

# Community Health Needs Assessment 2019

**OSF SAINT ANTHONY'S HEALTH CENTER**

MADISON COUNTY

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# Community Health Needs Assessment

2019

*Collaboration for sustaining health equity*

## Executive Summary

The Madison County Community Health-Needs Assessment is a collaborative undertaking by OSF Saint Anthony's Health Center to highlight the health needs and well-being of residents in Madison County. Through this needs assessment, collaborative community partners have identified numerous health issues impacting individuals and families in the Madison County region. Several themes are prevalent in this health-needs assessment – the demographic composition of the Madison County region, the predictors for and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors.

Results from this study can be used for strategic decision-making purposes as they directly relate to the health needs of the community. The study was designed to assess issues and trends impacting the communities served by the collaborative, as well as perceptions of targeted stakeholder groups.

This study includes a detailed analysis of secondary data to assess information regarding the health status of the community. In order to perform these analyses, information was collected from numerous secondary sources, including publicly available sources as well as private sources of data. Additionally, primary data were collected for the general population and the at-risk or economically disadvantaged population. Areas of investigation included perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to medical care, dental care, prescription medications and mental-health counseling. Additionally, demographic characteristics of

respondents were utilized to provide insights into why certain segments of the population responded differently.

Ultimately, the identification and prioritization of the most important health-related issues in the Madison County region were identified. The collaborative team considered health needs based on: (1) magnitude of the issue (i.e., what percentage of the population was impacted by the issue); (2) severity of the issue in terms of its relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method, three significant health needs were identified and determined to have equal priority:

- **Healthy Behaviors** – *defined as active living and healthy eating, and their impact on obesity*
- **Behavioral Health** – *including mental health*
- **Substance Abuse** – *specific focus*

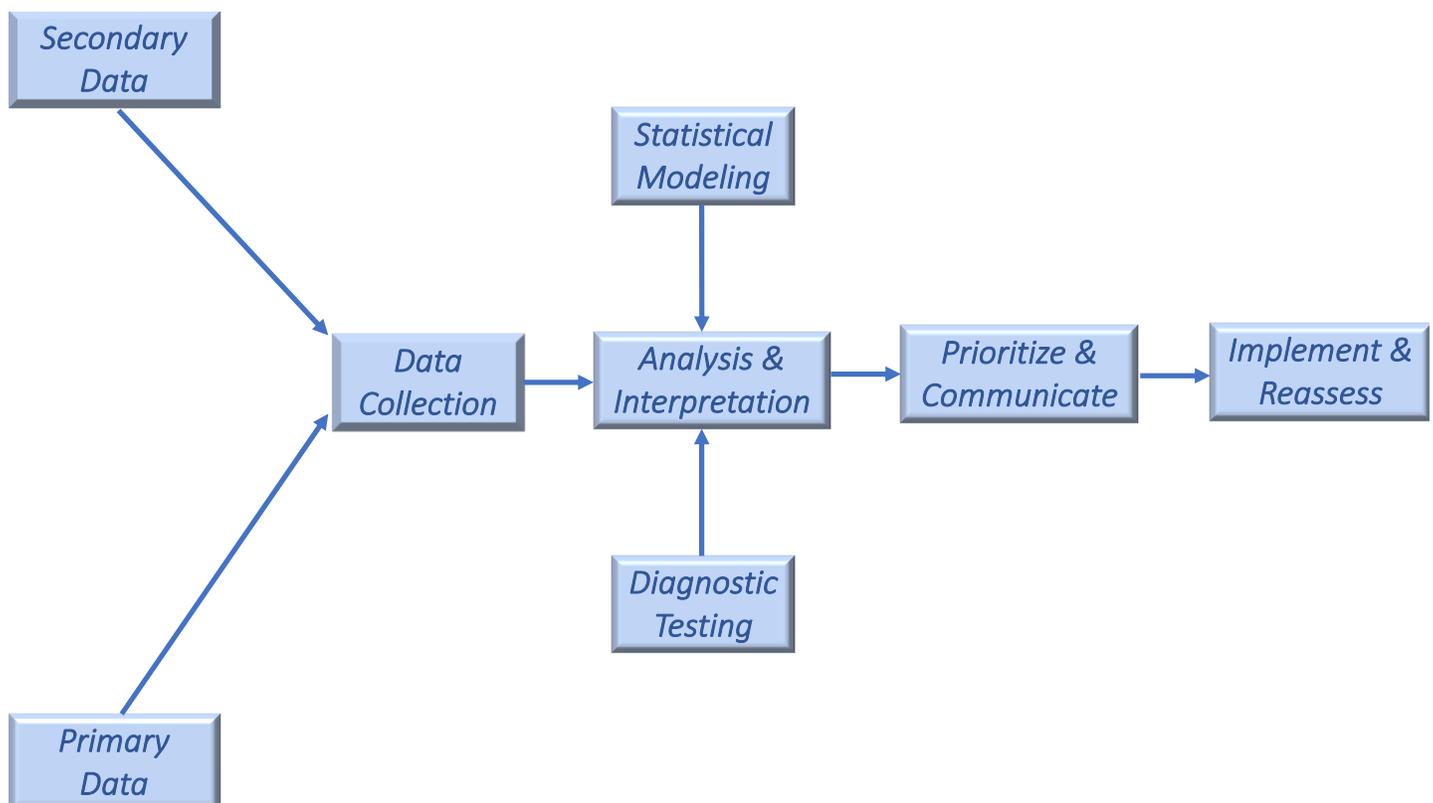
# I. INTRODUCTION

## Background

The Patient Protection and Affordable Care Act (Affordable Care Act), enacted March 23, 2010, added new requirements for tax-exempt hospitals to conduct community health-needs assessments and to adopt implementation strategies to meet the community health needs identified through the assessments. This community health-needs assessment (CHNA) takes into account input from specific individuals who represent the broad interests of the community served by OSF Saint Anthony's Health Center including those with special knowledge of or expertise in public health. For this study, a community health-needs assessment is defined as a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, create a plan, and act upon unmet community health needs. Results from this assessment will be made widely available to the public. This CHNA Report was approved by the OSF Healthcare System's Board of Directors on July 29, 2019.

The structure of the CHNA is based on standards used by the Internal Revenue Service to develop Form 990, Schedule H–Hospitals, designated solely for tax-exempt hospitals. The fundamental areas of the community health-needs assessment are illustrated in Figure 1.

## Community Health Needs Assessment Framework



## Collaborative Team and Community Engagement

In order to engage the entire community in the CHNA process, a collaborative team of health-professional experts and key community advocates was created. Members of the collaborative team were carefully selected to ensure representation of the broad interests of the community. Specifically, team members included representatives from OSF Saint Anthony's Health Center, members of the Madison County Health Department, and administrators from key community partner organizations. Engagement occurred throughout the entire process, resulting in shared ownership of the assessment. The entire collaborative team met in the first and second quarters of 2018 and in the first quarter of 2019. Additionally, numerous meetings were held between the facilitators and specific individuals during the process.

Specifically, members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Note that the collaborative team provided input for all sections of the CHNA. Individuals, affiliations, titles and expertise can be found in Appendix 1.

## Definition of the Community

In order to determine the geographic boundaries for OSF Saint Anthony's Health Center, analyses were completed to identify what percentage of inpatient and outpatient activity was represented by Madison County. Data show that Madison County alone represents 81.9% of all patients for the hospital.

In addition to defining the community by geographic boundaries, this study targets the at-risk population as an area of potential opportunity to improve the health of the community. Note that the at-risk population was defined as those individuals that were eligible to receive Medicaid based on the state of Illinois guidelines using household size and income level.

## Purpose of the Community Health-Needs Assessment

In the initial meeting, the collaborative committee identified the purpose of this study. Specifically, this study has been designed to provide necessary information to health-care organizations, including hospitals, clinics and health departments, in order to create strategic plans in program design, access and delivery. Results of this study will act as a platform that allows health-care organizations to orchestrate limited resources to improve management of high-priority challenges. By working together, hospitals, clinics, agencies and health departments will use this CHNA to improve the quality of healthcare in Madison County. When feasible, data are assessed longitudinally to identify trends and patterns by comparing with results from the 2016 CHNA and benchmarked with State of Illinois averages.

## Community Feedback from Previous Assessments

The 2016 CHNA was made widely available to the community to allow for feedback. Specifically, the hospital posted both a full version and a summary version of the 2016 CHNA on its website. While no written feedback was received by individuals from the community via the available mechanism, verbal feedback was provided by key stakeholders from community-service organizations and incorporated as part of the collaborative process.

## 2016 CHNA Health Needs and Implementation Plans

The 2016 CHNA for Madison County identified two significant health needs. These included: Healthy Behaviors, defined as healthy eating and active living, and their impact on obesity; and Behavioral Health, including mental health and substance abuse. Specific actions were taken to address these needs. Detailed discussions of goals and strategies to improve these health needs can be seen in Appendix 2.

## II. METHODS

To complete the comprehensive community health-needs assessment, multiple sources were examined. Secondary statistical data were used to assess the community profile, morbidity rates and causes of mortality. Additionally, a study was completed to examine perceptions of the community health-related issues, healthy behaviors, behavioral health, food security, social determinants of health and access to healthcare.

### Secondary Data Collection

We first used existing secondary statistical data to develop an overall assessment of health-related issues in the community. Within each section of the report, there are definitions, importance of categories, data and interpretations. At the end of each chapter, there is a section on key takeaways.

Based on several retreats, a separate OSF Collaborative Team used COMP data to identify six primary categories of diseases, including: age related, cardiovascular, respiratory, cancer, diabetes and infections. In order to define each disease category, we used modified definitions developed by Sg2. Sg2 specializes in consulting for healthcare organizations. Their team of experts includes MDs, PhDs, RNs and healthcare leaders with extensive strategic, operational, clinical, academic, technological and financial experience.

### Primary Data Collection

In addition to existing secondary data sources, primary survey data were also collected. This section describes the research methods used to collect, code, verify and analyze primary survey data. Specifically, we discuss the research design used for this study: survey design, data collection and data integrity.

### Survey Instrument Design

Initially, all publicly available health-needs assessments in the U.S. were assessed to identify common themes and approaches to collecting community health-needs data. By leveraging best practices from these surveys, we created our own pilot survey in 2018, designed for use with both the general population and the at-risk community. To ensure that all critical areas were being addressed, the entire collaborative team was involved in survey design/approval through several fact-finding sessions. Additionally, several focus groups were used to collect the qualitative information necessary to design survey items. Specifically, for the community health-needs assessment, eight specific sets of items were included:

**Ratings of health issues in the community** – to assess the importance of various community health concerns. Survey items included assessments of topics such as cancer, diabetes and obesity.

**Ratings of unhealthy behaviors in the community** – to assess the importance of various unhealthy behaviors. Survey items included assessments of topics such as violence, drug abuse and smoking.

**Ratings of issues concerning well-being** – to assess the importance of various issues relating to well-being in the community. Survey items included assessments of topics such as access to healthcare, safer neighborhoods and effective public transportation.

**Accessibility to healthcare** – to assess the degree to which residents could access healthcare when needed. Survey items included assessments of topics such as access to medical, dental and mental-healthcare, as well as access to prescription medications.

**Healthy behaviors** – to assess the degree to which residents exhibited healthy behaviors. The survey items included assessments of topics such as exercise, healthy eating habits and cancer screenings.

**Behavioral health** – to assess community issues related to areas such as anxiety and depression.

**Food security** – to assess access to healthy food alternatives.

**Social determinants of health** – to assess the impact that social determinants may have on the above-mentioned areas.

Finally, demographic information was collected to assess background information necessary to segment markets in terms of the eight categories discussed above.

After the initial survey was designed, a pilot study was created to test the psychometric properties and statistical validity of the survey instrument. A total of 230 surveys were collected in Peoria, IL in May and June 2018. Results from the pilot survey revealed specific items to be included/excluded in the final survey instrument. Item selection criteria for the final survey included validity, reliability and frequency measures based on responses from the pilot sample. A copy of the final survey is included in Appendix 3.

## Sample Size

In order to identify our potential population, we first identified the percentage of the Madison County population that was living in poverty. Specifically, we multiplied the population of the county by its respective poverty rate to identify the minimum sample size to study the at-risk population. The poverty rate for Madison County was 13.5 percent in 2017. The population used for the calculation was 265,428 yielding a total of 35,833 residents living in poverty in the Madison County area.

We assumed a normal approximation to the hypergeometric distribution given the targeted sample size.

$$n = (Nz^2pq)/(E^2 (N-1) + z^2 pq)$$

where:

$n$  = the required sample size

$N$  = the population size

$pq$  = population proportions (set at .05)

$z$  = the value that specified the confidence interval (use 90% CI)

$E$  =desired accuracy of sample proportions (set at +/- .05)

For the total Madison County area, the minimum sample size for *aggregated* analyses (combination of at-risk and general populations) was 384. The data collection effort for this CHNA yielded a total of 582 usable responses. This exceeded the threshold of the desired 90% confidence interval.

To provide a representative profile when assessing the aggregated population for the Madison County region, the general population was combined with a portion of the at-risk population. To represent the at-risk population as a percentage of the aggregate population, a random-number generator was used to select at-risk cases to include in the general sample. Additionally, efforts were made to ensure that the demography of the sample was aligned with population demographics according to U.S. Census data. This provided a total usable sample of 449 respondents for analyzing the aggregate population. Sample characteristics can be seen in Appendix 4.

## Data Collection

Data were collected in the 3<sup>rd</sup> quarter of 2018. To collect data in this study, two techniques were used. First, an online version of the survey was created. Second, a paper version of the survey was distributed. In order to be sensitive to the needs of respondents, surveys stressed assurance of complete anonymity. Note that versions of both the online survey and paper survey were translated into Spanish.

To specifically target the at-risk population, surveys were distributed at homeless shelters, food pantries and soup kitchens. Since we specifically targeted the at-risk population as part of the data collection effort, this became a stratified sample, as we did not specifically target other groups based on their socio-economic status.

Note that use of electronic surveys to collect community-level data may create a potential for bias from convenience sampling error. To recognize for potential bias in the community sample, a second control sample of data was collected. Specifically, the control sample consisted of random patients surveyed at the hospital, assuming that patients receiving care represent an unbiased representation of the community. All questions on the patient version of the survey pertaining to access to healthcare were removed, as these questions were not relevant to current patients. Data from the community sample and the control sample were compared using *t-tests* and tetrachoric correlations when appropriate. Results show that the community sample did not exhibit any significance patterns of bias. If specific relationships exhibited a potential for bias between the community sample and the control sample, they are identified in the social-determinants sections of the analyses within each chapter.

## Data Integrity

Comprehensive analyses were performed to verify the integrity of the data for this research. Without proper validation of the raw data, any interpretation of results could be inaccurate and misleading if used for decision-making. Therefore, several tests were performed to ensure that the data were valid. These tests were performed before any analyses were undertaken. Data were checked for coding accuracy, using descriptive frequency statistics to verify that all data items were correct. This was followed by analyses of means and standard deviations and comparison of primary data statistics to existing secondary data.

## Analytic Techniques

To ensure statistical validity, we used several different analytic techniques. Specifically, frequencies and descriptive statistics were used for identifying patterns in residents' ratings of various health concerns. Additionally, appropriate statistical techniques were used for identification of existing relationships between perceptions, behaviors and demographic data. Specifically, we used Pearson correlations,  $\chi^2$  tests and tetrachoric correlations when appropriate, given characteristics of the specific data being analyzed.

**CHAPTER 1 OUTLINE**

- 1.1 Population
- 1.2 Age, Gender and Race Distribution
- 1.3 Household/Family
- 1.4 Economic Information
- 1.5 Education
- 1.6 Telehealth Interest and Internet Access
- 1.7 Key Takeaways from Chapter 1

# CHAPTER 1

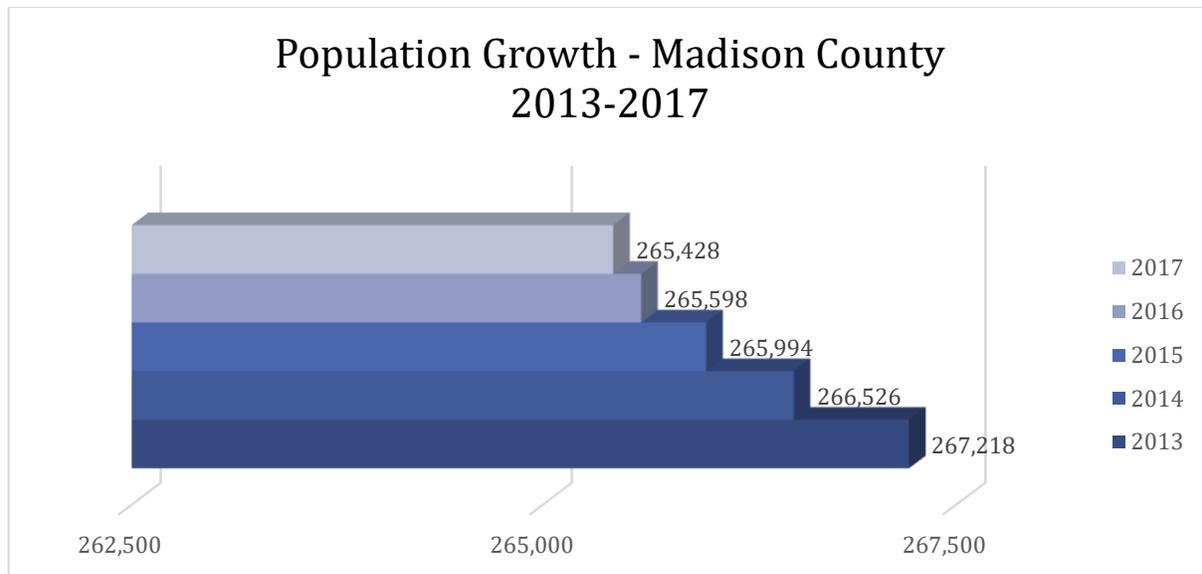
## DEMOGRAPHY AND SOCIAL DETERMINANTS

### 1.1 Population

*Importance of the measure:* Population data characterize individuals residing in Madison County. Population data provide an overview of population growth trends and build a foundation for additional analysis of data.

#### Population Growth

Data from the last census indicate the population of Madison County has slightly decreased (0.7%) between 2013 and 2017.



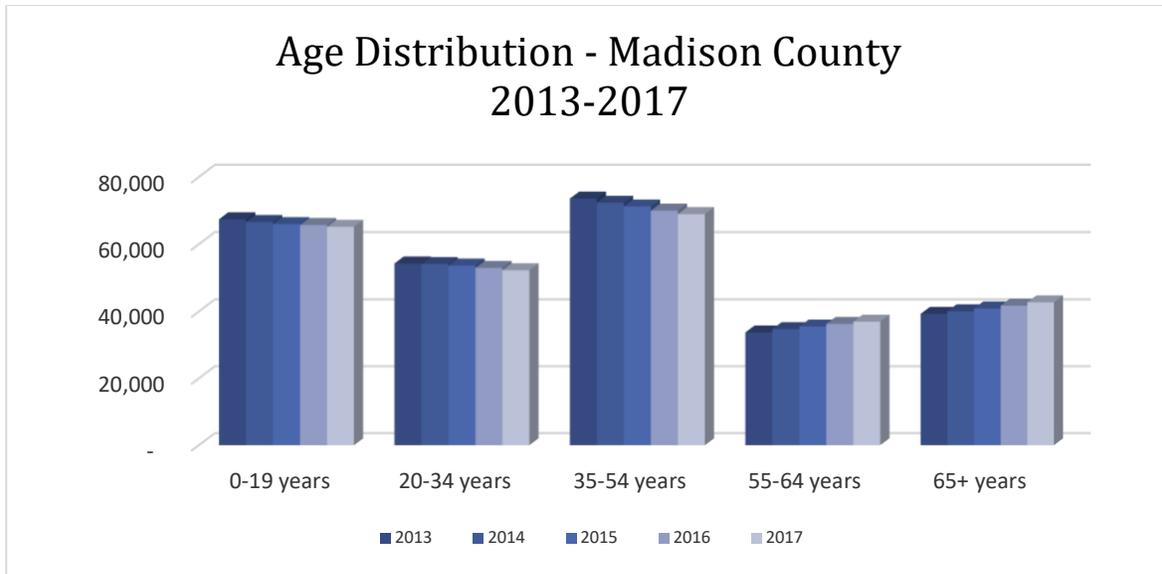
Source: US Census

## 1.2 Age, Gender and Race Distribution

*Importance of the measure:* Population data broken down by age, gender, and race groups provide a foundation to analyze the issues and trends that impact demographic factors including economic growth and the distribution of healthcare services. Understanding the cultural diversity of communities is essential when considering healthcare infrastructure and service delivery systems.

### Age

As indicated in the graph below, the percentage of individuals in Madison County aged 35-54 declined 6.2% between 2013 and 2017, and the percentage of individuals aged 65 and older increased 8.8% between 2013 and 2017.

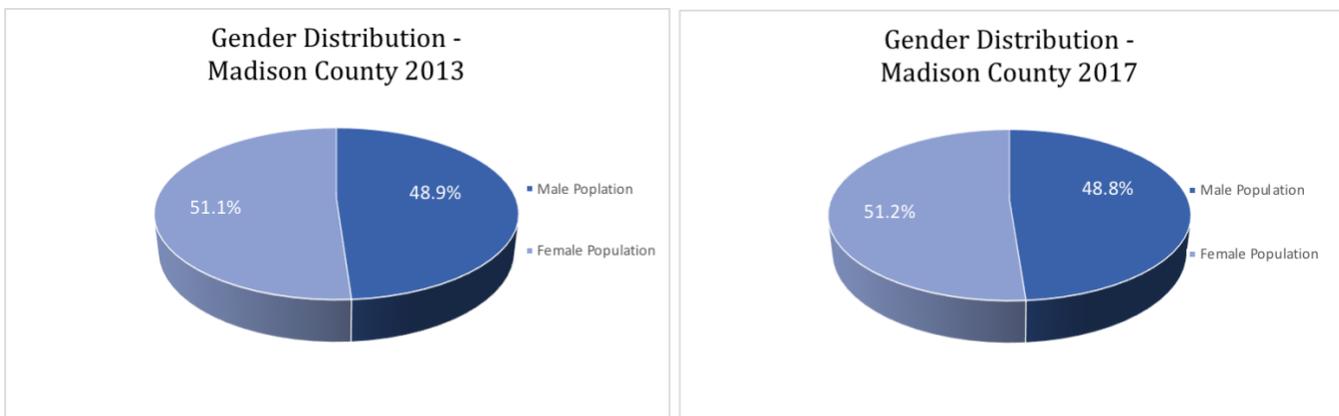


Age	2013	2014	2015	2016	2017
0-19 years	67,442	66,631	66,011	65,736	65,196
20-34 years	54,289	54,127	53,666	52,970	52,279
35-54 years	73,586	72,353	71,248	70,007	68,972
55-64 years	33,755	34,740	35,515	36,302	36,965
65+ years	39,301	40,086	40,916	41,744	42,741

Source: US Census

## Gender

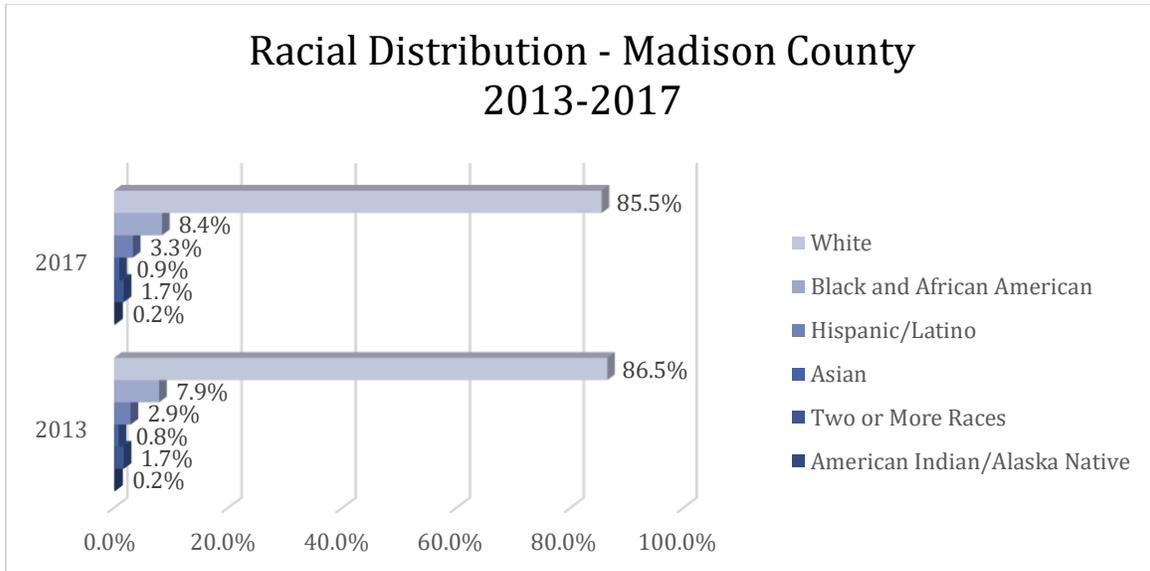
The gender distribution of Madison County residents has remained relatively consistent between 2013 and 2017.



Source: US Census

## Race

With regard to race and ethnic background, Madison County is largely homogenous, yet in recent years, the county is becoming more diverse. Data from 2017 suggest that White ethnicity comprises 85.5% of the population in Madison County. However, the non-White population of Madison County has been increasing (from 13.5% to 14.5% in 2017), with Black ethnicity comprising 8.4% of the population, multi-racial ethnicity comprising 1.7% of the population, and Hispanic/Latino ethnicity comprising 3.3% of the population.

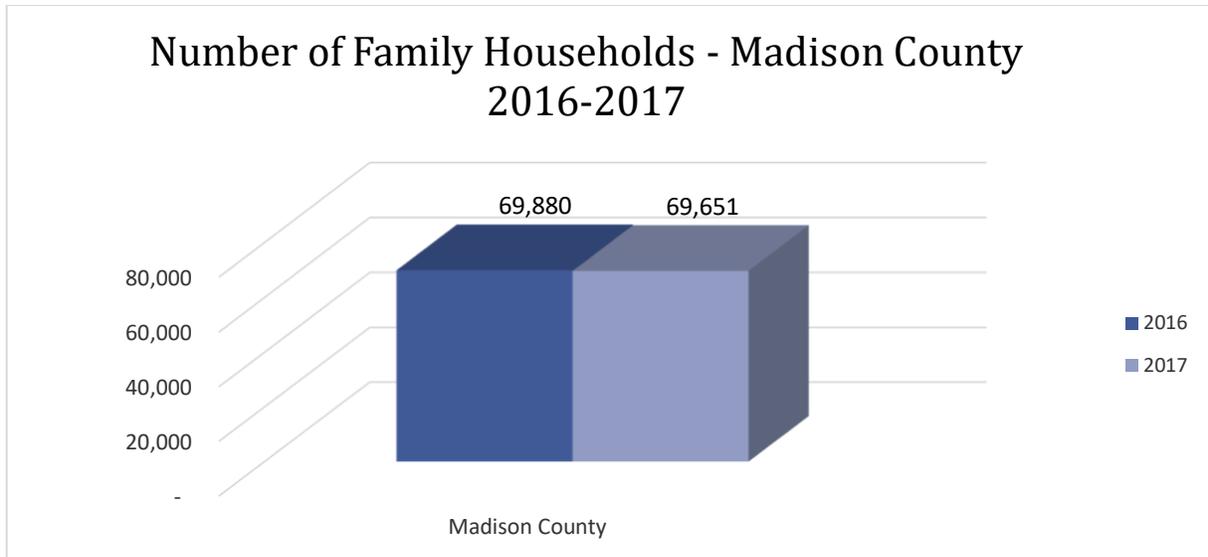


Source: US Census

## 1.3 Household/Family

*Importance of the measure:* Families are an important component of a robust society in Madison County, as they dramatically impact the health and development of children and provide support and well-being for older adults.

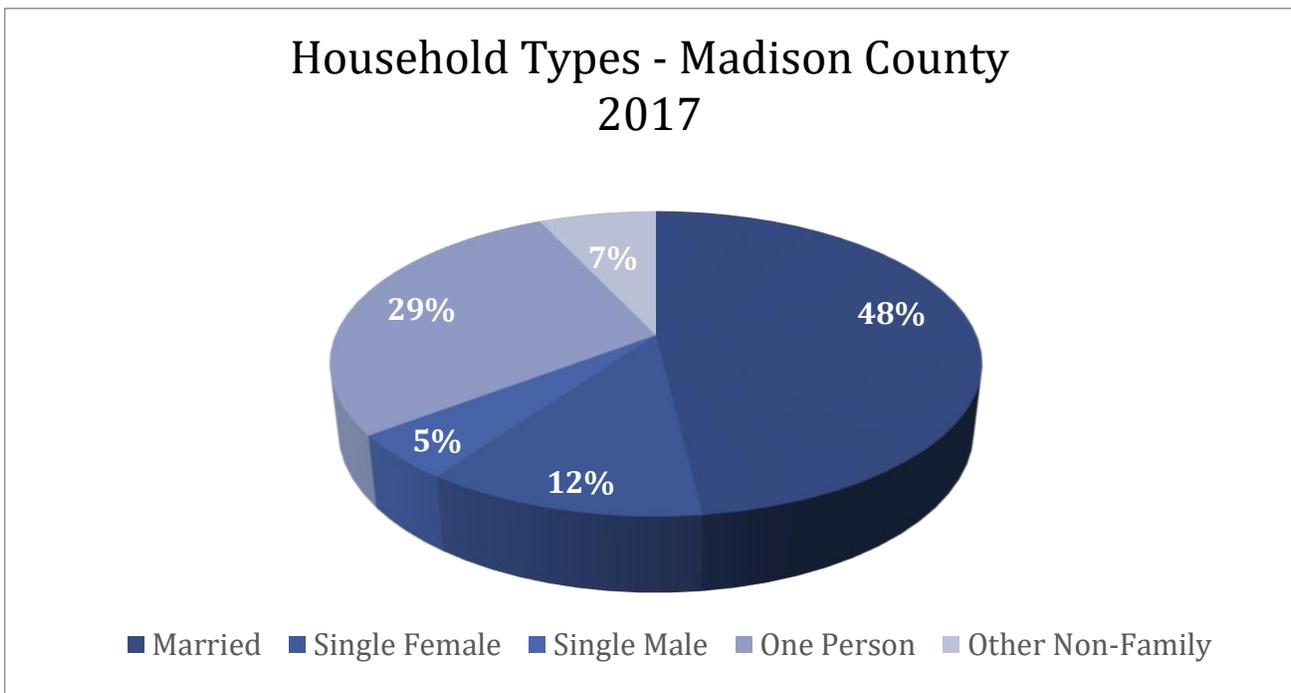
As indicated in the graph below, the number of family households in Madison County decreased slightly from 2016 to 2017.



Source: US Census

## Family Composition

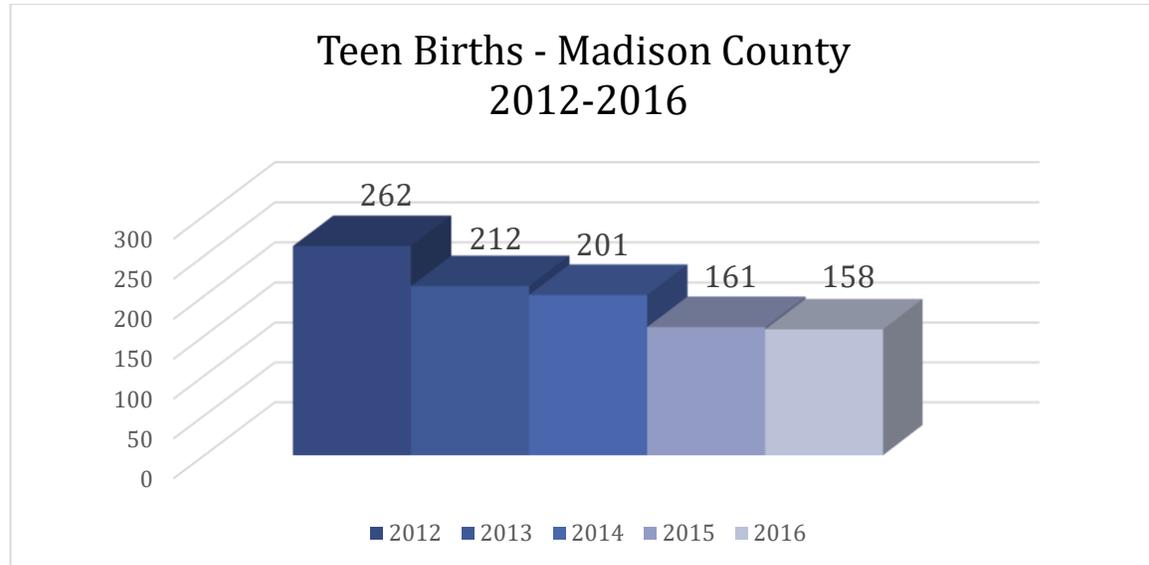
In Madison County, data from 2017 suggest the percentage of two-parent families in Madison County is 48%. One-person households represent 29% of the county population, and single-female head-of-household families represent 12%.



Source: US Census

## Early Sexual Activity Leading to Births from Teenage Mothers

Madison County has experienced a decline in teenage birth count. The teen birth count steadily declined from 2012-2016.



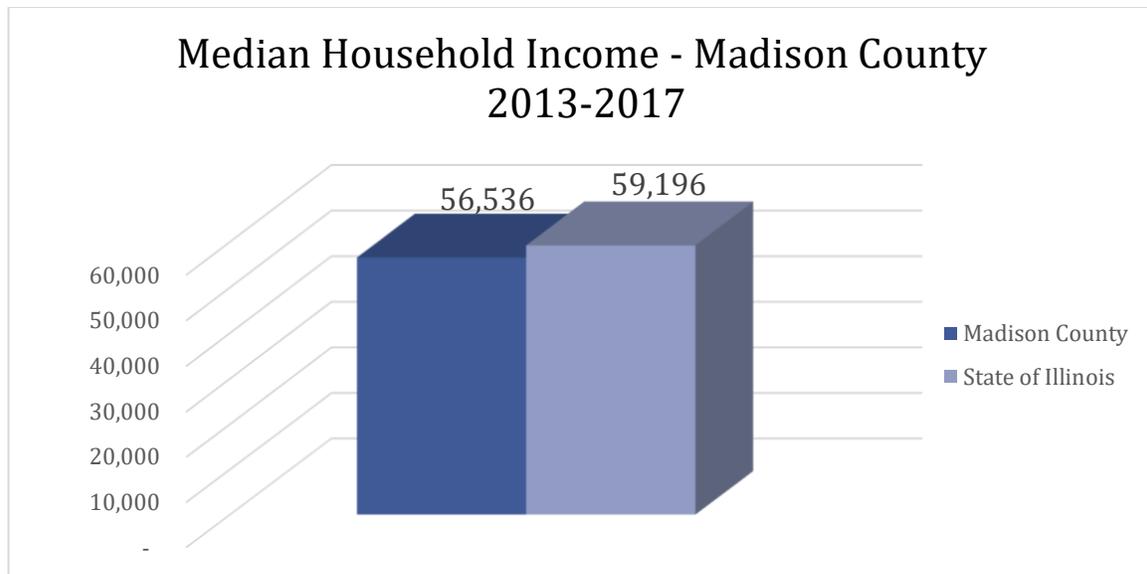
Source: Illinois Department of Public Health

## 1.4 Economic Information

*Importance of the measure:* Median income divides households into two segments with one-half of households earning more than the median income and the other half earning less. Because median income is not significantly impacted by unusually high or low-income values, it is considered a more reliable indicator than average income. To live in poverty means to lack sufficient income to meet one's basic needs. Accordingly, poverty is associated with numerous chronic social, health, education, and employment conditions.

### Median Income Level

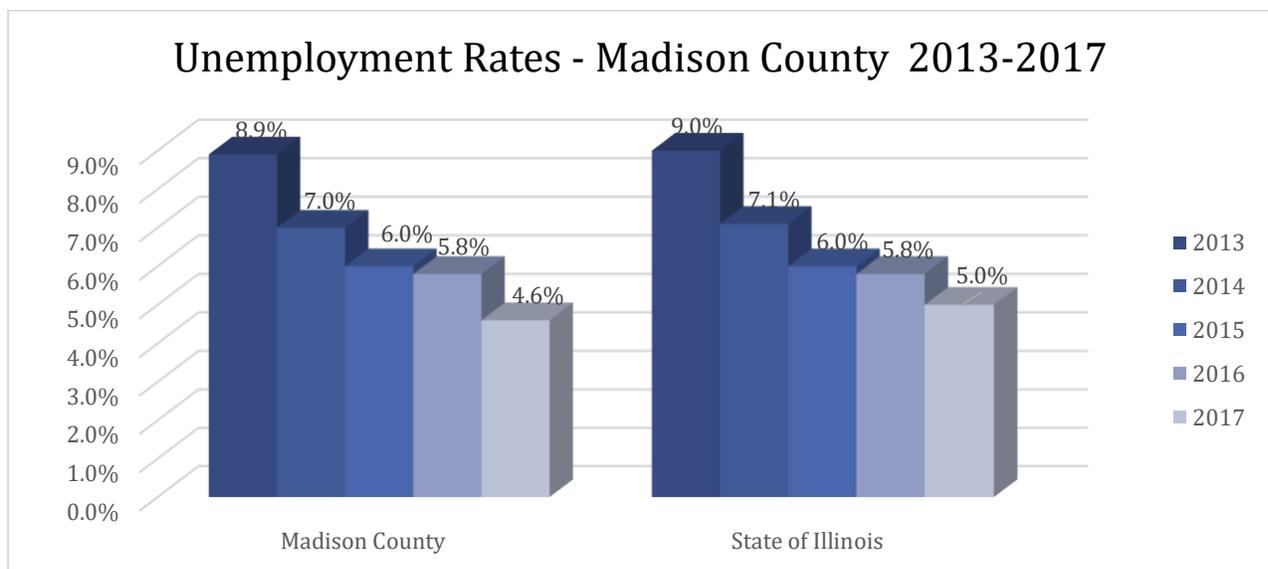
For 2013-2017, the median household income in Madison County was lower than the State of Illinois.



Source: US Census

## Unemployment

For the years 2013-2017, the Madison County unemployment rate was at or lower than the State of Illinois unemployment rate. Overall, between 2013 and 2017, unemployment in Madison County decreased by 4.3%.

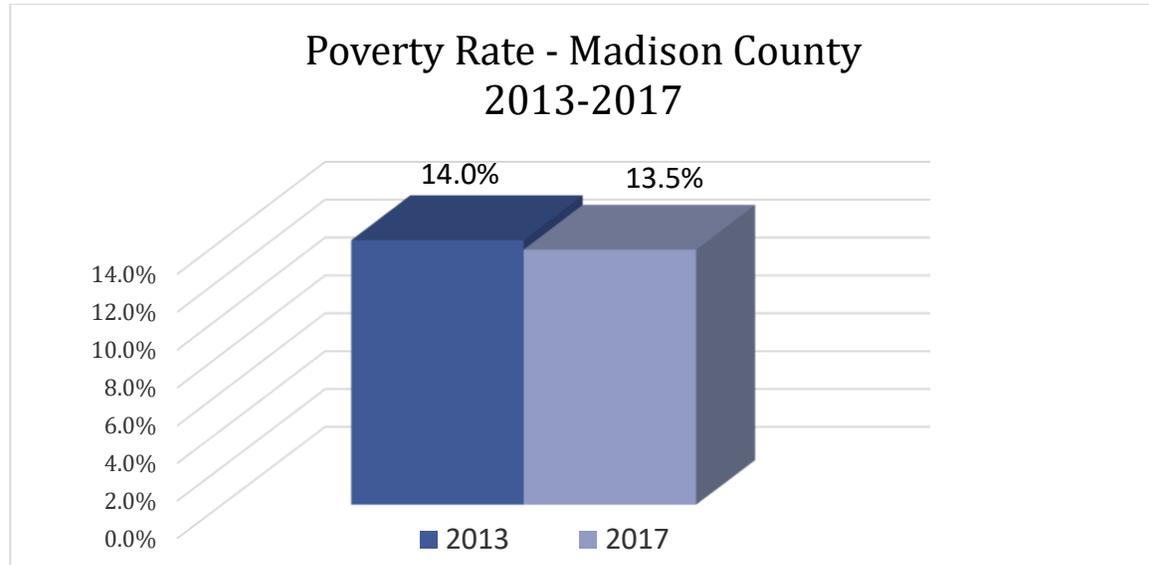


Source: Bureau of Labor Statistics

## Individuals in Poverty

In Madison County, the percentage of individuals living in poverty between 2013 and 2017 slightly decreased by 0.5%. The poverty rate for individuals is 13.5%, which is equal to the State of Illinois

individual poverty rate of 13.5%. Poverty has a significant impact on the development of children and youth. In 2017 the poverty rate for families living in Madison County (9.8%) was equal to the State of Illinois family poverty rate (9.8%).



Source: US Census

## 1.5 Education

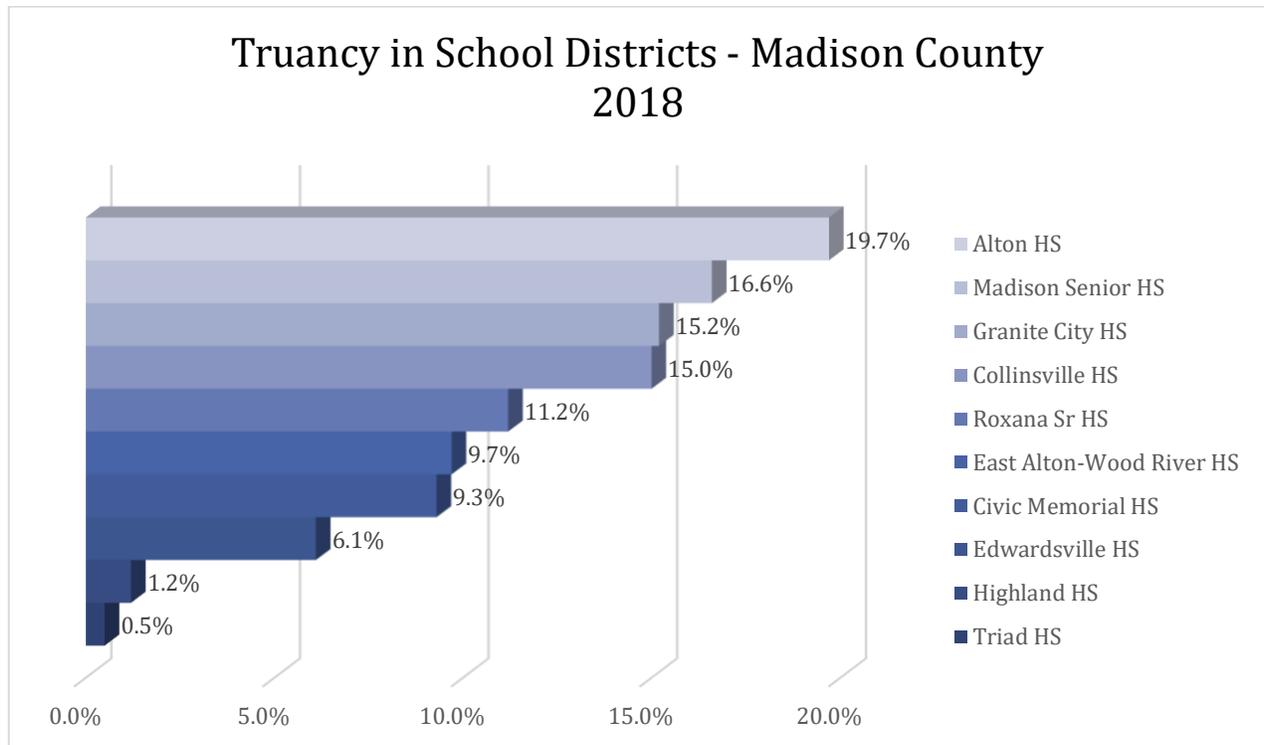
**Importance of the measure:** According to the National Center for Educational Statistics<sup>1</sup>, “The better educated a person is, the more likely that person is to report being in ‘excellent’ or ‘very good’ health, regardless of income.” Research suggests that the higher the level of educational attainment and the more successful one is in school, the better one’s health will be and the greater likelihood of one selecting healthy lifestyle choices. Accordingly, years of education is strongly related to an individual’s propensity to earn a higher salary, gain better employment, and foster multifaceted success in life.

### Truancy

Chronic truancy is a major challenge to the academic progress of children and young adults. The causes of truancy vary considerably for young children. Truancy of middle- and high-school students is more likely a result of the inappropriate behavior and decisions of individual students. Primary school truancy often results from decisions and actions of the parents or caregivers rather than the students themselves. The State of Illinois defines truancy as a student who is absent without valid cause for 5% or more of the previous 180 regular attendance days.

<sup>1</sup> NCES 2005

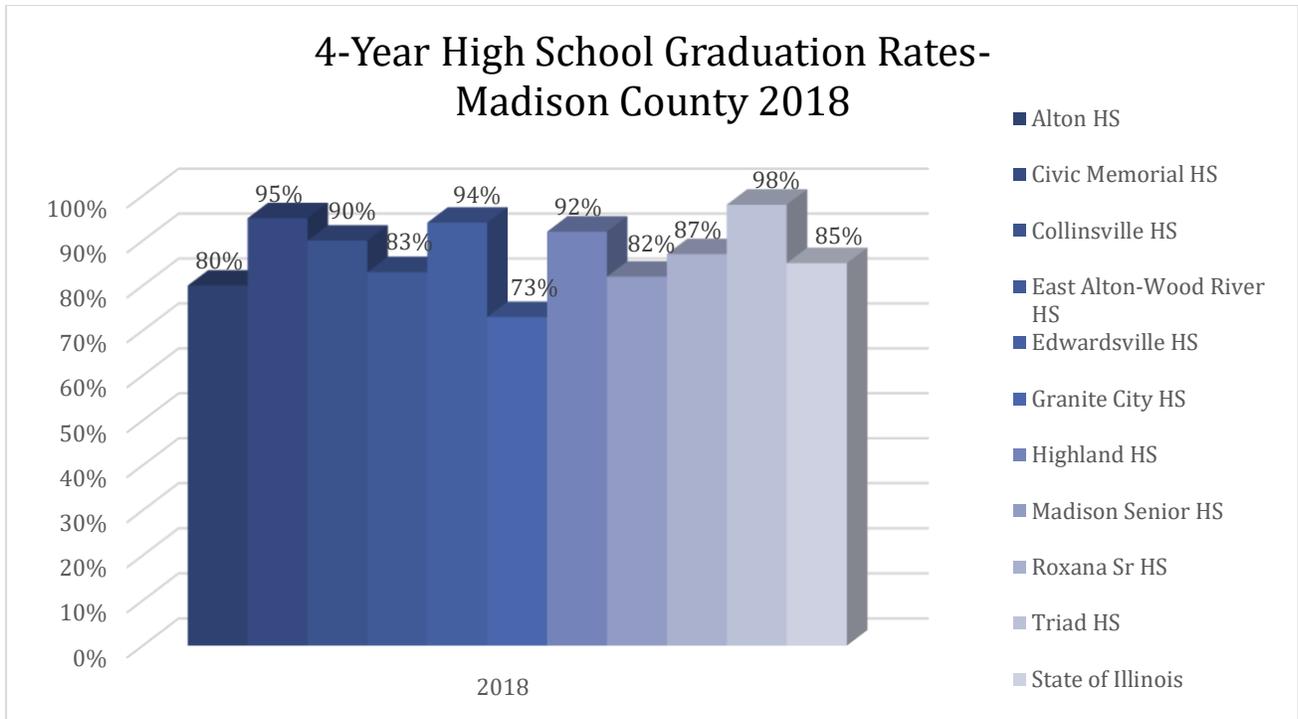
Alton high school, Madison Senior high school, Granite City high school, and Collinsville high school have the largest percentage of students who were chronically truant in 2018.



Source: Illinois Report Card

## High School Graduation Rates

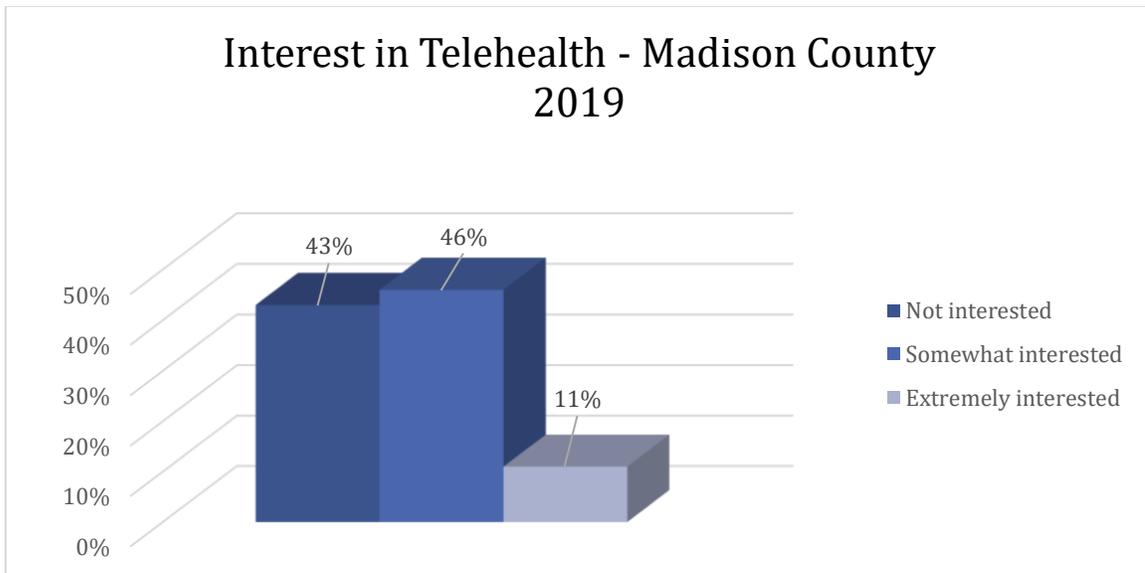
In 2018, Alton High School, East Alton-Wood River High School, Granite City High School, and Madison Senior High School in Madison County reported high school graduation rates that were below the State average of 85%.



Source: Illinois Report Card

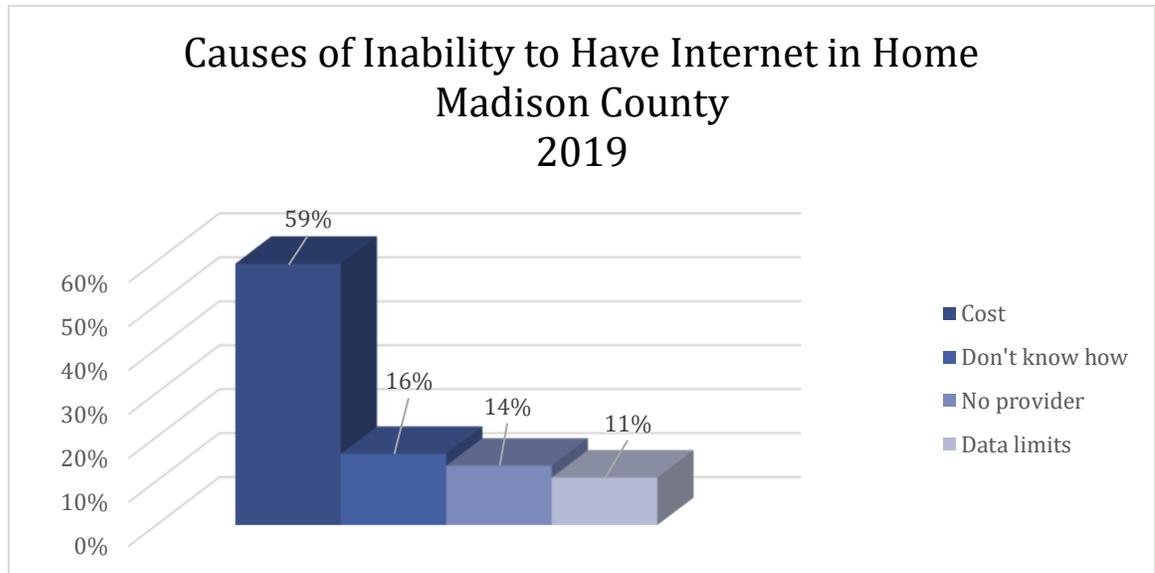
## 1.6 Telehealth Interest and Internet Accessibility

Survey respondents were asked *How interested would you be in health services provided through Internet or phone?* Of respondents, 57% indicated they would be either somewhat or extremely interested.



Source: CHNA Survey

In terms of accessibility, 87% of respondents indicated they had access to free public Internet, and 90% indicated they had Internet in their homes. For those that did not have Internet in their home, cost was the most frequently cited reason.



Source: CHNA Survey

## Social Determinants Related to Telehealth and Internet Access

Several factors show significant relationships with an individual's interest in telehealth and Internet access. The following relationships were found using correlational analyses:

**Interest in telehealth** tends to be rated higher by younger people, men, those with higher education and those with higher income.

**Access to Internet** tends to be rated higher for younger people, those with higher education, those with higher income and those with a stable housing environment.

## 1.7 Key Takeaways from Chapter 1

- ✓ POPULATION OVER AGE 65 IS INCREASING .
- ✓ SINGLE FEMALE HEAD-OF-HOUSE-HOUSEHOLD REPRESENTS 12% OF THE POPULATION. HISTORICALLY, THIS DEMOGRAPHIC INCREASES THE LIKELIHOOD OF FAMILIES LIVING IN POVERTY.
- ✓ DECLINING TEENAGE BIRTH COUNT.
- ✓ ALMOST 2/3 OF THE POPULATION IS INTERESTED IN TELEHEALTH SERVICES.

**CHAPTER 2 OUTLINE**

- 2.1 Accessibility
- 2.2 Wellness
- 2.3 Access to Information
- 2.4 Physical Environment
- 2.5 Health Status
- 2.6 Key Takeaways from Chapter 2

# CHAPTER 2

## PREVENTION BEHAVIORS

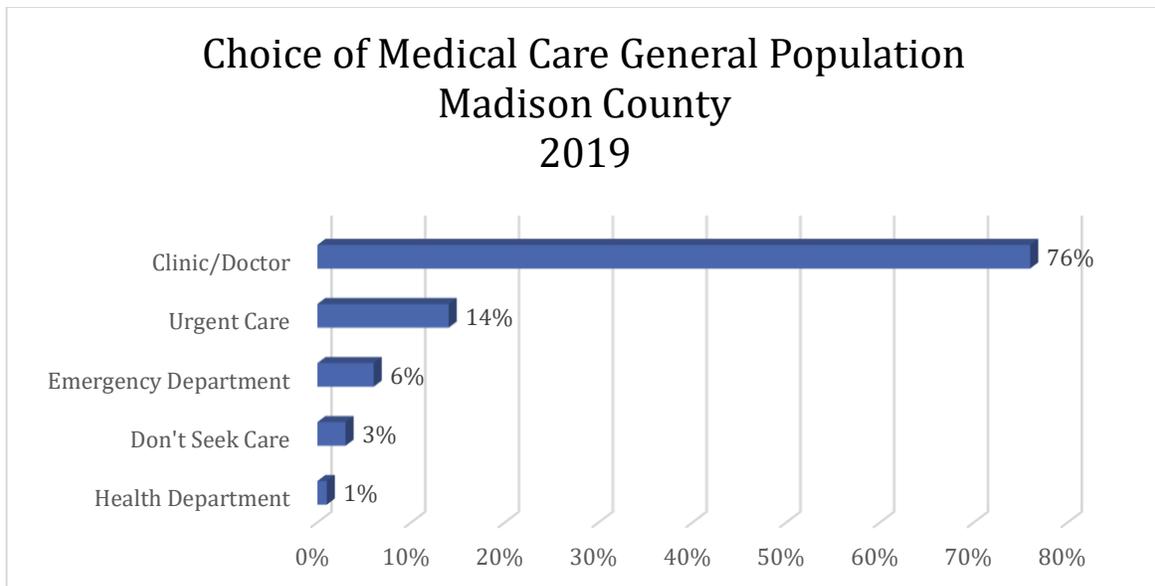
### 2.1 Accessibility

*Importance of the measure:* It is critical for healthcare services to be accessible. Therefore, accessibility to healthcare must address both the associated financial costs and the supply and demand of medical services.

#### Choice of Medical Care

Survey respondents were asked to select the type of healthcare facility used when sick. Six different alternatives were presented, including clinic or doctor's office, emergency department, urgent-care facility, health department, no medical treatment, and other.

The most common response for source of medical care was clinic/doctor's office, chosen by 76% of survey respondents. This was followed by urgent care (14%), the emergency department (6%), not seeking medical attention (3%), and the health department (1%).



Source: CHNA Survey

### Comparison to 2016 CHNA

Clinic/doctor's office decreased from 83% in 2016 to 76% in 2019. Much of this can be attributed to the significant increase in use of urgent care facilities (3% in 2016 to 14% in 2019).

### Social Determinants Related to Choice of Medical Care

Several factors show significant relationships with an individual's choice of medical care. The following relationships were found using correlational analyses:

**Clinic/Doctor's Office** tends to be used more often by older people, those with higher income. Clinic/Doctor's office is used less often by Black people and those with an unstable (e.g., homeless) housing environment.

**Urgent Care** tends to be used less by Black people.

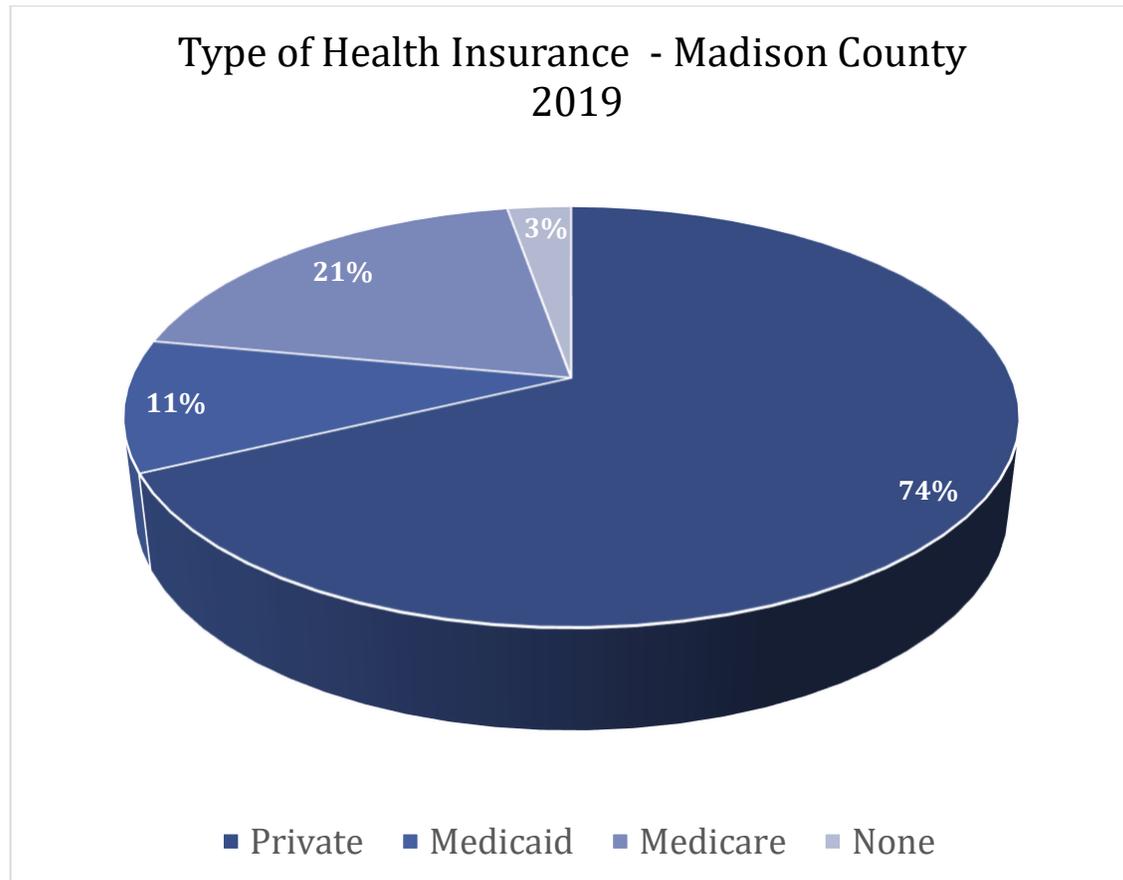
**Emergency Department** tends to be used more often by men, Black people, less educated people, those with lower income and people with an unstable (e.g., homeless) housing environment. Emergency departments tend to be used less by White people as a primary source of healthcare.

**Do Not Seek Medical Care** did not have any significant correlates.

**Health Department** did not have any significant correlates.

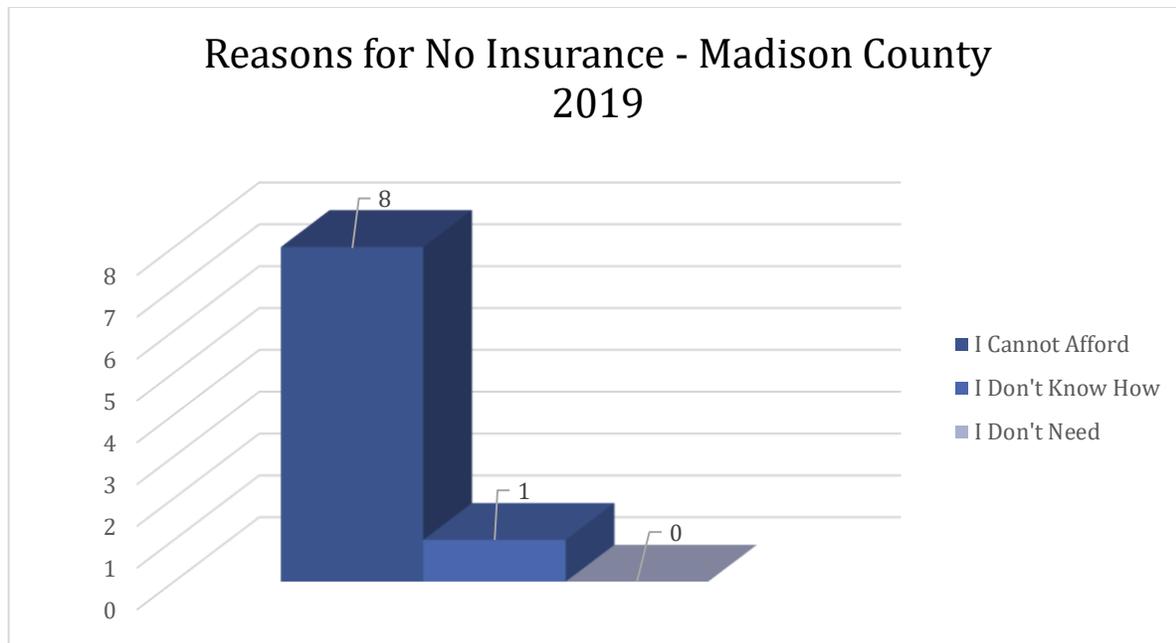
## Insurance Coverage

According to survey data, 74% of the residents are covered by private insurance, followed by Medicare (21%), and Medicaid (11%). Only 3% of respondents indicated they did not have any health insurance.



*Source: CHNA Survey*

Data from the survey show that for the 3% of individuals who do not have insurance, the most common reason was cost. Note that these data are displayed in frequencies rather than percentages given the low number of responses.



Source: CHNA Survey

## Comparison to 2016 CHNA

Compared to survey data from the 2016 CHNA, there has been an increase in the percentage of the population with private insurance from 57% in 2016 to 74% in 2019. This has resulted in less people relying on Medicare and Medicaid.

## Social Determinants Related to Type of Insurance

Several characteristics show significant relationships with an individual's type of insurance. The following relationships were found using correlational analyses:

**Medicare** tends to be used more frequently by older people, those with lower education, those with less income and those with an unstable (e.g., homeless) housing environment.

**Medicaid** tends to be used more frequently by Black people, those with lower income, those with less income and people with an unstable (e.g., homeless) housing environment.

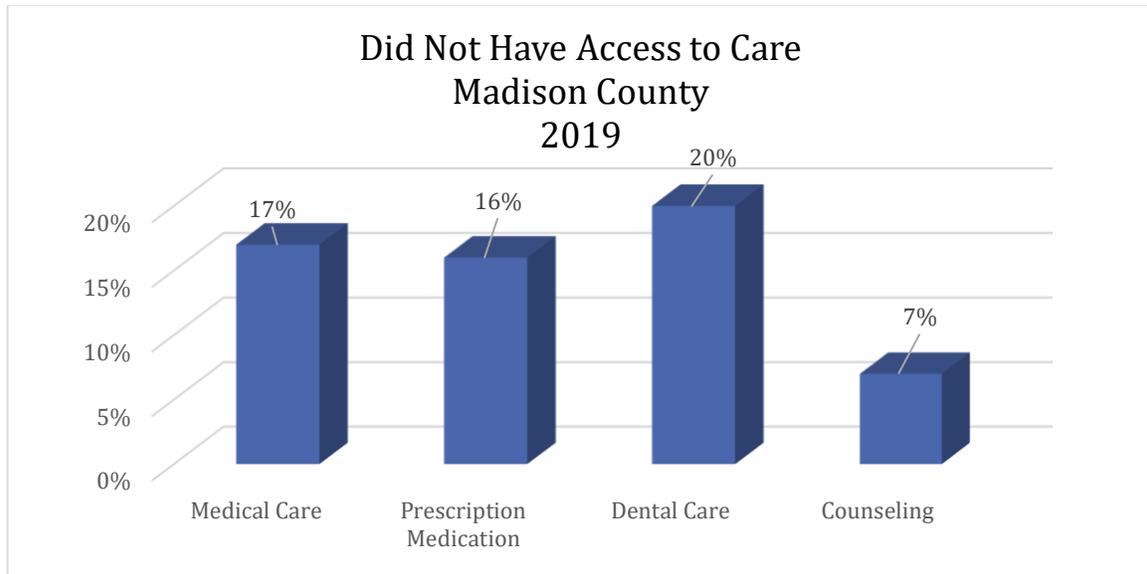
**Private Insurance** is used more often by White people, and those with higher education and income and those with a stable housing environment. Private insurance is used less by Black people.

**No Insurance** tends to be reported more often by, Black people, and those with lower income.

## Access to Care

In the CHNA survey, respondents were asked, "Was there a time when you needed care but were not able to get it?" Access to four types of care were assessed: medical care, prescription medications, dental care and counseling. Survey results show that 17% of the population did not have access to medical care when needed; 16% of the population did not have access to prescription medications when

needed; 20% of the population did not have access to dental care when needed; and 7% of the population did not have access to counseling when needed.



Source: CHNA Survey

## Social Determinants Related to Access to Care

Several characteristics show a significant relationship with an individual's ability to access care when needed. The following relationships were found using correlational analyses:

**Access to medical care** tends to be higher for those with higher income, those with higher education, and those with a stable housing environment. Access to medical care tends to be lower for Black people.

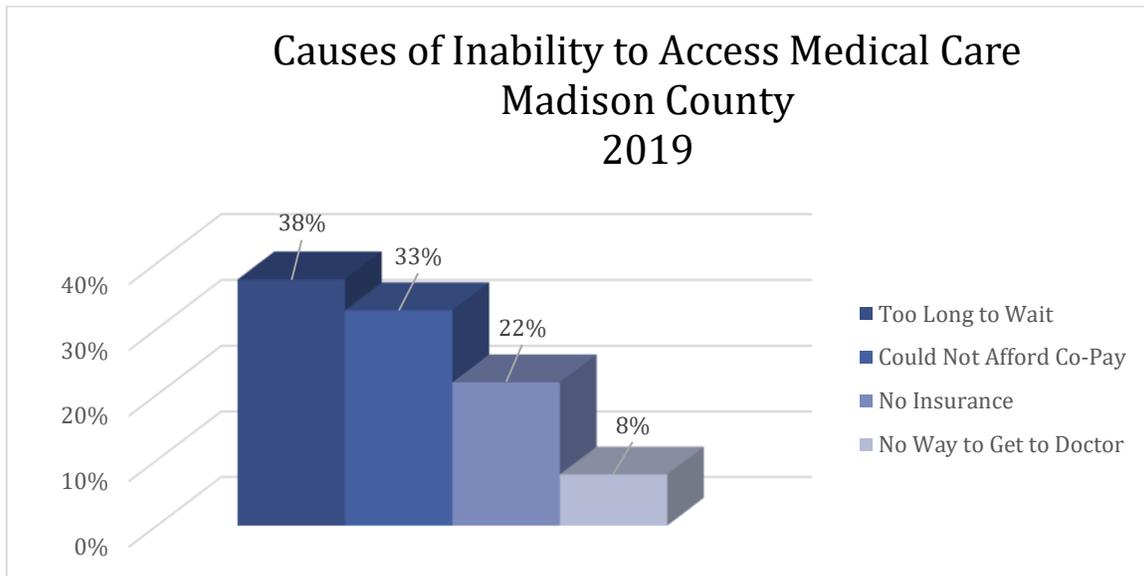
**Access to prescription medications** tends to be higher for those with higher income, those with higher education, and those with a stable housing environment. Access to prescription medications tends to be lower for Black people.

**Access to dental care** tends to be higher for White people, those with higher education and those with higher income. Black people and those with an unstable (e.g., homeless) housing environment are less likely to have access to dental care.

**Access to counseling** tends to be higher for those with higher income, and those with a stable housing environment. Access to counseling tends to be lower for Black people.

## Reasons for No Access – Medical Care

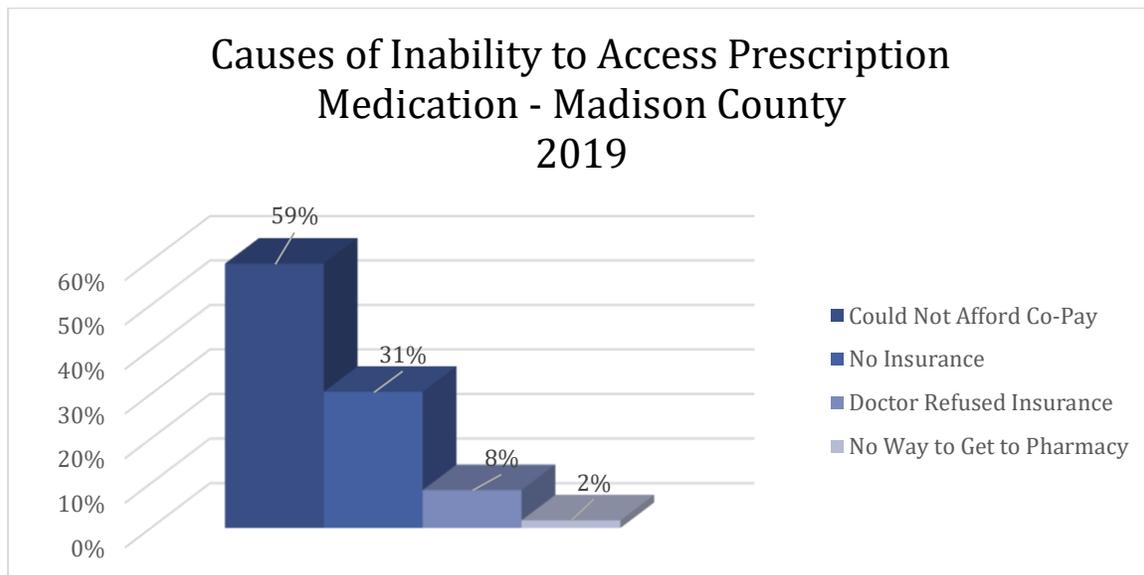
Survey respondents who reported they were not able to get medical care when needed were asked a follow-up question. The leading causes of the inability to gain access to medical care were too long to wait for an appointment (38%), the inability to afford the copay (33%), no insurance (22%) and no way to get to the doctor (8%).



Source: CHNA Survey

## Reasons for No Access – Prescription Medication

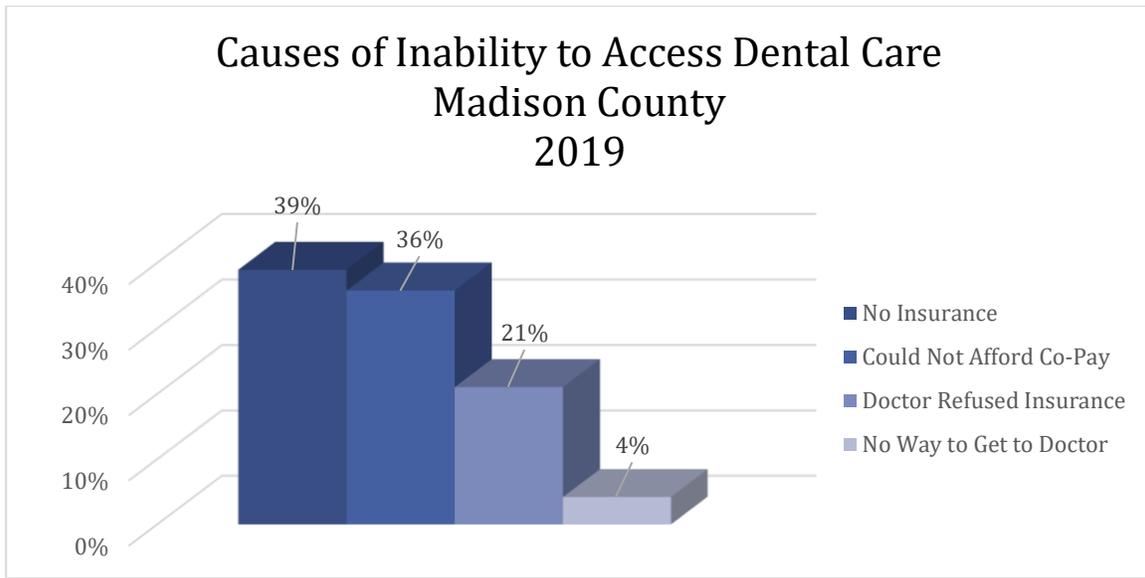
Survey respondents who reported they were not able to get prescription medications when needed were asked a follow-up question. The leading causes of the inability to gain access to prescription medicine were the inability to afford copayments or deductibles (59%) and no insurance (31%).



Source: CHNA Survey

## Reasons for No Access – Dental Care

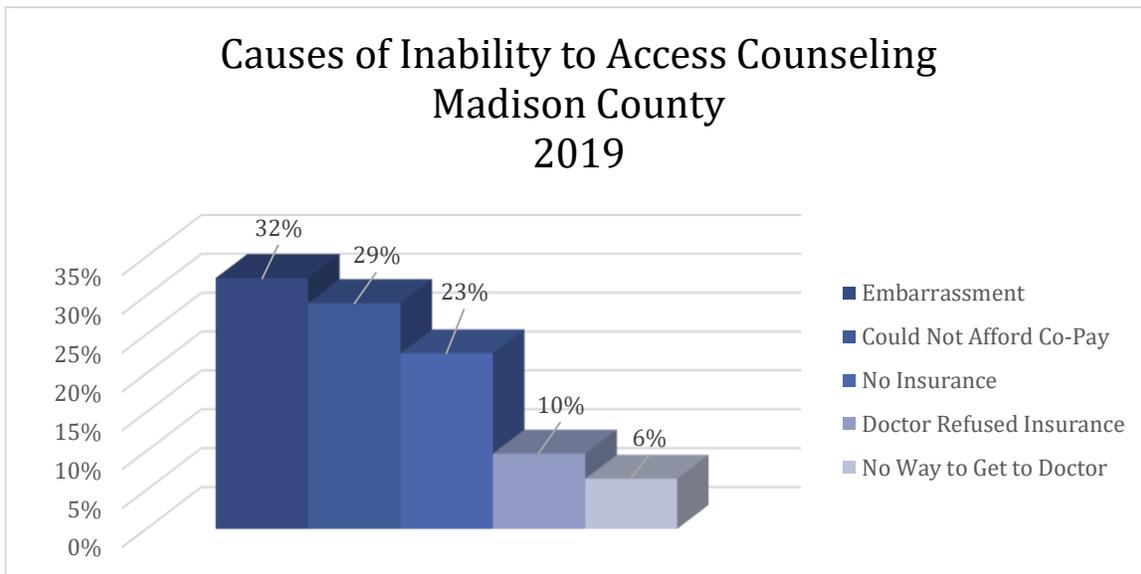
Survey respondents who reported they were not able to get dental care when needed were asked a follow-up question. The leading causes of inability to gain access to dental care were no insurance (39%), and the inability to afford copayments or deductibles (36%).



Source: CHNA Survey

## Reasons for No Access – Counseling

Survey respondents who reported they were not able to get counseling when needed were asked a follow-up question. The causes of the inability to gain access to counseling were embarrassment (32%), inability to afford co-pay (29%), the lack of insurance (23%), counselor refused insurance (10%) and no way to get to the counselor (6%).



Source: CHNA Survey

### Comparison to 2016 CHNA

**Access to Medical Care** – Compared to 2016, results show an increase of 3% in those that were not able to get access to medical care when needed.

**Access to Prescription Medications** – Compared to 2016, results show an increase of 1% in those that were not able to get access to prescription medication when needed.

**Access to Dental Care** – Compared to 2016, results show an increase of 1% in those that were not able to get dental care when needed.

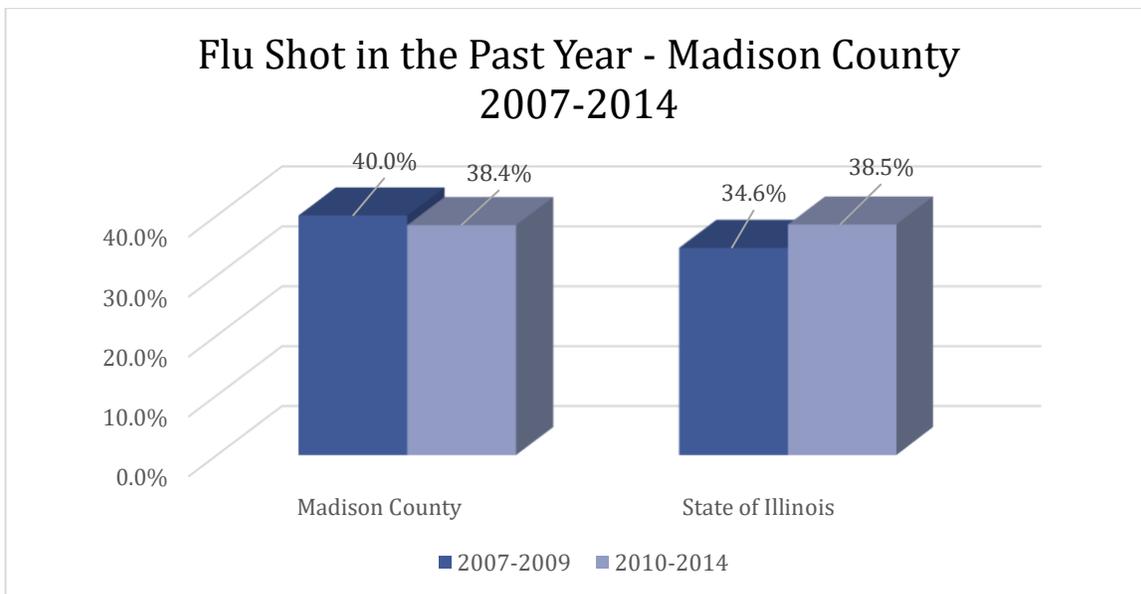
**Access to Counseling** – Compared to 2016, results were the same at 7%.

## 2.2 Wellness

*Importance of the measure:* Preventative healthcare measures, including getting a flu shot, engaging in a healthy lifestyle, and undertaking screenings for diseases are essential to combating morbidity and mortality while reducing healthcare costs.

### Frequency of Flu Shots

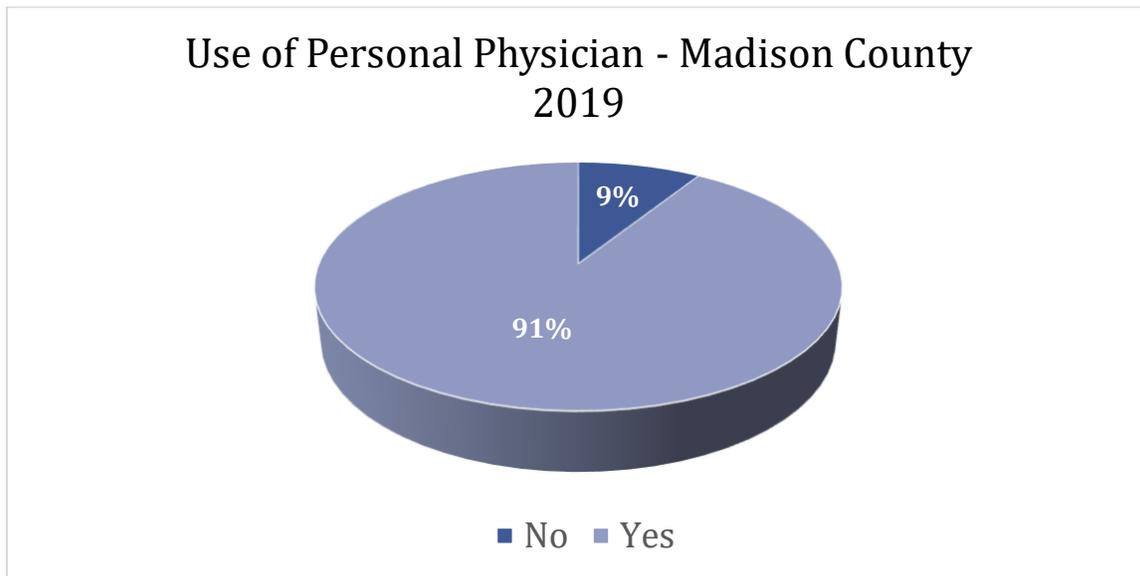
The overall health of a community is impacted by preventative measures including immunizations and vaccinations. The chart below shows that the percentage of people who have had a flu shot in the past year is 38.4% for Madison County in 2010-2014 compared to 40.0% for 2007-2009. During the same timeframe, the State of Illinois realized an increase. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

## Personal Physician

The CHNA survey asked respondents if they had a personal physician. Having a personal physician suggests that individuals are more likely to get wellness check-ups and less likely to use an emergency department as a primary healthcare service. According to survey data, 91% of residents have a personal physician.



*Source: CHNA Survey*

### Comparison to 2016 CHNA

The 2019 CHNA survey results for having a personal physician are higher compared to the 2016 CHNA. Specifically, 87% of residents reported a personal physician in 2016 and 91% report the same in 2019.

## Social Determinants Related to Having a Personal Physician

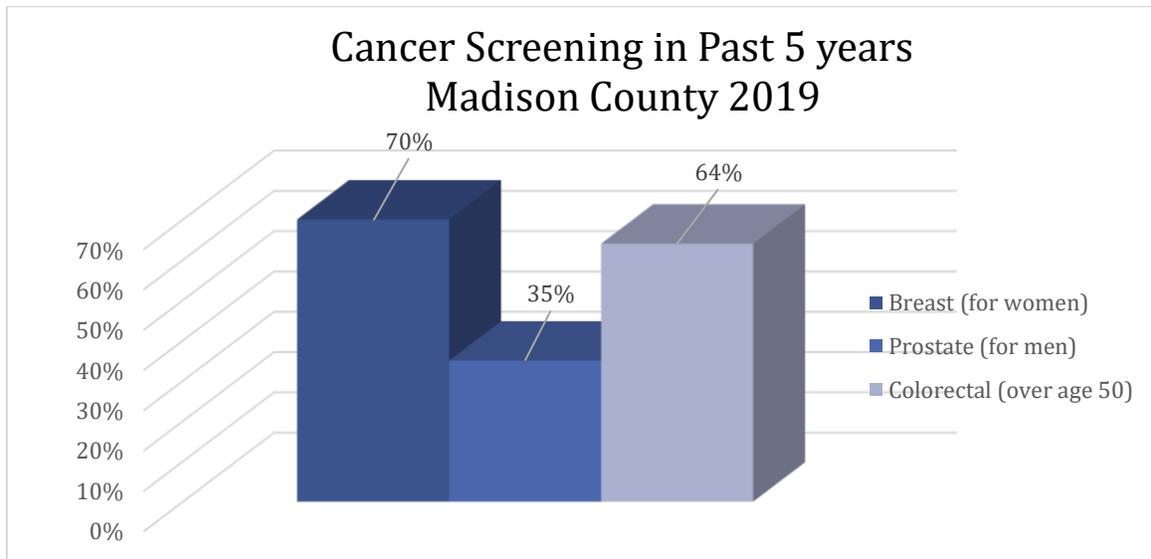
Multiple characteristics show significant relationships with having a personal physician. The following relationships were found using correlational analyses:

**Having a personal physician** tends to be more likely for older people, those with more income and those with a stable housing environment.

## Cancer Screening

Early detection of cancer may greatly improve the probability of successful treatment. In the case of colorectal cancer, early detection of precancerous polyps can prevent cancer. **Cancer screening is a new section to the 2019 CHNA.** Specifically, three types of cancer screening were measured: breast, prostate and colorectal.

Results from the CHNA survey show that 70% of women had a breast screening in the past five years. For men, 35% had a prostate screening in the past five years. For women and men over the age of 50, 64% had a colorectal screening in the last five years.



Source: CHNA Survey

## Social Determinants Related to Cancer Screenings

Multiple characteristics show significant relationships with cancer screening. The following relationships were found using correlational analyses:

**Breast screening** tends to be more likely for older White women, those with a higher level of education, those with higher income and those in a stable housing environment.

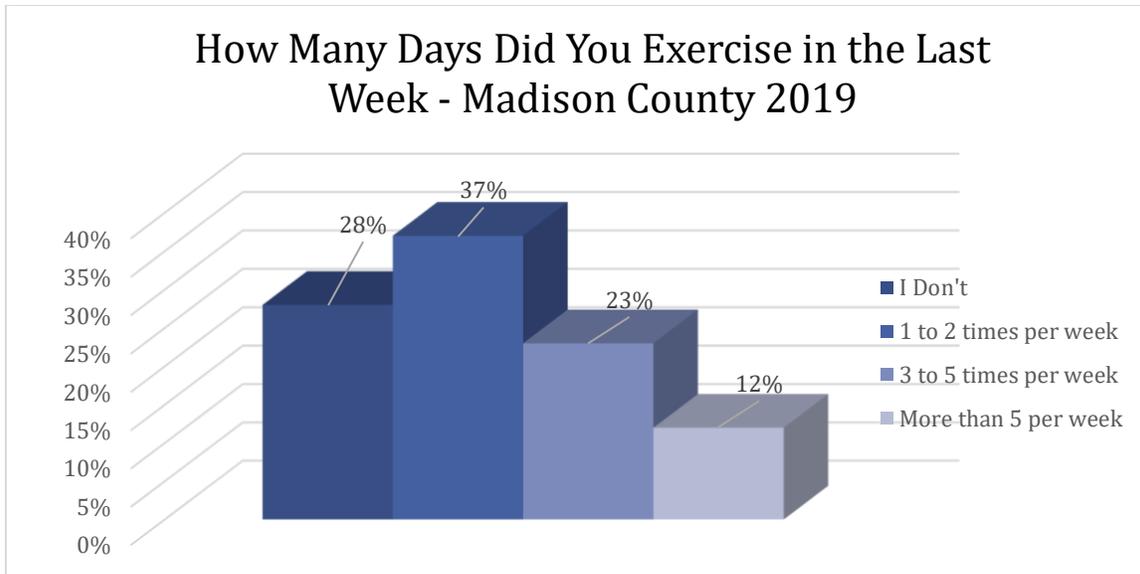
**Prostate screening** tends to be more likely for older White men.

**Colorectal screening** tends to be more likely for older people.

## Physical Exercise

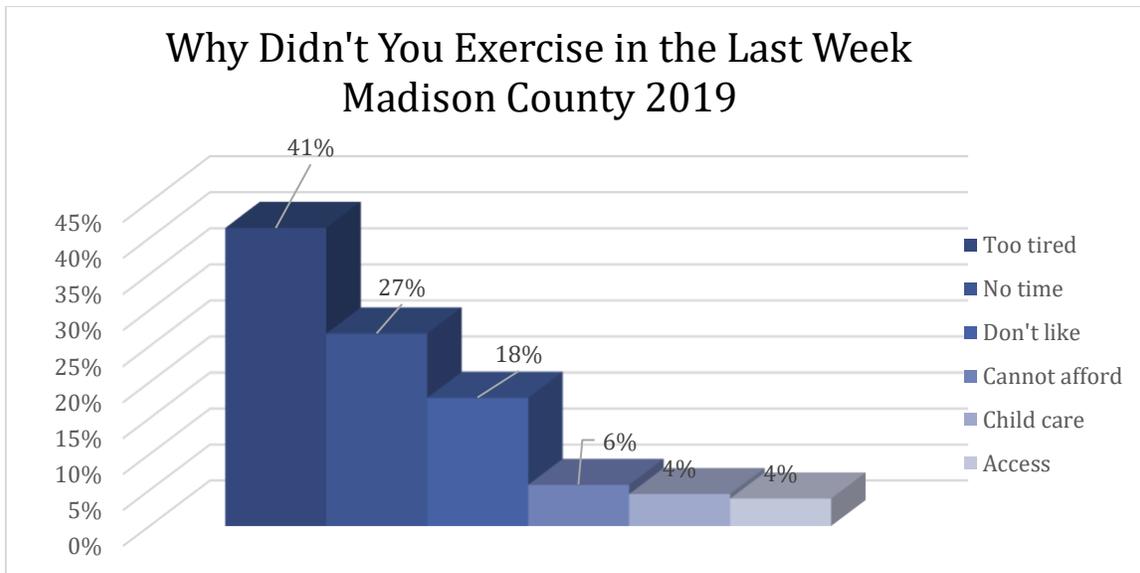
A healthy lifestyle, comprised of regular physical activity, has been shown to increase physical, mental, and emotional well-being.

Specifically, 28% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week.



Source: CHNA Survey

To find out why some residents do not exercise at all, a follow up question was asked. Similar to the 2016 CHNA, the most common reasons for not exercising are not having enough energy (41%), no time (27%) and a dislike of exercise (18%).



Source: CHNA Survey

## Comparison to 2016 CHNA

There has been a slight increase in those that do not engage in exercise in 2019 (28%) compared to data from the 2016 CHNA. In 2016, 26% of residents indicated they did not exercise at all.

## Social Determinants Related to Exercise

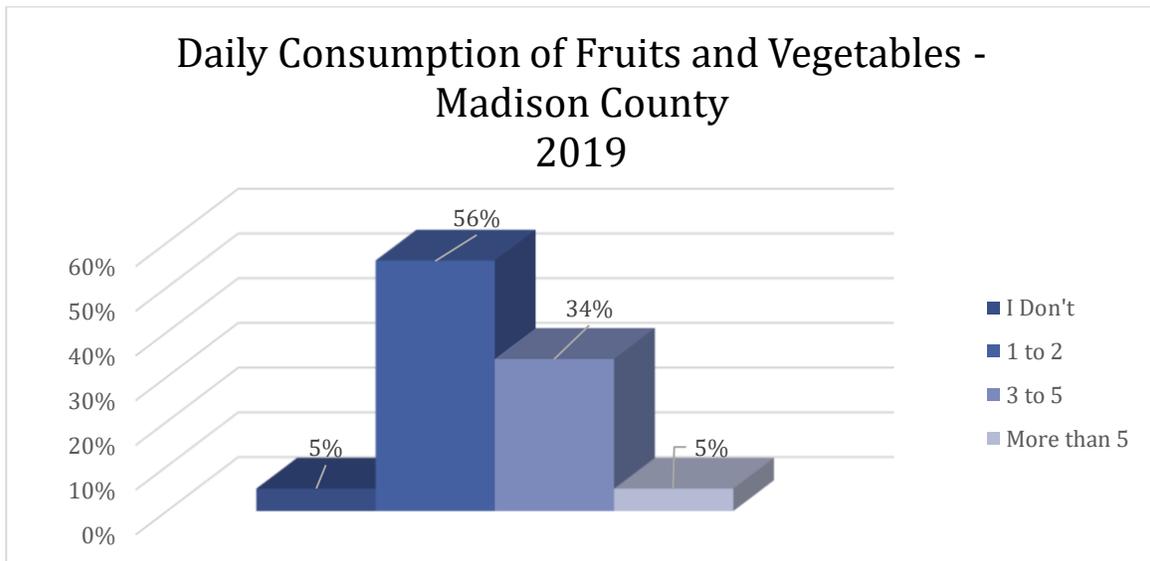
Multiple characteristics show significant relationships with frequency of exercise. The following relationships were found using correlational analyses:

**Frequency of exercise** tends to be more likely for younger people, men, and those with a higher income.

## Healthy Eating

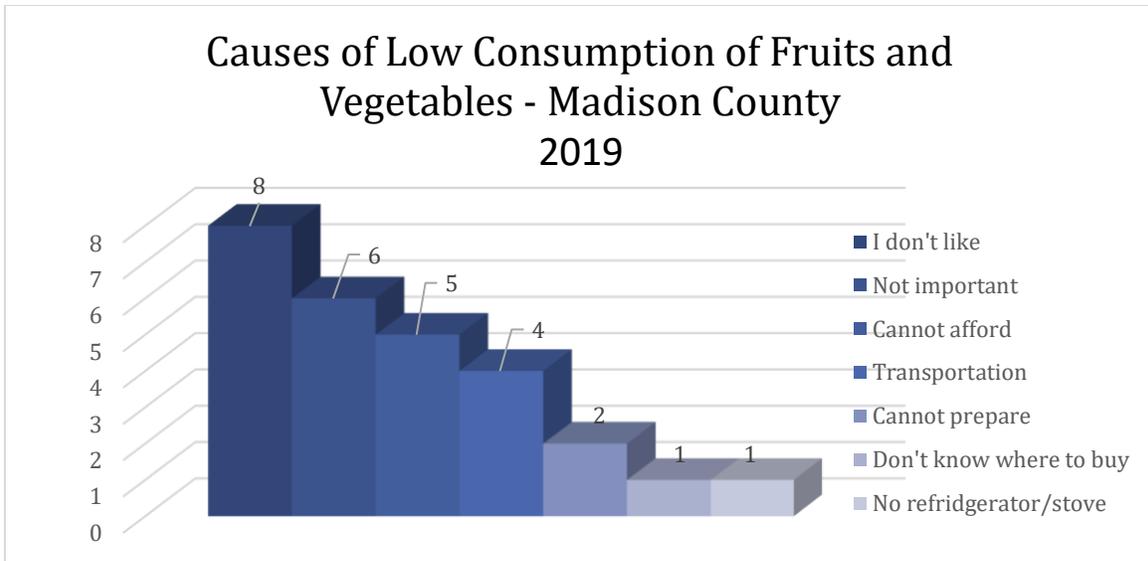
A healthy lifestyle, comprised of a proper diet, has been shown to increase physical, mental, and emotional well-being. Consequently, nutrition and diet are critical to preventative care.

Almost two-thirds (61%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 5%.



Source: CHNA Survey

Those individuals who indicated they do not eat any fruits or vegetables were asked a follow up question. The most common reason for failing to eat more fruits and vegetables not liking fruits and vegetables (8), followed by lack of importance (6). Note that these data are displayed in frequencies rather than percentages given the low number of responses.



Source: CHNA Survey

### Comparison to 2016 CHNA

Results of the 2019 CHNA show a slight improvement over 2016. In 2016, 62% of respondents indicated they had two or fewer servings of fruits and vegetables per day, compared to 61% in 2019.

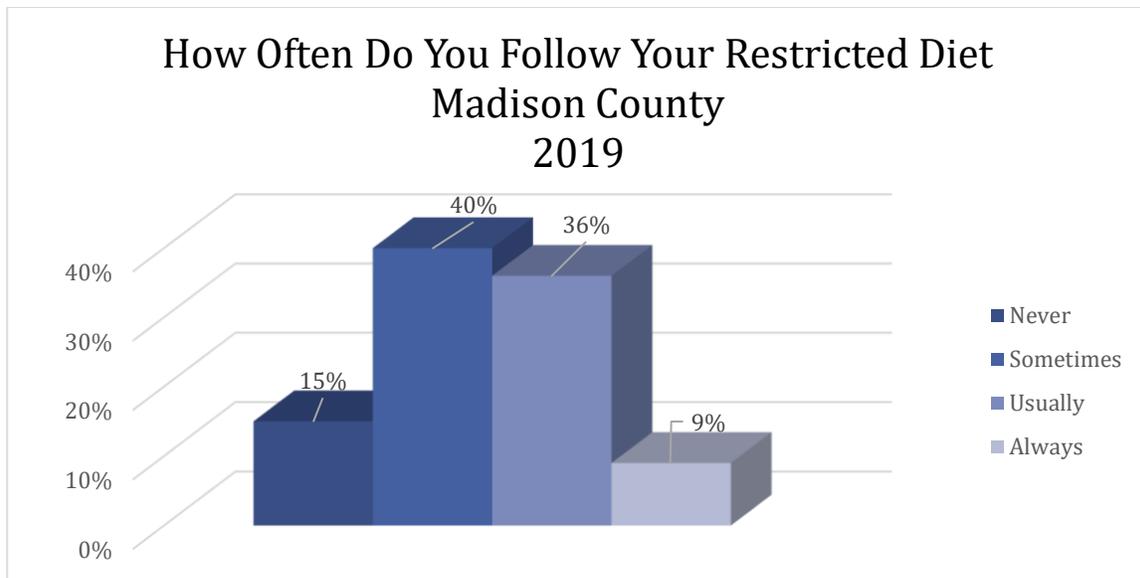
### Social Determinants Related to Healthy Eating

Multiple characteristics show significant relationships with healthy eating. The following relationships were found using correlational analyses:

**Consumption of fruits and vegetables** tends to be more likely for White people, Latino people, those with a higher level of education and those with higher income. Consumption of fruits and vegetables tends to be less likely for Black people.

### Restricted Diet

Respondents were also asked if they followed a restricted diet if recently diagnosed with a morbidity. Of respondents, 45% usually or always follow a restricted diet. **This is a new question to the 2019 CHNA.**



Source: CHNA Survey

## Morbidities related to following a restricted diet

Individuals with certain morbidities show significant relationships with following a restricted diet. The following relationships were found using correlational analyses:

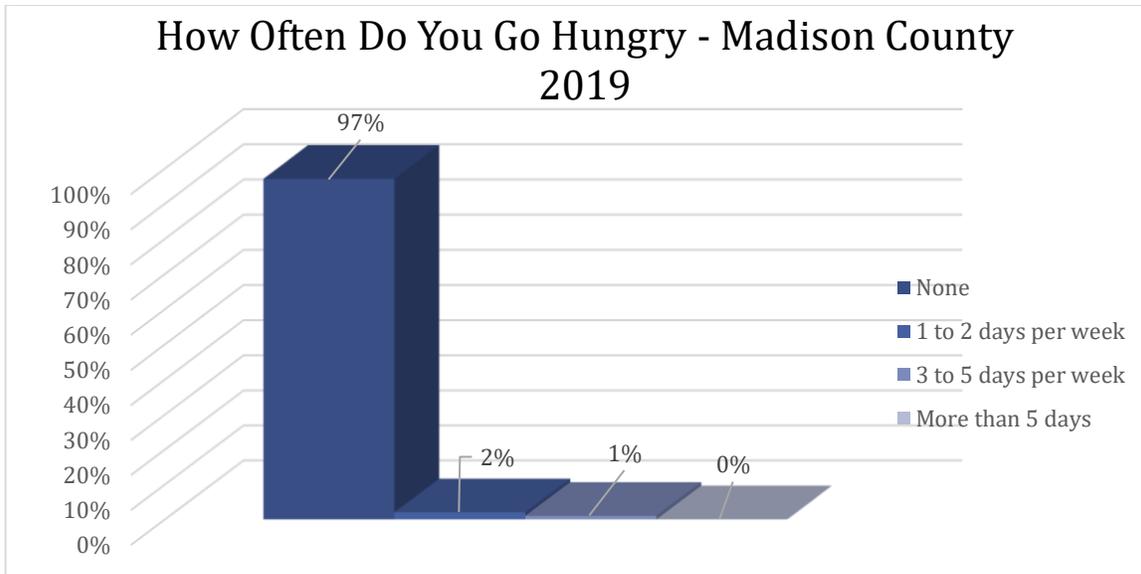
**Following a restricted diet** tends to be less likely for those diagnosed with being overweight.

## 2.3 Understanding Food Insecurity

*Importance of the measure:* It is essential that everyone has access to food and drink necessary for living healthy lives. Food insecurity exists when people don't have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs for a healthy life. **This is a new section to the 2019 CHNA.**

### Prevalence of Hunger

Respondents were asked, "How many days a week do you or your family members go hungry?" The vast majority of respondents (97%) indicated they do not go hungry.



Source: CHNA Survey

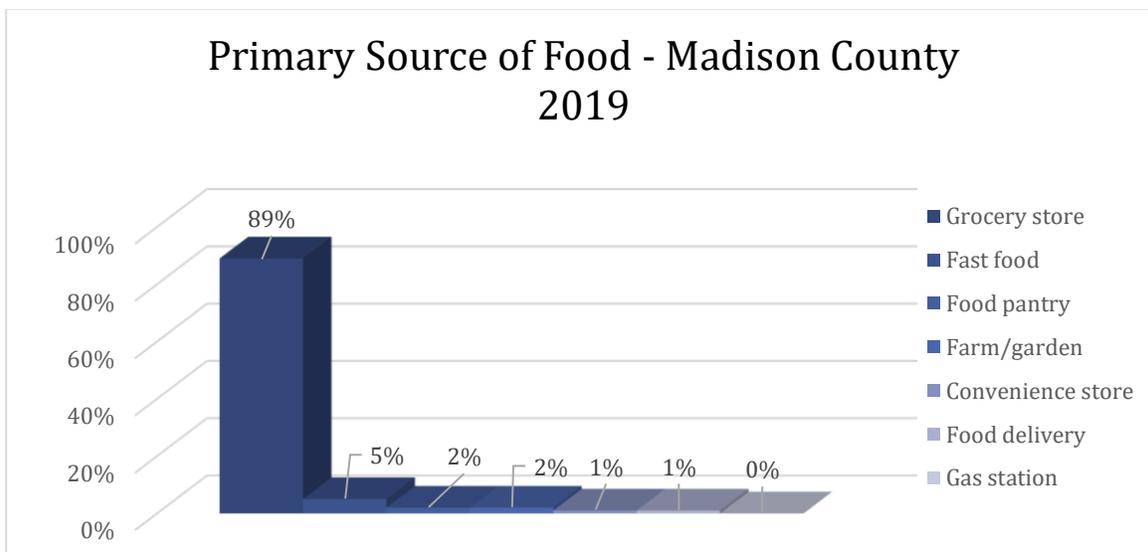
## Social Determinants Related to Prevalence of Hunger

Multiple characteristics show significant relationships with hunger. The following relationships were found using correlational analyses:

**Prevalence of Hunger** tends to be more likely for those with less income and those in an unstable (e.g., homeless) housing environment. White people are less likely to go hungry.

## Primary Source of Food

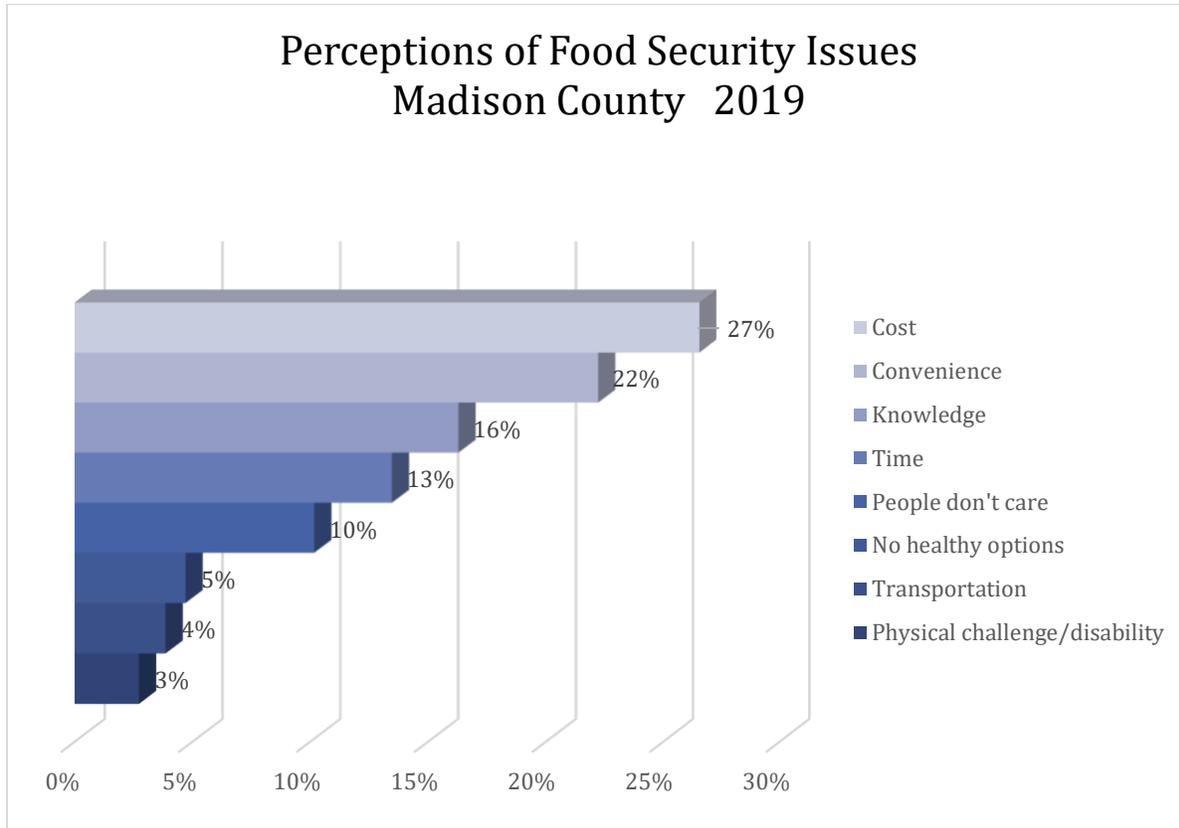
Respondents were asked to identify their primary source of food. It can be seen that the majority (89%) identified a grocery store. **This is a new section in the 2019 CHNA.**



Source: CHNA Survey

## Community Perceptions of Causes for Food Insecurity

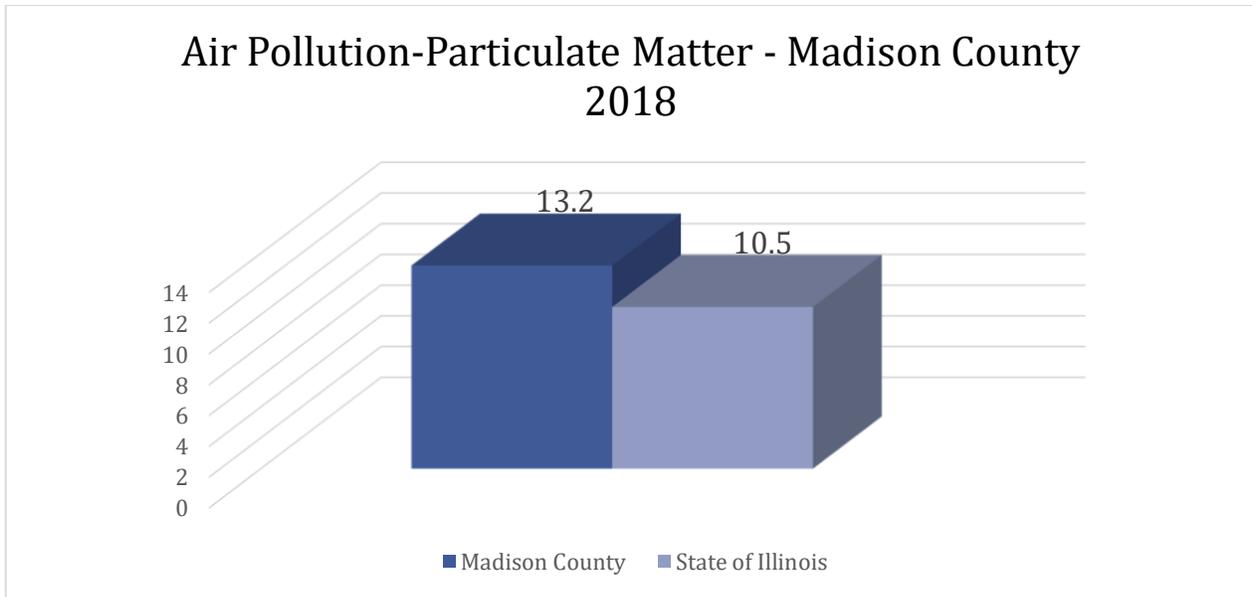
Respondents were asked to identify issues with food insecurity. The most prevalent answer was cost (27%), followed by convenience (22%). **This is a new section to the 2019 CHNA.**



Source: CHNA Survey

## 2.4 Physical Environment

**Importance of the measure:** According to the County Health Rankings, Air Pollution - Particulate Matter (APPM) is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases are emitted from power plants, manufacturing facilities and automobiles. The relationship between elevated air pollution, particularly fine particulate matter and ozone, and compromised health has been well documented. Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. The APPM for Madison County (13.2) is higher than the State average of 10.5.



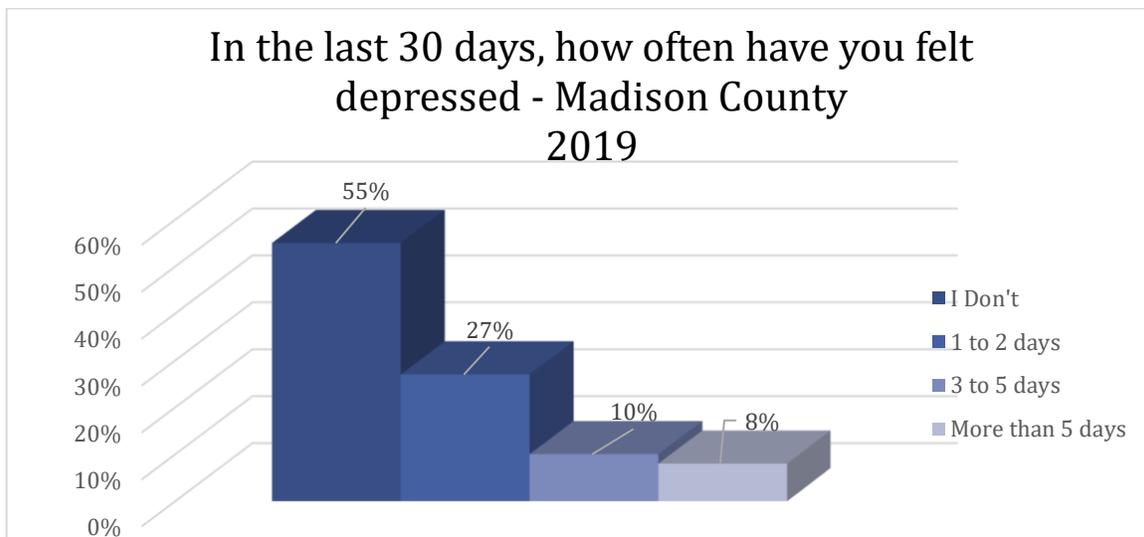
Source: County Health Rankings 2018 Data

## 2.5 Health Status

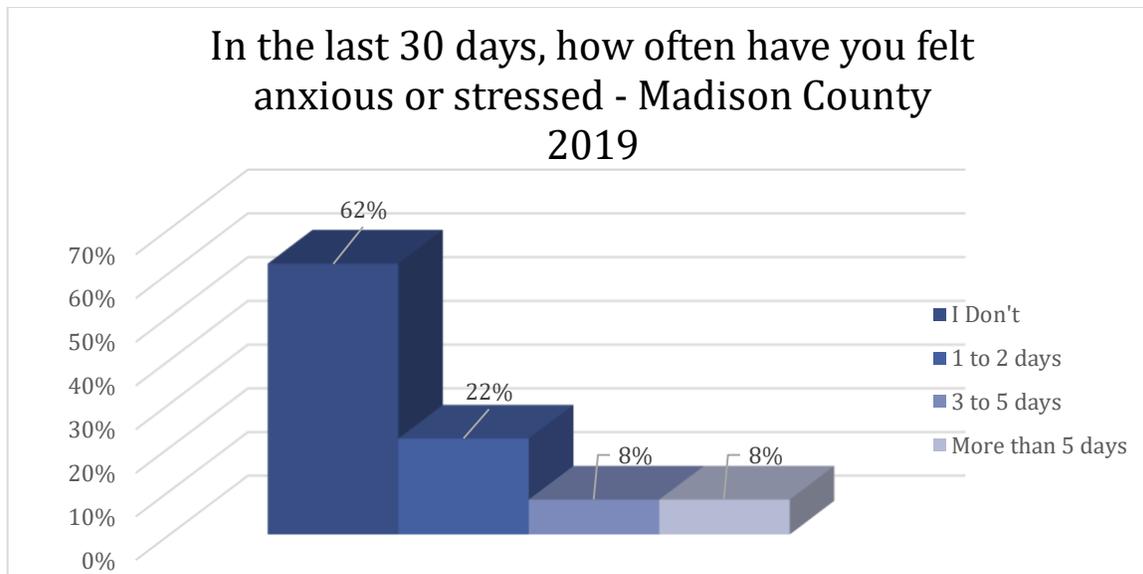
*Importance of the measure:* Self-perceptions of health can provide important insights to help manage population health. Not only do self-perceptions provide benchmarks regarding health status, but they can also provide insights into how accurately people perceive their own health.

### Mental Health

The survey asked respondents to indicate specific issues, such as depression and stress/anxiety. Of respondents, 55% indicated they did not feel depressed in the last 30 days and 62% indicated they did not feel anxious or stressed. **This is a new section to the 2019 CHNA.**



Source: CHNA Survey



Source: CHNA Survey

## Social Determinants Related to Behavioral Health

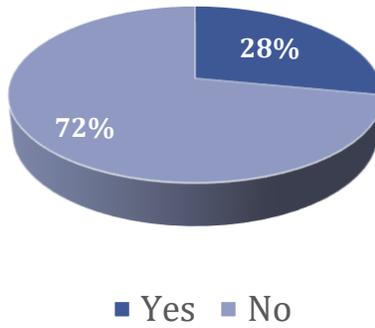
Multiple characteristics show significant relationships with behavioral health. The following relationships were found using correlational analyses:

**Depression** tends to be rated higher for younger people, women, Black people, those with less income and those in an unstable (e.g., homeless) housing environment. Depression tends to be rated lower by White people.

**Stress and anxiety** tends to be rated higher for younger people, Black people, those with less income and those in an unstable (e.g., homeless) housing environment.

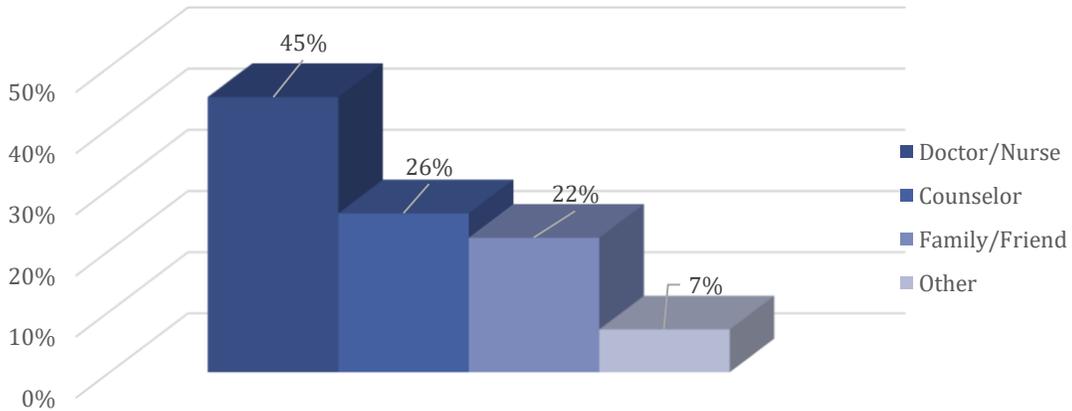
Respondents were also asked if they spoke with anyone about their mental health in the past year. Of respondents 28% indicated that they spoke to someone, the most common response was a doctor/nurse (45%).

### Have you talked to anyone about your mental health in the past year Madison County 2019



Source: CHNA Survey

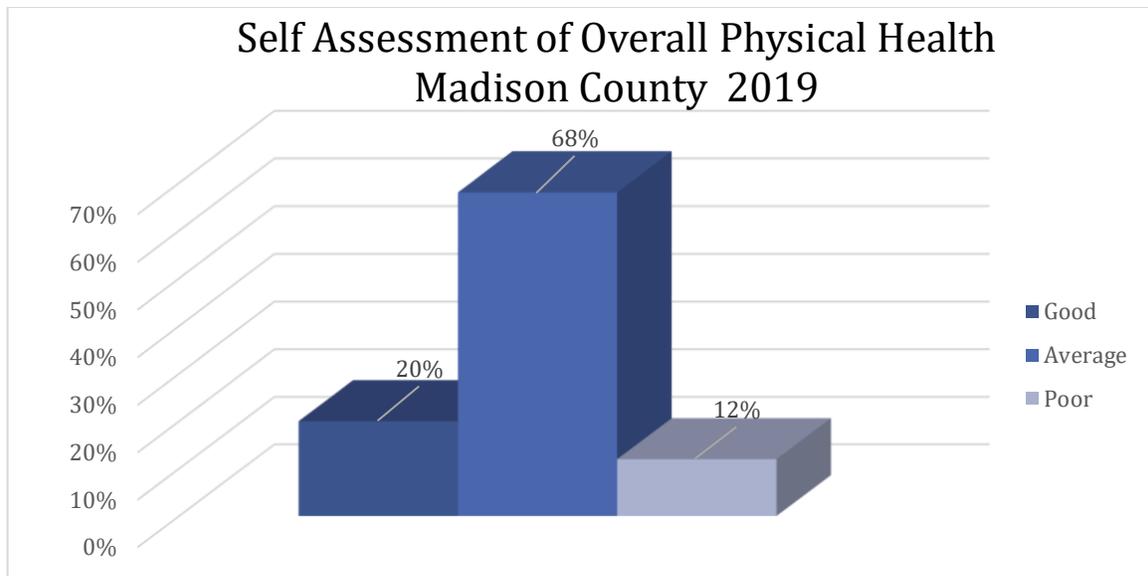
### Who have you talked to about your mental health Madison County 2019



Source: CHNA Survey

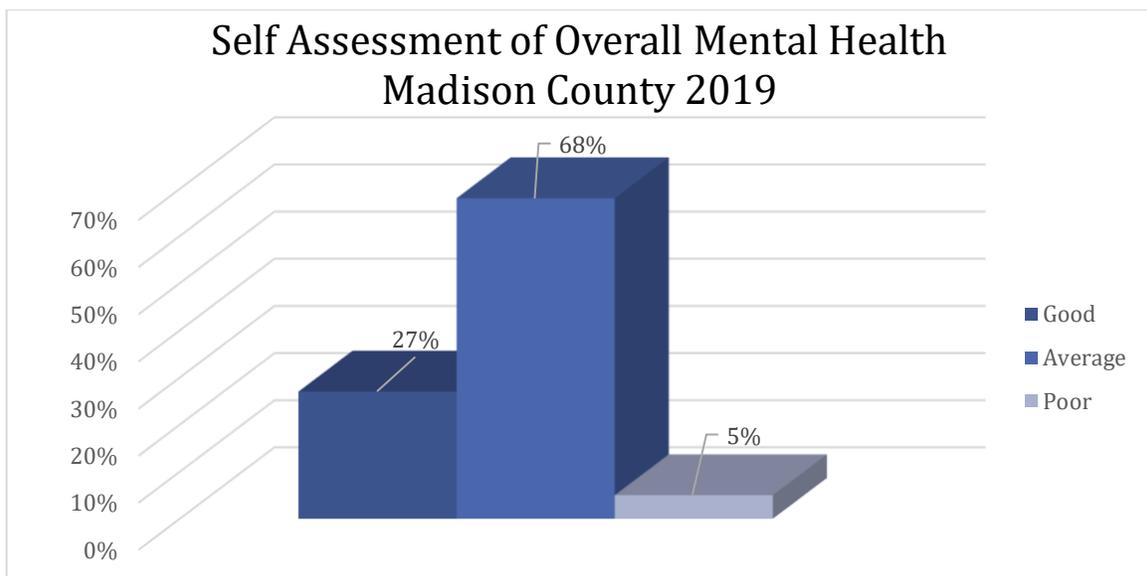
## Self-Perceptions of Overall Health

In regard to self-assessment of overall physical health, 12% of respondents report having poor overall physical health.



Source: CHNA Survey

In regard to self-assessment of overall mental health, 5% of respondents stated they have poor overall mental health.



Source: CHNA Survey

### Comparison to 2016 CHNA

With regard to physical health, more people see themselves in poor health in 2019 (12%) than 2016 (5%). With regard to mental health, more people see themselves in poor health in 2019 (5%) than 2016 (2%).

## Social Determinants Related to Self-Perceptions of Health

Multiple characteristics show significant relationships with self-perceptions of health. The following relationships were found using correlational analyses:

**Perceptions of physical health** tend to be higher for those with higher education and income.

**Perceptions of mental health** tend to be higher for older people and those with higher education and income.

## 2.6 Key Takeaways from Chapter 2

- ✓ SIGNIFICANT INCREASED UTILIZATION OF URGENT CARE AS A PRIMARY SOURCE OF HEALTHCARE.
- ✓ INCREASED NUMBER OF INDIVIDUALS WITH PRIVATE HEALTH INSURANCE.
- ✓ PROSTATE SCREENING IS RELATIVELY LOW COMPARED TO BREAST AND COLORECTAL SCREENING.
- ✓ THE MAJORITY OF PEOPLE EXERCISE LESS THAN 2 TIMES PER WEEK AND CONSUME 2 OR FEWER SERVINGS OF FRUITS/VEGETABLES PER DAY.
- ✓ APPROXIMATELY 1/3 OF RESPONDENTS EXPERIENCED DEPRESSION OR STRESS IN THE LAST 30 DAYS.

CHAPTER 3 OUTLINE

- 3.1 Tobacco Use
- 3.2 Drug and Alcohol Use
- 3.3 Overweight and Obesity
- 3.4 Predictors of Heart Disease
- 3.5 Key Takeaways from Chapter 3

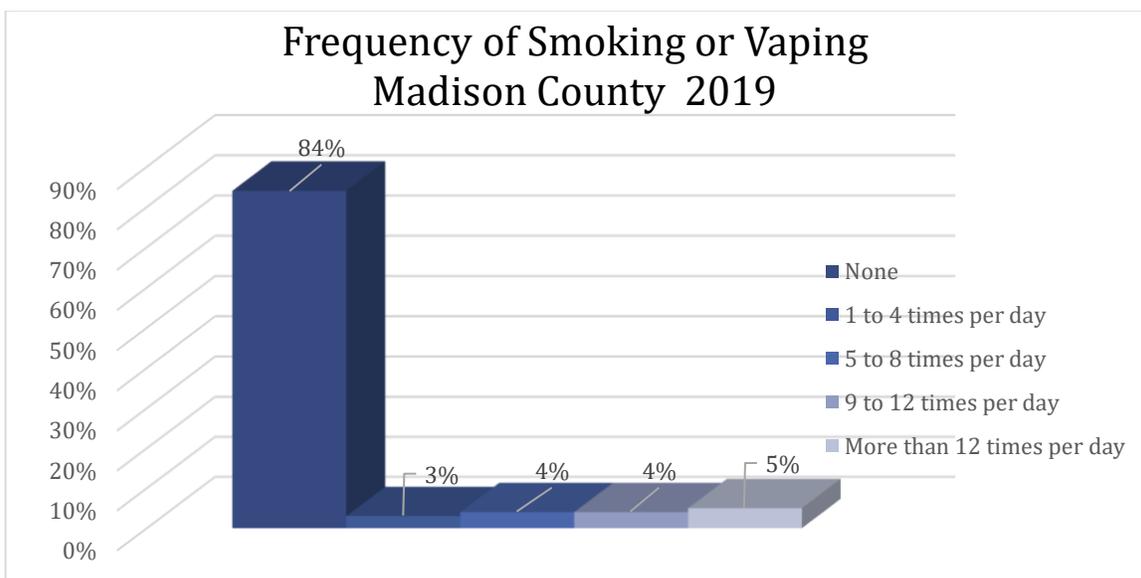
# CHAPTER 3

## SYMPTOMS AND PREDICTORS

### 3.1 Tobacco Use

*Importance of the measure:* In order to appropriately allocate healthcare resources, a thorough analysis of the leading indicators regarding morbidity and disease must be conducted. In this way, healthcare organizations can target affected populations more effectively. Research suggests tobacco use facilitates a wide variety of adverse medical conditions.

CHNA survey data show 84% of respondents do not smoke and only 5% state they smoke or vape more than 12 times per day.



Source: CHNA Survey

## Comparison to 2016 CHNA

Results from 2019 show an improvement over 2016. Specifically, in 2016, 82% of respondents indicated they did not smoke or vape. In 2019, 84% indicated they did not smoke or vape.

## Social Determinants Related to Smoking or Vaping

Multiple characteristics show significant relationships with smoking or vaping. The following relationships were found using correlational analyses:

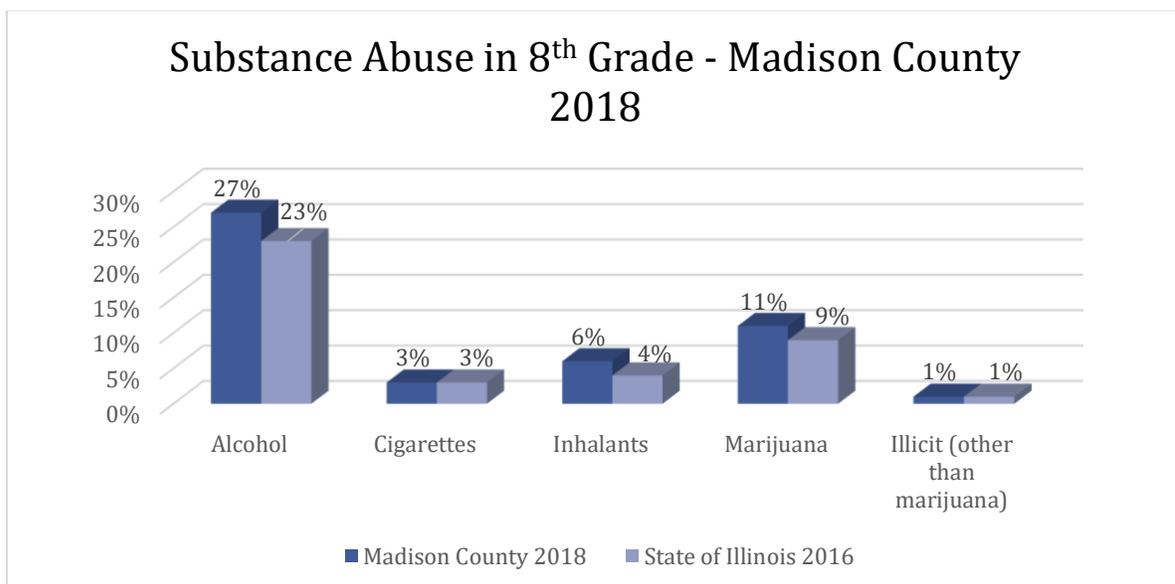
**Smoking/vaping** tends to be rated higher by younger people, those with less education, those with a lower income, and those in an unstable (e.g., homeless) housing environment.

## 3.2 Drug and Alcohol Abuse

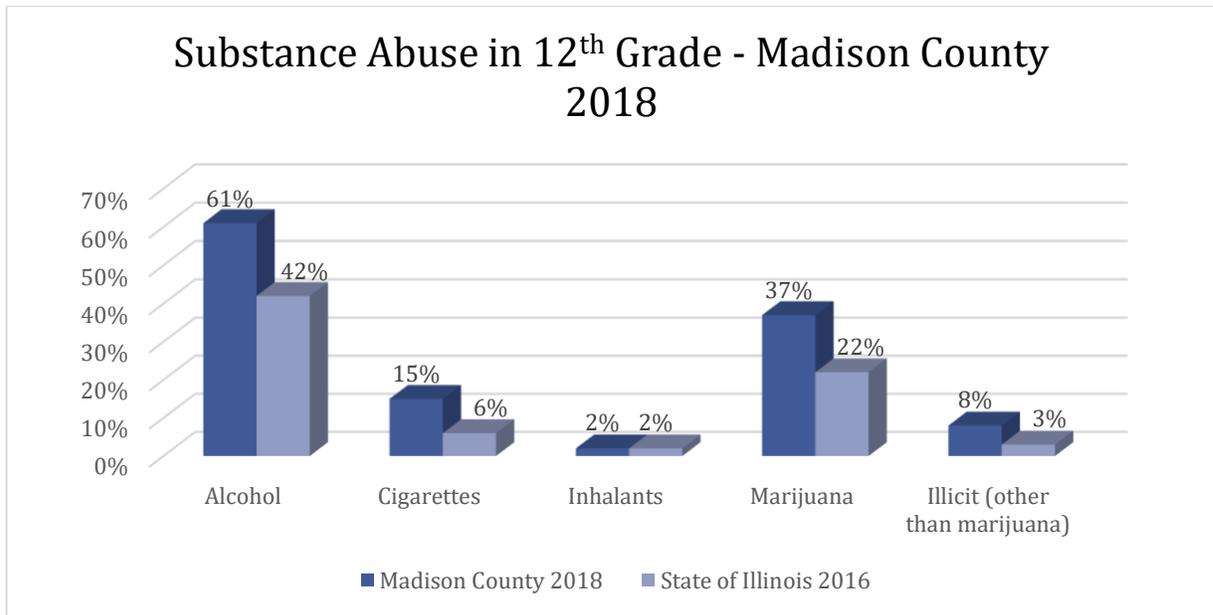
*Importance of the measure:* Alcohol and drugs impair decision-making, often leading to adverse consequences and outcomes. Research suggests that alcohol is a gateway drug for youth, leading to increased usage of controlled substances in adult years. Accordingly, the substance abuse values and behaviors of high school students is a leading indicator of adult substance abuse in later years.

### Youth Substance Abuse

Data from the 2018 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Madison County is at or above State averages in all categories among 8<sup>th</sup> graders. Among 12<sup>th</sup> graders, Madison County is at or above State averages in all categories.



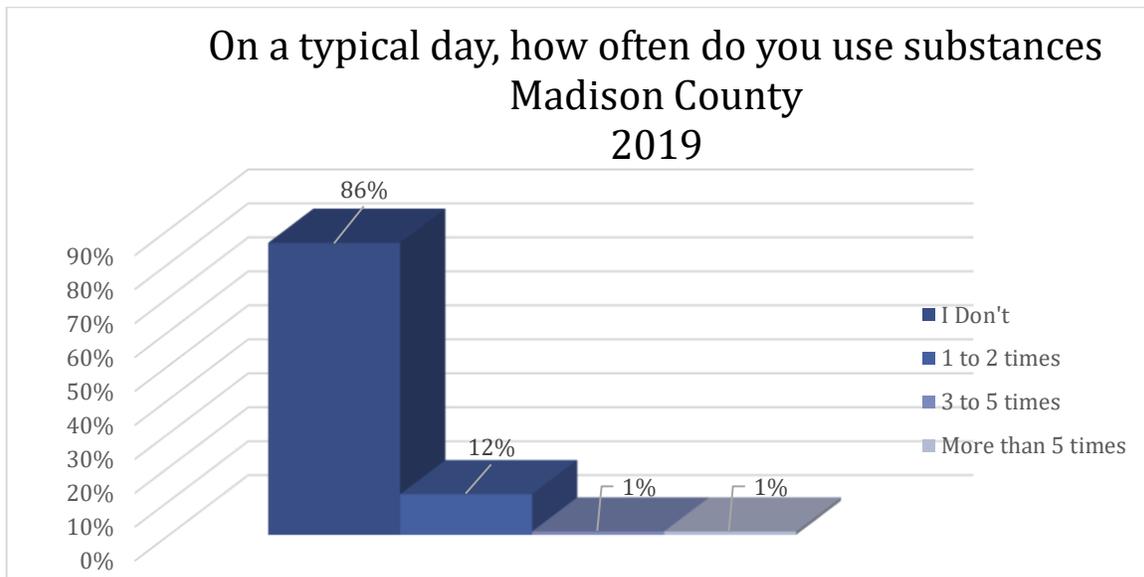
Source: University of Illinois Center for Prevention Research and Development



Source: University of Illinois Center for Prevention Research and Development

## Adult Substance Abuse

Survey respondents were asked “On a typical DAY, how often to do you use substances (either legal or illegal) to make yourself feel better?” Note given the increase in opioid abuse, use of legal drugs was included in the question. Of respondents, 86% indicated they do not use substances to make themselves feel better. **This is a new section to the 2019 CHNA.**



Source: CHNA Survey

## Social Determinants Related to Substance Abuse

Multiple characteristics show significant relationships with substance abuse. The following relationships were found using correlational analyses:

**Use of substances** tends to be rated higher by men.

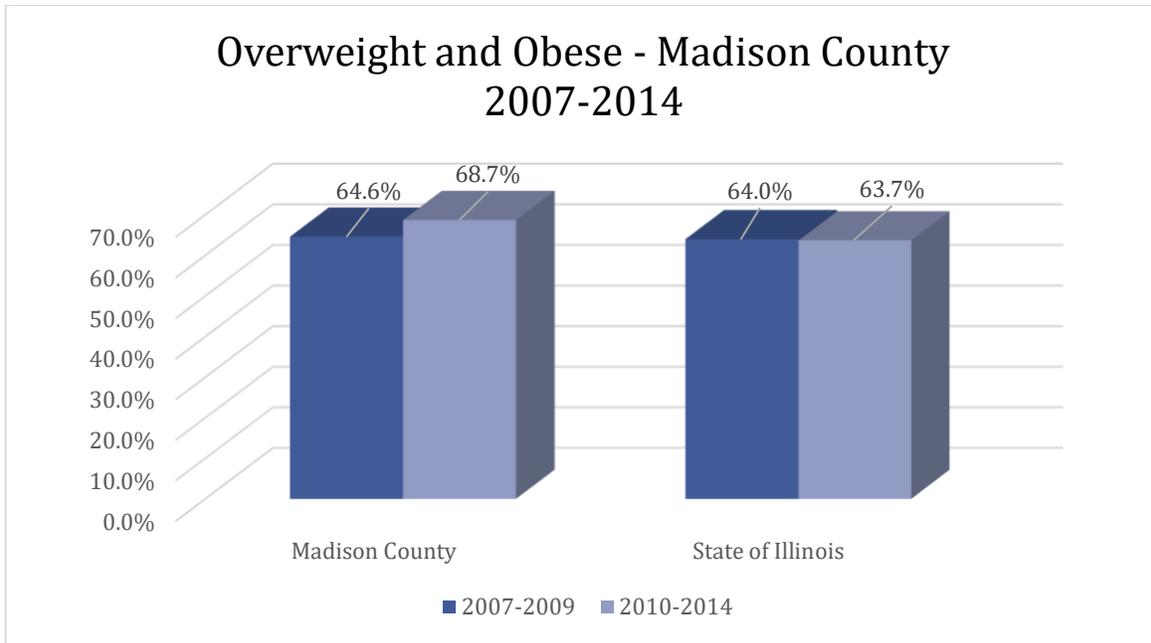
### 3.3 Overweight and Obesity

*Importance of the measure:* Individuals who are overweight and obese place greater stress on their internal organs, thus increasing the propensity to utilize health services. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Madison County. The US Surgeon General has characterized obesity as “the fastest-growing, most threatening disease in America today.” According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion, ranking Illinois 6<sup>th</sup> in the nation for obesity-attributed medical costs.

With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children.

With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

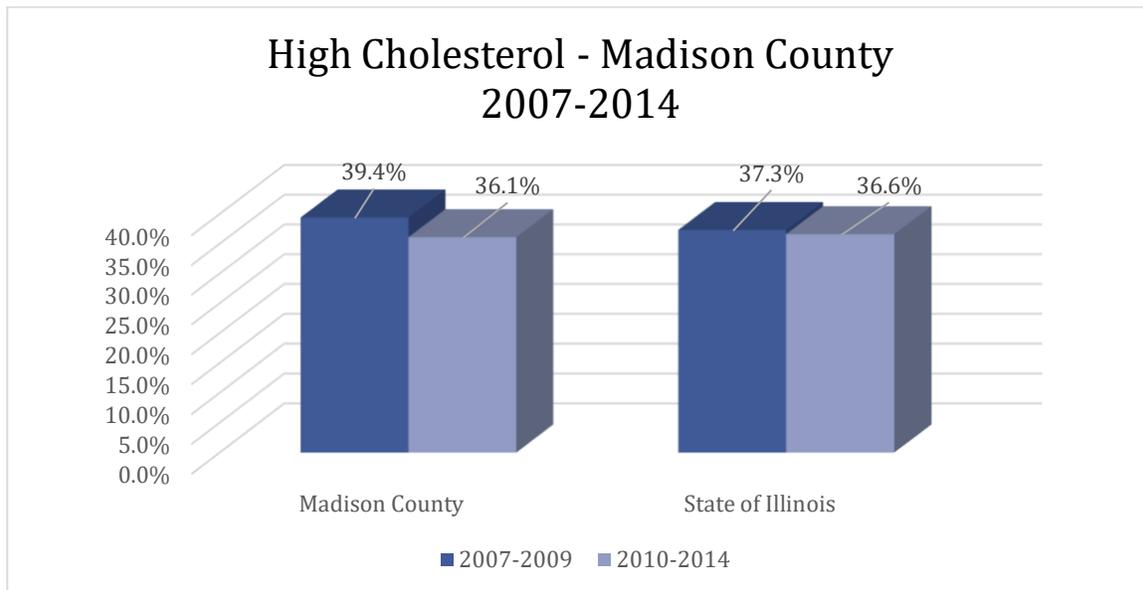
In Madison County, the number of people diagnosed with obesity and being overweight has increased from 2007-2009 to 2010-2014. Note specifically that the percentage of obese and overweight people has increased from 64.6% to 68.7%. Overweight and obesity rates in Illinois have decreased from 2009 (64.0%) to 2014 (63.7%). Note that data have not been updated by the Illinois Department of Public Health. However, note in the 2019 CHNA survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.



Source: Illinois Behavioral Risk Factor Surveillance System

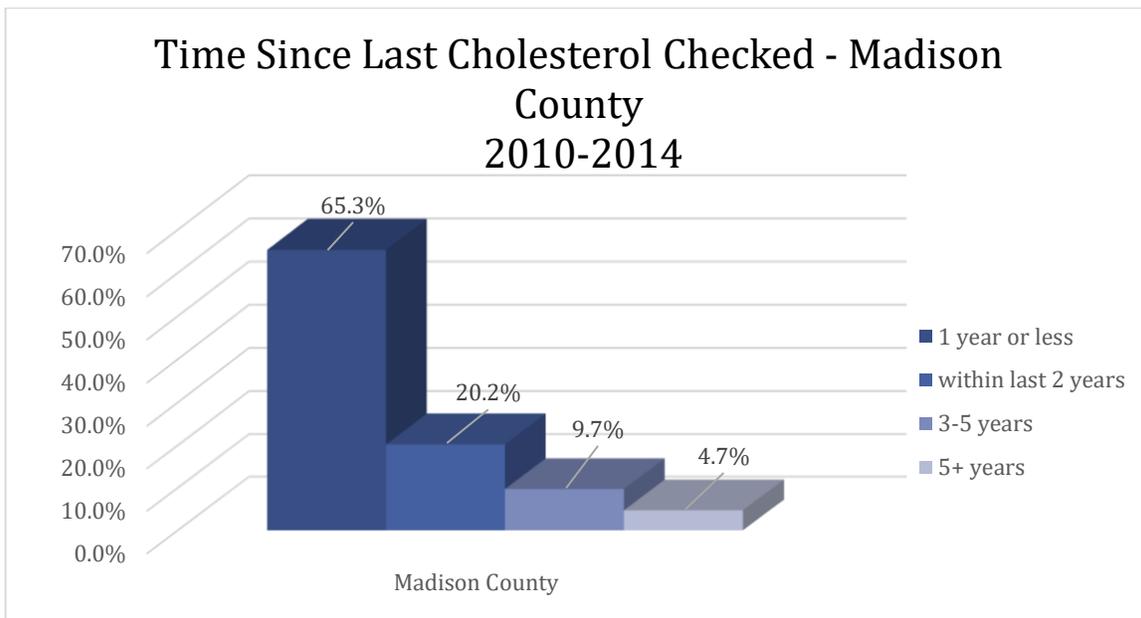
### 3.4 Predictors of Heart Disease

The percentage of residents who report they have high cholesterol is slightly lower in Madison County (36.1%) than the State of Illinois average of 36.6%. Note that data have not been updated by the Illinois Department of Public Health.



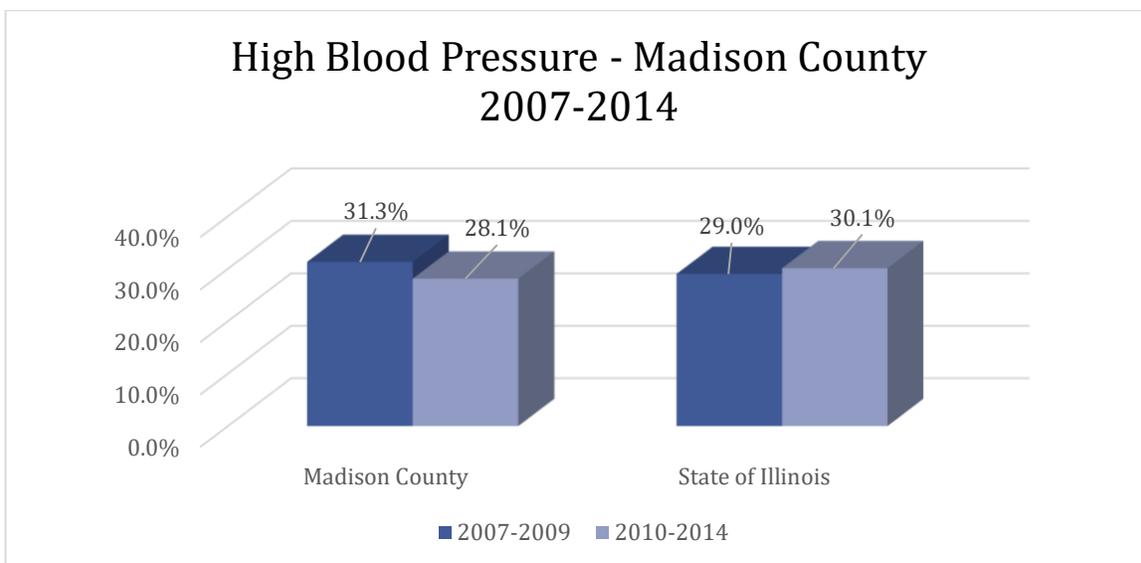
Source: Illinois Behavioral Risk Factor Surveillance System

Most residents of Madison County report having their cholesterol checked recently. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

With regard to high blood pressure, Madison County has a lower percentage of residents with high blood pressure than residents in the State of Illinois as a whole. The percentage of Madison County residents reporting they have high blood pressure in 2014 decreased from 31.3% to 28.1%. Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

## 3.5 Key Takeaways from Chapter 3

- ✓ **SUBSTANCE ABUSE AMONG 8<sup>TH</sup> AND 12<sup>TH</sup> GRADERS IS AT OR ABOVE STATE AVERAGES.**
- ✓ **THE PERCENTAGE OF PEOPLE WHO ARE OVERWEIGHT AND OBESE HAS INCREASED IN MADISON COUNTY.**

**CHAPTER 4 OUTLINE**

- 4.1 Self-Identified Health Conditions
- 4.2 Healthy Babies
- 4.3 Cardiovascular
- 4.4. Respiratory
- 4.5 Cancer
- 4.6 Diabetes
- 4.7 Infectious Disease
- 4.8 Injuries
- 4.9 Mortality
- 4.10 Key Takeaways from Chapter 4

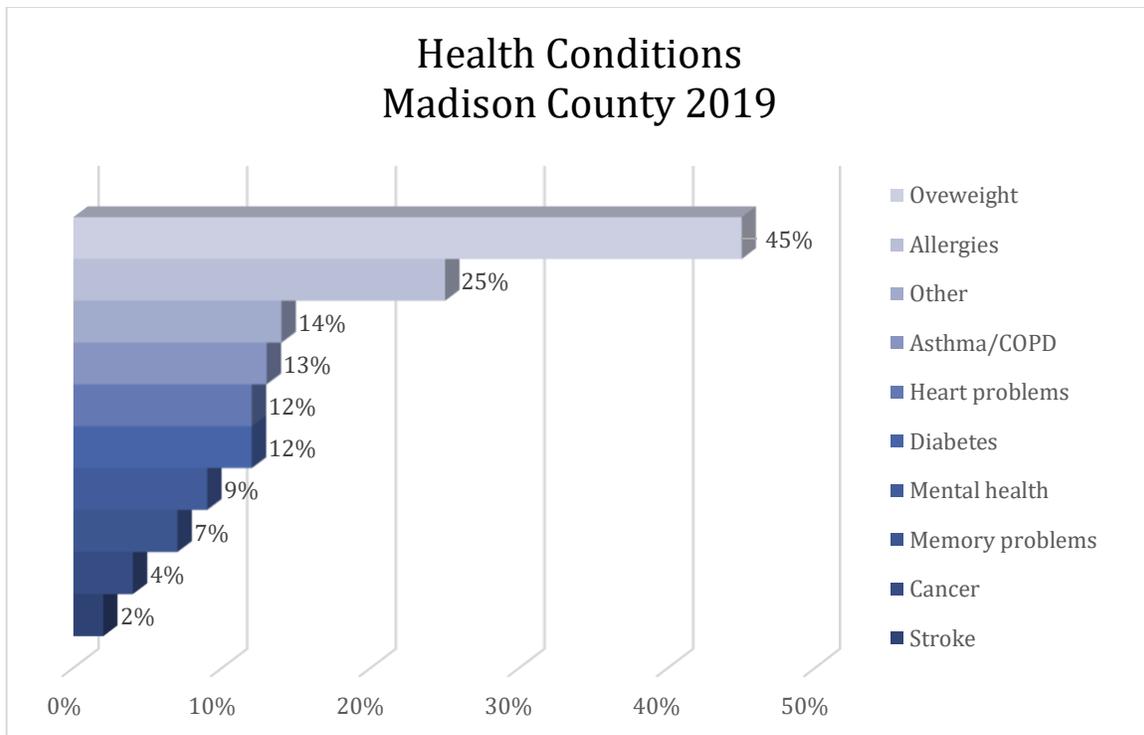
# CHAPTER 4

## MORBIDITY AND MORTALITY

Given the lack of recent disease/morbidity data from existing secondary data sources, much of the data used in this chapter was manually gathered from Madison County hospitals using COMP data. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.

### 4.1 Self-Identified Health Conditions

Survey respondents were asked to self-identify any health conditions. Note that being overweight (45%) was significantly higher than any other health conditions. This percentage is significantly lower than secondary sources. Specifically, BRFSS data indicate that roughly two-thirds of the population is overweight or obese. Most other self-identified morbidities reflected existing sources of secondary data accurately (e.g., diabetes 12% and cancer 4%).



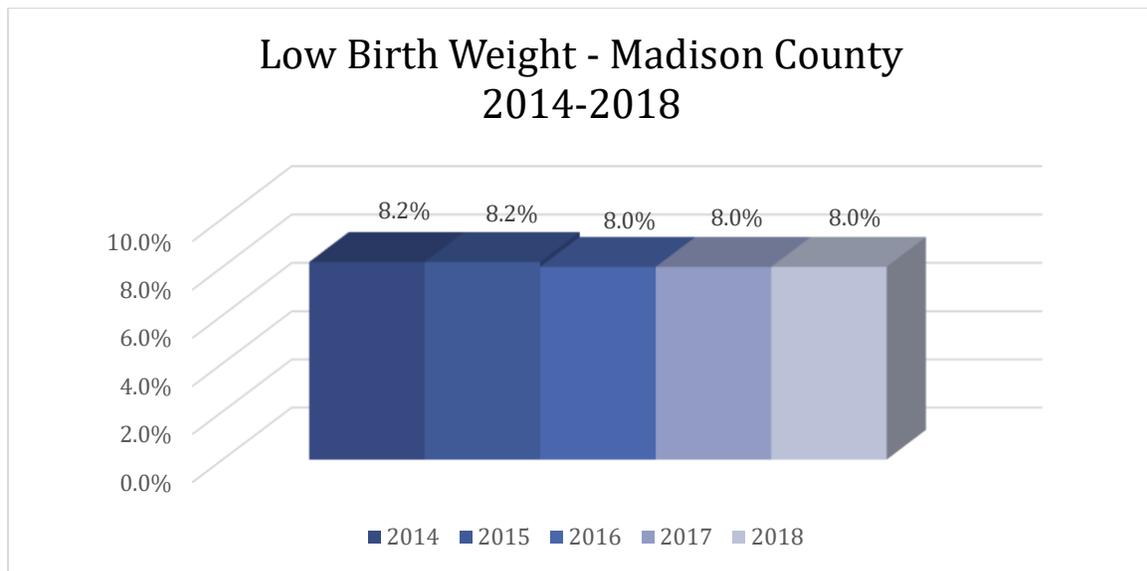
Source: CHNA Survey

## 4.2 Healthy Babies

*Importance of the measure:* Regular prenatal care is a vital aspect in producing healthy babies and children. Screening and treatment for medical conditions as well as identification and interventions for behavioral risk factors associated with poor birth outcomes are important aspects of healthy babies. Research suggests that women who receive adequate prenatal care are more likely to have better birth outcomes, such as full term and normal weight babies.

### Low Birth Weight Rates

Low birth weight rate is defined as the percentage of infants born below 2,500 grams or 5.5 pounds. Very low birth weight rate is defined as the percentage of infants born below 1,500 grams or 3.3 pounds. In contrast, the average newborn weighs about 7 pounds. The percentage of babies born with low birth weight in Madison County slightly decreased from 2014 (8.2%) to 2018 (8.0%).



Source: <http://www.countyhealthrankings.org>

## 4.3 Cardiovascular Disease

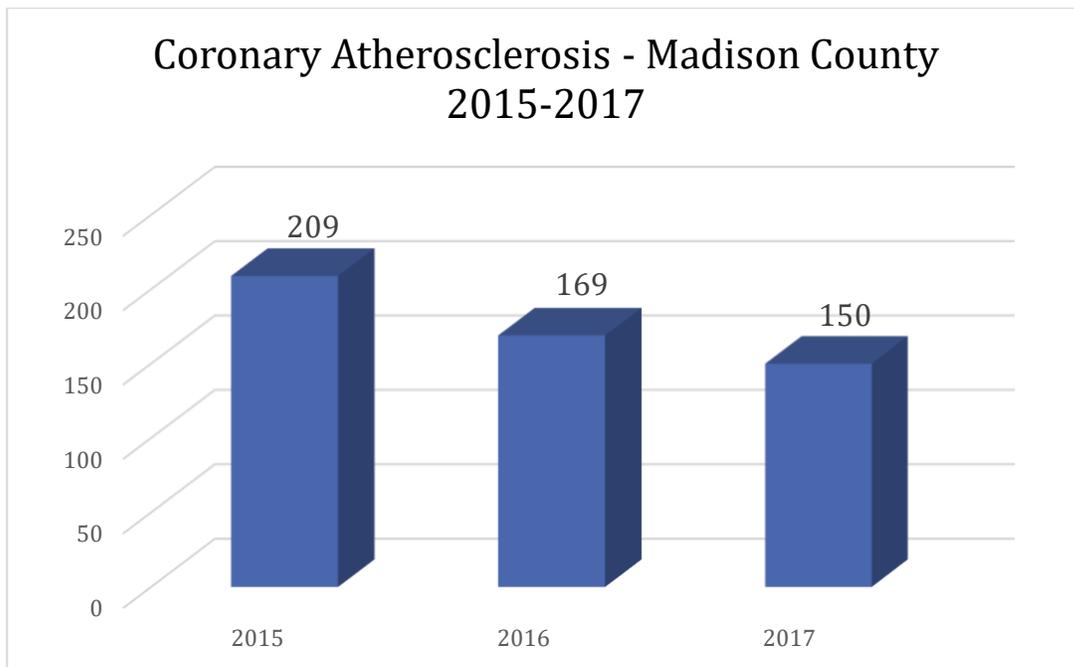
*Importance of the measure:* Cardiovascular disease is defined as all diseases of the heart and blood vessels, including ischemic (also known as coronary) heart disease, cerebrovascular disease, congestive heart failure, hypertensive disease, and atherosclerosis.

### Coronary Atherosclerosis

Coronary Atherosclerosis, sometimes-called hardening of the arteries, can slowly narrow and harden the arteries throughout the body. When atherosclerosis affects the arteries of the heart, it is called coronary artery disease.

Coronary artery disease is a leading cause of death for Americans. Most of these deaths are from heart attacks caused by sudden blood clots in the heart's arteries.

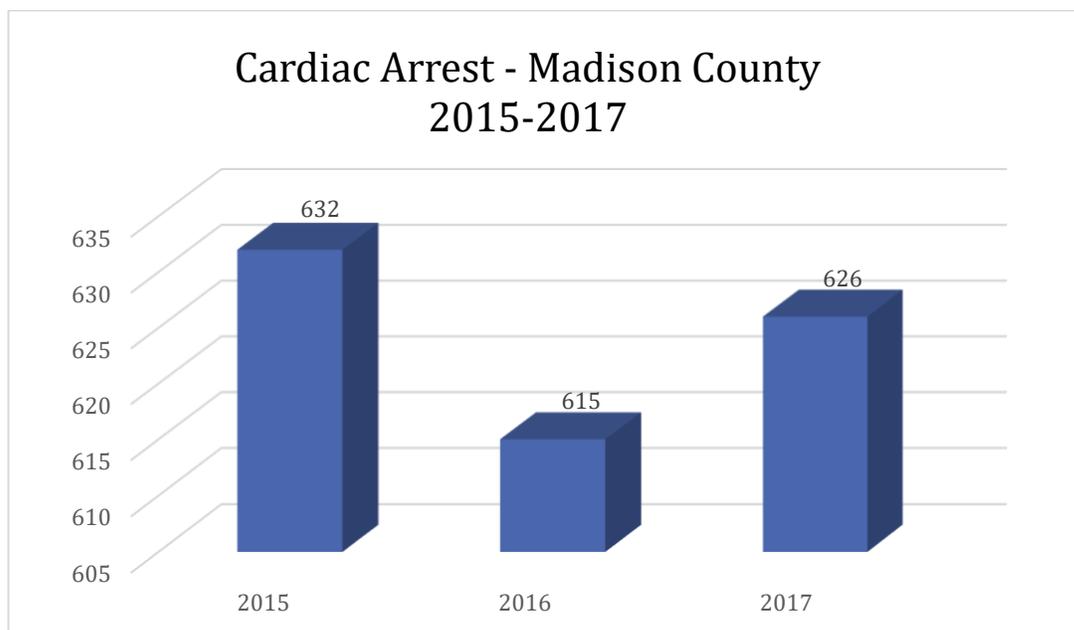
The number of cases of coronary atherosclerosis complication at Madison County area hospitals has decreased between FY 2015 (209 cases) and FY 2017 (150 cases). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



Source: COMPdata 2017

## Cardiac Arrest

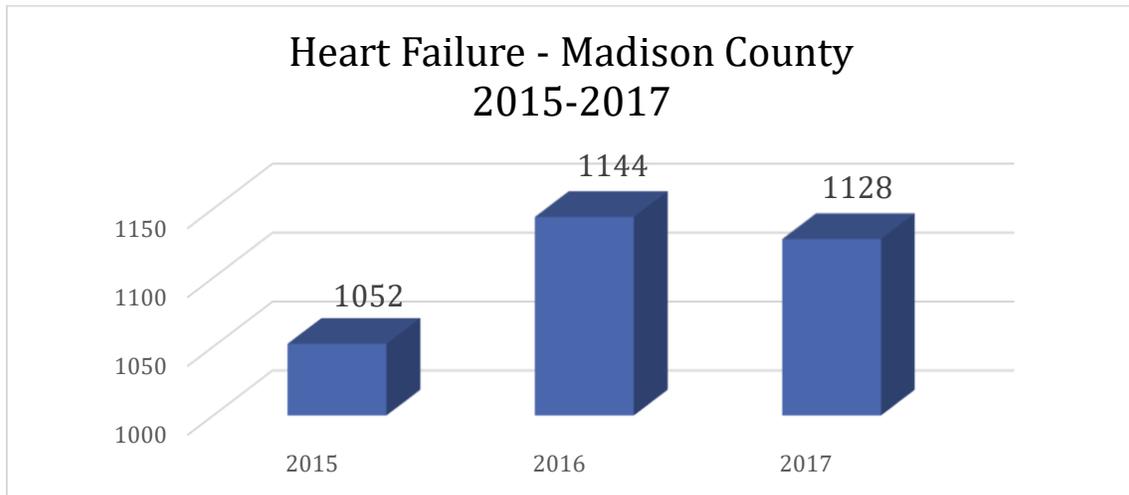
Cases of dysrhythmia and cardiac arrest at Madison County area hospitals decreased by 17 cases between FY15 and FY16. However, cases of dysrhythmia and cardiac arrest increased by 11 cases between FY16 and FY17. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

## Heart Failure

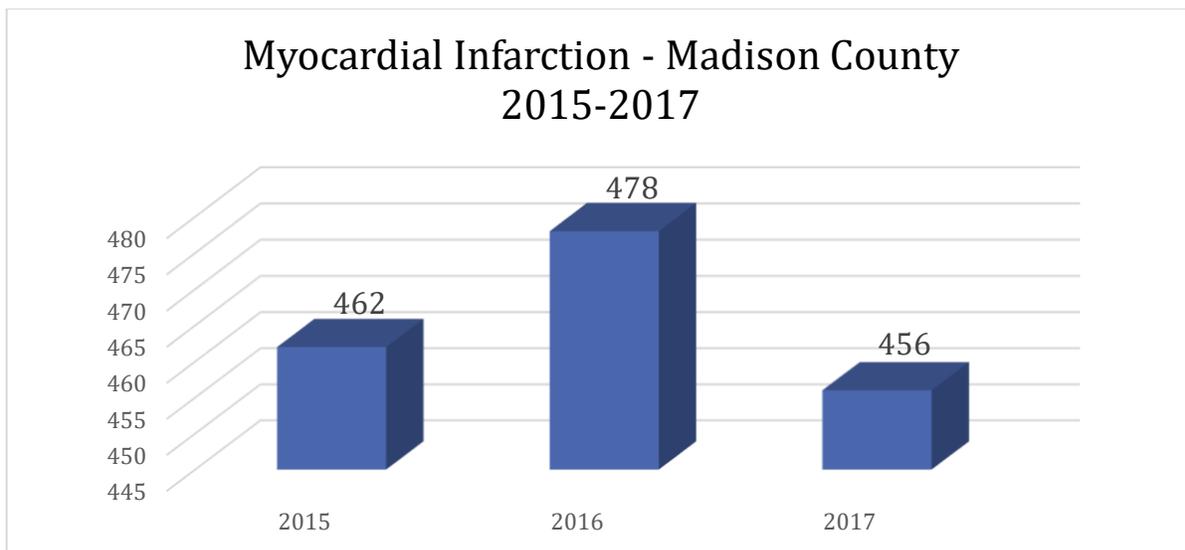
The number of treated cases of heart failure at Madison County area hospitals increased. In FY 2015, 1052 cases were reported, and in FY 2016, there were 1144 cases reported. There was a slight decline in the number of heart failure cases (1128) in FY 2017. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

## Myocardial Infarction

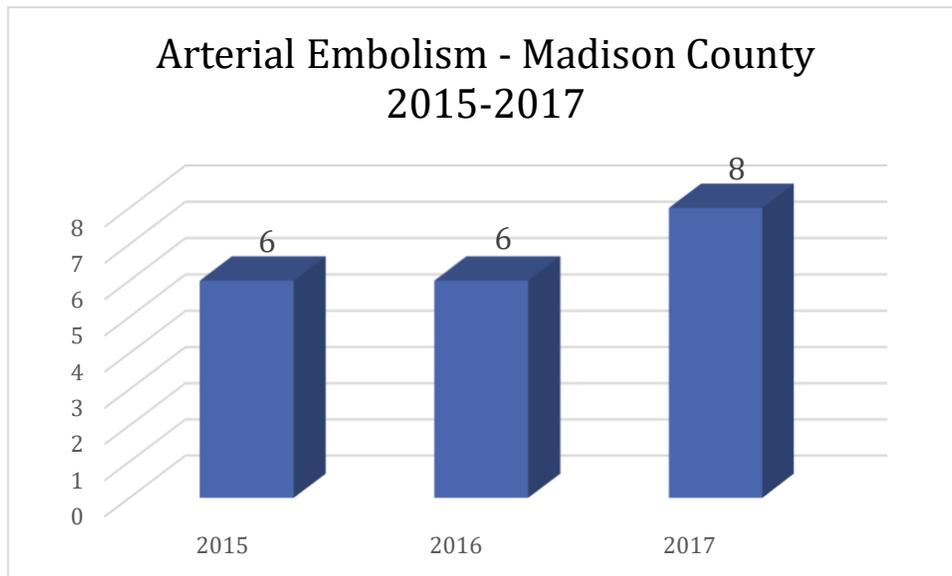
The number of treated cases of myocardial infarction at area hospitals in Madison County increased from 462 in 2015 to 478 in 2016. The number of cases of myocardial infarction then decreased to 456 in 2017. Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

## Arterial Embolism

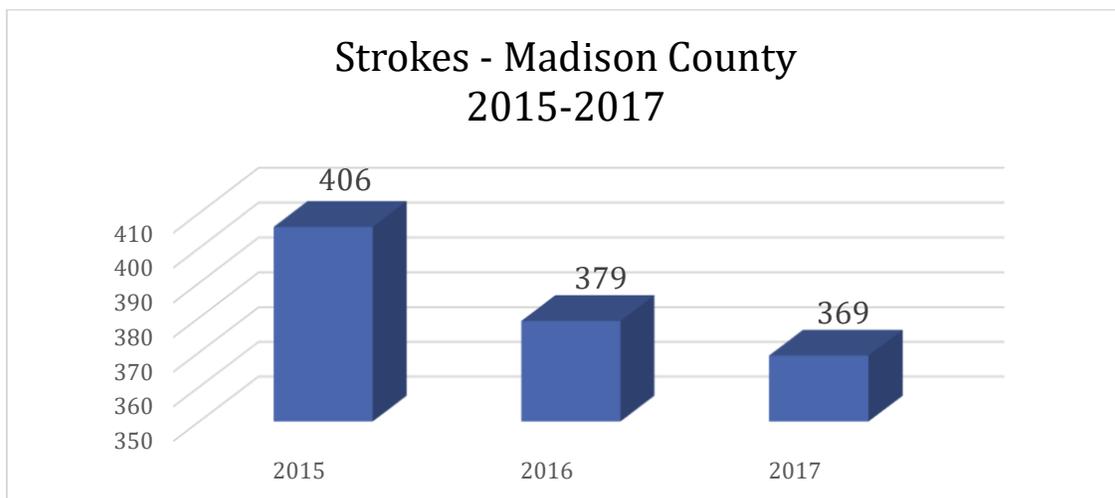
The number of treated cases of arterial embolism at Madison County area hospitals slightly inclined between FY 2015 (6 cases) and FY 2017 (8 cases). Note that hospital-level data only show hospital admissions.



Source: COMPdata 2017

## Strokes

The number of treated cases of stroke at Madison County area hospitals decreased by 37 cases between FY 2015 and FY 2017. Note that hospital-level data only show hospital admissions and do not reflect outpatient treatments and procedures.



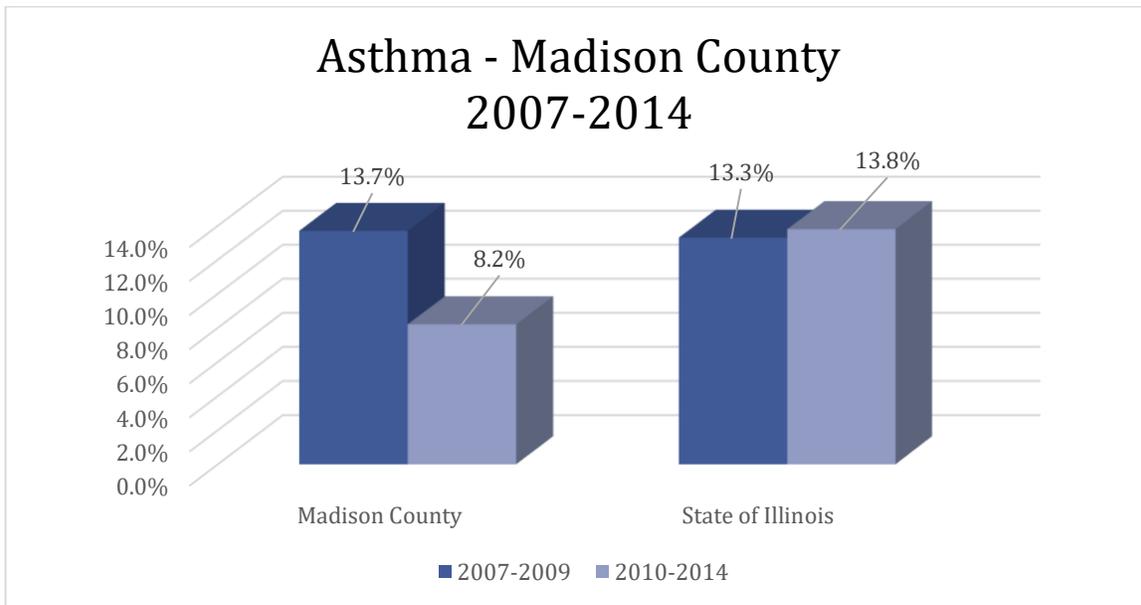
Source: COMPdata 2017

## 4.4 Respiratory

*Importance of the measure:* Disease of the respiratory system includes acute upper respiratory infections such as influenza, pneumonia, bronchitis, asthma, emphysema, and Chronic Obstructive Pulmonary Disease (COPD). These conditions are characterized by breathlessness, wheezing, chronic coughing, frequent respiratory infections, and chest tightness. Many respiratory conditions can be successfully controlled with medical supervision and treatment. However, children and adults who do not have access to adequate medical care are likely to experience repeated serious episodes, trips to the emergency room and absences from school and work. Hospitalization rates illustrate the worst episodes of respiratory diseases and are a proxy measure for inadequate treatment.

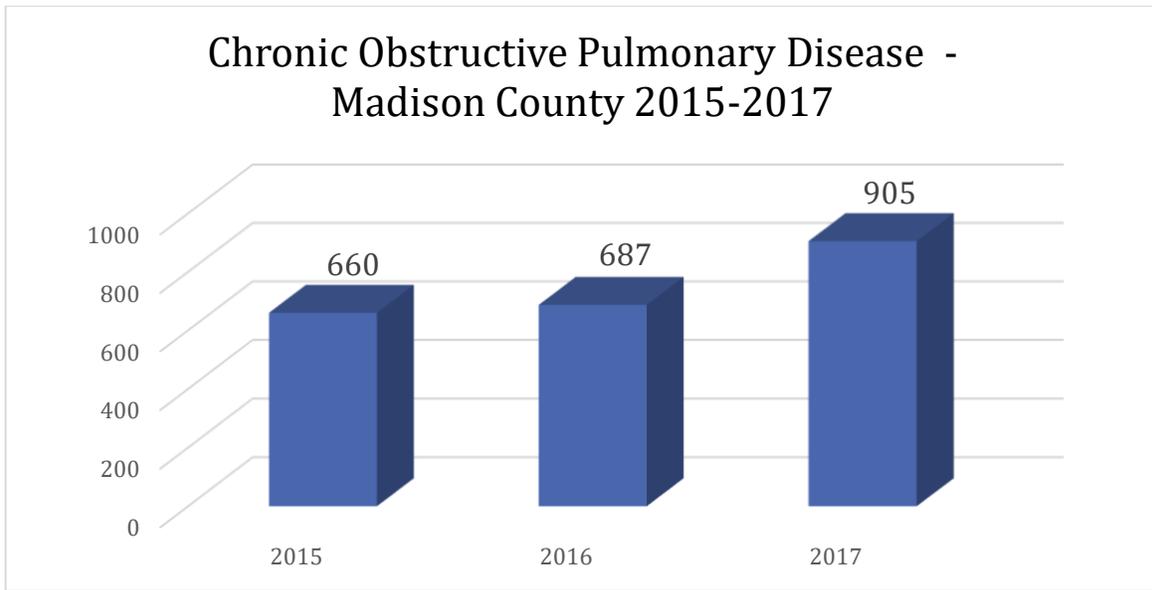
### Asthma

The percentage of residents that have asthma in Madison County has decreased between 2007-2009 and 2010-2014, while State averages are increasing slightly. According to the Illinois BRFSS, asthma rates in Madison County (8.2%) are lower than the State of Illinois (13.8%). Note that data have not been updated by the Illinois Department of Public Health.



Source: Illinois Behavioral Risk Factor Surveillance System

Treated cases of COPD at Madison County area hospitals increased between FY 2015 and FY 2017. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.

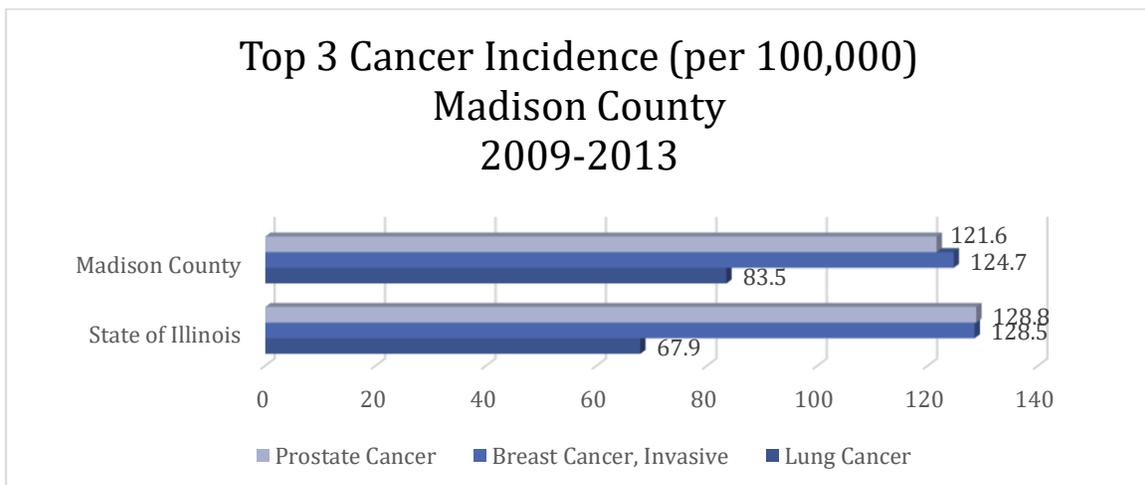


Source: COMPdata 2017

## 4.5 Cancer

*Importance of the measure:* Cancer is caused by the abnormal growth of cells in the body and many causes of cancer have been identified. Generally, each type of cancer has its own symptoms, outlook for cure, and methods for treatment. Cancer is one of the leading causes of death in Madison County.

For the top three prevalent cancers in Madison County, comparisons can be seen below. Specifically, prostate cancer and breast cancer are lower than the State, while lung and bronchus cancer rates are higher than the State of Illinois.

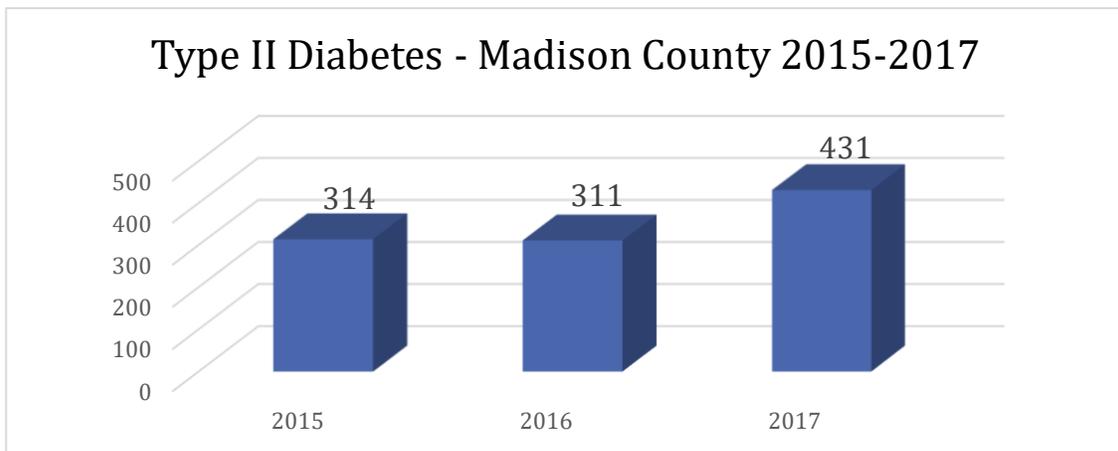


Source: <http://dph.illinois.gov/sites/default/files/publications/County-Sec1-Site-Specific-Cancer-Incidence-ers1605.pdf>

## 4.6 Diabetes

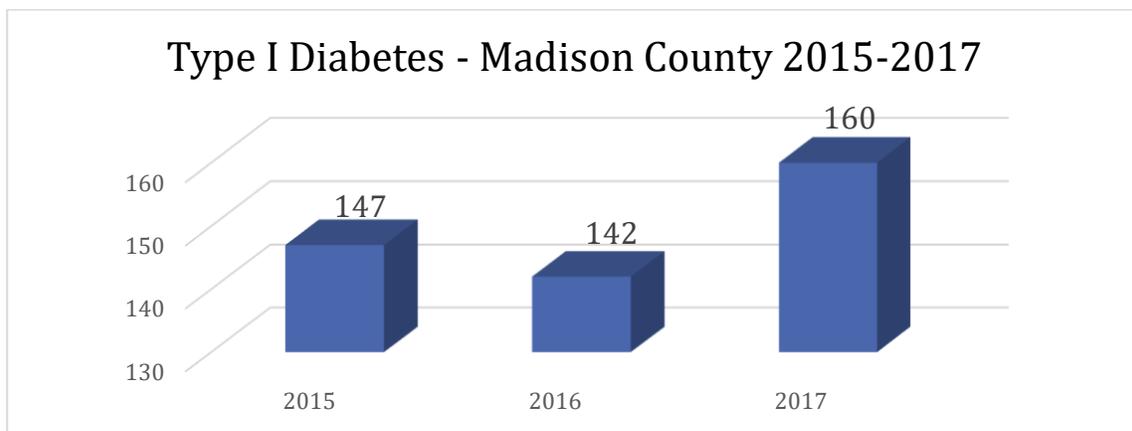
*Importance of the measure:* Diabetes is the leading cause of kidney failure, adult blindness and amputations and is a leading contributor to strokes and heart attacks. It is estimated that 90-95% of individuals with diabetes have Type II diabetes (previously known as adult-onset diabetes). Only 5-10% of individuals with diabetes have Type I diabetes (previously known as juvenile diabetes).

Inpatient cases of Type II diabetes from Madison County increased between FY 2015 (314 cases) and FY 2017 (431 cases). Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



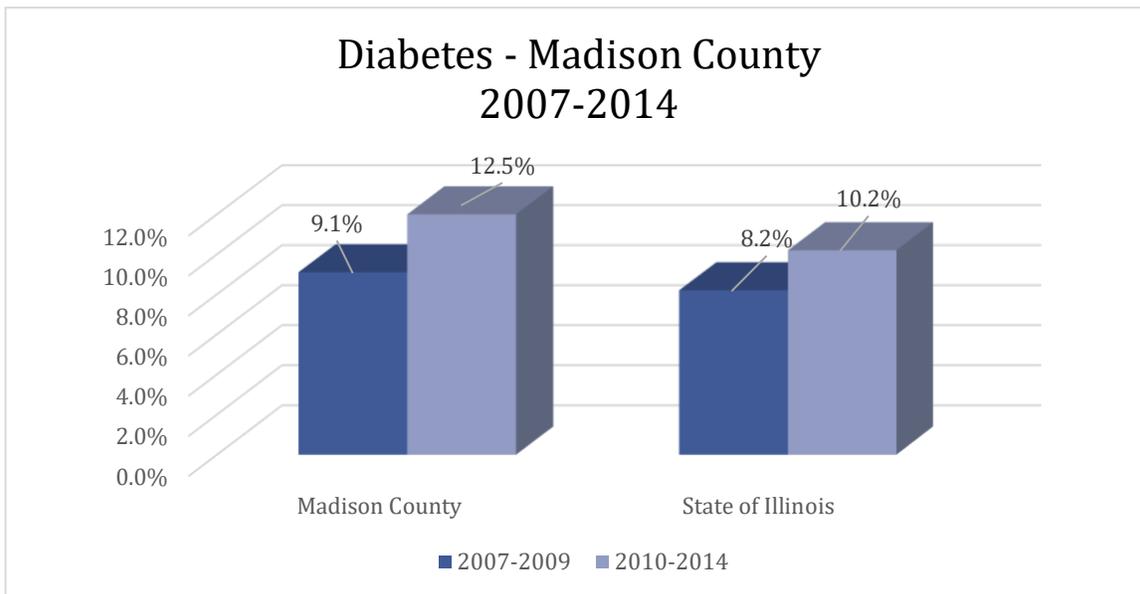
Source: COMPdata 2017

Inpatient cases of Type I diabetes show a decrease from 2015 (147) to 2016 (142) followed by an increase in 2017 (160) for Madison County. Note that hospital-level data only show hospital admissions and do not reflect out-patient treatments and procedures.



Source: COMPdata 2017

Data from the Illinois BRFSS indicate that 12.5% of Madison County residents have diabetes. Trends are concerning, as the prevalence of diabetes is increasing and higher in Madison County compared to data from the State of Illinois. Note that data have not been updated by the Illinois Department of Public Health.



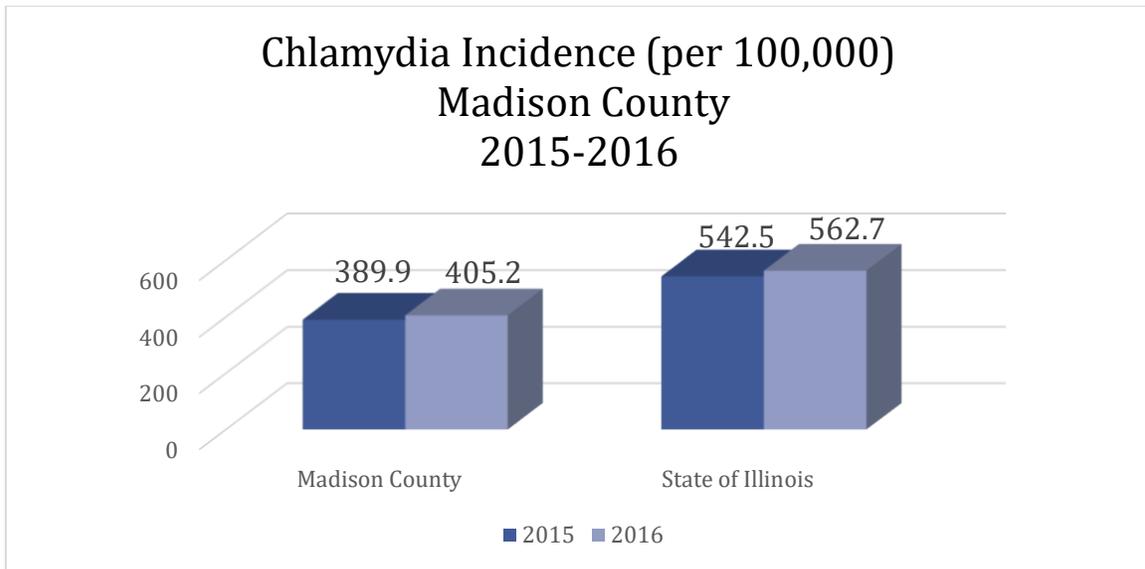
Source: Illinois Behavioral Risk Factor Surveillance System

## 4.7 Infectious Diseases

*Importance of the measure:* Infectious diseases, including sexually transmitted infections and hepatitis, are related to high-risk sexual behavior, drug and alcohol abuse, limited access to healthcare, and poverty. It would be highly cost-effective for both individuals and society if more programs focused on prevention rather than treatment of infectious diseases.

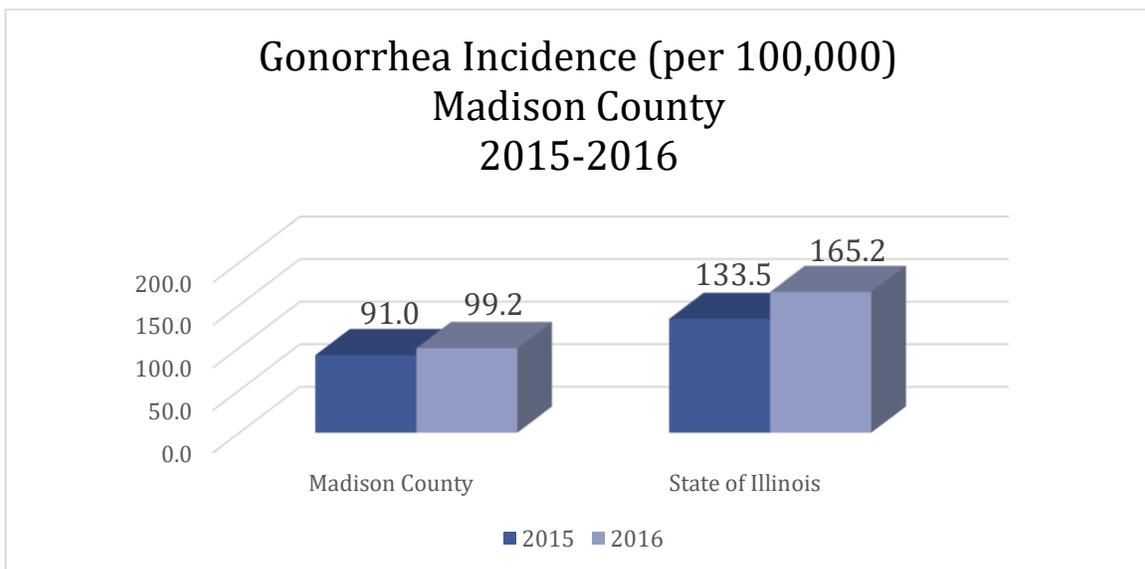
### Chlamydia and Gonorrhea Cases

The data for the number of infections of chlamydia in Madison County from 2015-2016 indicate a slight increase. There is also an increase of incidence of chlamydia across the State of Illinois. Rates of chlamydia in Madison County are lower than State averages.



Source: Illinois Department of Public Health

The data for the number of infections of gonorrhea in Madison County indicate an increase from 2015-2016. The State of Illinois also experienced a significant increase from 2015-2016.



Source: Illinois Department of Public Health

## Vaccine preventable diseases

A vaccine-preventable disease is an infectious disease for which an effective preventive vaccine exists. If a person acquires a vaccine-preventable disease and dies, the death is considered a vaccine-preventable death. According to the Illinois Public Health Department, the most common and serious vaccine-preventable diseases are: Varicella (chickenpox), Tetanus (lockjaw), Pertussis (whooping cough), Poliomyelitis (Polio), Measles (Rubeola), Mumps, Rubella (German measles), Diphtheria, Hepatitis B, and Hemophilic Influenza Type B (HIB) Infections. These diseases used to strike thousands of children each year. Today there are relatively few cases, but outbreaks still occur each year because some babies are not immunized. Madison County has shown no significant outbreaks compared to state statistics, but there are limited data available.<sup>2</sup>

### Vaccine Preventable Diseases 2013-2016 Madison County Region

<b>Mumps</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Madison County	1	0	0	0
State of Illinois	26	142	430	333

<b>Pertussis</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Madison County	42	24	9	35
State of Illinois	785	764	718	1034

<b>Varicella</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Madison County	18	18	18	9
State of Illinois	731	596	443	469

Source: <http://iquery.illinois.gov/DataQuery/Default.aspx>

### Tuberculosis 2012-2017 Madison County Region

<b>Tuberculosis</b>	<b>2012</b>	<b>2014</b>	<b>2016</b>	<b>2017</b>
Madison County	1	1	1	1
State of Illinois	347	320	341	336

Source: <http://iquery.illinois.gov/DataQuery/Default.aspx>

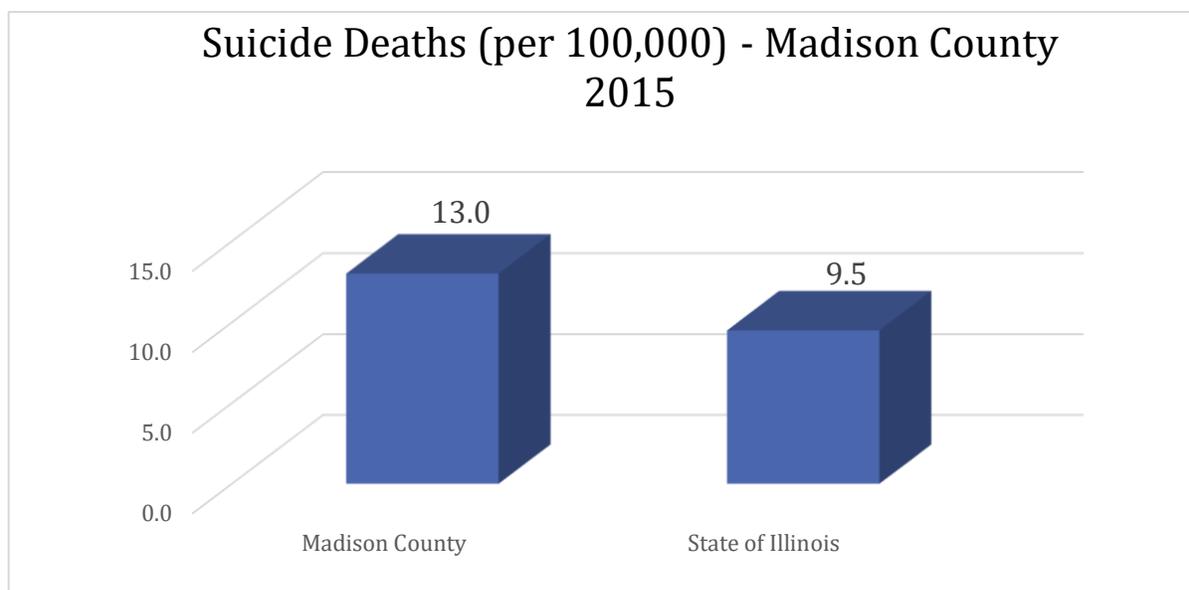
<sup>2</sup> Source: <http://www.idph.state.il.us/about/vpcd.htm>

## 4.8 Injuries

*Importance of the measure:* Suicide is intentional self-harm resulting in death. These injuries are often indicative of serious mental health problems requiring the treatment of other trauma-inducing issues. Unintentional injuries can occur, in part, from violent crimes.

### Suicide

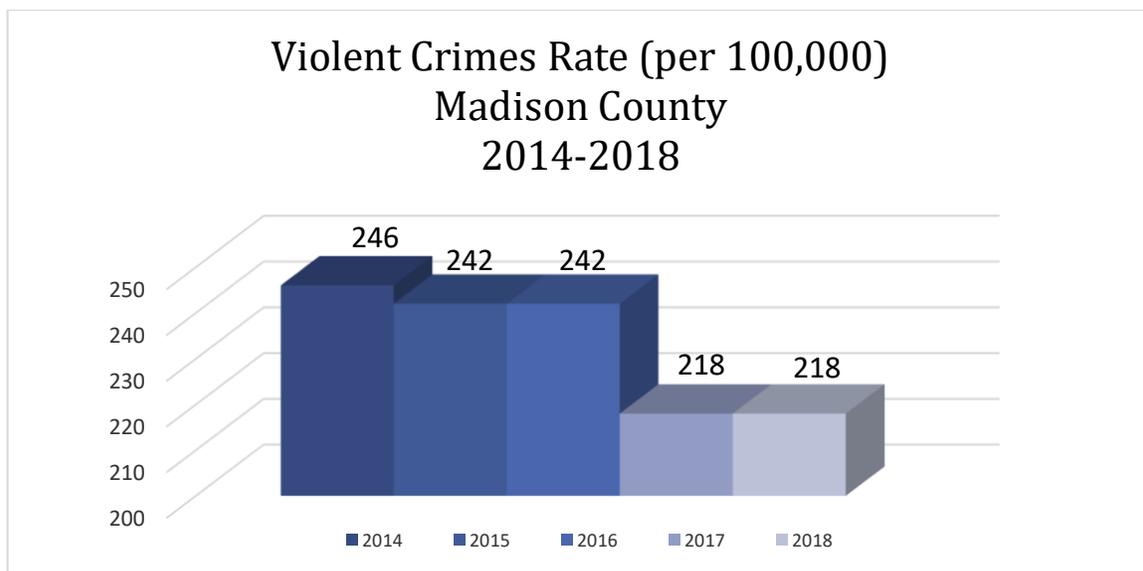
The number of suicides in Madison County indicate higher incidence than State of Illinois averages, as there were approximately 13.0 per 100,000 people in Madison County in 2015.



*Source: Illinois Department of Public Health*

### Violent Crimes

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault. Violent crime is represented as an annual rate per 100,000 people. The number of violent crimes has decreased significantly for 2014-2018 in Madison County. Note that 2015-2016 numbers are identical, as well as 2017-2018. These rates were verified with *Illinois County Health Rankings*



Source: Illinois County Health Rankings and Roadmaps

## 4.9 Mortality

*Importance of the measure:* Presenting data that focuses on causes of mortality provides an opportunity to define and quantify which diseases are causing the most deaths.

The top two leading causes of death in the State of Illinois and Madison County are similar as a percentage of total deaths in 2017. Diseases of the Heart are the cause of 25.2% of deaths and Cancer is the cause of 20.6% of deaths in Madison County.

Top 5 Leading Causes of Death for all Races by County, 2017		
Rank	Madison County	State of Illinois
1	Diseases of Heart (25.2%)	Diseases of Heart
2	Malignant Neoplasm (20.6%)	Malignant Neoplasm
3	Accidents (6.9%)	Cerebrovascular Disease
4	Stroke (5.4%)	Accidents
5	Chronic Lower Respiratory Disease (5.1%)	Chronic Lower Respiratory Disease

Source: Illinois Department of Public Health

## 4.10 Key Takeaways from Chapter 4

- ✓ LUNG CANCER RATES IN MADISON COUNTY ARE SLIGHTLY HIGHER THAN STATE AVERAGES.
- ✓ ASTHMA HAS SEEN A REDUCTION IN MADISON COUNTY AND IS NOW LOWER THAN STATE AVERAGES.
- ✓ CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF MORTALITY IN MADISON COUNTY.

**CHAPTER 5 OUTLINE**

- 5.1 Perceptions of Health Issues
- 5.2 Perceptions of Unhealthy Behavior
- 5.3. Perceptions of Issues with Well Being
- 5.4 Summary of Community Health Issues
- 5.5 Community Resources
- 5.6 Significant Needs Identified and Prioritized

# CHAPTER 5

## PRIORITIZATION OF HEALTH-RELATED ISSUES

In this chapter, we identify the most critical health-related needs in the community. To accomplish this, we first consider community perceptions of health issues, unhealthy behaviors and issues related to well-being. Using key takeaways from each chapter, we then identify important health-related issues in the community. Next, we complete a comprehensive inventory of community resources; and finally, we prioritize the most significant health needs in the community.

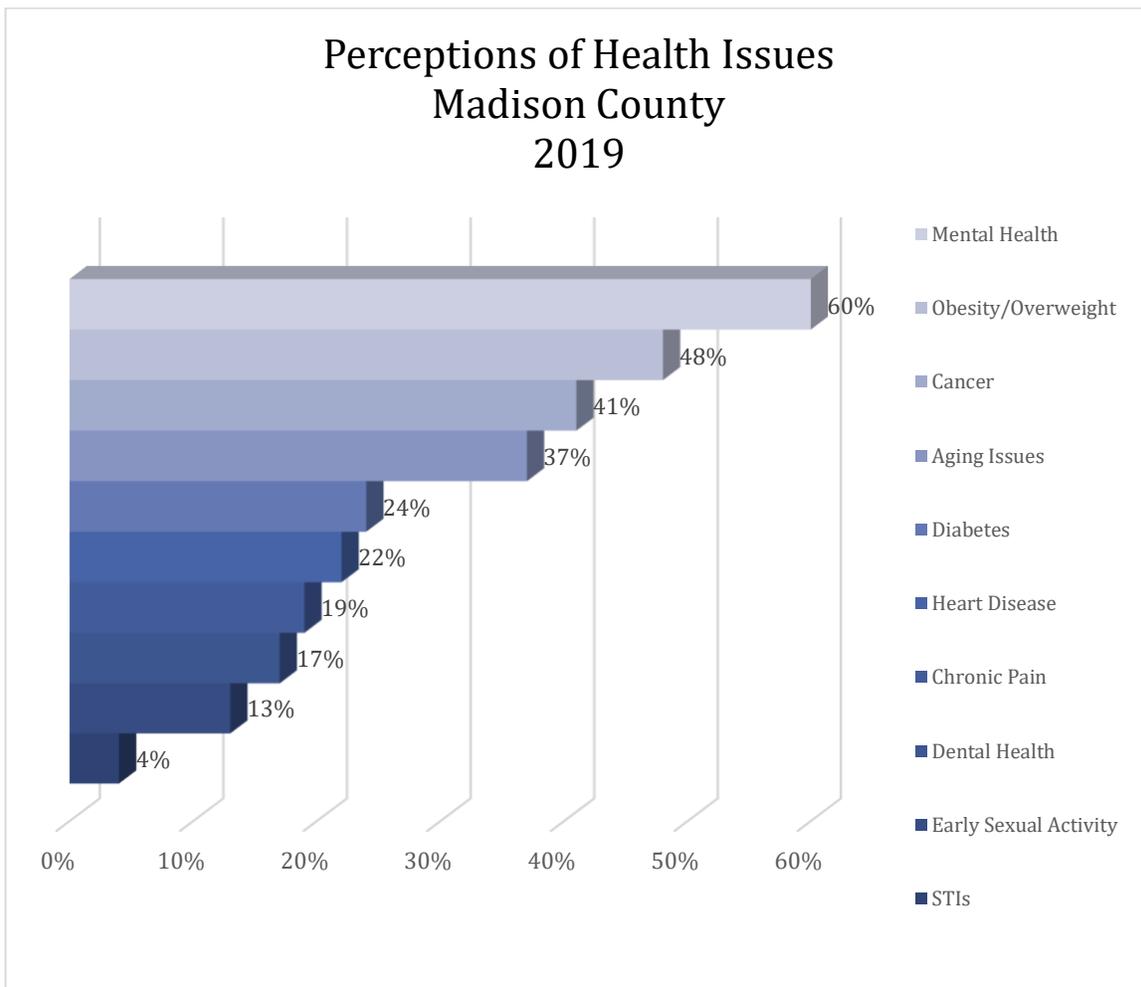
Specific criteria used to identify these issues included: (1) magnitude in the community; (2) severity in the community; (3) potential for impact to the community.

## 5.1 Perceptions of Health Issues

The CHNA survey asked respondents to rate the three most important health issues in the community. Respondents had a choice of 10 different options. Note that respondents could choose up to three health issues, so total percentages are greater than 100.

The health issue that rated highest was mental health (60%), followed by obesity/overweight (48%), cancer (41%) and aging issues (37%). These four factors were significantly higher than other categories based on *t-tests* between sample means.

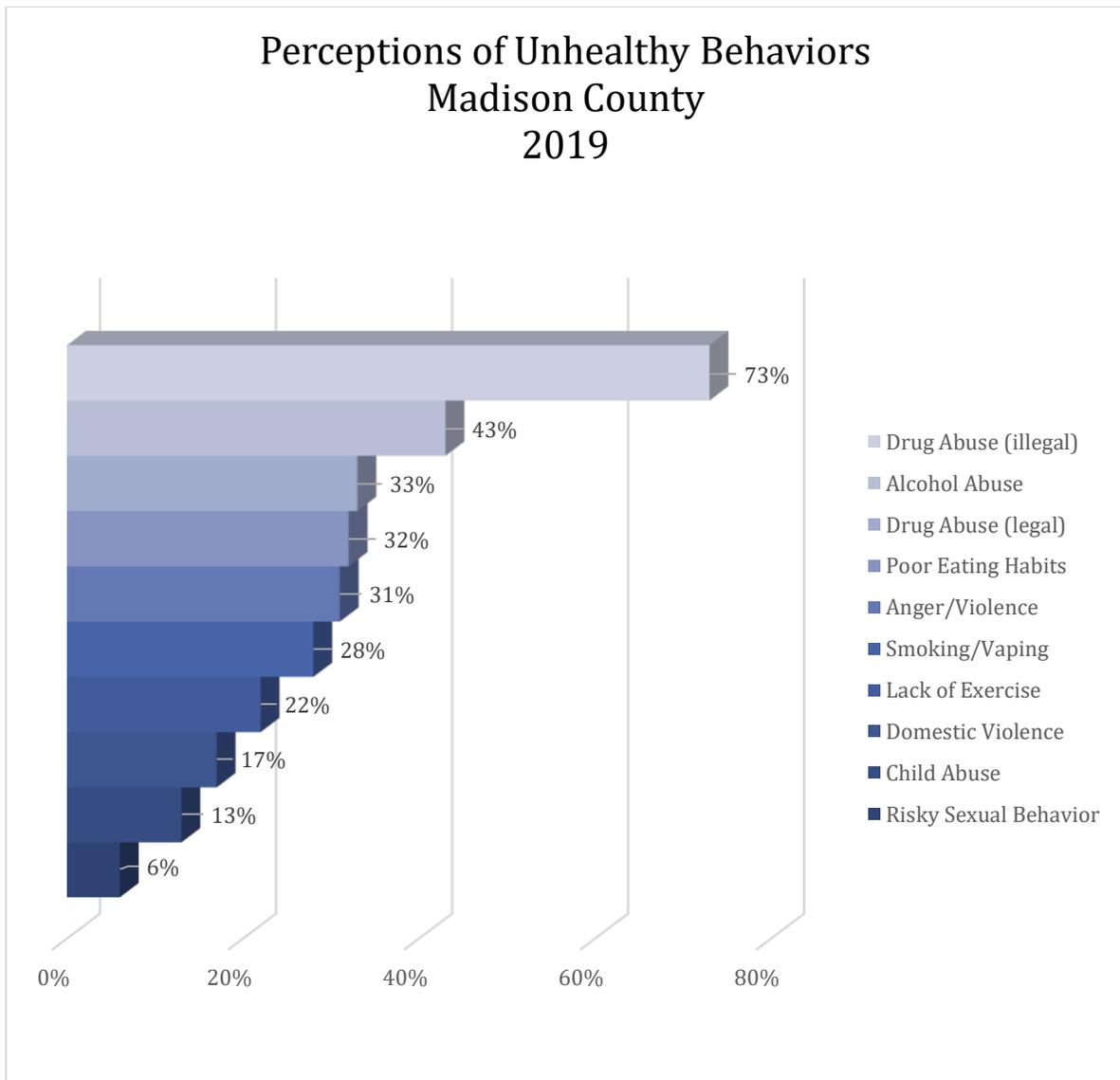
Note that perceptions of the community were accurate in some cases. For example, mental health, obesity and cancer are significant issues. The survey respondents accurately identified these as important health issues. However, some perceptions were inaccurate. For example, while heart disease is a leading cause of mortality, it is ranked relatively low.



Source: CHNA Survey

## 5.2 Perceptions of Unhealthy Behaviors

Respondents were asked to select the three most important unhealthy behaviors in the community out of a total of 10 choices. The two unhealthy behaviors that rated highest were drug abuse (illegal) at 73% and alcohol abuse at 43%. Note that drug abuse (legal) rated relatively high given the increase, in part, of opioid abuse.

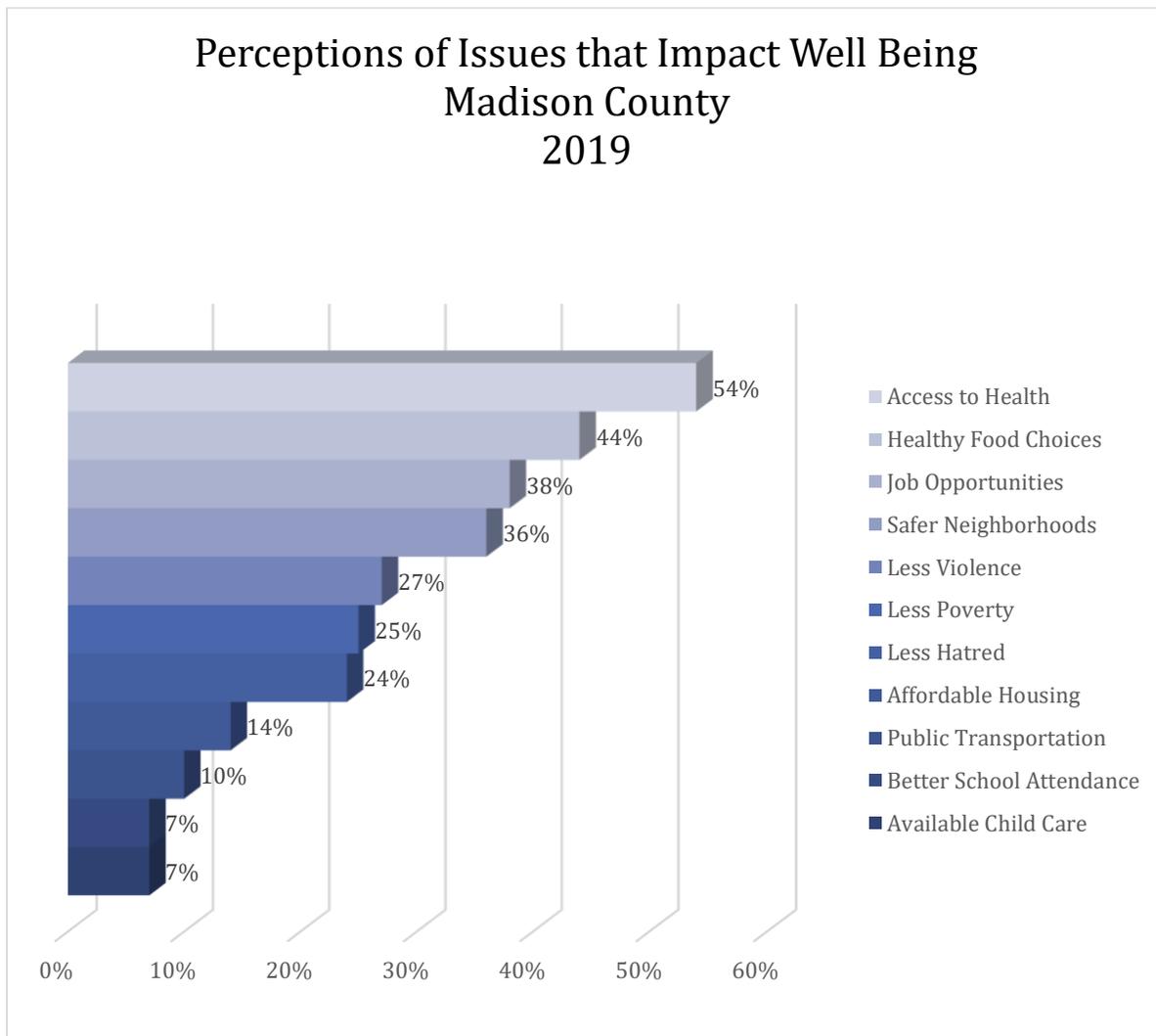


Source: CHNA Survey

## 5.3 Perceptions of Issues Impacting Well Being

Respondents were asked to select the three most important issues impacting well-being in the community out of a total of 11 choices.

The issue impacting well-being that rated highest was access to health (54%). It was followed by healthy food choices (44%) job opportunities (38%) and safer neighborhoods (36%). These four factors were significantly higher than other categories based on *t-tests* between sample means.



Source: CHNA Survey

## 5.4 Summary of Community Health Issues

Based on findings from the previous analyses, a chapter-by-chapter summary of key takeaways is used to provide a foundation for identification of the most important health-related issues in the community. Considerations for identifying key takeaways include magnitude in the community, strategic importance to the community, existing community resources, and potential for impact and trends and future forecasts.

**Demographics (Chapter 1)** – Three factors were identified as the most important areas of impact from the demographic analyses:

- Population over age 65 increased
- Single female head-of-household represents 12% of the population
- Telehealth

**Prevention Behaviors (Chapter 2)** – Four factors were identified as the most important areas of impact from the chapter on prevention behaviors:

- Increased utilization of urgent care facilities
- Prostate screening is relatively low
- Exercise and healthy eating behaviors
- Depression and stress/anxiety

**Symptoms and Predictors (Chapter 3)** – Three factors were identified as the most important areas of impact from the chapter on symptoms and predictors:

- Substance abuse
- Overweight and obesity
- Risk factors for heart disease

**Morbidity and Mortality (Chapter 4)** – Two factors were identified as the most important areas of impact from the chapter on morbidity/mortality behaviors:

- Lung cancer
- Cancer and heart disease are the leading causes of mortality

### Potential Health-Related Needs Considered for Prioritization

Before the prioritization of significant community health-related needs was performed, results were aggregated into 7 potential categories. Based on similarities and duplication, the 7 potential areas considered are:

- **Aging issues**
- **Healthy behaviors – nutrition & exercise**
- **Behavioral health**
- **Overweight/Obesity**
- **Substance abuse**
- **Cancer - lung**
- **Cancer screening - prostate**

## 5.5 Community Resources

After summarizing potential categories for prioritization in the Community Health Needs Assessment, a comprehensive analysis of existing community resources was performed to identify the efficacy to which these 7 health-related areas were being addressed. A resource matrix can be seen in Appendix 5 relating to the 7 health-related issues.

There are numerous forms of resources in the community. They are categorized as recreational facilities, county health departments, community agencies and area hospitals/clinics. A detailed list of community resources and descriptions appears in Appendix 6.

## 5.6 Significant Needs Identified and Prioritized

In order to prioritize the previously identified dimensions, the collaborative team considered health needs based on: (1) magnitude of the issues (e.g., what percentage of the population was impacted by the issue); (2) severity of the issues in terms of their relationship with morbidities and mortalities; (3) potential impact through collaboration. Using a modified version of the Hanlon Method (as seen in Appendix 7), the collaborative team identified three significant health needs and considered them equal priorities:

- **Healthy Behaviors** – *defined as active living and healthy eating, and their impact on obesity*
- **Behavioral Health** – *including mental health*
- **Substance Abuse** – *specific focus*

### HEALTHY BEHAVIORS – ACTIVE LIVING, HEALTHY EATING AND SUBSEQUENT OBESITY

**ACTIVE LIVING.** A healthy lifestyle, comprised of regular physical activity and balanced diet, has been shown to increase physical, mental, and emotional well-being. Note that 28% of respondents indicated that they do not exercise at all, while the majority (60%) of residents exercise 1-5 times per week. The most common reasons for not exercising are not having enough energy (41%) or time (27%) and a dislike of exercise (18%).

**HEALTHY EATING.** Almost two-thirds (61%) of residents report no consumption or low consumption (1-2 servings per day) of fruits and vegetables per day. Note that the percentage of residents who consume five or more servings per day is only 5%. The most prevalent reason for failing to eat more fruits and vegetables was dislike followed by the perceived lack of importance.

**OBESITY.** In Madison County, over two-thirds (68.7%) of residents were diagnosed with obesity and being overweight. In the 2019 CHNA survey, respondents indicated that being overweight was the second most important health issue and was rated as the most prevalently diagnosed health condition. Research strongly suggests that obesity is a significant problem facing youth and adults nationally, in Illinois, and within Madison County. The U.S. Surgeon General has characterized obesity as “the fastest-growing, most threatening disease in America today.” According to the Obesity Prevention Initiative from the Illinois General Assembly, 20% of Illinois children are obese. The financial burden of overweight and obese individuals is staggering, as the estimated annual medical costs attributed to obesity in Illinois for 1998-2000 exceeded \$3.4 billion, ranking Illinois 6<sup>th</sup> in the nation for obesity-attributed medical costs. With children, research has linked obesity to numerous chronic diseases including Type II diabetes, hypertension, high blood pressure, and asthma. Adverse physical health side effects of obesity include orthopedic problems due to weakened joints and lower bone density. Detrimental mental health side effects include low self-esteem, poor body image, symptoms of depression and suicide ideation. Obesity impacts educational performance as well; studies suggest school absenteeism of obese children is six times higher than that of non-obese children. With adults, obesity has far-reaching consequences. Testimony to the Illinois General Assembly indicated that obesity-related illnesses contribute to worker absenteeism, slow workflow, and high worker compensation rates. A Duke University study on the effects of obesity in the workforce noted 13 times more missed workdays by obese employees than non-obese employees. Nationwide, lack of physical activity and poor nutrition contribute to an estimated 300,000 preventable deaths per year.

## BEHAVIORAL HEALTH – MENTAL HEALTH

**MENTAL HEALTH.** The CHNA survey asked respondents to indicate prevalence of specific issues, namely depression and stress/anxiety. Of respondents, 45% indicated they felt depressed in the last 30 days and 38% indicated they felt anxious or stressed. Respondents were also asked if they spoke with anyone about their mental health in the last 30 days. Of respondents 28% indicated that they spoke to someone, the most common response was to a doctor/nurse (45%). In regard to self-assessment of overall mental health, 5% of respondents stated they have poor overall mental health. In the 2019 CHNA survey, respondents indicated that mental health was the most important health issue.

## SUBSTANCE ABUSE

**SUBSTANCE ABUSE.** Survey respondents were asked “On a typical DAY, how often do you use substances (either legal or illegal) to make yourself feel better?” Of respondents, 14% indicated they use substances to make themselves feel better. Substance abuse values of students is a leading indicator of adult

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substance abuse in later years. Data from the 2018 Illinois Youth Survey measures illegal substance use (alcohol, tobacco, and other drugs – mainly marijuana) among adolescents. Madison County is at or above State averages in all categories among 8th graders. Among 12th graders, Madison County is at or above State averages in all categories. Finally, survey respondents identified drug abuse (illegal), alcohol abuse, and drug abuse (legal) as the three most prevalent unhealthy behaviors in the community.

## APPENDIX 1. MEMBERS OF COLLABORATIVE TEAM

Members of the **Collaborative Team** consisted of individuals with special knowledge of and expertise in the healthcare of the community. Individuals, affiliations, titles and expertise are as follows:

### Internal Stakeholders

**Sister M. Anselma** entered the Sisters of St. Francis of the Martyr St. George in 1997. With a Bachelor's in Business from Franciscan University of Steubenville, and an MBA from Saint Louis University, she has worked in various capacities of Human Resources and Administration, and currently serves as the Chief Operating Officer of OSF HealthCare Saint Anthony's Health Center.

**Ginger Becker, R.D., L.D.**, is a registered dietician and supervisor of all dietitians at OSF HealthCare Saint Anthony's Health Center, where she has worked since 2001. He has nearly 20 years of experience in hospital-based dietetics, as well as eight years of nursing home clinical practice experience and three years of dietetic consulting. A graduate of Fontbonne University with a degree in General Dietetics (1987), she has been in a variety of health and wellness programs in the community, including three years as part of a grant program in the Alton School district advancing fitness and healthy eating. She is married with two adult children.

**Angie Halliday, MBA, BSN, RN, OCN**, is the manager for Oncology Services at the OSF HealthCare Saint Anthony's Cancer Center of Excellence. She earned her Bachelor of Science in nursing from the Goldfarb School of Nursing at Barnes-Jewish College in St. Louis, and her Master of Business Administration from Missouri Baptist University in St. Louis. Before joining OSF HealthCare, Angie served as a pediatric nurse – hematology, oncology, bone marrow transplants and home infusions. In 2011, she started as an infusion and chemotherapy nurse at OSF Saint Anthony's Cancer Center of Excellence. After serving as the department's charge nurse, Angie became the manager for Oncology services in September of 2017. In addition to her responsibilities in the cancer center, she is a certified smoking cessation facilitator for the American Cancer Society and is actively involved in various community outreach activities, including "OSF Team Hope" for the American Cancer Society Relay for Life. She lives in Godfrey, Illinois, with her husband and 4 children.

**Colleen Becker** is the Vice President Chief Nursing Office for OSF HealthCare Saint Anthony's Health Center. She has been with the Health Center since 2017, leading the nursing operations and working to achieve key results and drive superior clinical outcomes. Colleen began her nursing career at OSF HealthCare, graduating from the St. Francis College of Nursing in Peoria. She also holds a Bachelor of Science in Nursing from Webster University, a Master of Science in Nursing from Saint Louis University, and is currently completing the dissertation phase of her Ph.D. in Nursing from University of Missouri, in Columbia, Missouri. Immediately prior to joining OSF HealthCare, Colleen served as Executive Director of Perioperative Services at Barnes-Jewish Hospital in St. Louis. Throughout her management career, she has led a broad scope of both inpatient and perioperative nursing services. Colleen serves on the

OSF HealthCare Chief Nursing Officer Council. Colleen and her husband, Scott, have two daughters, Brit, 27, and Jennifer, 24, as well as one grandson, Matthew. Together, Colleen and Scott enjoy biking, skiing, hiking, watching sports and spending time with family. Additionally, Colleen likes to spend her time reading and gardening.

**Kelly Bogowith, PT, DPT, CSCS** is the clinical lead therapist at Saint Anthony's Health Center. Kelly began working here in 2008 as a staff physical therapist after graduating from Saint Louis University. Kelly earned her Bachelors of Science in Exercise Science, Master of Physical Therapy and then Doctor of Physical Therapy all from SLU. She is a Certified Strength and Conditioning Specialist with the National Strength and Conditioning Association. Kelly primarily works in outpatient rehab services here and has special interests in athletes, shoulders, knees, concussions, dry needling, and those with cancer. She is busy with a three year old son and one year old daughter, but before this mommy life, Kelly enjoyed participating in sprint triathlons, indoor soccer, sand volleyball, taught high school Sunday school, and growing professionally as a physical therapist through various learning opportunities.

**Traci Bromaghim, RN, BSN** is the Manager of Emergency Services for OSF HealthCare Saint Anthony's Health Center, a position she has held since 2016. Prior to her current management role she was an Emergency Room Case Manager. Past work experience includes emergency room staff nurse, house supervisor and float pool nurse. After receiving her Associate's Degree in Nursing from Lewis & Clark Community College, she went on to complete her undergraduate work at Goldfarb School of Nursing, graduating with her Bachelor's Degree in Nursing. Currently she is enrolled at Webster University for her Masters in Health Administration.

**Kelly Keenan** began her role at OSF HealthCare Saint Anthony's Health Center as a Patient Navigator for Cardiology & Pulmonology in April, 2013. Prior to joining OSF St. Anthony's Health Center, Kelly worked at the United Methodist Village serving in the roles of Director of Resident Services and later Director of Fund Development. Kelly has also worked for Lutheran Senior Services, as an Assistant Director of Activities. She earned her Bachelors of Science in Organizational Leadership from Greenville University. Kelly's community involvement includes: Organizing teams/donations for the American Heart Association "Heart Walk", committee member/co-chair for St. Mary's Oktoberfest silent and live auction. While working at the United Methodist Village she served on the Board of Director's for the Illinois Coalition to Improve End of Life Care. A planning member for the Life Care Services National Conference for Resident Services Director's. Past member of the North Alton/Godfrey Business Council, Riverbend Growth Association and "Your Referral Source" networking groups.

**Ajay Pathak** has led OSF HealthCare Saint Anthony's Health Center as President and CEO since 2014. Prior to leading the OSF Saint Anthony's team, Ajay has served The Sisters of the Third Order and OSF Healthcare System in a variety of leadership roles, including the Chief Integration Officer and the Director of Strategic Business Development. Ajay earned his Bachelors of Science (BS) in Biology and Sociology with an emphasis in Health Care from Union College and a Certificate Master's in Public Health from Harvard School of Public Health (MPH), as well as a Master's in Business Administration (MBA) with a concentration in Finance from Georgetown University McDonough School of Business. He serves on various boards including the St. Louis Metropolitan Hospital Council (Chairperson), the Lewis and

Clark Community College Foundation Board, the Southern Illinois Employers Association (SIEA) Board, as well as the American Cancer Society (ACS) Regional Leadership Board.

**Susanne Ringhausen, MA, LCPC, CEAP** is the Manager of Psychological Services and Employee Assistance at OSF HealthCare Saint Anthony's Health Center. She earned her Master's degree in Applied Clinical Psychology as a Winthrop Fellow at CUA, Washington, D.C. and has over 34 years of experience delivering mental health, substance abuse and EAP services, both as a clinician and administrator. A Mission Partner with Saint Anthony's since 1989, Susanne is an Illinois licensed Clinical Professional Counselor and internationally Certified Employee Assistance Professional. She has served on the Board of Directors of Tri-County Counseling Center and the Employee Assistance Professional's Association. Susanne has consulted in the areas of community prevention, professional training and service development for numerous businesses and community organizations. She and her husband Richard have four grown children, and are active in their local community.

**Erin Mitchell** joined OSF HealthCare in 2018 as the Strategic Marketing Director for OSF HealthCare's Western Region, which includes OSF HealthCare Saint Anthony's Health Center in Alton. Prior to joining OSF, she was Marketing and Communications Director for Presence Health, where she was responsible for marketing, advertising, PR, and internal communications for the hospitals located in Urbana and Danville; and the Brand Manager for the Libman Company where she was responsible for all consumer facing marketing and advertising including social media, packaging, and digital advertising. She is a member of the Champaign Chamber of Commerce, United Way, University of Illinois Alumni Association, and Copper Creek Church.

**Tina Zumwalt** currently serves as Community Relations Coordinator with OSF HealthCare Saint Anthony's Health Center in Alton, and has been with the OSF Saint Anthony's family in since 1985. Tina has also served in the role of Marketing Coordinator, with extensive experience in event planning, and coordinating health programs for local business partners. She has served on boards and planning committees, leading teams and fundraising efforts for community-based health organizations, including: American Heart Association, American Cancer Society and Arthritis Foundation. Tina is married with three daughters and six grandchildren.

**Felecia Huebener** is the Physician Liaison/Business Development Specialist for OSF HealthCare Saint Anthony's Health Center. She has been with the Health Center since 1979 in a variety of roles. Felecia currently leads the strategic business and partnership development efforts of the health center including employer relations. Building and maintaining positive relationships which allow OSF to better serve the needs of the community is a key function of Felecia's role. Felecia has a Bachelor of Science Degree in Occupational Therapy from the University of Oklahoma and is a licensed Occupational Therapist. She developed and managed the Occupational Therapy service line at Saint Anthony's and later became Director of Rehabilitative Services, developing the inpatient rehabilitation program. Felecia also served as Director of Post Acute Services and later became involved with clinical program development, physician recruitment and medical group operations. Felecia and her husband Charles have two children, daughter Emily of Chicago, IL and son Ben of Lexington, KY. They also own and operate a

family farm. Charles serves as the Clerk of the Circuit Courts in Jersey County. They enjoy spending time with family, travel, gardening, and sporting events.

### **Community Health Needs Assessment – Stakeholders in Alton, IL**

**Sheri L. Banovic, DNP, RN, FNP-BC** has worked in the field of nursing in various areas for the past 32 years. A graduate of St. John's Hospital School of Nursing with a diploma in nursing, she obtained her Bachelor's and Master's in Nursing from Southern Illinois University at Edwardsville. She received a Post-Master's certificate in Adult Nurse Practitioner from Jewish Hospital College and Family Nurse Practitioner from Northern Kentucky University. In 2018 she completed a Doctorate of Nursing Practice at the University of Missouri. Sheri has worked in nursing education for over 20 years. Currently she serves as the Director of Nursing Education at Lewis and Clark Community College. As a certified Family Nurse Practitioner, she currently sees patients per diem in the Family Health Clinic located at Lewis and Clark Community College. Sheri served as co-chair for the Illinois Healthcare Action Coalition Education Workgroup, and was a member of the Illinois Workforce Investment Board Healthcare Taskforce.

**Kristie Baumgartner** is the Assistant Superintendent of the Alton School District. Since 2000, she served in various roles, where wrote and secured over \$22 million in competitive grants that have aided in funding programs for students such as: technology, after school and summer programs, school improvement, homeless youth education programs, professional development, lighting upgrades, drug and alcohol prevention, crisis planning, building security, curriculum enhancements, physical education and many others. Baumgartner received her Bachelor of Arts degree in Elementary Education in 1992. She then received her Master's Degree in Educational Administration in 2007 from McKendree University in Lebanon, Illinois, and completed her Specialist Degree in Educational Administration from the University of Arkansas in 2018. She is also active in the community and volunteers for many organizations and charitable events, including: RiverBend Head Start, Hayner Library, Senior Services Plus, Alton Marketplace, Alton NAACP, Alton YWCA, American Heart Association, United Way, National Multiple Sclerosis Society, Southwestern Illinois Foundation for Educational Excellence and many others. She and her husband, Steve, have two children.

**John Keller** has served as president of the Riverbend Growth Association since 2017. The RBGA is the chamber of commerce and economic development agency for 11 communities in Madison County. John is responsible for overseeing all business functions and the staff of the Growth Association, as well as facilitating the Legislative and Public Affairs Committee, the Transportation Committee and the Business Retention and Expansion Committees. Prior to joining the Growth Association as its leader, John served 34 years in banking, most recently serving as Regional President of Carrollton Bank in Alton from 1996 to 2016. During that time, he was an RBGA board member for a total of 16 years, as well as a past board chairman and a two-time winner of the Chairman's Award. John earned a bachelor's degree in Business Administration from Benedictine College in Atchison, Kansas. Throughout his career, he has served in many volunteer leadership roles including OSF HealthCare Saint Anthony's Foundation, East End Improvement Association, Alton/Godfrey Rotary Club, Greater Alton Community Development Corporation, American Cancer Society Mardi Gras Ball, Marquette High School Board and Foundation

Board, Southern Illinois Employers Association, Alton Knights of Columbus, and North Alton/Godfrey Business Council.

**Theresa Collins** is the COO of Senior Services Plus, Inc. She has worked at Senior Services Plus, Inc. since 2008. Theresa has nearly 20 years' experience in social services and management. She is a graduate of Greenville College where she earned her Bachelors of Science degree. Theresa is a resident of Belleville, Illinois where she lives with her husband and three daughters. Theresa is the President of the Illinois Association of Community Care Program Home Care Providers, Vice President of the Belle Valley School District #119 Board of Education, and serves of the Community Care Program Advisory Committee for the Illinois Department on Aging, Older Adults Services Advisory Committee for the State of Illinois and the Executive Council for AARP Illinois.

**Courtney McFarlin, PA-C** is a Graduate of Greenville College with a Bachelor of Arts in Science and Pre-Medicine; Post Graduate studies at SIU Carbondale. Physician Assistant since 2001. She graduated with a Master of Science and Medicine in Physician Assistant Studies from Trevecca Nazarene University of Nashville, TN. Most of her years as a PA have been in either Neurosurgery/Neurology/ Neuro-oncology or Geriatric Primary Care. Since 2013, she has served as a Physician Assistant for Saint Anthony's Physician Group Internal Medicine/Primary Care, where she provides medical care from a primary care/internal medicine perspective but also sees patients as part of its Memory Care Center. A member of the American Academy of Physician Assistants and the Illinois Academy of Physician Assistants, Courtney also volunteers at Trinity Lutheran School in Edwardsville, IL. She is a provider for the Belize Mission Project, a non-profit medical missionary group, and assistant coach to various extra-curricular sports for her children.

**Yusuf Mohyuddin, M.D., M.P.H.** is a Board Certified Family Practice Physician with OSF Saint Anthony's Physician Group in Alton, Illinois. He attended University of Illinois College of Medicine at Peoria (Peoria, Il), completed internship and residency at Southern Illinois University (Carbondale, Il). Professional Affiliations with Illinois State Medical Society, Madison County Medical Society, American Academy of Family Physicians, Illinois Academy of Family Physicians, Physicians for Human Rights and Physicians for Social Responsibility. He has been practicing medicine with OSF Saint Anthony's Physician Group since 2007. His areas of interest include preventive health and wellness, diabetes, high blood pressure and weight management.

**K. Margarett Trushel** is a founding member of Oasis Women's Center and has served as Executive Director since 1979. She holds a Bachelor's of Arts in Human Services, a Bachelor's of Science in Special Education and a Master's of Science in Counseling/Human Services Administration. In addition, she has attended Post Graduate Workshops at Harvard Medical School on Victimization and Abuse; she is a Certified Domestic Violence Professional. For the last 40 years, Margarett has participated in the Illinois Coalition Against Domestic Violence and is a member of the Illinois Department of Human Services Statewide Domestic Violence Advisory Committee. A Co-Founding Member and Chair of Chairs of the Third Judicial Circuit Family Violence Prevention Council, she chairs the Intervention, Prevention and Education Committee of the Council. She is active in many community organizations as well: the Eva A. McDonald Women's History Coalition, and Alton Area Church Women United.

**Anne Tyree, MPA, CFRE** is Regional Chief Operations Officer for Centerstone, and oversees the organization's statewide operations in five Southern Illinois counties. Anne has worked for nonprofit organizations for over 20 years, including those serving women who are chronically homeless, runaway and homeless youth, children with disabilities, a public university, and for the last 14 years for community behavioral healthcare organizations. She helped design the unique collaborative partnership that integrates primary and behavioral healthcare for adults with serious mental illness at Centerstone's Alton location. Anne received her BA from UIC and her MPA with an emphasis on health care from APU, both magna cum laude. She is Vice President for the Community Behavioral Healthcare Association of Illinois, serves on the Madison County CSBG Advisory Group, and served on the Governor's Task Force for Supportive Housing, and the Madison County Illinois Continuum of Care. Born and raised in Chicago, Anne now lives in rural Jersey County in Southwestern Illinois.

**Al Womack, Jr.** has served as Executive Director of Boys & Girls Club of Alton for 20 years; also serves as assistant football coach at Alton High School, and head football coach for Alton West Middle School. Graduated with a Bachelor's of Science degree in Business Administration from Central State University in Ohio. His community involvement includes: City of Alton Human Relations Commission, OSF Saint Anthony's Hospital Community Assessment Team, City Wide Clean Up, Alton Community School District Wall of Fame Committee, Alton School District "School Climate Leadership Team", Alton Memorial Hospital Community Benefit Committee, Illinois Alliance of Boys & Girls Clubs Government Relations Committee Member, Former Alton Education Foundation Board member, Former Madison -Bond County Workforce Investment Board, Former Catholic Children's Home Advisory Board, American Diabetes Association volunteer, Alton Community School District #11 Academic Achievement Committee member, Former Alton High School Discipline Review board member (for athletes), Former Volunteer Parks & Recreation basketball coach. Recipient of the 2007 Elijah P. Lovejoy Human Rights Award, 2002 Southern Illinois University at Edwardsville Dr. Martin Luther King Jr. Humanitarian Award, 2001 Illinois Association of Club Women Inc. (Southern District) Mentoring Award. Al is the father of three children.

**Maura Wuellner** is the Director, Illinois Region for United Way of Greater St. Louis. She has been with United Way since 2014. Her primary responsibilities include the annual fundraising campaigns for the Southwest Illinois Division and Tri-Cities Area Division, as well as supervisory responsibilities for both divisional offices. The Southwest Illinois Division covers the counties of Madison, Calhoun, Jersey, Greene and Macoupin and serves thirty-five United Way member agencies. The United Way is focused on helping people live measurably better lives. United Way provides these thirty-eight member agencies with ongoing, operational funding on an annual basis. These agencies provide quality services within the Southwest Illinois Division's service area and are organizationally strong. To ensure that the money raised in the community is well invested, volunteer panels review and assess each member agency on the Quality Standards, which measure the agencies' ability to demonstrate success and competency in four key areas: programs, governance, finance, and administration.

**Amy J. Yeager, MPH** has been the Health Promotion Manager at Madison County Health Department (MCHD) in Illinois for 18 years. She has also worked at SSM Cardinal Glennon Children's Hospital in St. Louis and Chestnut Health Systems in substance abuse prevention and treatment. She has been adjunct faculty at Southern Illinois University Edwardsville and Saint Louis University. In 1995, Amy received

her Bachelor of Science in Human Development and Family Studies from The Pennsylvania State University. In 2002, Amy received a Master of Public Health in Behavioral Science and Health Education from Saint Louis University School of Public Health. Amy is the lead for IPLAN (Illinois Project for Local Assessment of Needs) a state mandated process every 5 years for a countywide health needs assessment, the identification of 5 year health priorities, and the development and implementation of a countywide health plan to address those priorities. As Health Promotion Manager, Amy has guided her team on multiple health communication campaigns for breast and cervical cancer, prostate and testicular cancer, tobacco, underage drinking, youth development, and public health emergency preparedness.

**Ameera Nauman, M.D., FAAP**, is a Board Certified Pediatrician with OSF Saint Anthony's Physician Group in Alton, Illinois. She attended the American University of the Caribbean in St. Maarten before completing her residency at Nassau University Medical Center in East Meadow, NY. She is involved in various community organizations including the Riverbend Health Services Advisory Committee and Refuge. Her areas of interest include community health, mental health, development, and preventive health and wellness. She is committed to using her community's resources along with dedicated professionals, organizations, and parents to attain accessibility and quality of services for all children, and fully believes in advocating for those who lack access to care because of their socioeconomic status.

In addition to collaborative team members, the following **facilitators** managed the process and prepared the Community Health Needs Assessment. Their qualifications and expertise are as follows:

**Michelle A. Carrothers (Coordinator)** is currently the Vice President of Strategic Reimbursement for OSF Healthcare System, a position she has served in since 2014. She serves as a Business Leader for the Ministry Community Health Needs Assessment process. Michelle has over 35 years of health care experience. Michelle obtained both a Bachelor of Science Degree and Masters of Business Administration Degree from Bradley University in Peoria, IL. She attained her CPA in 1984 and has earned her Fellow of the Healthcare Financial Management Association Certification in 2011. Currently she serves on the National Board of Examiners for HFMA. Michelle serves on various Peoria Community Board of Directors and Illinois Hospital Association committees.

**Dawn Tuley (Coordinator)** is a Strategic Reimbursement Senior Analyst at OSF Healthcare System. She has worked for OSF Healthcare System since 2004 and has acted as the coordinator for 13 Hospital Community Health Need Assessments. In addition, she has coordinated the submission of the Community Benefit Attorney General report and the filing of the IRS Form 990 Schedule H since 2008. Dawn has been a member of the McMahan-Illini Chapter of Healthcare Financial Management Association for over ten years. Dawn served as the Vice President, President-Elect and two terms as a Chapter President on the board of Directors with the McMahan-Illini HFMA Chapter. She currently serves as a Director on the board.

**Dr. Laurence G. Weinzimmer Ph.D. (Principal Investigator)** is the Caterpillar Inc. Professor of Strategic Management in the Foster College of Business at Bradley University in Peoria, IL. An internationally recognized thought leader in organizational strategy and leadership, he is a sought-after consultant to numerous *Fortune 100* companies and not-for-profit organizations. Dr. Weinzimmer has authored over 100 academic papers and four books, including two national best sellers. His work appears in 15 languages, and he has been widely honored for his research accomplishments by many prestigious organizations, including the Academy of Management. Dr. Weinzimmer has served as principal investigator for numerous community assessments, including the United Way, Economic Development Council and numerous hospitals. His approach to Community Health Needs Assessments was identified by the Healthcare Financial Management Association (HFMA) as a Best-in-Practice methodology. Dr. Weinzimmer was contracted for assistance in conducting the CHNA.

## APPENDIX 2. ACTIVITIES RELATED TO 2016 CHNA PRIORITIZED NEEDS

Two major health needs were identified and prioritized in the Madison County 2016 CHNA. Below are examples of the activities, measures and impact during the last three years to address these needs.

### 1. Healthy Behaviors defined as - Active Living, Healthy Eating and Obesity Goals

*Goal: Increase awareness of nutrition and fitness resources for providers and community.*

#### **Healthy Behaviors Measurement and Impact**

Established a baseline for the number of programs and/or events promoting physical activity offered by OSF Saint Anthony's Health Center.

- Educational events with Physical and Occupational Therapists were held at community sites, including a Spring Health fair at Senior Services Plus, United Methodist Village, Retired Nurses group, and Girls Night Out for Breast Health.
- Fit & Flexible 6-week physical fitness program offered throughout the years.

Developed a process to introduce nutritional education and/or information in OSF Saint Anthony's primary care office.

- Clinicians downloaded nutritional guidance for patients, as well as directed patients to OSF HealthCare's Health and Wellness Resources. Up-to-date diet education on normal and disease conditions can be downloaded or printed. Dietitians provided diet education to patients per clinical care processes and staff when requested.
- Provided a leader for the Madison County Partnership Community Health-Obesity Reduction Committee, working to collaborate efforts of organizations to promote healthy environments and lifestyles. The project developed healthy eating signage for the community.

Community resource information is continually added to the OSF Saint Anthony's website.

- Updates have been made to the website on nutrition. Recipes with a search tool and added nutritional values and videos for instruction.

Utilized Heart Check Station to promote nutritional and fitness information.

- Heart health nutrition and fitness materials have been updated and placed at the Heart Check station.

Hosted Food Drives annually.

- Holiday Food Drive Challenge has been held to benefit the Crisis Food Pantry. Including department level food drives throughout the year.

Developed a workforce Wellness Plan.

- An OSF 4Life Wellness Program was rolled out to employees. Activities are ongoing through the OSF system. Dietitians help to provide health coaches on the OSF4Life portal and communicate with enrolled participants.

Tracked number of events and community members at any of the OSF Saint Anthony's nutrition/exercise events and/or outreach partnerships in the community.

- Served over 600 community members on education for Nutrition and Fitness.
- Served over 350 with a Fit and Flexible program.
- Educated 200 at Senior Services Plus.
- Provided education to 36 at an employee event.
- Education provided to 150 at Girls Night Out.
- Educated approx. 270 at the Fall Health Fair.
- Partnered with United Methodist Village to educate 50 residents.

Tracked number of patients receiving nutrition education and information.

- Approximately 600 primary care patients with OSF Medical Group were given referrals for nutrition education / information.

Tracked number of visits to the website and social media.

- Able to reach over 1,000 on social media for posts on healthy food choices and nutrition.

Tracked number of visits to Heart Check Station

- This new metric produced 8,111 visits to the Heart Check Station in 2018.

Tracked number of persons served through Food Drives.

- Approximately 167 meals were provided by five pallets of food collected at Holiday Food Drive.

## 2. Behavioral Health defined as – Mental Health and Substance Abuse

### **Goals:**

- *Link community to existing resources for mental health care.*
- *Increase awareness and engagement to decrease substance abuse (marijuana, opiates, etc.) and tobacco use in Madison County.*
- *Increase referrals into appropriate treatment programs.*

### **Behavioral Health Measurement and Impact**

Establish a baseline for the number programs or events regarding mental health offered by OSF Saint Anthony's Health Center.

- Provided free community screenings held for depression and anxiety that included targeted distribution of mental health materials.
- Provided a speaker to Caring Circle women's group on handling stress
- Provided additional speakers to a Stroke Support Group.

- Presented at a church banquet on healthy communication, in addition to presenting at United Methodist Village on Dementia.
- Approximately six mental health programs or events occurred each year. Reaching 230 community members per year.

Establish a baseline for the number of programs and/or events regarding substance abuse offered by OSF Saint Anthony's Health Center.

- Provided sitter coverage and designated specific full time employees to ensure the safety of at-risk patients.
- Provided an Opioid education program for caregivers on using Behavioral Health for Management of Chronic Pain.
- Presented to Cope Plastics on Opioid Addiction.
- Participated on the radio WBGZ on alcohol addiction.
- Approximately three presentations for substance abuse were completed each year, reaching about 115 per session.

Establish a baseline for the number of programs or events for tobacco use offered by OSF Saint Anthony's Health Center.

- An American Cancer Society Freshstart® smoking cessation was held in the 4th quarter of 2018.
- A Lunch and Learn was offered to the community regarding the health effects of smoking as related to cancer.
- Smoking cessation materials were distributed at various health fairs for United Methodist Village
- Approximately five programs or events for Tobacco Use per year were conducted, reaching about 600 each year.

Develop mental health, substance abuse and tobacco use messaging aimed at reducing the stigma on abuse and use.

- Distributed materials through social media or through community resource information on the OSF Saint Anthony's website.
- Social media messages for mental health, substance abuse, and alcohol awareness were developed in collaboration with Behavioral Health and Oncology Nurses/smoking cessation facilitators.
- New blogposts posted on website to address: Anxiety, stress, suicide stigma, seasonal and workplace overeating, smoking cessation, sedentary lifestyles, reducing sugar intake, youth vaping, nutritional mandates, exercise, and weight loss.

Number of social media posts on behavioral health offered by OSF Saint Anthony Medical Center.

- In 2018, 2696 views for social media posts on mental health, substance abuse, and tobacco use occurred. In 2018, 2315 views for social media messaging on SilverCloud, a free mental health services. 94 views on social media for blog posts on mental health. 679 or 96.86% of patients seen in the ED with behavioral health problems, received an intervention based on their responses to a Risk of Suicide Questionnaire (RSQ).

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In addition, four oncology clinicians received their training for American Cancer Society Freshstart® smoking cessation classes. Following the final class, communication with a local school resulted in adding Vaping to the curriculum.

## APPENDIX 3. SURVEY



# OSF<sup>®</sup> HEALTHCARE

## COMMUNITY HEALTH-NEEDS ASSESSMENT SURVEY

### INSTRUCTIONS

We want to know how you view our community, so we are inviting you to participate in a research study about community health needs. Your opinions are important! This survey will take about 10 minutes to complete. All of your individual responses are confidential. We will use the survey results to better understand and address health needs in our community.

This survey was reviewed by the Committee on the Use of Human Subjects and Research, Bradley University Institutional Review Board (IRB) in June, 2018  
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## COMMUNITY PERCEPTIONS

1. What would you say are the three (3) biggest **HEALTH ISSUES** in our community?

- |  |  |
|--|--|
| <input type="checkbox"/> Aging issues, such as Alzheimer’s disease, hearing loss, memory loss, arthritis | <input type="checkbox"/> Early sexual activity   |
| <input type="checkbox"/> Cancer  | <input type="checkbox"/> Heart disease/heart attack                                    |
| <input type="checkbox"/> Chronic pain  | <input type="checkbox"/> Mental health issues, such as depression, hopelessness, anger |
| <input type="checkbox"/> Dental health (including tooth pain)  | <input type="checkbox"/> Obesity/overweight  |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Sexually transmitted infections                               |
| <input type="checkbox"/> Other _____   |  |

2. What would you say are the three (3) most **UNHEALTHY BEHAVIORS** in our community?

- |   |   |
|---|---|
| <input type="checkbox"/> Angry behavior/violence    | <input type="checkbox"/> Drug abuse (legal drugs) |
| <input type="checkbox"/> Alcohol abuse              | <input type="checkbox"/> Lack of exercise         |
| <input type="checkbox"/> Child abuse                | <input type="checkbox"/> Poor eating habits       |
| <input type="checkbox"/> Domestic violence          | <input type="checkbox"/> Risky sexual behavior    |
| <input type="checkbox"/> Drug abuse (illegal drugs) | <input type="checkbox"/> Smoking                  |
| <input type="checkbox"/> Other _____                |   |

3. What would you say are the three (3) most important factors that would improve your **WELL-BEING?**

- |   |   |
|---|---|
| <input type="checkbox"/> Access to health services  | <input type="checkbox"/> Job opportunities                    |
| <input type="checkbox"/> Affordable clean housing   | <input type="checkbox"/> Less hatred & more social acceptance |
| <input type="checkbox"/> Availability of child care | <input type="checkbox"/> Less poverty                         |
| <input type="checkbox"/> Better school attendance   | <input type="checkbox"/> Less violence                        |
| <input type="checkbox"/> Good public transportation | <input type="checkbox"/> Safer neighborhoods/schools          |
| <input type="checkbox"/> Healthy food choices       | <input type="checkbox"/> Other _____                          |

## ACCESS TO CARE

The following questions ask about your own health and health choices. Remember, this survey will not be linked to you in any way.

### Medical Care

1. When you get sick, where do you go? (Please choose only one answer).

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Clinic/Doctor's office | <input type="checkbox"/> Emergency Department | <input type="checkbox"/> I don't seek medical attention |
| <input type="checkbox"/> Urgent Care Center     | <input type="checkbox"/> Health Department    | <input type="checkbox"/> Other _____                    |

2. In the last YEAR, was there a time when you needed medical care but were not able to get it?

- Yes (please answer #3)       No (please go to #4: Prescription Medicine)

3. If you were not able to get medical care, why not? (Please choose all that apply).

- Didn't have health insurance.  Too long to wait for appointment.  
 Couldn't afford to pay my co-pay or deductible.  Didn't have a way to get to the doctor.

Are there any other reasons why you could not access medical care?

### Prescription Medicine

4. In the last YEAR, was there a time when you needed prescription medicine but were not able to get it?

- Yes (please answer #5)  No (please go to #6: Dental Care)

5. If you were not able to get prescription medicine, why not? (Please choose all that apply).

- Didn't have health insurance.  The pharmacy refused to take my insurance or Medicaid.  
 Couldn't afford to pay my co-pay or deductible.  Didn't have a way to get to the pharmacy.

Are there any other reasons why you could not access prescription medicine?

### Dental Care

6. In the last YEAR, was there a time when you needed dental care but were not able to get it?

- Yes (please answer #7)  No (please go to #8: Mental-Health Counseling)

7. If you were not able to get dental care, why not? (Please choose all that apply).

- Didn't have dental insurance.  The dentist refused my insurance/Medicaid  
 Couldn't afford to pay my co-pay or deductible.  Didn't have a way to get to the dentist.

Are there any other reasons why you could not access a dentist?

### Mental-Health Counseling

8. In the last YEAR, was there a time when you needed mental-health counseling but could not get it?

- Yes (please answer #9)  No (please go to next section – HEALTHY BEHAVIORS)

9. If you were not able to get mental-health counseling, why not? (Please choose all that apply).

- Didn't have insurance.  The counselor refused to take my insurance/Medicaid  
 Couldn't afford to pay my co-pay or deductible.  Embarrassment.  
 Didn't have a way to get to a counselor.

Are there any other reasons why you could not access a mental-health counselor?

## HEALTHY BEHAVIORS

The following questions ask about your own health and health choices. Remember, this survey will not be linked to you in any way.

### Exercise

1. In the last WEEK how many times did you participate in exercise, (such as jogging, walking, golf, weight-lifting, fitness classes) that lasted for at least 30 minutes?

- None (please answer #2)  1 – 2 times  3 - 5 times  More than 5 times

2. If you answered “none” to the question about exercise, why didn’t you exercise in the past week? (Please choose all that apply).

- Don’t have any time to exercise.                       Don’t like to exercise.  
 Can’t afford the fees to exercise.                       Don’t have child care while I exercise.  
 Don’t have access to an exercise facility.                       Too tired.

Are there any other reasons why you could not exercise in the last week?

### Healthy Eating

3. On a typical DAY, how many **servings/separate portions** of fruits and/or vegetables did you have? An example would be a banana (but not banana flavored pudding).

- None (please answer #4)                       1 – 2                       3 - 5                       More than 5

4. If you answered “none” to the questions about fruits and vegetables, why didn’t you eat fruits/vegetables? (Please choose all that apply).

- Don’t have transportation to get fruits/vegetables                       Don’t like fruits/vegetables  
 It is not important to me                       Can’t afford fruits/vegetables  
 Don’t know how to prepare fruits/vegetables                       Don’t have a refrigerator/stove  
 Don’t know where to buy fruits/vegetables

Are there any other reasons why you do not eat fruits/vegetables?

5. Where is your primary source of food? (Please choose only one answer).

- Grocery store                       Fast food                       Gas station                       Food delivery program  
 Food pantry                       Farm/garden                       Convenience store                       Other \_\_\_\_\_

6. What are the biggest challenges to eating healthy in our community? (Please choose all that apply).

- Knowledge                       Convenience                       People don’t care                       Physical challenge/Disability  
 Cost                       Time                       No healthy options                       Transportation                       Other

7. Please check the box next to any of the health conditions that you have. (Please choose all that apply).

If you don’t have any health conditions, please check the first box and go to question #9: Smoking.

- I do not have any health conditions                       Diabetes                       Mental-health conditions  
 Allergy                       Heart problems                       Stroke  
 Asthma/COPD                       Overweight                       Other \_\_\_\_\_  
 Cancer                       Memory problems

8. If you identified any conditions in Question #7, how often do you follow an eating plan to manage your condition(s)?  Never                       Sometimes                       Usually                       Always                       Not applicable

### Smoking

9. On a typical DAY, how many cigarettes do you smoke, or how many times do you use electronic vaping?

- None                       1 - 4                       5 - 8                       9 - 12                       More than 12

### General Health

10. Where do you get most of your medical information? (Please choose only one answer).

- Doctor                       Friends/family                       Internet                       Pharmacy                       Nurse at my church

11. Do you have a personal physician/doctor?  Yes  No

12. How many days a week do you or your family members go hungry?

None  1–2 days  3–5 days  More than 5 days

13. In the last 30 DAYS, how many days have you felt depressed, down, hopeless?

None  1–2 days  3 – 5 days  More than 5 days

14. In the last 30 DAYS, how often has your stress and/or anxiety stopped you from your normal daily activities?

None  1–2 days  3 - 5 days  More than 5 days

15. In the last YEAR have you talked with anyone about your mental health?

Yes (please answer #16)  No (please go to #17)

16. If you talked to anyone about your mental health, who was it?

Doctor/nurse  Counselor  Family/friend  Other \_\_\_\_\_

17. On a typical DAY, how often to do you use substances (either legal or illegal) to make yourself feel better?

None  1–2 times  3–5 times  More than 5 times

18. When you were a child, did a parent or other adult often swear at you, insult you or make you feel afraid?

Yes  No

19. Do you feel safe where you live?  Yes  No

20. In the past 5 years, have you had a:

Breast/mammography exam	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable
Prostate exam	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable
Colonoscopy/colorectal cancer screening	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable

**Overall Health Ratings**

21. My overall physical health is:  Below average  Average  Above average

22. My overall mental health is:  Below average  Average  Above average

**INTERNET**

1. How interested would you be in health services provided through Internet or phone?

1  2  3  
 Not interested Somewhat interested Extremely interested

2. Can you get free wi-fi in public locations?  Yes  No

3. Do you have Internet in your home (or where you live)? For example, can you watch Youtube?

Yes (please go to next section – BACKGROUND INFORMATION)  No (please answer #4)

4. If don't have Internet, why not?  Cost  No available Internet provider  Data limits  
 I don't know how  Other \_\_\_\_\_

## BACKGROUND INFORMATION

1. What county do you live in?

Madison       Other

2. What is your Zip Code? \_\_\_\_\_

3. What type of health insurance do you have? (Please choose all that apply).

Medicare       Medicaid       Private/Commercial       None (Please answer #4)

4. If you answered “none” to the question about health insurance, why **don’t** you have insurance? (Please choose all that apply).

Can’t afford health insurance       Don’t need health insurance  
 Don’t know how to get health insurance       Other \_\_\_\_\_

5. What is your gender?       Male       Female

6. What is your age?     Under 20       21-35       36-50       51-65       Over 65

7. What is your racial or ethnic identification? (Please choose only one answer).

White/Caucasian       Black/African American       Hispanic/Latino  
 Pacific Islander       Native American       Asian/South Asian  
 Multiracial       Other: \_\_\_\_\_

8. What is your highest level of education? (Please choose only one answer).

Grade/Junior high school       Some high school       High school degree (or GED)  
 Some college (no degree)       Associate’s degree       Bachelor’s degree  
 Graduate or professional degree       Other: \_\_\_\_\_

9. What was your household/total income last year, before taxes? (Please choose only one answer).

Less than \$20,000       \$20,001 to \$40,000       \$40,001 to \$60,000  
 \$60,001 to \$80,000       \$80,001 to \$100,000       More than \$100,000

10. What is your housing status?

Do not have       Have housing, but worried about losing it       Have housing, **NOT** worried about losing it

11. How many people live with you? \_\_\_\_\_

12. What is your job status? (Please choose only one answer).

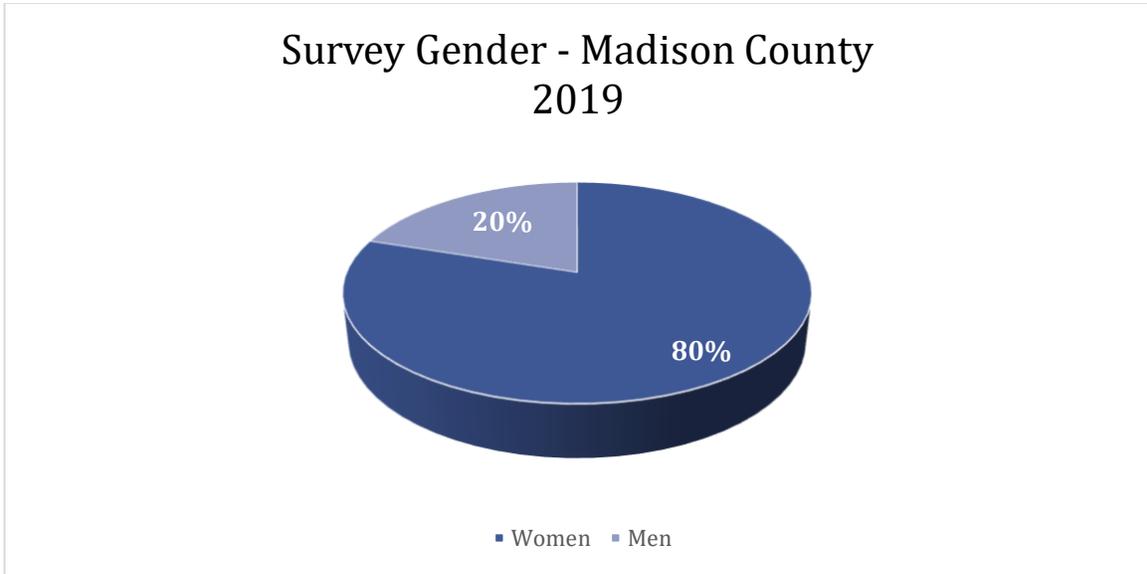
Full-time       Part-time       Unemployed       Homemaker  
 Retired       Disabled       Student       Armed Forces

Is there anything else you’d like to share about your own health goals or health issues in our community?

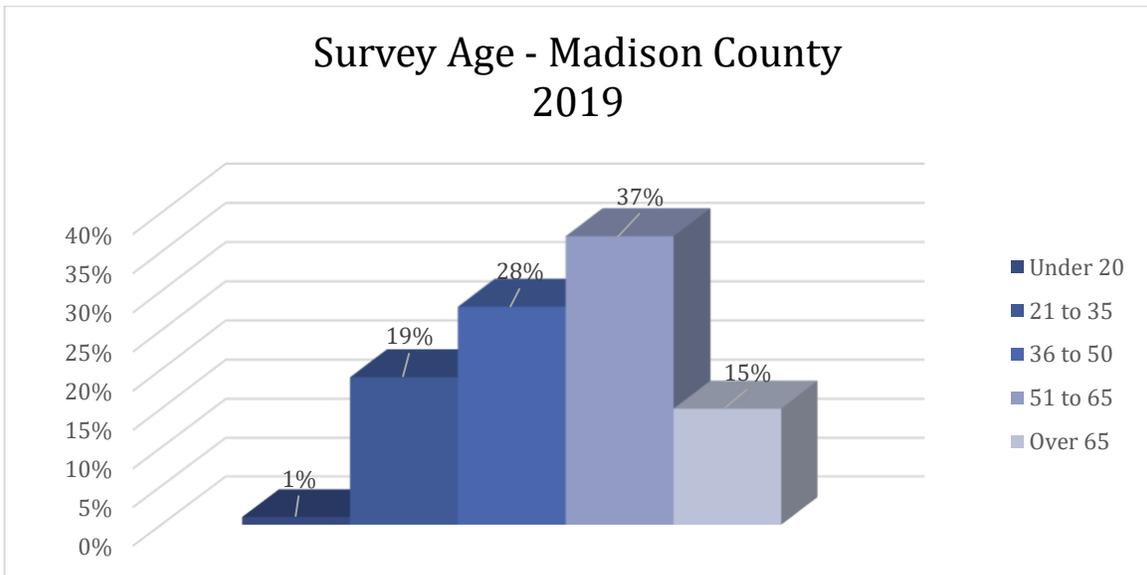
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**Thank you very much for sharing your views with us!**

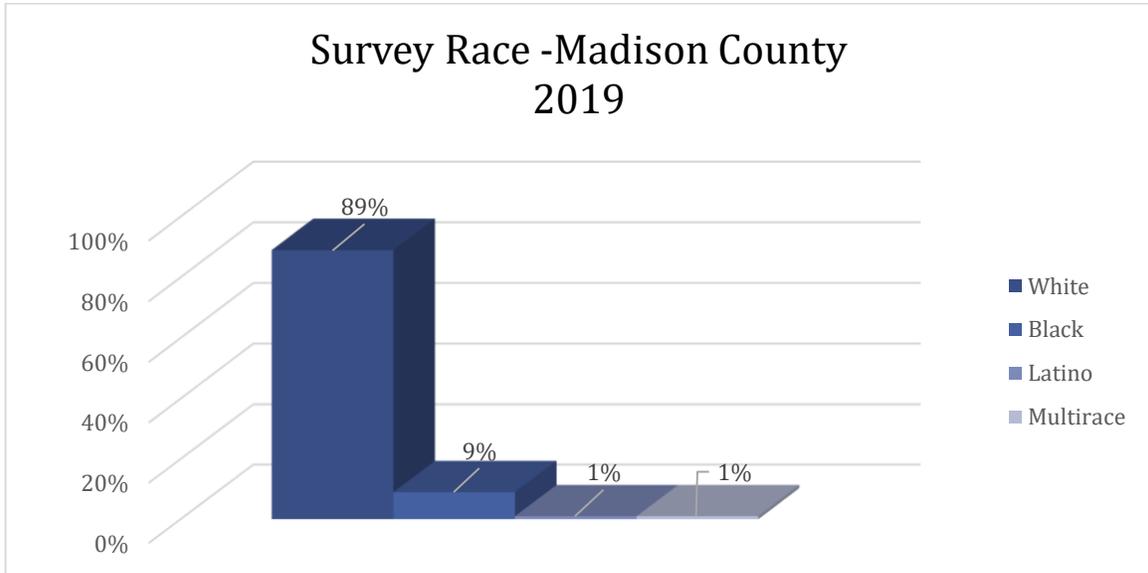
## APPENDIX 4. CHARACTERISTICS OF SURVEY RESPONDENTS



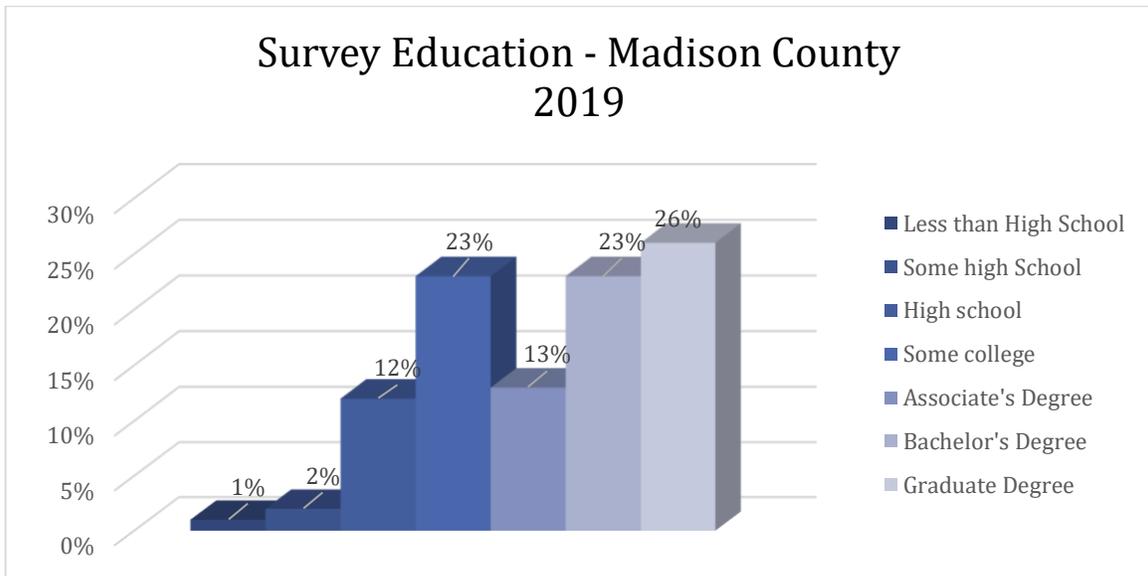
Source: CHNA Survey



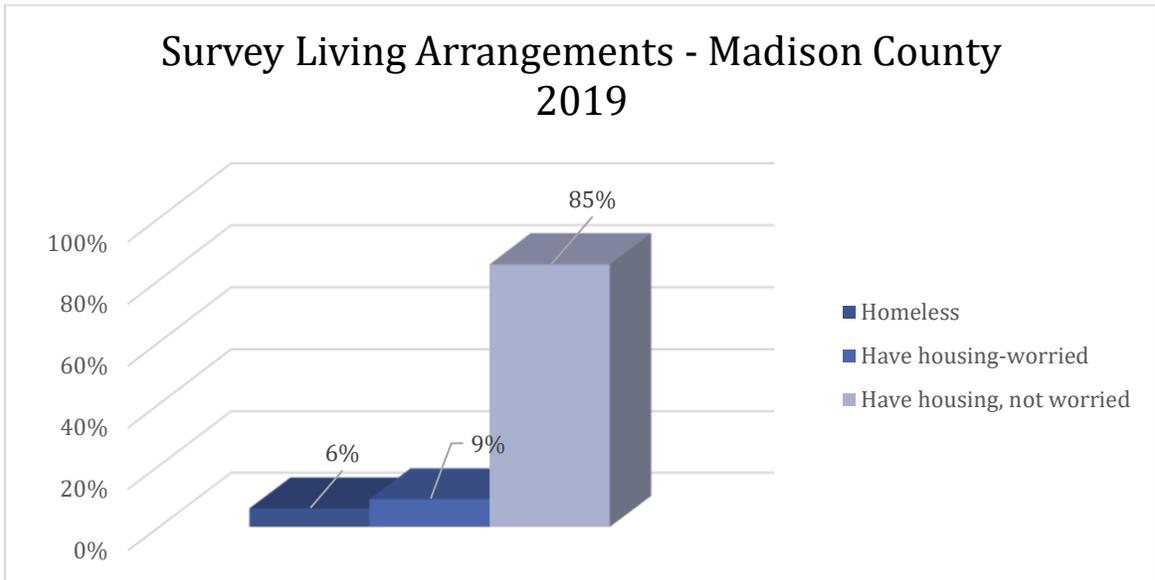
Source: CHNA Survey



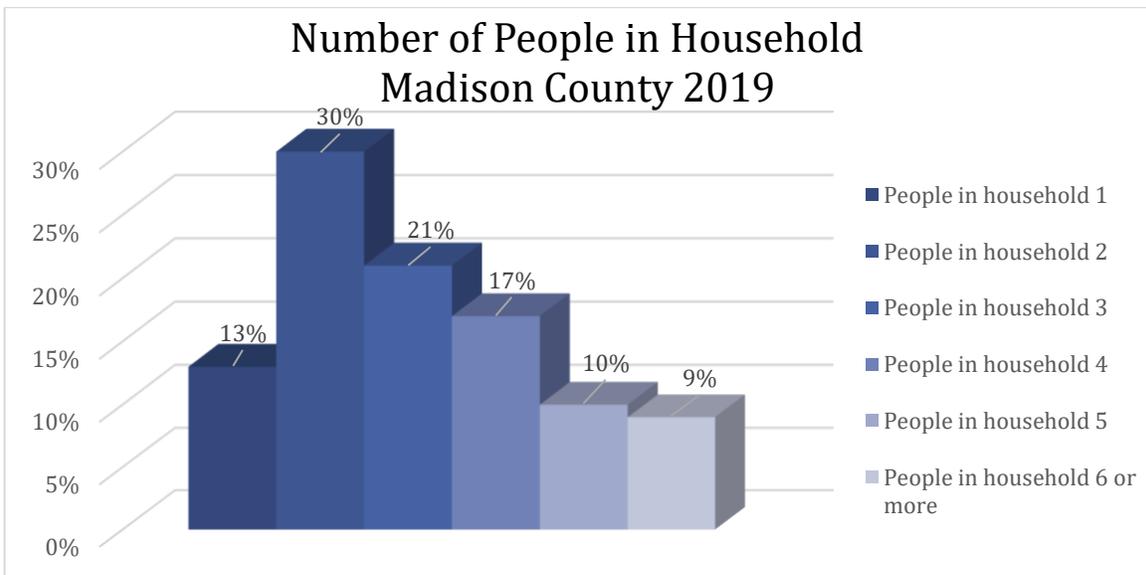
Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey



Source: CHNA Survey

## APPENDIX 5. RESOURCE MATRIX\*

	Aging Population	Healthy Behaviors/ Nutrition & Exercise	Behavioral Health	Overweight /Obesity	Substance Abuse	Lung Cancer	Cancer Screening (Prostate)
<b>Recreational Facilities</b>							
Nautilus Fitness Center		3		2			
Club Fitness		3		2			
Senior Services Plus	3	3		2			
The Max Sports		3		2			
Leisure World	1	3		2			
<b>Health Departments</b>							
Madison County Health Department							
<b>Education</b>							
Alton Community School District		2	1	1	2		
Lewis & Clark Community College	2	3	2	1	1	1	1
University of Illinois Extension							
<b>Community Agencies</b>							
Alton Main Street - Farmers' Market	1	2		2			
Alton YWCA	3	3	1	2	1		
American Cancer Society	2	3		2	1	3	3
Boys & Girls Club		3	2	2	1		
Drug Free Alton Coalition			1		3		
Centerstone	1	2	3	2	3		
Oasis Women's Center							
Riverbend Family Ministries	1	1	3	1	2		
Salvation Army	2	1	1		1		

	Aging Population	Healthy Behaviors/ Nutrition & Exercise	Behavioral Health	Overweight /Obesity	Substance Abuse	Lung Cancer	Cancer Screening (Prostate)
The 100 Black Men of Alton	1	2	2			1	2
United Way	3	3	1	2	1		
NAACP							
American Diabetes Association		3	2	3	1	1	1
American Heart Association		3	2	3	1		
American Lung Association		3	2	2	3	3	
<b>Hospitals / Clinics</b>							
OSF HealthCare Saint Anthony's Health Center	1	2	3	1	2	3	3
Alton Memorial Hospital	3	3	2	3	3	2	1
Jersey Community Hospital	2	2	1	1	1	1	1
Anderson Hospital	2	3	2	3	2	3	3

**\*(1)= low; (2)= moderate; (3) = high, in terms of degree to which the need is being addressed**

## APPENDIX 6. DESCRIPTION OF COMMUNITY RESOURCES

### Recreational Facilities

#### Nautilus Fitness Center

Nautilus Fitness Center offers the latest in fitness trends and equipment. The fitness facility offers classes, pool, and boot camp.

#### Club Fitness

Affordable, friendly, state of the art fitness facility (Moving to new location in East Alton in summer 2019).

#### Senior Services Plus

Senior Services Plus is an agency that helps enrich lives of older adults through programs and services that encourage independent living. The agency offers recreation, arts & crafts, and educational classes.

#### The Max Sports

Fitness facility offering various classes and equipment. (Formerly Metro Sports)

#### Leisure World

Leisure World is a fitness facility that commits helping members meet their needs with various classes and equipment.

### Health Departments

#### Madison County Health Department

The Madison County Health Department provides a core of services in the areas of portable water supplies, food protection, infectious disease control, and community health education.

### Education (3)

#### Alton Community School District

Alton Community School District #11 provides students with expanded academic opportunities and/or interventions in order to increase achievement level. The school targets level K – 12.

#### Lewis & Clark Community College

Lewis & Clark Community College is a two-year higher education institution with multiple campuses, river research center, and community education and training centers located throughout the 220,000+ person college district.

#### University of Illinois Extension

University of Illinois Extension's programs are aimed at making life better, healthier, safer and more prosperous for individuals and their communities.

## **Community Agencies/Private Practices**

### **Alton Main Street Famer's Market**

A responsible way for people to shop for healthy food.

### **Alton YWCA**

Because we know that healthy lifestyles are achieved through nurturing mind, body and spirit, well-being at the YWCA of Alton is more than just working out. We offer opportunities to get fit, get educated and connect with others in the community.

### **American Cancer Society**

The American Cancer Society saves lives by helping people stay well and get well by finding cures and by fighting back.

### **Boys & Girls Club**

Boys & Girls Club is a youth development agency. The agency enables young people to reach their full potential as productive, responsible and caring citizens.

### **Drug Free Alton Coalition (DFA)**

Drug Free Alton Coalition commits to prevention youth from using alcohol, tobacco, and other drugs. DFA serves the Greater Alton area (Alton and Godfrey).

### **Centerstone**

Centerstone is a community based behavioral health care, offering a full range of mental health services, substance abuse treatment and intellectual and developmental disabilities.

### **Oasis Women's Center**

Oasis Women's Center is a shelter for domestic violence and homeless, chemically dependent woman and their dependent children.

### **Riverbend Family Ministries**

Riverbend Family Ministries provides families and individuals, who have experienced trauma, most often due to violence, addiction, poverty and homelessness, the tools they need to be self-sufficient.

### **Salvation Army**

Salvation Army is an integral part of the Christian Church. It brings comfort to the needy and homeless individual.

### **United Way**

United Way improves lives by mobilizing the caring power of communities around the world to advance the common good.

### **National Association for the Advancement of Colored People (NAACP)**

NAACP is to insure a society in which all individuals have equal rights without discrimination based on race.

**The 100 Black Men of Alton**

The "100" is concerned about the well-being of the whole community and the whole person: physical, emotional/psychological, and spiritual.

**American Diabetes Association**

American Diabetes Association is a network of more than one million volunteers. It funds research to prevent, cure and manage diabetes.

**American Heart Association**

American Heart Association is a voluntary organization dedicating to fight heart disease and stroke.

**American Lung Association**

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease through education, advocacy and research.

**Hospitals/Clinics****OSF Saint Anthony's Health Center**

OSF Saint Anthony's Health Center is established by the Sisters of St. Francis of the Martyr St. George and now sponsored by the Sisters of the Third Order of St. Francis.

**Alton Memorial Hospital**

Alton Memorial Hospital is a member of BJC Healthcare and a non-profit healthcare organization.

**Jersey Community Hospital**

Jersey Community Hospital is an independent hospital base of primary care services.

**Anderson Hospital**

Anderson Hospital is an independent non-profit hospital. The hospital provides personal, convenient, and quality healthcare.

## APPENDIX 7. PRIORITIZATION METHODOLOGY

### 5-STEP PRIORITIZATION OF COMMUNITY HEALTH ISSUES

#### **Step 1. Review Data for Potential Health Issues**

#### **Step 2. Briefly Discuss Relationships Among Issues**

#### **Step 3. Apply “PEARL” Test from Hanlon Method<sup>3</sup>**

Screen out health problems based on the following feasibility factors:

**Propriety** – Is a program for the health problem appropriate?

**Economics** – Does it make economic sense to address the problem?

**Acceptability** – Will a community accept the program? Is it wanted?

**Resources** – Is funding available for a program?

**Legality** – Do current laws allow program activities to be implemented?

#### **Step 4. Use Voting Technique to Narrow Potential Issues**

#### **Step 5. Prioritize Issues. Use a weighted-scale approach (1-5 scale) to rate remaining issues based on:**

**1. Magnitude** – size of the issue in the community. Considerations include, but are not limited to:

- *Percentage of general population impacted*
- *Prevalence of issue in low-income communities*
- *Trends and future forecasts*

**2. Severity** – importance of issue in terms of relationships with morbidities, comorbidities and mortality. Considerations include, but are not limited to:

- *Does an issue lead to serious diseases/death*
- *Urgency of issue to improve population health*

**3. Potential for impact through collaboration** – can management of the issue make a difference in the community?

Considerations include, but are not limited to:

- *Availability and efficacy of solutions*
- *Feasibility of success*

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<sup>3</sup> “Guide to Prioritization Techniques.” National Connection for Local Public Health (NACCHO)