not to answer	2%

Table H14: Total Sample Rates of Smoking Quantity

OVER THE PAST 30 DAYS, ON THE DAYS YOU SMOKED, HOW MUCH DID YOU SMOKE PER DAY?	
1 per day	14%
2 - 5 per day	31%
6 - 10 (1/2 pack) per day	28%
11 - 20 (1 pack) per day	17%
1 - 2 packs per day	8%
Not sure	4%

Table H15: Total Sample Rates of Smokeless Tobacco Use

IN THE PAST 30 DAYS, DID YOU USE SMOKELESS TOBACCO, LIKE CHEWING TOBACCO, SNUFF, DIP, SNUS, OR DISSOLVABLE TOBACCO PRODUCTS?	
Yes	22%
No, never	77%
Prefer not to answer	1%

Table H16: Total Sample Rates of Frequency, Smokeless Tobacco Use

IN THE PAST 30 DAYS, ON HOW MANY DAYS DID YOU USE SMOKELESS TOBACCO?	
0 days	8%
1 - 2 days	8%
3 - 5 days	8%
20 - 29 days	25%
All 30 days	50%

Table H17: Total Sample Rates of Frequency, Electronic Vapor Use

IN THE PAST 30 DAYS, HAVE YOU USED ANY ELECTRONIC VAPOR PRODUCTS, ALSO KNOWN AS E-CIGARETTES, VAPES, VAPE PENS, OR MODS?	
Yes	6%
No, never	93%
Prefer not to answer	0%

Table H18: Total Sample Rates of Nicotine Levels Used, Electronic Vapor Products

WHAT STRENGTH(S) OF NICOTINE DO YOU CURRENTLY VAPE WITH?	
No nicotine	2%
1-6 mg nicotine/mL	33%
7-12 mg/mL	33%
13-18 mg/mL	13%
Over 18 mg/mL	6%
Not sure	13%

Table H19: Total Sample Rate, Quantity of Electronic Vapor Product Cartridge Use

IF YOU USED PRE-FILLED CARTRIDGES OR DISPOSABLE E-CIGARETTES (LIKE JUUL, OR BLU), ABOUT HOW MANY DO YOU USE PER WEEK?	
0	17%
1	33%
2	17%
3	0%
4	17%
7	17%

RESPONSE DATA: MENTAL ILLNESSES AND DISORDERS

Table H20: Rates of Reported Mental Illness by Sample

HAS ANYONE IN YOUR HOUSEHOLD BEEN TOLD BY A DOCTOR, THERAPIST, OR PSYCHIATRIST THAT THEY HAVE ANY OF THESE MENTAL HEALTH CONDITIONS?						
	Random	Schools	Housing Authorities	Pop Ups	Facebook	Total
Addiction or substance-abuse (alcohol, drugs, gambling)	7%	6%	8%	11%	3%	6%
Anxiety	23%	33%	29%	23%	8%	18%
Attention deficit disorder or ADHD	12%	26%	8%	11%	4%	9%
Autism spectrum disorder	6%	5%	1%	5%	2%	4%
Bipolar disorder (manic-depressive)	8%	8%	12%	10%	3%	7%
Depression or depressive disorders	21%	24%	29%	20%	7%	16%
Eating disorder (Anorexia, Bulimia)	6%	5%	3%	3%	2%	4%
Obsessive-compulsive disorder (OCD)	6%	3%	5%	6%	2%	4%
Post-traumatic stress disorder (PTSD)	8%	14%	12%	7%	3%	7%
Schizophrenia and other psychoses	5%	1%	5%	4%	2%	3%
Suicidal or self-harming impulses	9%	1%	7%	5%	2%	5%

APPENDIX I

SURVEY INSTRUMENT

DEMOGRAPHICS

1. What is your gender? ***(Mark all that apply)***

☐ Woman ☐ Man ☐ Non-binary ☐ Prefer Not to Disclose

☐ Prefer to Self-Describe (*Describe here*:) _____

2. What is your age group?

◯ 17 or younger ◯ 18-29 ◯ 30-44 ◯ 45-64 ◯ 65-74 ◯ 75+

3. What is your zip code?

◯ 60033	◯ 61008	◯ 61020	◯ 61063	◯ 61084	◯ 61104	◯ 61112
◯ 60135	◯ 61011	◯ 61024	◯ 61065	◯ 61088	◯ 61107	◯ 61114
◯ 60145	◯ 61012	◯ 61038	◯ 61072	◯ 61101	◯ 61108	◯ 61115
◯ 60146	◯ 61016	◯ 61047	◯ 61073	◯ 61102	◯ 61109	
◯ 60152	◯ 61019	◯ 61052	◯ 61080	◯ 61103	◯ 61111	

4. What racial or ethnic group do you feel you belong to? ***(Mark all that apply)***

☐ White (Non-Hispanic)
☐ Black/African American (Non-Hispanic)
☐ Hispanic/Latino
☐ Asian or Pacific Islander
☐ American Indian
☐ Multi-racial or bi-racial
☐ Prefer not to say
☐ Other (*please write-in*): _____

5. What is the highest grade that you finished in school?

◯ Less than high school
◯ High school diploma or GED
◯ Some college, no degree
◯ Associates or technical degree
◯ Bachelor's degree
◯ Graduate or professional degree

6. My household includes ..... ***(Mark all that apply)***

☐ A married couple
☐ Single parent
☐ Married couple raising child(ren)
☐ Unmarried couple raising child(ren)
☐ Adult with adult child or relative
☐ Grandparent(s) raising child
☐ Same sex couple
☐ Unmarried persons living together
☐ Single person, living alone
☐ Two or more families living together
☐ Other *(please write-in)*: _____

7-13. Not including you, how many other people in each age group live in your home? ***(Enter number of people in each group)***

7. _____ Ages 0 – 12
8. _____ Ages 13 – 17
9. _____ Ages 18 – 29
10. _____ Ages 30 – 44
11. _____ Ages 45 – 64
12. _____ Ages 65 – 74
13. _____ Ages 75+

---

14. What is your total annual household income (from all sources)?

- ◯ Less than $10,000
- ◯ $10,001 - $15,000
- ◯ $15,001 - $20,000
- ◯ $20,001 - $25,000
- ◯ $25,001 - $35,000
- ◯ $35,001 - $50,000
- ◯ $50,001 - $75,000
- ◯ $75,001 - $100,000
- ◯ $100,001 or more
- ◯ Don't know/not sure

---

15. The employment status of the adults in my home is ……: ***(Mark all that apply)***

You	Other Adult	
☐	☐	Self-employed, full time
☐	☐	Work a full-time job only
☐	☐	Work a part-time job only
☐	☐	Work two or more jobs
☐	☐	Work seasonally or part of the year
☐	☐	Unemployed, looking for work
☐	☐	A homemaker
☐	☐	A student
☐	☐	Retired
☐	☐	Disabled
☐	☐	Not employed, not looking for work
☐	☐	Other (*please specify*) _____

16. Do you own or rent your home?

◯ Own ◯ Rent ◯ Stay there without paying rent ◯ Homeless ◯ Other (*Please write in*): _____

COMMUNITY ASSETS, ISSUES & CONCERNS

17. Which community assets are most important to you? ***(Mark all that apply)***

- ☐ Activities for seniors
- ☐ Activities for teens
- ☐ Duplication of programs, agencies
- ☐ Help coping with death
- ☐ Job training, retraining
- ☐ Substance Abuse/Mental health services
- ☐ Services for people or families in crisis
- ☐ Services for developmental disabilities
- ☐ Special education for children
- ☐ Support for caregivers, elderly, disabled
- ☐ Programs to create a safe, healthy, clean environment
- ☐ Other *(please write-in):* _____

18. Which community issues and concerns are important to you? **(*Mark all that apply*)**

- ☐ Child abuse
- ☐ Obesity
- ☐ Gangs, delinquency, youth violence
- ☐ Substance abuse
- ☐ Violence, guns
- ☐ Need for affordable housing
- ☐ Neighborhood safety
- ☐ Domestic violence
- ☐ School graduation rates
- ☐ Teen pregnancy
- ☐ Homelessness
- ☐ Economic discrimination
- ☐ Crime
- ☐ Racial discrimination
- ☐ Unhealthy environment (i.e. poor air quality)
- ☐ Mental health
- ☐ Literacy, ability to read
- ☐ Other (*please write-in*): _____

19. Which 3 things should we work on to make the Rockford Region one of the Top 25 communities in the U.S.? ***(Mark Exactly 3)***

- ☐ Access to healthcare
- ☐ Police, Fire and Emergency services
- ☐ Clean environment
- ☐ Better schools
- ☐ Arts and culture
- ☐ Walkable, bikeable communities
- ☐ Parks and recreation
- ☐ Good jobs and healthy economy
- ☐ Reduce bullying
- ☐ Faith based services
- ☐ Public transportation
- ☐ Lower violent crime and safer neighborhoods
- ☐ Affordable housing
- ☐ Science, Technology, Engineering, and Math (STEM) education
- ☐ Early childhood services
- ☐ Services for seniors
- ☐ Health related education
- ☐ Homelessness services
- ☐ Other (*please write-in*): _____

Circle one number for each question

20. Overall, how would you rate the community as a place to walk? Would you say it is…?

1	2	3	4	5
Terrible		Okay		Very Nice

21. Overall, how would you rate the community as a place to ride a bike? Would you say it is…?

1	2	3	4	5
Terrible		Okay		Very Nice

22. In general, would you say that the people you know in the community are…?

1……..2……..3……..4……..5

Terrible	Okay	Very Nice

23. How do you buy your fresh fruits and vegetables? **(*Mark all that apply*)**

- ☐ Drive my own/my family's car
- ☐ Walk
- ☐ Ride the bus/public transit
- ☐ Get a ride from someone
- ☐ I have them delivered
- ☐ I don't buy fresh fruits & vegetables
- ☐ Ride my bike
- ☐ Taxi/Uber
- ☐ Community garden
- ☐ Other: *(please describe*) _____

HEALTH CARE ACCESS

24. Is there a certain person or place that you usually go to for health care? ***(Mark the <u>one</u> that best applies)***

- ❍ A doctor's office or private clinic
- ❍ The county health department
- ❍ Crusader Clinic
- ❍ Veteran's Affairs (VA) Hospital or clinic
- ❍ Urgent/immediate care/Emergency Room
- ❍ Hospital emergency room
- ❍ Retail clinic (Walgreens, Wal-Mart, etc.)
- ❍ Virtual healthcare provider
- ❍ No, I don't have a regular doctor or clinic
- ❍ Other *(please write-in*): _____

25. Do you have insurance that pays all or some of your health care costs? (***Mark one for each column***)

	<u>Medical</u>	<u>Dental</u>	<u>Mental Health/ Substance Abuse</u>
Yes, I have insurance	❍	❍	❍
No, I do not have insurance	❍	❍	❍
Not Sure	❍	❍	❍
I Don't Need/Want Insurance	❍	❍	❍

IF YOU ANSWERED: NO, NOT SURE, OR DON'T NEED/WANT INSURANCE, <u>skip to Question 26</u>

25(a) **IF YES**, what kind of insurance do you have? ***(Mark all that apply)***

	Medical	Dental	Mental Health/ Substance Abuse
Private medical plan through work	☐	☐	☐
Private medical – individual plan	☐	☐	☐
Medicaid (Public Aid)/ Family Care / All Kids	☐	☐	☐
Private Plan and Family Care/All Kids	☐	☐	☐
Medicare Only	☐	☐	☐
Medicare with supplement	☐	☐	☐
Military (Veteran's Affairs (VA) / TRICARE)	☐	☐	☐
I Don't Know	☐	☐	☐
Other (*please write-in*)	_____	_____	_____

---

26. **In the past 12 months,** have you been able to get medical, dental, and/or mental health/substance abuse care? ***(Circle one for each question)***

Medical Care **1……..2……..3……..4……..5**
I could not get care	*I could sometimes get care/ Not sure*	*Yes, I could get care*

☐ *Not Applicable/Did Not Need/Want Care*

Dental Care **1……..2……..3……..4……..5**
I could not get care	*I could sometimes get care/ Not sure*	*Yes, I could get care*

☐ *Not Applicable/Did Not Need/Want Care*

Mental Health or Substance Abuse Care **1……..2……..3……..4……..5**
I could not get care	*I could sometimes get care/ Not sure*	*Yes, I could get care*

☐ *Not Applicable/Did Not Need/Want Care*

- ***IF YOU MARKED 3, 4, OR 5 ON any question above, continue to Question 27.***
- ***IF YOU DID NOT MARK 3, 4, OR 5, skip Question 27 and go to Question 28.***

➢ 27. **IF YOU SAID YOU COULD NOT GET CARE** ***(IF YOU MARKED 3, 4, OR 5 ON Question 26)*** …

➢ Why couldn't you get medical, dental, and/or mental health care?
(Mark all that apply in each column)

	Medical	Dental	Mental Health/ Substance Abuse
Could not afford it, cost of care	☐	☐	☐
Doctor/dentist/provider would not take public aid	☐	☐	☐
No insurance	☐	☐	☐
No transportation	☐	☐	☐
Could not afford deductible or co-pay	☐	☐	☐
Could not find a doctor/dentist	☐	☐	☐
Could not find a specialist	☐	☐	☐
Long wait for appointment	☐	☐	☐
Did not have child care	☐	☐	☐
Language barrier, no interpreter	☐	☐	☐
Discriminated against by provider	☐	☐	☐
Other (please write-in): _____	☐	☐	☐

28. **During the past 12 months,** have you been unable to get or fill a prescription because you could not afford it? ***(Circle one number)***

1……**2**……**3**……**4**……**5**

I could not get care — *I could sometimes get care/ Not sure* — *Yes, I could get care*

☐ *Not Applicable/Did Not Need/Want Care*

CORE HEALTH AND HEALTH CARE LITERACY

29. In general, how would you describe your health? ***(Circle one number)***

1……**2**……**3**……**4**……**5**

Poor — *Okay* — *Excellent*

30. In general, how would you describe your weight?

❍ Underweight ❍ About the right weight ❍ Overweight ❍ Obese ❍ Prefer not to say

31. Do you have difficulty with any of the following because of health problems? (***Mark all that apply***)

☐ Walking or climbing stairs
☐ Dressing or bathing
☐ Concentrating or making decisions
☐ Exercising
☐ Keeping a job

32. In the last 30 days, did physical or mental health/substance abuse problems make it hard to participate in your normal daily activities? ***(Mark all that apply)***

	Physical Health	Mental Health
Yes, my daily activities were hard because of my…	☐	☐
No, I had no problem with my daily activities because of my…	☐	☐
Prefer not to answer	☐	☐

---

33. About how long has it been since you saw a doctor <u>for a checkup</u>?

- ❍ Less than 12 months ago
- ❍ 1 – 2 Years
- ❍ 3 – 5 Years
- ❍ 6 Years or more
- ❍ Never, I don't have checkups
- ❍ Not sure / Don't remember

---

34. About how long has it been since you saw a dentist for a checkup?

- ❍ Less than 12 months ago
- ❍ 1 – 2 Years
- ❍ 3 – 5 Years
- ❍ 6 Years or more
- ❍ Never, I don't have checkups
- ❍ Not Sure / Don't remember

---

35. Do you have a hard time getting medical information?

- ❍ Yes
- ❍ No
- ❍ Not Sure

---

36. Do you have a hard time understanding medical information?

- ❍ Yes
- ❍ No
- ❍ Not Sure

---

37. Do you trust the medical advice and information that you get from doctors, nurses and dentists?

- ❍ Yes
- ❍ No
- ❍ Not Sure

---

38. Do you have children between the ages of 18-26 that are covered by your health insurance?
(Please include all children, including older children that don't live with you)

- ❍ Yes
- ❍ No

If yes, how many children? _____

---

39. Have you or anyone in your household had any public assistance in the past year, like TANF (Cash Assistance), Township Assistance, Public Aid, LIHEAP, Medical Card (Medicaid or Public Aid), Supplemental Security Income (SSI), Disability, or any other types of aid? *(Do not include SNAP, Medicare or Social Security)*

- ❍ Yes
- ❍ No
- ❍ Not sure

---

40. In the last 12 months, did you or anyone in your household have to reduce the size of your meals to make the food last longer or skip meals because you/your family didn't have enough food?

- ◯ Yes
- ◯ No ***(if no, skip to Question 41)***

➢ 40(a). **IF YES (to Question 40):** How often does this happen?

- ◯ At least once a month
- ◯ About once every other month
- ◯ Every few months or less
- ◯ Rarely

41. Which of the following food assistance programs, if any, have you or the people in your household, used in the past year? *(Please select all that apply)*

- ☐ SNAP (Food Stamps)
- ☐ Commodities (CSFP)
- ☐ Free School Lunch and/or Breakfast Program(s)
- ☐ None of these
- ☐ Food Pantry or Food Bank
- ☐ Shelter that Provides Food
- ☐ Summer food service program such as at a school or community center
- ☐ WIC
- ☐ Meals on Wheels
- ☐ Other (Please Describe): _____

Please circle one number showing how much you agree with these statements:

42. People in my neighborhood can be trusted.

1.....**2**.....**3**.....**4**.....**5**
| | |
Strongly Disagree Unsure Strongly Agree

43. There is a lot of crime in my neighborhood.

1.....**2**.....**3**.....**4**.....**5**
| | |
Strongly Disagree Unsure Strongly Agree

44. My neighborhood is safe.

1.....**2**.....**3**.....**4**.....**5**
| | |
Strongly Disagree Unsure Strongly Agree

45. In the past 30 days, did you smoke cigarettes, cigars, cigarillos or any other tobacco products?

◯ (a) Yes ◯ (b) No, never ◯ (c) Prefer not to answer

If answer is "No, never" or "Prefer not to answer", skip to Question 46

- 45(a). In the past 30 days, on how many days did you smoke tobacco products?

◯ 1 or 2 days ◯ 3 to 5 days ◯ 6 to 9 days ◯ 10 to 19 days
◯ 20 to 29 days ◯ All 30 days ◯ Don't know

- 45(b). Over the past 30 days, on the days you smoked, how much did you smoke per day?

◯ 1 per day ◯ 2 - 5 per day ◯ 6 - 10 (1/2 pack) per day
◯ 11 - 20 (1 pack) per day ◯ 1 – 2 packs per day ◯ Not Sure

---

46. In the past 30 days, did you use smokeless tobacco, like chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Copenhagen, Grizzly, Skoal, or Camel Snus?

◯ Yes ◯ No, never ◯ Prefer not to answer

If answer is "No, never" or "Prefer not to answer", skip to Question 47

- 46 (a). In the past 30 days, on how many days did you use smokeless tobacco?

◯ 0 days ◯ 1 or 2 days ◯ 3 to 5 days ◯ 6 to 9 days
◯ 10 to 19 days ◯ 20 to 29 days ◯ All 30 days

---

47. In the past 30 days, have you used any electronic vapor products, also known as e-cigarettes, vapes, vape pens, or mods? This includes JUUL, Vuse, MarkTen, and Blu products.

◯ Yes ◯ No, never ◯ Prefer not to answer

If answer is "No, never" or "Prefer not to answer", skip to Question 48

- 47(a). In the past 30 days, on how many days did you use electronic vapor products?

◯ 1 or 2 days ◯ 3 to 5 days ◯ 6 to 9 days ◯ 10 to 19 days
◯ 20 to 29 days ◯ All 30 days ◯ Don't know

- 47(b). What strength(s) of nicotine do you currently vape with?

◯ No nicotine ◯ 1-6 mg nicotine/mL ◯ 7-12 mg/mL
◯ 13-18 mg/mL ◯ over 18 mg/mL ◯ Not Sure

- 47(c) If you used pre-filled cartridges or disposable e-cigarettes (like JUUL, or BLU), about how many do you use per week?

_____

CONFIDENTIALITY STATEMENT

Your answers will be kept confidential. That means that research staff have access to information about who took a given survey, but this information is not available to anyone outside the team. RRHC will never associate a person's personal information with their survey answers in any reporting. When survey results are reported, individual answers are combined together and presented as a group. We will also never associate comments submitted on surveys with your personal information.

48. Do you drink alcohol?

◯ Yes ◯ No, never ◯ Prefer not to answer

If answer is "No, never" or "Prefer not to answer", skip to Question 49

- 48(a). If yes, how much do you drink in a day? (1 drink = 1 beer, glass of wine, or shot)

◯ 1 drink per day or less ◯ 2-3 drinks per day ◯ 4-5 drinks per day
◯ More than 5 drinks per day ◯ Prefer not to answer

- 48(b). How often do you drink?

◯ Once a month or less ◯ 2-3 times per month ◯ Once a week
◯ A few times a week, but not daily ◯ Daily ◯ Prefer not to answer

49. Within the last 12 months, have you used any of the following drugs? ***(Mark all that apply)***

☐ Marijuana or other products containing THC
☐ Amphetamines
☐ Prescription Opioids (not used as prescribed)
☐ Cocaine or Crack
☐ Heroin
☐ Withdrawal-relieving products such as methadone or Suboxone©
☐ Barbiturates
☐ LSD or other hallucinogens
☐ Prefer not to answer
☐ Other (please describe): _____

50-66. Has anyone in your household been told by a doctor or dentist that they have any of the following conditions or diseases? **(*Write the number of persons in each age group*)**

	Disease, Condition, or Diagnosis	0-17	18-44	45-64	65+
50.	Alzheimer's, dementia, or severe memory impairment				
51.	Arthritis or rheumatism				
52.	Asthma				
53.	Cancer or malignant neoplasms				
54.	Chronic back pain or disc disorders				
55.	Chronic bronchitis, emphysema, COPD, or other respiratory problem				
56.	Chronic digestive or stomach disorders (such as GERD, reflux or Crohn's Disease)				
57.	Heart or cardiovascular disease				
58.	High blood pressure, hypertension				
59.	High cholesterol				
60.	Kidney disease				
61.	Liver disease				
62.	Obesity				
63.	Oral health disease, gum disease				
64.	Osteoporosis				
65.	Stroke				
66.	Other:_____				

67 - 78. Has anyone in your household been told by a doctor, therapist, or psychiatrist that they have any of these mental health conditions? (**Mark number of persons in each age group**)

	Disease, Conditions, or Diagnosis	0-17	18-44	45-64	65+
67.	Addiction or substance-abuse (alcohol, drugs, gambling)				
68.	Anxiety				
69.	Attention Deficit Disorder or ADHD				
70.	Autism Spectrum Disorder				
71.	Bipolar Disorder (Manic- Depressive)				
72.	Depression or depressive disorders				
73.	Eating disorder (Anorexia, Bulimia)				
74.	Obsessive-Compulsive Disorder (OCD)				
75.	Post-Traumatic Stress Disorder (PTSD)				
76.	Schizophrenia and other psychoses				
77.	Suicidal or self-harming impulses				
78.	Other:_____				

Thank you for your time!