



MISSOURI DELTA  
MEDICAL CENTER



- ▶ MISSISSIPPI
- ▶ NEW MADRID
- ▶ SCOTT

# COMMUNITY HEALTH NEEDS ASSESSMENT

2022

## Table of Contents

<b>Executive Summary</b> .....	4
<b>Community Health Needs Assessment Introduction and Methods</b> .....	6
Description .....	6
Requirements.....	6
Implementation Strategy Requirements .....	7
Assessment Process .....	8
Defining Community .....	10
Primary Data .....	10
Secondary Data .....	19
Community Background .....	19
Population .....	19
Age & Gender .....	22
Race & Ethnicity .....	23
<b>CHAPTER 1: Health Factors</b> .....	24
Health Behaviors .....	25
Tobacco Use .....	25
Adult Smoking .....	25
Diet & Exercise .....	26
Access to Healthy Foods .....	26
Alcohol & Drug Use .....	28
Binge or Heavy Drinking .....	29
Driving Deaths Involving Alcohol .....	29
Sexual Activity.....	30
Teen Births .....	30
Sexually Transmitted Infections .....	31
Clinical Care .....	32
Access to Care .....	33
Insurance (Uninsured Population) .....	34
Healthcare Providers/Resources/Quality .....	35
Preventable Hospital Stays .....	47
Social & Economic Factors .....	48
Education .....	49

High School Completion .....	49
Student Reading Proficiency .....	50
Employment .....	51
Unemployment Rate .....	52
Income .....	52
Median Family Income .....	53
Children Eligible for Free/Reduced Price Lunch .....	54
Food Insecurity .....	54
Food Insecurity Rate .....	55
Food Insecure Children .....	55
Food Insecure Population Ineligible for Assistance .....	56
Family & Social Support .....	57
Children in Single-Parent Households .....	57
Social or Emotional Support .....	58
Community Safety.....	59
Violent Crime .....	60
Injury Deaths .....	60
Physical Environment .....	61
Air & Water Quality .....	62
Air Pollution – Particulate Matter .....	62
Drinking Water Violations .....	63
Transportation .....	63
<b>Chapter 2: Health Outcomes .....</b>	<b>64</b>
Length of Life .....	64
Years of Potential Life Lost .....	64
Quality of Life .....	65
Poor or Fair Health .....	65
Poor Physical Health Days .....	66
Poor Mental Health Days .....	66
<b>Chapter 3: Health Measures .....</b>	<b>67</b>
Morbidity .....	67
Obesity .....	67

Diabetes .....	69
High Blood Pressure .....	70
High Cholesterol .....	70
Mortality .....	71
Leading Causes of Death in Adults .....	71
Mississippi County .....	72
New Madrid County .....	73
Scott County .....	74
Leading Causes of Death in Children and Adolescents .....	75
Causes of Death in Children ages 1-14 .....	75
Causes of Death in Adolescents ages 15-17 .....	75
<b>Conclusion</b> .....	76
Appendix A: .....	77
Appendix B: .....	78
List of Tables: .....	78
List of Charts: .....	79

# Executive Summary

Creating healthy communities requires a high level of mutual understanding and collaboration with individuals and organizations in the community. The development of this assessment brought together community health leaders and providers to research and prioritize community health needs and to document community health delivery success.

This health assessment will serve as the foundation for Missouri Delta Medical Center’s community health improvement efforts over the next three years (Sept 2022 – Sept 2025).

## Community Health Needs Assessment Process and Requirements

A Community Health Needs Assessment (CHNA) must be conducted every three years by not-for-profit hospitals in order to comply with federal tax-exemption requirements under the Affordable Care Act. Following the CHNA, the hospital must adopt an implementation strategy to meet the community health needs identified through the assessment, and it must report how it is addressing the needs identified in the CHNA and provide a description of needs that are not being addressed with the reasons why such needs are not being addressed. The ultimate purpose of the CHNA is to improve community health.

The Community Health Needs assessment process consists of the following steps:

1. Define the community served by the hospital facility.
2. Identify the partners and individuals representing the broad interest of the community.
3. Gather available data and current assessments.
4. Develop and conduct primary research.
5. Aggregate primary and secondary research.
6. Identify and prioritize the health needs of your community.
7. Develop and implement a strategy to address the identified priority health issues.
8. Widely disseminate the CHNA.

## **Primary Data**

Primary Data are collected by the user by methods of community surveys, focus groups, in-depth interviews, community dialogues, etc. For the purposes of this CHNA, we held a Focus Group in each of the 3 counties (Mississippi County, New Madrid County, and Scott County) being reported. Participants were sent a pre-survey to complete before the Focus Group held by Zoom. The Scott County Focus Group was moderated by Saint Francis Medical Center. Mississippi and New Madrid Counties were moderated by Missouri Delta Medical Center.

## **Secondary Data**

Secondary data are quantitative in nature and refer to data collected by someone other than the primary user. Secondary data sources used for this CHNA include U.S. Census Bureau, Missouri Department of Health & Human Services, County Health Rankings, ExploreMOHealth, and the National Center for Education Statistics, among others. To organize, the Secondary Data is divided by chapters.

**Chapter 1. Health Factors** - Health Factors represent those things we can modify to improve the length and quality of life. Everything from our education to our environments impact our health.

**Chapter 2. Health Outcomes** – Health Outcomes reflect the physical and mental well-being of residents within a community through measures representing not only the length of life but quality of life as well.

**Chapter 3. Health Measures** - Health Measures contains information on mortality and morbidity.

## **Conclusion**

# COMMUNITY HEALTH NEEDS ASSESSMENT

## INTRODUCTION AND METHODS

### Community Health Needs Assessment Description

A community health needs assessment (CHNA) is a systematic process involving the community, to identify and analyze community health needs and assets in order to prioritize these needs, and to plan and act upon unmet community health needs. The CHNA is an asset to the community and the hospital, providing valuable information for the planning and prioritizing of programs.

### Community Health Needs Assessment Requirements

A CHNA must be conducted every three years by not-for-profit hospitals in order to comply with federal tax-exemption requirements under the Affordable Care Act. The CHNA must take into account input from persons who represent the broad interest of the community served by the hospital facility, including those with special knowledge or expertise in public health; and it must be made widely available to the public. Following the CHNA, the hospital must adopt an implementation strategy to meet the community health needs identified in the CHNA and provide a description of needs that are not being addressed with the reasons why such needs are not being addressed. The ultimate purpose of the CHNA is to improve community health.

The documentation of the CHNA must include the following information:

1. A description of the community served by the hospital facility and how it was determined.
2. A description of the process and methods used to conduct the assessment, including:
  - a. A description of the sources and dates of the data and other information used in the assessment, including primary and secondary sources.
  - b. The analytical methods applied to identify community health needs.
  - c. Information gaps that affect the hospital's ability to assess the community's health needs.
  - d. If the hospital collaborates with other organizations in conducting a CHNA, the report should then identify all of the community organizations that collaborated with the hospital.

- e. If the hospital contracts with one or more third parties to assist in conducting a CHNA, the report should also disclose the identity and qualifications of the third parties.
3. A description of the approach used to plan, develop, and conduct the assessment and how the hospital organization took into account input from individuals who represent the broad interest of the community served by the hospital facility including:
  - a. A description of when and how the organization consulted with these individuals (whether through meetings, focus groups, interviews, surveys, written correspondence, etc.).
  - b. Community leaders who were consulted and/or collaborated in the planning and implementation process.
  - c. Justification of why data sources were used and selected.
  - d. Justification of the approach for primary data collection.
  - e. Explanation of successful and non-successful approaches to see broad-based community input, especially underserved or high-risk groups within the community.
  - f. If the hospital takes into account input from an organization, the written report should identify the organization and provide the name and title of at least one individual in that organization who consulted with the hospital.
  - g. Identification of any individual providing input who has special knowledge of or expertise in public health and the report should list those people by name, title, affiliation, and include a brief description of the individual's special knowledge or expertise.
4. A prioritized description of all community health needs identified through the CHNA, as well as a description of the process and criteria used in prioritizing such health needs.
  - a. Priorities identified through primary and secondary data.
  - b. Other processes used to rank priorities.
5. A description of the existing health care facilities and other resources within the community available to meet the community health needs identified through the CHNA.

### **Implementation Strategy Requirements**

Provisions under Section 501(r) specify hospitals must conduct a CHNA and adopt an implementation strategy that meets the needs identified at least once every three years. The



implementation plan should be updated as community needs and priorities change, hospital resources change or based on evaluation results.

The Treasury and IRS expect the implementation strategy to:

1. Describe how the hospital facility plans to meet the health need; or
2. Identify the health need as one the hospital facility does not intend to meet and explains why the hospital facility does not intend to meet the health need

As with the CHNA report, a hospital facility may develop an implementation strategy in collaboration with other hospital facilities or other organizations. This includes, but is not limited to, related and unrelated hospital organizations and facilities, for-profit and government hospitals, governmental departments and nonprofit organizations.

In general, a hospital facility that collaborates with other facilities or organizations to develop its implementation strategy must still document its implementation strategy in a separate written plan tailored to the particular hospital facility, taking into account its specific resources.

A hospital facility that adopts a joint CHNA report may also adopt a joint implementation strategy. With respect to each significant health need identified through the joint CHNA, the joint implementation strategy must either describe how one or more of the collaborating facilities or organizations plan to address the health need, or identify the health need as one the collaborating facilities or organizations do not intend to address. It must also explain why they do not intend to address the health need.

A joint implementation strategy adopted for the hospital must also:

- Be clearly identified as applying to the hospital facility.
- Clearly identify the hospital facility's role and responsibilities in taking the actions described in the implementation strategy, as well as the resources the hospital facility plans to commit to such actions.
- Include a summary or other tool that helps the reader easily locate those portions of the joint implementation strategy that relate to the hospital facility.

An authorized body of the hospital facility must adopt the implementation strategy.

### **Community Health Needs Assessment Process**

To conduct a CHNA, a hospital facility must complete the following steps according to the IRS:

1. Define the community it serves.
2. Assess the health needs of that community.

3. In assessing the community's health needs, solicit and take into account input received from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health.
4. Document the CHNA in a written report (CHNA report) that is adopted for the hospital facility by an authorized body of the hospital facility.
5. Make the CHNA report widely available to the public.

A hospital facility is considered to have conducted a CHNA on the date it has completed all of these steps, including making the CHNA report widely available to the public.

### **Identify and Prioritize the Health Needs in the Community**

From the analysis of this research, community needs are determined based on what the community finds most important and by what the community is most lacking in that could have an impact on the health of its citizens. These needs are primarily determined by the primary research – what the community finds most important, along with tying that information to what the secondary research shows and looking at the community's statistics and trends against the state's statistics and trends.

### **Develop and Implement a Strategy to Address the Identified Priority Health Issues**

Missouri Delta Medical Center will decide what needs will be addressed and how those needs will be addressed. From this, an implementation plan will be created and executed within 6 months of the dissemination of this report (by March 2023).

### **Widely Disseminate the CHNA**

The CHNA is not considered "conducted" until the written report is made widely available to the public. Fulfilling the "widely available" requirement requires the following:

1. Posting the CHNA on a website that clearly informs users that the document is available and provides instructions for downloading.
2. The documents are posted in a format that exactly reproduces the image of the report when accessed, downloaded, viewed and printed.
3. That individuals with Internet access are able to access, download, view and print the report without the use of special hardware or software.
4. The hospital or other organization distributing the report will provide direct website address to individuals who request a copy of the report.

5. Printed copies of the CHNA will be made available upon request.
6. The CHNA must remain widely available to the public until the next CHNA for that hospital is conducted and made widely available.
7. Notification of completion findings and access will be publicized through public media outlets.

### **Defining “Community”**

For the purposes of this assessment, community is defined as the geographic area from which a significant number of patients using Missouri Delta Medical Center (MDMC) services reside. The primary service area for MDMC is based on the number of inpatient discharges and emergency department visits by patients that reside in each of the three counties: Scott, Mississippi and New Madrid. In discharges from Missouri Delta, 73% are from these counties (Scott 42%, New Madrid 16%, and Mississippi 15%). Missouri Delta Emergency Department visits come from 87% of three counties (Scott 51%, Mississippi 19%, and New Madrid 17%).

The CHNA for Scott County was conducted in partnership with Saint Francis Medical Center. As Mississippi County and New Madrid County were the primary service area of Missouri Delta alone the CHNA was not conducted in partnership with Saint Francis Medical Center.

The Mississippi County, New Madrid County and Scott County secondary data was collected from a variety of local, county, state and national sources in order to profile the demographics, social/economic factors, health status and access to healthcare in the communities serviced. The data sources are listed in Appendix A. Analyses were conducted by comparing the three county area data to state and national benchmarks when available.

### **Primary Data - Individuals Representing the Broad Interest of the Community**

Representatives from organizations that work closely with the community in different aspects were invited to attend the discussion. Efforts were made to include those who have interaction with the at-risk, targeted populations within each county. The CHNA for Scott County was conducted in partnership with Saint Francis Medical Center. Mississippi County and New Madrid County were the primary service area of Missouri Delta Medical Center and this portion of the CHNA was not conducted in partnership with Saint Francis Medical Center.

Individuals representing the following organizations participated in the primary research in:

#### **Scott County**

- Bootheel Counseling Services
- Missouri Delta Medical Center
- Missouri House of Representatives
- American Red Cross

- Ferguson Medical Group
- Scott County Health Department
- SEMO Health Network (FQHC)
- Sikeston Regional Chamber
- Scott County Central Schools

**New Madrid County**

- Missouri Delta Medical Center
- New Madrid County Health Department
- Bootheel Counseling
- SEMO Health Network

**Mississippi County**

- Missouri Delta Medical Center
- Mississippi County Health Department
- L & S Pharmacy
- Missouri Women, Infants and Children (WIC)

The Focus Group process began with the CHNA team compiling a list of potential participants who have interaction with the at-risk, targeted populations within each county and then inviting those participants to the focus group via email. Prior to the virtual event, participants were sent a pre-survey to complete. The purpose of the pre-survey was to find out perceptions of participants prior to their exposure to other members of the focus group. Focus groups, according to research, are a great tool to gather qualitative information, but they lend themselves to groupthink. Groupthink is a phenomenon in which participants unconsciously conform to the opinion of the group at large. It is a natural byproduct of group discussion to maintain social harmony, but it means focus groups sometimes offer a skewed viewpoint. A copy of the pre-survey for Focus Group participants can be found in Appendix A.

**Scott County:**

**Table 1 | Scott County Pre-Survey Top Ten Most Pressing Health Issues**

Issue	Severity Average Score
Affordability of healthcare and prescription drugs	9.0
Mental and behavioral disorders	8.1
Obesity, nutrition, activity	8.1
Substance use/abuse (alcohol, drugs)	8.1

Cancer	7.7
Diabetes and other chronic diseases	7.7
Oral health	7.7
Childcare accessibility	7.6
Lack of or inadequacy of insurance	7.3
Suicide	7.3

Source: Primary data collection, Community Health Needs Assessment 2022

**Table 2 | Scott County Health Issues Receiving Top Five Priority Ratings**

Issue
Affordability of healthcare and prescription drugs
Substance use/abuse (alcohol, drugs)
Mental and behavioral disorders
Communicable disease
Transportation
Vaccines

Source: Primary data collection, Community Health Needs Assessment 2022

### Mississippi County:

**Table 3 | Mississippi County Pre-Survey Top Ten Most Pressing Health Issues**

Issue	Severity Average Score
Smoking, vaping and tobacco use	9.5
Mental and behavioral disorders	9
Communicable Disease	9
Healthcare availability	8.5
Affordability of healthcare and prescription drugs	8.5
Diabetes and other chronic diseases	8.5
Lack of or inadequacy of insurance	8.5
Obesity, nutrition, activity	8.5
Oral Health	8
Transportation	8

Source: Primary data collection, Community Health Needs Assessment 2022

**Table 4 | Mississippi County Health Issues Receiving Top Five Priority Ratings**

Issue
Transportation
Smoking, vaping and tobacco use
Healthcare availability
Mental and Behavioral disorders
Other: education/job skills

Source: Primary data collection, Community Health Needs Assessment 2022

**New Madrid County:**

**Table 5 | New Madrid County Pre-Survey Top Ten Most Pressing Health Issues**

Issue	Severity Average Score
Mental and behavioral disorders	8.4
Substance use/abuse (alcohol, drugs)	8.2
Oral health	8.2
Obesity, nutrition, activity	7.8
Transportation	7.8
Diabetes and other chronic diseases	7.8
Affordability of healthcare and prescription drugs	7.6
Suicide	7
Reproductive and sexual health	7
Smoking, vaping and tobacco use	6.8
Preventative and screening services	6.8

Source: Primary data collection, Community Health Needs Assessment 2022

**Table 6 | New Madrid County Health Issues Receiving Top Five Priority Ratings**

Issue
Mental and behavioral disorders
Oral health
Substance use/abuse (alcohol, drugs)
Suicide
Diabetes and other chronic diseases

Source: Primary data collection, Community Health Needs Assessment 2022

**Tentative Focus Group Questions: (for each county)**

1. What is your vision for a healthy community and county? What is currently unhealthy and what is healthy about this region?
2. What is your perception of the most serious health issues facing this community and country?
3. What are some of the causes of these problems?
4. What could be done to solve these problems?
5. What is your perception of the most beneficial health resources or services in the community and county? What health assets do we have?
6. What actions, programs and Health services can Missouri Delta or Saint Francis Medical Center offer to address the most critical health needs of the county?

The tentative questions were used as a guideline, but were not followed strictly. Questions were asked based on the discussion of the focus group. The following is a summary to the responses to the questions by county.

**1. What is your vision for a healthy community and county? What is currently unhealthy and what is healthy about this region?**

*Scott County* - Focus group members mentioned failure to offer screenings results in late diagnoses. They said the lack of COVID vaccine education and illness education is lacking. Residents suffer from diabetes and where to go for diabetetic education. They said poverty-stricken areas are lacking education and resources for getting people out of their current circumstances. One other issue mentioned was that childcare is an issue in the county.

Focus group members mentioned people are aware of exercise and outdoor activities and many walk for fitness. On the issue of prevention and access, one provider mentioned there is increasing availability of COVID19 vaccinations. One member pointed out there is better access to care in Scott County than some surrounding rural counties because it has a hospital, clinics, satellite clinics

and access to primary care is slightly easier than in rural areas and south of the county. In addition, one focus group member mentioned there are plenty of specialists in the county.

*Mississippi County* – A healthy community to this group are residents who are able to get the health care resources needed. Too many Mississippi County residents have access problems to healthcare due to no insurance/underinsured (high deductibles or co-pays) or have no transportation. Residents could be healthier if they were able to see healthcare providers for preventive services and education on healthcare issues. Although there are many great resources available in the county, the residents either don't know about them, lack interest in participating or life struggles get in the way of utilizing them. It was also discussed that more educated residents would depict a healthier community because they would understand better how to take care of themselves and use the resources provided to them. Better education would also keep the streets safer overall.

*New Madrid County* – It was discussed that access to health care specialties in their county would help the community be healthier. Better quality education in schools would help the economic issues the county faces. More educated a person is the better job they can find. More education regarding health issues would also be healthier for the community, especially when it comes to the COVID vaccine. A high population in the county have misinformation regarding the vaccine and the percentage of those vaccinated is very low.

## **2. What is your perception of the most serious health issues facing this community and country?**

*Scott County* - A number of serious health issues were enumerated by focus group members including diabetes, obesity and cancer and the lack of cancer screenings. With regard to cancer, one person pointed out this area has a higher rate of colon cancer than other regions. The current COVID-19 pandemic was discussed along with related problems that have emerged due to it. The pandemic has created a critical situation for everyone in the area, especially those who are needing medical attention. Missouri Delta Medical Center was on diversion at the time of the focus group meeting because staffing was lacking. A diversion means some medical cases were not currently being accepted and instead diverted to another healthcare facility. An uptick in syphilis cases was mentioned. Mental health and oral health were also mentioned. Asthma related to agricultural harvests was mentioned as a serious health issue. Vaping was listed as an issue. One member mentioned the current critical need for blood pointing out the need is the greatest it has been since 2015 not only in Scott County, but in the rest of the nation as well. The serious substance abuse issue was discussed. This issue is causing some children to be removed from parents and placed with grandparents.

*Mississippi County* – Most agreed that mental and behavioral health resources are too low. Those in the community working with residents of Mississippi County find their hands are tied when trying to find help for someone needing mental health support. It was also discussed that access to primary healthcare is a serious issue with population of uninsured/underinsured and no transportation. Smoking/vaping was also discussed as a huge impact to the chronic disease problems in the county. Many of the chronic diseases can be preventable if behaviors are healthier.



*New Madrid County* – Mental and behavioral health issues was agreed to be a serious problem. Not enough mental health resources/providers causes other health problems. Obesity is linked to mental health issues and leads to chronic diseases which are already prevalent in the area. Dental health was discussed as several dentists in the county are planning to retire and it is very difficult to recruit new professionals to the area. Vision care is also an issue as residents have to travel far to seek services. Childcare has been an issue in the past and is about to be a major problem since the lady who had a long-time daycare in the county is retiring. The problems this will cause will be felt in the near future.

### **3. What are some of the causes of these problems?**

*Scott County* - The focus group mentioned several causes of health issues in Scott County. They included lack of education and generational poverty and that southeast Missouri has some of the poorest counties in Missouri. The cost of insurance and healthcare are challenging to poor people. They often avoid healthcare because it simply does not fit into their budgets. One member mentioned that availability of mental healthcare and negative stigma that accompanies it causes people to turn to drug use and abuse, overeating and other unhealthy behaviors. Scott County COVID vaccine rates are low, one member pointed out, because of lack of education and that everyone is “tired” of COVID. Another member agreed that COVID fatigue is an issue and has caused some to adopt an “I do not care” mindset and refusal to wear masks. Another member believed that because most people are not on the front lines and are not personally affected by the pandemic they do not take it seriously. Misinformation is rampant, especially on social media, and there seems to be no reasoning with people per one member. Scott County vaccine rates are far behind larger urban areas of the state. The group discussed vaccine mandates and issues of fear and politics related to COVID-19.

*Mississippi County* – Insurance barriers cause the issue of access to primary healthcare and mental health services as well as no transportation. Lack of healthcare knowledge causes problems because residents don’t know what they should be doing health wise to take care of themselves and their family. Transportation is a major issue in keeping residents healthy. Lack of transportation affects access to all types of health care, specialty care, healthy food choices, etc.

*New Madrid County* – Most agree that low education leads to many of the discussed issues, such as obesity. Residents aren’t educated on the healthy way of life (eating habits, regular screenings) and even when they are it’s hard for them to understand. A culture of apathy is causing many of the problems the community faces. Some residents have the education and accesses to resources, but just don’t want to do what needs to be done.

### **4. What could be done to solve these problems?**

*Scott County* - Discussion of solutions to health issues underscored a variety of ideas. Improved transportation was mentioned by more than one focus group member as a potential helpful solution because it is lacking in the county. More education was also mentioned as a solution as

was the need for more health screenings and focus on wellness. A topic of discussion was having healthcare providers (including dentists) come to schools for screenings. Sikeston currently has a school-based health center and more of these might be helpful in the county. Another member said that families with children with asthma could improve their health by taking advantage of SEMO's (Southeast Missouri State University's) home environmental assessments. More community health workers was mentioned as a solution. Since obesity is a concern, the group discussed solutions around better and more exercise facilities and healthier food options. Some believe obesity is tied to lack of access and affordability of healthcare facilities. Again, the pandemic emerged as a topic of discussion regarding current food shortages, including in schools, being an issue caused by labor shortages in wholesale food distribution.

*Mississippi County* – Improved public transportation would help solve many of the issues in the county. Although there is a transit bus for the county, it is only available certain times and needs to be scheduled ahead of time. Good planning and time management has to be in place to use what is currently available. Also, children are not allowed on the transit system so those that have kids are not able to use the system unless they have a babysitter, which is also an issue. It was discussed that going to the residents rather than relying on residents to come to medical providers for care would be helpful. This could be done through a school based health care clinic (similar to Sikeston Public Schools) or providing education to students and teachers through the school system outreach program. A better education system could also help with these issues, including adding a more robust VoTech program. Residents would be more employable which leads to higher income.

*New Madrid County* – Increasing the level and quality of education would help the county. There would be an increase in income, better understanding of health and all the benefits of each of these areas.

##### **5. What is your perception of the most beneficial health resources or services in the community and county? What health assets do we have?**

*Scott County* - The group talked about many parks available for exercise and that the YMCA has some scholarships and free after school and summer programs that are beneficial health resources. Regarding food, Sikeston has a variety of grocery stores and some are lower cost within walking distance for many residents; however, outside Sikeston in outlying areas, these are lacking. Sikeston also has a food pantry. Some schools in the county offer backpack programs to help alleviate food issues and some have food pantries. Some churches offer free meals to families. An organization called Life 360 is helping with hunger in a variety of communities in the county.

*Mississippi County* – Mississippi County has many helpful resources such, Suzanna Wesley, Mississippi County Health Department, L&S Pharmacy/Community Health Workers, Fresh Start, Meals on Wheels, Flaming of Hope Food Pantry and the Nutrition Center. The Shining Light Church

hold food bank drives and the local Mississippi County Lions Club is available for special case needs (ex. Hearing aids, glasses).

*New Madrid County* – The New Madrid Resource Center has many different programs available to help the youth of the county succeed in school and prepare for adulthood. Programs in job readiness training, job search assistance, and youth mentoring are just a few that were mentioned. SEMO Health Network, Missouri Delta and SoutheastHEALTH all provide primary healthcare services in the county, with a general/vascular surgeon seeing patients regularly in the Missouri Delta clinic. The New Madrid Health Department provides many resources including programs for Women, Infants & Children, community health programs and immunizations.

***What actions, programs and Health services can Saint Francis Medical Center (or Missouri Delta Medical Center) offer to address the most critical health needs of the county?***

*Scott County* - One focus group member said hospitals could offer more education via direct mailers. Another member said providers could prioritize visiting schools and doing outreach education to instill healthy habits. Free COVID testing was a service one member mentioned Saint Francis could offer to help Scott County. On the topic of COVID, another member expressed vaccine mandates might cause issues with employers and employees. [It was stated that hospitals and healthcare institutions are likely to see what the others do before they mandate – and as of 2022, it is a mandate] Another member pointed out that vaccines help eliminate diseases. Most of the discussion on the role Saint Francis can play in Scott County centered on outreach either via a mobile health unit to provide onsite healthcare in impoverished areas or onsite healthcare in school settings. Onsite in schools would be more than just a school nurse and might help schools deal with disruptive physical and mental behaviors. Diagnosis of illness could happen more quickly. A topic brought up was Saint Francis could help by increasing mental health and psychiatric providers in the area. One member said offering a daycare would help kids start eating healthy, teach them preventative measures and start healthy habits at a young age that could improve quality of life over the lifespan.

*Mississippi County* – Providing more mental and behavioral health providers would be extremely helpful to those needing support. With a few long-time physicians retiring or not accepting new patients, there is a problem finding healthcare providers who with manage patients on controlled medications. Could we add a providers who specializes and understands opioid use disorders? There are resources to help with Medicaid applications, but no help in education or application for Marketplace insurances. Adding Missouri Delta as a provider to these insurances and well as education/help for sign up would help with some of these access to healthcare issues. An after-hours clinic would be helpful in the county. Many residents call the ambulance with acute/minor health issues on weekends, nights, etc.

*New Madrid County* – New Madrid County would like to see more specialists coming to the county to see patients, especially OB/GYN. There needs to be a local program on smoking cessation with resources to obtain discounted Nicotine Replacement Therapies (NRT). Most of the over-the-

counter NRT's are extremely expensive and deter those who would like to quit smoking without having the money resource.

## **Secondary Data – Sources, Existing Health Status & Public Health Data**

Secondary data are existing data that are collected by someone else for a purpose other than the one being pursued. Secondary research was obtained from various credible sources and are included in this written assessment report. Some areas that were researched include demographics, the physical environment, social factors, the economy, and the education system. The assessment also includes existing health status and public health data. Examples of the data sources used are as follows:

- U.S. Census Bureau
- ExploreMOhealth.org
- Missouri Department of Health and Senior Services
- County Health Rankings

Data Sources used for this CHNA can be found in Appendix B.

### *Background Information*

**Mississippi County** is located in the Bootheel of Missouri, with its eastern border formed by the Mississippi River. As of the 2020 census, the population was 12,577. The largest city and county seat is Charleston. The county was officially organized on February 14, 1845, and was named after the Mississippi River.

**New Madrid County** is located in the Bootheel of Missouri. As of the 2020 census, the population was 16,434. The largest city and county seat is New Madrid, located on the northern side of the Kentucky Bend in the Mississippi River. The county includes a large part of the New Madrid Fault that produced the 1811–12 New Madrid earthquakes. This zone remains geologically active, and has continued to produce smaller earthquakes with some frequency.

**Scott County** is located in the southeastern portion of Missouri. As of the 2020 census, the population was 38,059. Its county seat is Benton. The county was organized in 1821 and named for U.S. Representative John Scott, the first federal representative from Missouri.

### *Population*

The total population for the three county area served by MDMC based on 2020 census was 67,070.

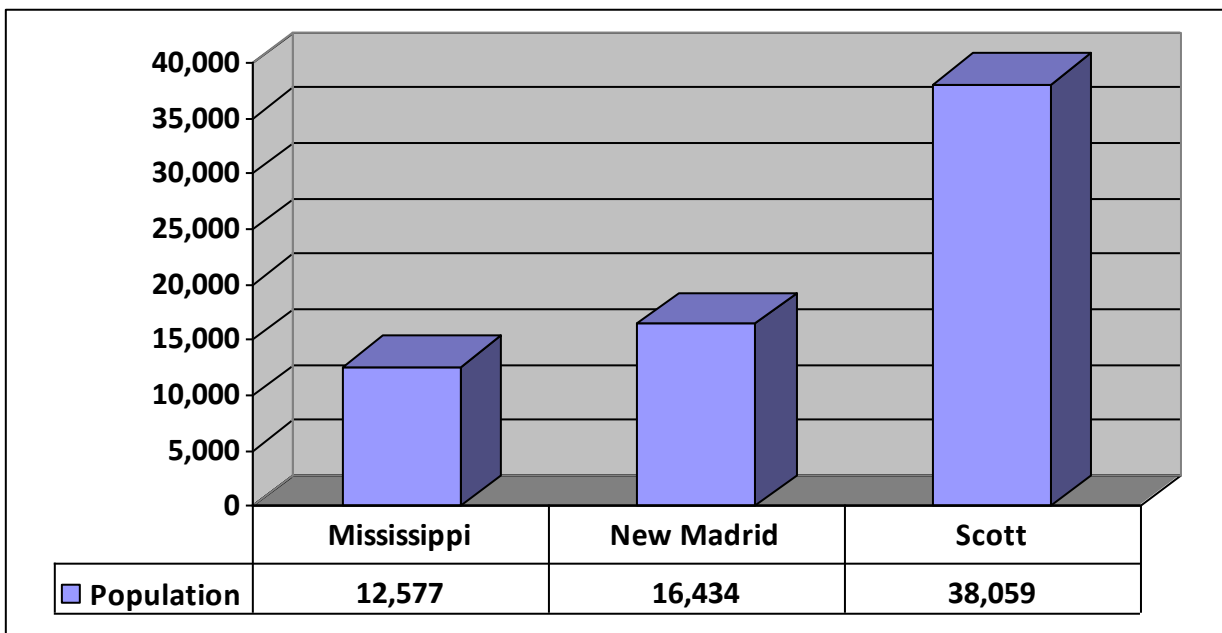
The population of **Scott** County in 2020 was 38,059 which showed a 2.88% decrease from the 2010 census.

**New Madrid** County’s population density is 29 people per square mile with a total population of 16,434. From 2010 to 2020 New Madrid County experienced a population decrease of 13.32%.

There are 12,577 residents in **Mississippi** County in 2020, a density of 32 people per square mile. The ten year population change from 2010 to 2020 shows a decrease of 12.40%.

There are seven cities/villages and six zip codes in Mississippi County, twenty cities/villages and fourteen zip codes in New Madrid County and twenty cities/villages and eleven zip codes in Scott County. Mississippi County covers four hundred and eleven (411) square miles. New Madrid is the largest geographic area of the three counties at six hundred seventy-four (674) square miles. Scott County is four hundred and nineteen (419) square miles.

**Chart 1 | Population for Each County According to 2020 Census.**



Source: US Census Bureau, American Community Survey. 2021 Source geography: ZCTA

**Table 7 | Zip Codes by County**

<u>County</u>	<u>Zip Code</u>	<u>City</u>	<u>County</u>	<u>Zip Code</u>	<u>City</u>
Mississippi	63834	Charleston	New Madrid	63838	Conran
Mississippi	63820	Anniston	New Madrid	63828	Canalou
Mississippi	63881	Wolf Island	New Madrid	63873	Boekerton
Mississippi	63845	East Prairie	Scott	63771	Oran
Mississippi	63823	Bertrand	Scott	63736	Haywood City
Mississippi	63882	Wyatt	Scott	63774	Perkins
Mississippi	63834	Diehlstadt	Scott	63740	Arbor
New Madrid	63878	Tallapoosa	Scott	63771	Haywood City
New Madrid	63873	Point Pleasant	Scott	63736	New Hamburg
New Madrid	63867	Matthews	Scott	63758	Kelso
New Madrid	63833	Catron	Scott	63740	Chaffee
New Madrid	63874	Risco	Scott	63784	Vanduser
New Madrid	63873	Portageville	Scott	63736	Benton
New Madrid	63860	Kewanee	Scott	63767	Morley
New Madrid	63870	Parma	Scott	63740	Randles
New Madrid	63848	Peach Orchard	Scott	63801	Miner
New Madrid	63862	North Lilbourn	Scott	63736	Lambert
New Madrid	63869	Howardville	Scott	63740	Allenville
New Madrid	63848	Gideon	Scott	63824	Blodgett
New Madrid	63873	Hayward	Scott	63780	Scott City
New Madrid	63862	Lilbourn	Scott	63740	Rockview
New Madrid	63866	Marston	Scott	63742	Commerce
New Madrid	63868	Morehouse	Scott	63801	Sikeston
New Madrid	63869	New Madrid			

*Source: US Census Bureau, American Community Survey. 2021 Source geography: ZCTA*

## Age and Gender

**Table 8 | Age & Gender Percentage of Population per 3 County Area Compared to Missouri and United States.**

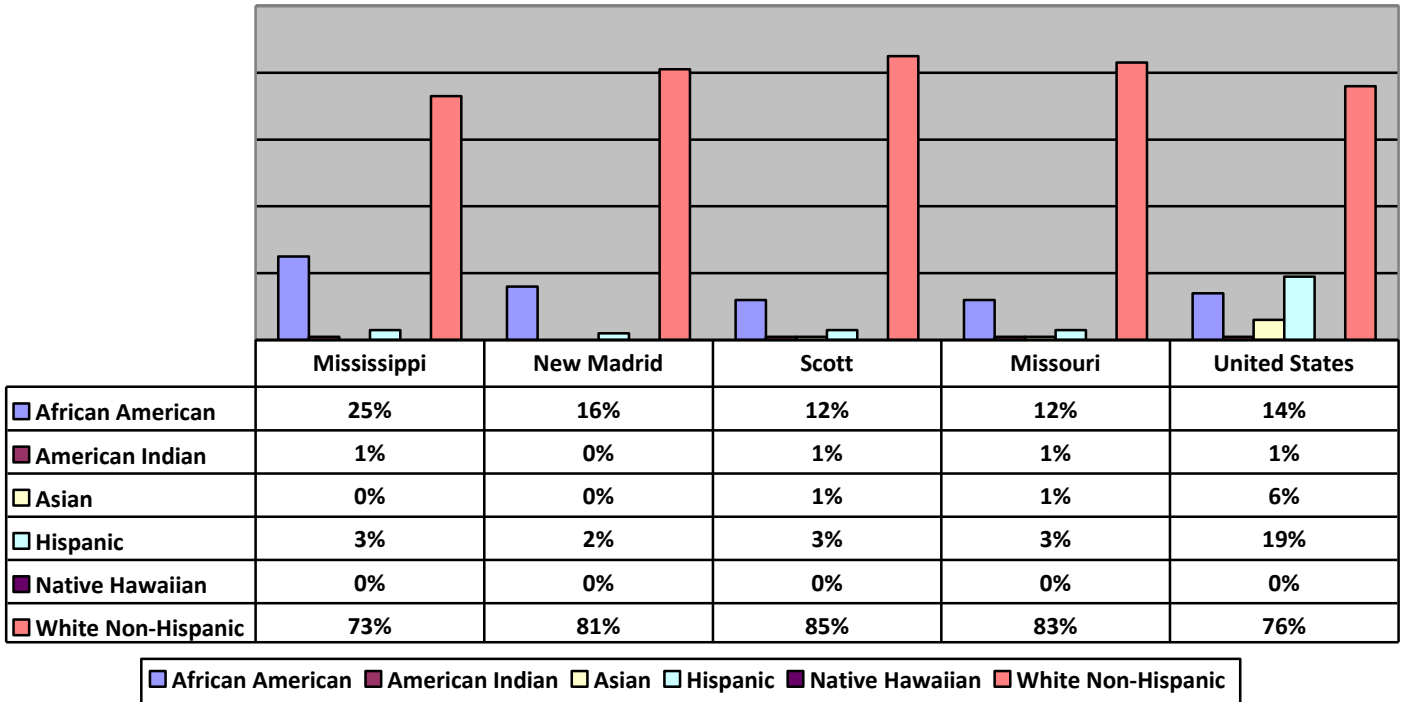
	Mississippi	New Madrid	Scott	Missouri	United States
<b>Gender</b>					
<b>Male</b>	54%	48%	49%	49%	49%
<b>Female</b>	46%	52%	51%	51%	51%
<b>Age</b>					
<b>0-17</b>	21%	23%	24%	23%	22%
<b>18-24</b>	7%	7%	8%	9%	9%
<b>25-34</b>	15%	12%	12%	13%	14%
<b>35-44</b>	13%	12%	11%	13%	13%
<b>45-54</b>	13%	12%	13%	12%	13%
<b>55-64</b>	12%	15%	13%	13%	13%
<b>65+</b>	18%	19%	18%	17%	16%

*Source: US Census Bureau, American Community Survey. 2021 Source geography: ZCTA*

## Race and Ethnicity

The race/ethnicity distribution based on 2020 Census data shows a population that is predominately White Non-Hispanic for all three counties. Mississippi County and New Madrid County have a higher rate of African Americans residents than Missouri and the United States, while Scott County has same rate as Missouri and a slightly lower rate than the United States. All three counties have a significantly lower Hispanic population than the United States.

Chart 2 | Percentage of Race & Ethnicity per 3 County Area Compared to Missouri and United States.



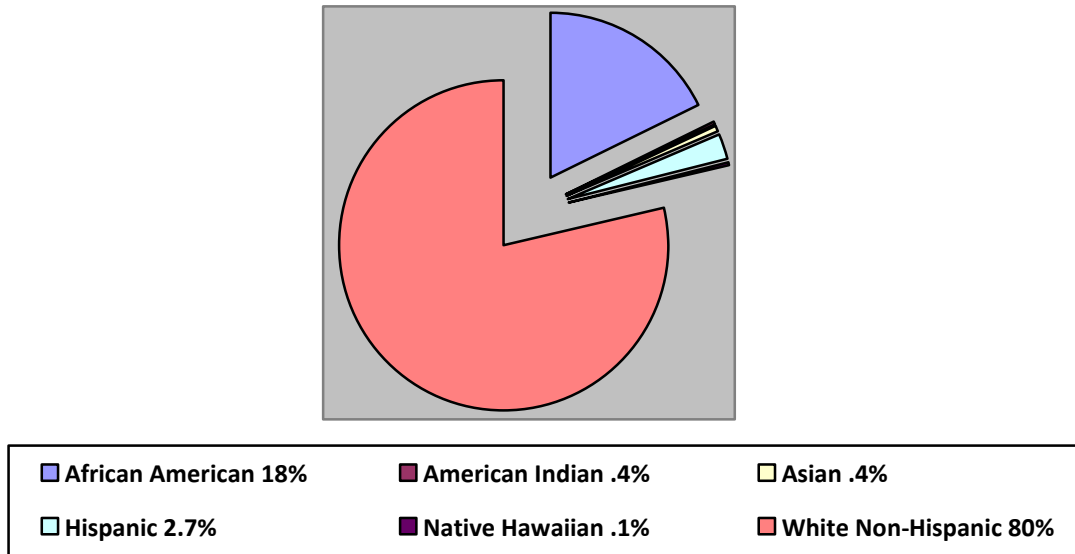
Source: US Census Bureau, American Community Survey. 2021 Source geography: ZCTA

*Race and Ethnicity Distribution in MDMC Service Area*

The African American rate in the MDMC service area (18%) is 6% higher than the Missouri rate (12%) and the White Non-Hispanic percentage (80%) is lower in our service area compared to Missouri as a whole (83%).



Chart 3 | Percentage of race & ethnicity for MDMC 3 county service area.



Source: US Census Bureau, American Community Survey. 2021 Source geography: ZCTA

## CHAPTER 1: HEALTH FACTORS

There are many things that influence how well and how long we live. Everything from our education to our environments impact our health. Health Factors represent those things we can modify to improve the length and quality of life for residents. They are predictors of how healthy our communities can be in the future.

There is no one factor that dictates the overall health of an individual or community. A combination of multiple modifiable factors, from clean air and water to literacy levels need to be considered to ensure community health for all.

For the purpose of the CHNA, we looked at four different Health Factors:

- **Health Behaviors**, tobacco use, diet and exercise, alcohol and drug use, and sexual activity.
- **Clinical Care**, measuring of access to health care as well as quality of care.
- **Social and Economic Factors**, high school completion and literacy scores.
- **Physical Environment**, air and water quality, transportation.

## Health Behaviors

Health behaviors are actions individuals take that affect their health. They include actions that lead to improved health, such as eating well and being physically active, and actions that increase one's risk of disease, such as smoking, excessive alcohol intake, and risky sexual behavior.

In the United States, many of the leading causes of death and disease are attributed to unhealthy behaviors. For example, poor nutrition and low levels of physical activity are associated with higher risk of cardiovascular disease, type 2 diabetes, and obesity. Tobacco use is associated with heart disease, cancer, and poor pregnancy outcomes if the mother smokes during pregnancy. Excessive alcohol use is associated with injuries, certain types of cancers, and cirrhosis.

It is important to consider that not everyone has the means and opportunity to make healthy decisions. Addressing health behaviors requires strategies to encourage individuals to engage in healthy behaviors, as well as ensuring that they can access nutritious food, safe spaces to be physically active, and support to make healthy choices.

In this CHNA we looked at:

- **Tobacco Use**, looking at the percentage of adult smokers.
- **Diet & Exercise**, physical activity levels and access to healthy foods.
- **Alcohol & Drug Use**, measuring excessive drinking and alcohol related driving deaths.
- **Sexual Activity**, showing rates of teen births and sexually transmitted infections.

### Tobacco Use

#### *Adult Smoking*

Each year, smoking kills 480,000 Americans, including approximately 41,000 from exposure to secondhand smoke. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease which includes emphysema and chronic bronchitis. On average, smokers die 10 years earlier than nonsmokers.

Tobacco is not only smoked. Smokeless tobacco, while less lethal than smoked tobacco, can lead to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half of new users are younger than 18.

Tobacco use has real economic impacts for individuals and communities. It costs the nation about \$170 billion annually to treat tobacco-related illnesses, and another \$156 billion in productivity losses. In 2006, over \$5 billion of that lost productivity was due to secondhand smoke. Researchers estimate that tobacco control policies have saved at least 8 million Americans. Yet about 18% of adults still smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 transition from occasional to daily smokers.

Mississippi, New Madrid and Scott County percentages of adults who are current smokers are all higher than Missouri as a whole.

**Table 9 | Percentage of Adults who are Current Smokers in 3 County Area Compared to Missouri**

	Percentage of Adults Who Are Current Smokers
<b>Mississippi County</b>	30%
<b>New Madrid County</b>	28%
<b>Scott County</b>	25%
<b>Missouri</b>	20%

*Source: County Health Rankings*

### Diet and Exercise

Balanced nutrition and physical activity are essential for health, yet only one-third of adults engage in the recommended amount of weekly physical activity and many American diets exceed calorie recommendations while being insufficient in servings of fruits and vegetables. Poor nutrition can hinder growth and development, while excessive calorie consumption can lead to obesity, especially when paired with too little physical activity. Inadequate physical activity also contributes to increased risk of conditions such as coronary heart disease, diabetes, and some cancers.

Unhealthy food intake and insufficient exercise have economic impacts for individuals and communities. Current estimates for obesity-related health care costs in the U.S. range from \$147 billion to nearly \$210 billion annually, and productivity losses due to obesity-related job absenteeism cost an additional \$4 billion each year. Inadequate physical activity results in \$117 million annually in additional healthcare costs.

The following table shows the percentage of adults reporting they participate in no leisure-time physical activity is much higher in all 3 county area compared to Missouri.

**Table 10 | Percentage of Adults 18+ Reporting No Leisure-Time Physical Activity in 3 County Area Compared to Missouri**

Percentage of Adults 18+ Reporting No Leisure-Time Physical Activity	
<b>Mississippi County</b>	44%
<b>New Madrid County</b>	40%
<b>Scott County</b>	40%
<b>Missouri</b>	30%

*Source: County Health Rankings*

### *Access to Healthy Foods*

Food environment accounts for both proximity to healthy foods and income. This measure includes access to healthy foods by considering the distance an individual lives from a grocery store or supermarket, locations for health food purchases in most communities, and the inability to access healthy food because of cost barriers.

There is strong evidence that food deserts are correlated with high prevalence of overweight, obesity, and premature death as supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores. Additionally, those with low income may face barriers to accessing a consistent source of healthy food. Lacking consistent access to food is related to negative health outcomes such as weight gain, premature mortality, asthma, and activity limitations, as well as increased health care costs.

The percentage of population in all 3 of our area counties, compared to Missouri, have a higher percentage of population who lack adequate access to food.

**Table 11 | Percentage of Population Who Lack Adequate Access to Food 3 County Area Compared to Missouri**

Percentage of Population Who Lack Adequate Access to Food	
<b>Mississippi County</b>	19%
<b>New Madrid County</b>	18%
<b>Scott County</b>	17%
<b>Missouri</b>	13%

*Source: County Health Rankings*

## *Alcohol and Drug Use*

Excessive alcohol consumption considers both the amount of alcohol consumed and the frequency of drinking. Prescription drug misuse includes taking a drug in a manner other than prescribed and taking drugs that have been prescribed to another person. Although moderate alcohol use is associated with health benefits such as reduced risk of heart disease and diabetes, excessive alcohol use causes 88,000 deaths in the U.S. each year. More than 46 people died every day from drug overdoses involving prescription opioids in 2016.

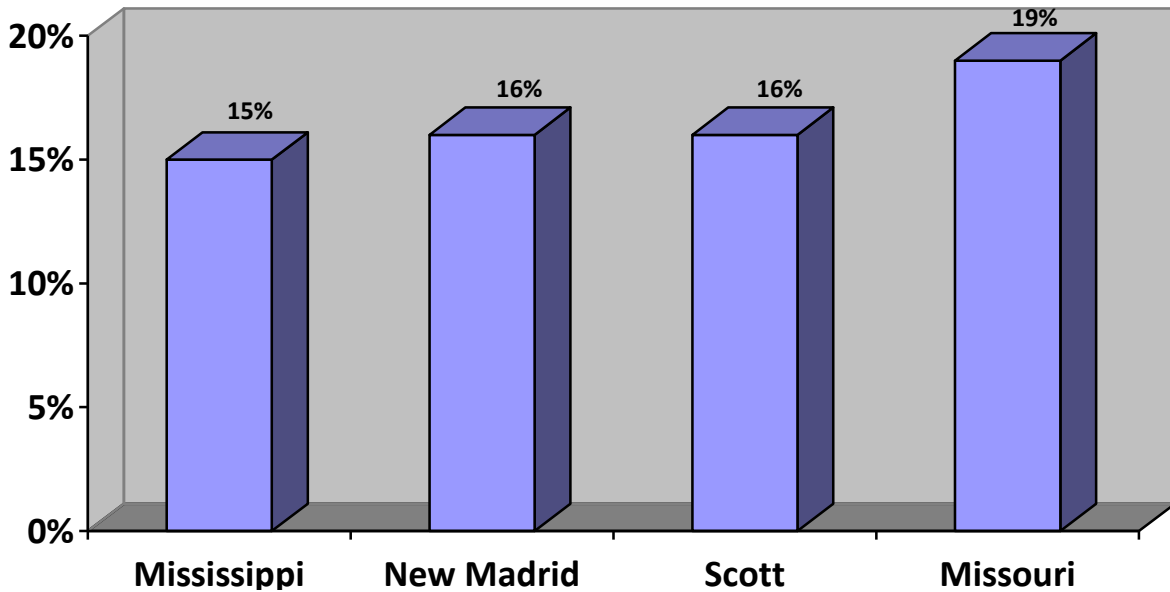
In 2015, 27% of people ages 18 and older reported binge drinking in the past month, while 7% reported heavy alcohol use in the past month. Over time, excessive alcohol consumption is a risk factor for high blood pressure, heart disease, fetal alcohol syndrome, liver disease, and certain cancers. In the short-term, excessive drinking is also linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, and motor vehicle crashes. Alcohol-impaired crashes accounted for nearly one-third of all traffic-related deaths in 2016—more than 10,000 fatalities.

From 1999 to 2017, overdose deaths from prescription painkillers have increased fivefold, with 218,000 deaths from overdoses related to prescription opioids during this time period. Prescription drug misuse now accounts for over 35% of opioid drug overdose deaths. Since 2002, rates of use for cocaine and hallucinogens have either declined or remained steady, while rates of marijuana and heroin use have increased. As of 2018, more teens smoke marijuana than cigarettes and in 2012, 156,000 people reported starting to use heroin, nearly double the number starting in 2006. Marijuana, now legal in some states, is the most frequently used illicit drug. Teenagers account for over half of all new illicit drug users.

Alcohol and drug use have significant economic costs. Excessive alcohol use costs \$249 billion in lost productivity, health care, and criminal justice expenses each year, whereas illicit drug use costs \$193 billion related to crime, health care, and lost productivity.

The percentage of adults reporting binge or heavy drinking is lower in all 3 area counties compared to that of Missouri as a whole. See following Chart.

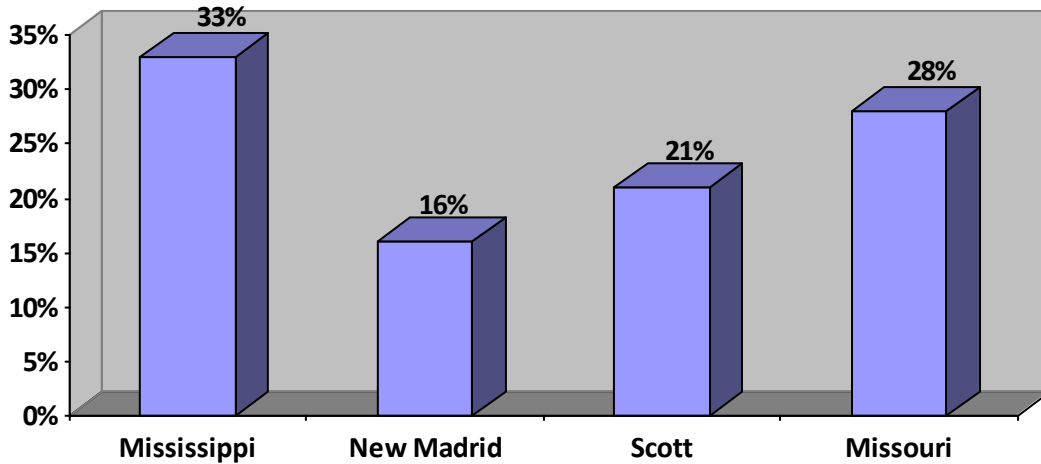
**Chart 4 | Percentage of Adults Reporting Binge or Heavy Drinking for 3 County Area Compared to Missouri.**



Source: County Health Rankings

Mississippi County has a much higher percentage of driving deaths involving alcohol in relation to other areas. Scott and New Madrid County show a significant lower percentage compared to Missouri.

**Chart 5 | Percentage of Driving Deaths with Alcohol Involvement for 3 County Area Compared to Missouri.**



Source: County Health Rankings

## Sexual Activity

High risk sexual practices such as unsafe sex and higher numbers of lifetime sexual partners can lead to sexually transmitted infections (STIs) and unplanned pregnancies, which can affect immediate and long-term health as well as the economic and social well-being of individuals, families, and communities.

Recent data across the U.S. shows increasing rates of syphilis, gonorrhea, and chlamydia infections. Young people, gay men, and bisexual men are at higher risk for STIs, which can have severe reproductive health complications, particularly for young women. Human papillomavirus (HPV) causes almost all cervical and anal cancers, as well as the majority of vaginal, vulvar, penile and oropharyngeal cancers. Some STIs, such as HIV and herpes, cannot be cured.

There are approximately 3 million unintended pregnancies in the US each year. Rates are highest among poor, minority, young, and cohabiting women. Unintended pregnancy is associated with delayed prenatal care.

The teen pregnancy rate is falling, but as of 2016, there were still over 200,000 teen pregnancies annually. Pregnant teens are less likely than older women to receive recommended prenatal care, and more likely to have pre-term or low birthweight babies. Teen mothers are often at increased risk for STIs and repeat pregnancies, are less likely than their peers to complete high school, and more likely to live below the poverty level and rely on public assistance.

Risky sexual behaviors can have high economic costs for communities and individuals. STIs cost the US health care system almost \$16 billion every year and, in 2010, the costs of teen childbearing were estimated at over \$9 billion.

### *Teen Births*

Early childbearing during teenage years has been associated with adverse health outcomes for the mother-child, the impacts of which can extend to partners, other family members, and the community. Negative outcomes for children and mothers with early childbearing are best explained by social disadvantage and social adversity. Mothers who give birth during teen years face barriers to attaining an education at or above high school completion and face additional mental and physical stress as well as chronic lack of community support. Young parents may struggle to find affordable, quality childcare, and suitable transportation, further hampering options for education or employment.

The following table shows the rate of teen births to those under age 15, aged 15-17 and aged 18-19 per county in 2019. Teen parents have unique social, economic and health support service needs. In addition, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

**Table 12 | Number of Teen Births in 2019 by County and Age**

<b>2019</b>	<b>Under 15</b>	<b>15-17</b>	<b>18-19</b>
<b>Mississippi</b>	0	3	18
<b>New Madrid</b>	1	5	17
<b>Scott</b>	0	6	18

*Sources: Centers for Disease Control and Prevention, CDC – National Vitals Statistic System  
Department of Health & Human Services, Health Indicators Warehouse. 2021 Source geography: County*

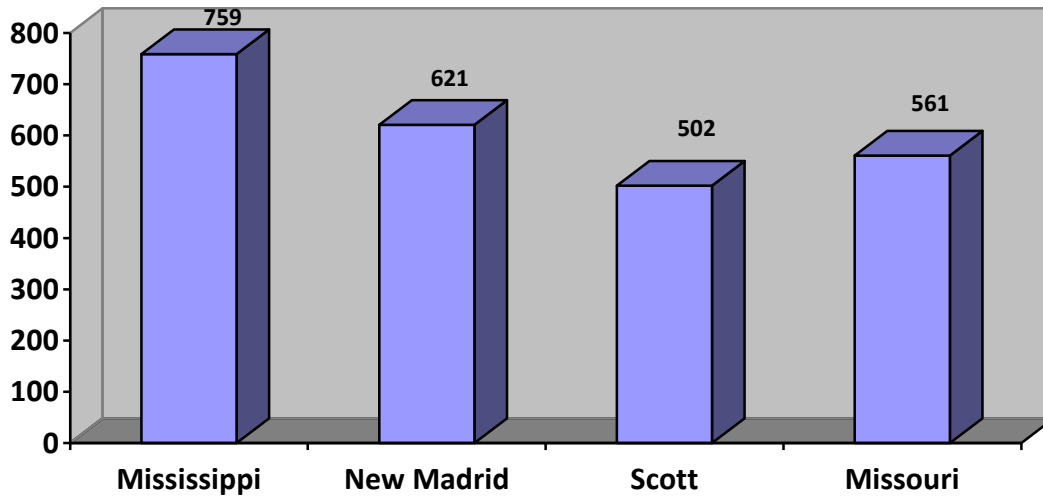
### *Sexually Transmitted Infections*

Chlamydia incidence rates are associated with unsafe sexual activity. Chlamydia is the most common bacterial sexually transmitted infection (STI) in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death. STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the United States, for example, was approximately 15.6 billion dollars in 2008. This measure is also significant to health equity as chlamydia disproportionately affects underserved communities, particularly adolescent minority women.

Sexually Transmitted Infections is the number of newly diagnosed chlamydia cases per 100,000 population in a county. The following rates measure the number of events based on 2019 data. Mississippi County and New Madrid County both have much higher numbers of new chlamydia cases than the average in Missouri.



Chart 6 | Number of Newly Diagnosed Chlamydia Cases per 100,000 Population (2019 data).



Sources: Centers for Disease Control and Prevention, CDC – National Vitals Statistic System  
Department of Health & Human Services, Health Indicators Warehouse. 2021 Source geography: County

## Clinical Care

Access to affordable, quality, and timely health care can help prevent diseases and detect issues sooner, enabling individuals to live longer and healthier lives. While part of a larger context, looking at clinical care helps us understand why some communities can be healthier than others.

Advances in clinical care over the last century, including breakthroughs in vaccinations, surgical procedures like transplants and chemotherapy, and preventive screenings, have contributed significantly to increases in life expectancy. Care continues to evolve, with promising advances in fields like tele-health and care coordination leading to improved quality and availability.

Despite these advances, many individuals do not have access to a provider. Nearly 30 million Americans remain without health insurance, generally considered the first barrier to receiving quality health care. Others do not access health services because of high deductible costs, distance to a provider, or lack of specialists in their geographic area or health network. Those without regular access to quality providers and care are often diagnosed at later, less treatable stages of a disease than those with insurance, and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

Health care access and quality also vary widely both by place and by race, ethnicity, and income.

For the purpose of this CHNA, we looked at:

- **Access to Care**, measures of primary care, mental health providers, and dentists, percentage of uninsured, and a list of healthcare providers/resources in Mississippi, New Madrid and Scott Counties
- **Quality of Care**, measures of preventing hospital stays.

### *Access to Care*

Together, health insurance, local care options, and a usual source of care help to ensure access to health care. Having access to care allows individuals to enter the health care system, find care easily and locally, pay for care, and get their health needs met.

In 2016, 28 million Americans younger than age 65 were uninsured, nearly a 16 million decrease since 2013. Health insurance reforms, such as the Affordable Care Act (ACA), helped to extend coverage to many previously uninsured individuals. By the end of the 2015 enrollment period, 11.7 million Americans were reported as having chosen an insurance plan through the ACA Marketplace. Medicaid expansion states saw insurance rates that declined 52.5% from 2013 to 2015, while states that did not adopt expansion saw only a 30.6% decline in uninsured.

The uninsured are much less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

Nationally, many counties lack sufficient providers to meet patient needs; as of 2017, there were about 6,900 primary care, 5,000 mental health, and 5,700 dental federally designated “Health Professional Shortage Areas” in the US. Having a usual primary care provider is associated with a higher likelihood of appropriate care, and a usual source of care is associated with better health outcomes. In 2010, 86% of Americans had a usual source of care, but those with low incomes were less likely to than those with higher incomes, and the uninsured were twice as likely as the insured to lack a usual care source. Additionally, neighborhoods with low health insurance rates often have fewer providers, hospital beds and emergency resources than areas with higher rates. Even the insured have more difficulty getting care in these areas.

Cost can be a barrier to care even for those who have insurance. In 2009, 17% of people younger than 65 had premium and out of pocket costs totaling more than 10% of their family income. From 2010 to 2012, over half of Americans with chronic illness reported that cost was a barrier in access to care. Those with private, non-group insurance were three times as likely as those with employer-sponsored insurance to face such costs.

Missouri Delta has developed programs and have hired non-physician providers to offset the lack of physicians in rural communities. Below tables show the ratio of population to primary care physicians as well as a table showing the ratio of population to primary care providers other than physicians. The ratios are much better when taking into account the non-physician providers Missouri Delta, as well as other medical entities in the area, have provided for the counties.

**Table 13 | Ratio of Population to Primary Care Physicians in 3 County Service Area Compared to Missouri.**

	<b>Ratio of Population to Primary Care Physician</b>
<b>Mississippi County</b>	6,590:1
<b>New Madrid County</b>	17,080:1
<b>Scott County</b>	1,910:1
<b>Missouri</b>	1,400:1

*Source: County Health Rankings*

**Table 14 | Ratio of Population to Primary Care Providers other than Physicians in 3 County Service Area Compared to Missouri.**

	<b>Ratio of Population to Primary Care Providers <i>OTHER THAN PHYSICIANS</i></b>
<b>Mississippi County</b>	3,170:1
<b>New Madrid County</b>	1,850:1
<b>Scott County</b>	770:1
<b>Missouri</b>	890:1

*Source: County Health Rankings*

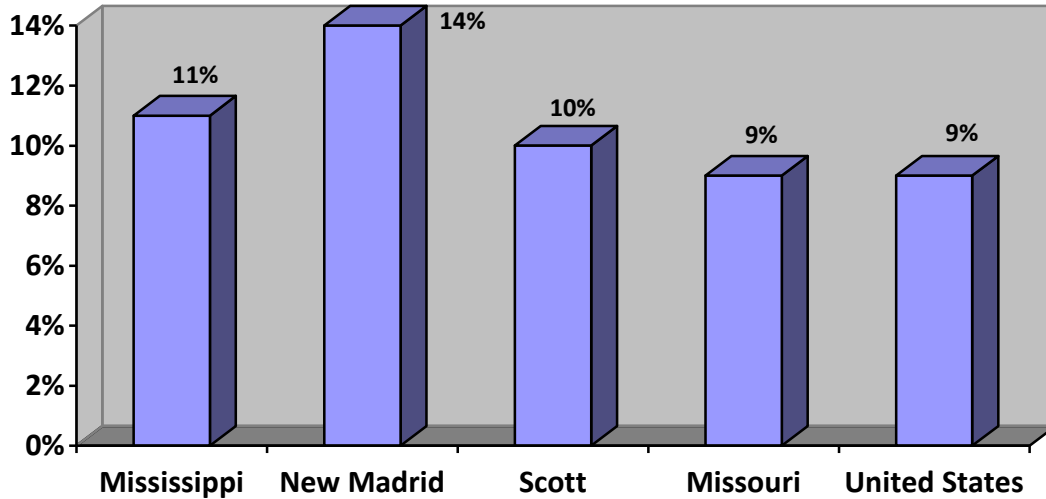
### *Insurance – Uninsured Population*

Uninsured is the percentage of the population under age 65 without health insurance coverage. A person is uninsured if they are currently not covered by insurance through a current/former employer or union, purchased from an insurance company, Medicare, Medicaid, Medical Assistance, any kind of government-assistance plan for those with low incomes or disability, TRICARE or other military health care, Indian Health Services, VA, or any other health insurance or health coverage plan.

The uninsured are much less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates. The lack of health insurance is considered a key driver of health status.

The rate of uninsured persons in each of our three county areas is greater than the state average of 9.40%.

**Chart 7 | Percentage of Uninsured Population in 3 County area compared to Missouri and United States.**



Source: County Health Rankings

### *Healthcare Providers/Resources*

#### *Hospitals*

Missouri Delta Medical Center is the only hospital in the county and offers comprehensive medical care to residents of Southeast Missouri. Missouri Delta was founded in Sikeston in 1948 and provides high-quality, accessible services.

#### **Services offered at Missouri Delta Medical Center include:**

- Audiology
- Behavioral Health (geriatric & adolescent)
- Cancer & Infusion Center
- Cardiology and Cardiac Rehabilitation
- Dermatology
- Diagnostic Imaging
- Endocrine and Diabetes Center
- ENT and Allergy Clinic

Emergency Care  
Gerontology  
Gynecologic Oncology  
Home Health  
Hospice Care  
Inpatient Rehabilitation  
Laboratory and Pathology  
Neurology  
Occupational Medicine  
Orthopedics and Sports Medicine  
Pain Center  
Podiatry  
Pulmonology  
Rheumatology  
Surgical Services  
Sleep Institute  
Urology  
Walk-In Express Care Clinic  
Women's and Children's Services  
Wound and Hyperbaric Center

#### *Primary Care Clinics*

As mentioned before, Missouri Delta, as well as other medical entities in the area, utilize non-physician practitioners to meet the healthcare demand in Southeast Missouri.

**Missouri Delta Physician Services** was established by Missouri Delta Medical Center nearly 20 years ago. It began with one specialty clinic (Endocrinology) and has now grown into 31 primary care and specialty clinics throughout Southeast Missouri. Most of the Physician Services clinics are part of Missouri's Rural Health Clinic (RHC) program. This program is intended to increase access to primary care services for patients in rural communities. To receive certification, the clinics must be located in rural, underserved areas with a shortage of primary care providers,

personal health services, or both. They are required to use a team approach of physicians working with non-physician providers such as nurse practitioners (NP), physician assistants (PA), and certified nurse midwives (CNM) to provide services. The clinic must be staffed at least 50% of the time with an NP, PA, or CNM. RHCs are required to provide outpatient primary care services and basic laboratory services. Missouri Delta has RHC's specifically in Mississippi County, New Madrid County and several throughout Scott County.

**SEMO Health Network** is a federally qualified community health center (FQHC) and has offices throughout Southeast Missouri, including Sikeston, Benton and New Madrid. FQHCs are nonprofit or public healthcare organizations that serve insured patients, uninsured patients, private pay patients and medically underserved populations. They are usually found in areas designated Medically Underserved Areas (MUA). A portion of Scott County is designated MUA for primary care. FQHC services are provided to all persons regardless of their ability to pay and charges for services are based on a board-approved, sliding-fee scale based on the patient's family income and size. SEMO Health Network provides comprehensive, quality primary healthcare, and dental care.

**Ferguson Medical Group, a Saint Francis Healthcare System Medical Partner**, is located in Sikeston and consists of a team of physicians, non-physician providers and mental health specialists. In addition to family medicine, internal medicine and pediatrics, Ferguson also offers urgent care where walk-ins are welcome. Other medical specialties available at Ferguson include ophthalmology, podiatry and nephrology.

**Other family practices** available to Mississippi, New Madrid and Scott County residents include Managed Care, Family Preference Healthcare, Scott City Medical Clinic and SoutheastHEALTH Sikeston Clinic.

### *Mental Health*

Access to behavioral health care requires not only financial coverage, but also access to providers. Nearly thirty percent of the U.S. population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages. Below shows the ratio of population to Mental Health Providers for our 3 county service areas.

**Table 15 | Ratio of Population to Mental Health Providers in 3 County Area Compared to Missouri**

	Ratio of Population to Mental Health Providers
<b>Mississippi County</b>	2,540:1
<b>New Madrid County</b>	4,170:1
<b>Scott County</b>	570:1
<b>Missouri</b>	460:1

*Source: County Health Rankings*

**Bootheel Counseling Services** located in Scott County, is a private, not-for-profit organization providing services in southeast Missouri for more than 40 years. They provide outpatient counseling services, crisis services, psychiatric medical services, community psychiatric rehabilitation, integrated treatment for co-occurring disorders, psychosocial rehabilitation, and target case management for adults and youth.

**Missouri Delta Behavioral Health Services** offers outpatient behavioral health services provided by Psychiatrists, Psychiatric Mental Health Nurse Practitioners, Counselors and Licensed Clinical Social Workers. Missouri Delta also has an inpatient units for patients 55+ years old (Senior Lifestyles) and for Adolescents (ABHU) ages 12-17 years old. Patients being discharged from either of these units can follow up with our outpatient behavioral health services.

**Ferguson Medical Group, SEMO Health Network, Tilghman Clinic Counseling** also provide behavioral and mental health services in the area.

### *Dentists*

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral health care, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2020, there were 6,559 Dental Health Professional Shortage Areas (HPSAs) in the U.S., with 60 million people total living in them.

With the Missouri Medicaid program expanding in 2020, roughly 275,000 Missourians are newly eligible for dental care. Dentists were already having trouble keeping up with the demand. Several dentists in Scott County do accept Medicaid.

**Table 16 | Ratio of Population to Dentists in 3 County Area Compared to Missouri.**

	<b>Ratio of Population to Dentists</b>
<b>Mississippi County</b>	6,350:1
<b>New Madrid County</b>	16,690:1
<b>Scott County</b>	1,600:1
<b>Missouri</b>	1,650:1

Source: County Health Rankings

**Table 17 | Dentists per County**

<b>Dentist</b>	<b>County</b>
Lori Adell, DDS	Scott
William Boyce, DDS	Scott
William Chouinard, DDS	Scott
John Leible, DDS	Scott
Rachael Parker, DDS	Scott
Beth Priggle, DDS	Scott
Mark Priggle, DDS	Scott
Gary Riddle, DDS	Scott
David Tongatae, DDS	Scott
Stas Vidyakin, DDS	Scott
Jeff Walton, DDS	Scott
Grant Weathers, DDS	Scott
Ronald Petersen, DDS	Mississippi
Gabrielle Roberts, DDS	Mississippi
Kristen Nelson, DDS	New Madrid
Timothy Rausch, DDS	New Madrid

Source: Primary data collection, Community Health Needs Assessment 2022

### *Eye Care*

There are several Optometrist practices in Scott County as well as one Ophthalmologist, Kenneth Barkett, MD, who performs surgeries at Missouri Delta Medical Center. Optometrist practices include Barnett Family Eyecare, Eye Consultants, Heartland Eyecare, Marion Eye Center and Obermark Eye healthcare. All of these eye care specialists are located in Sikeston, the main city in Scott County.



## *Other*

There are several **chiropractic physicians** in Scott County (Harrison Chiropractic Center, 360 Chiropractic and Wellness, Winchester and Mills Chiropractic, Nagle Chiropractic, Branch to Health: Chiropractic and Acupuncture Center, and Taylor Chiropractic). 360 Chiropractic and Wellness also has a satellite clinic in Mississippi County.

Several **pharmacies** are available throughout Scott County, Mississippi County and New Madrid County. A locally owned pharmacy entity has several pharmacies throughout Scott County and into Mississippi County. They offer Community Health Workers (CHWs) who are individuals from the communities who form relationships with patients and help increase their access to health care resources. Studies have shown CHWs help improve medication adherence and patient outcomes.

## *Resources – Health Departments*

Each of the 3 counties we are reporting on have their own health departments. Each of those departments offer a wide variety of resources for public health as well as environmental health.

Services by County through Health Department (non-exhaustive list):

### **Mississippi County Health Department:**

- WIC - Women, Infants, and Children
- Safe Cribs for Missouri Program
- Communicable Disease - Education and Tracking
- Chronic Disease Self-Management Program
- Freedom from Smoking
- Diabetes Center/Diabetes Self-Management Program
- Immunizations/Vaccinations
- Women’s Health: pelvic exams, clinical breast exams, and pap smears
- Show Me Healthy Women (SMHW) (offers free breast and cervical cancer screenings for Missouri Women who meet age, income and insurance guidelines)
- Lab Services: Testing for STD/HIV, Pregnancy, Tuberculosis, Fasting Lipid and Hemoglobin, A1C's, Lead, Iron, PSA, TSH, CMP, CBC
- Blood pressure, head lice checks/treatment
- Nutrition Counseling
- Lab Services

- Blood Pressure Monitoring Program

**New Madrid County Health Department:**

- WIC - Women, Infants, and Children
- Family Planning/Birth Control
- Immunizations/Vaccinations
- Communicable Disease - Education and Tracking
- Show Me Healthy Women (SMHW) (*offers free breast and cervical cancer screenings for Missouri Women who meet age, income and insurance guidelines*)
- Breastfeeding education and pump loan program
- Testing for STD/HIV, Pregnancy, Tuberculosis, Lead, Iron
- Blood pressure, cholesterol and head lice checks
- Chronic Disease Self-Management Program

**Scott County Health Department:**

- Arthritis Exercise Classes
- Freedom from Smoking
- Diabetes Self-Management
- Safe Cribs for Missouri Program
- Chronic Disease Self-Management Program
- Blood Pressure Screening
- Testing for STD/HIV, Pregnancy, Tuberculosis, Lead
- Women's Health: Pap Smears, Breast Exams, Birth Control

*Additional Resources*

**Susanna Wesley Family Learning Center**, located in Mississippi County (East Prairie and Charleston) focuses on building healthy families. Community residents, realizing the troubled plight of many families in Mississippi County, raised initial funding to begin the operation in March of 1992. Susanna Wesley Family Learning Center initially began as a pilot project of Epworth Children's Home in St. Louis, Missouri. By 1998 the center's programs had grown so exponentially that the

center went out on its own, became its own 501c3 and changed its name to Susanna Wesley Family Learning Center.

When the center opened in 1992 the initial focus was to assist families who were at risk of out of home placement of their children for various reasons including extreme poverty, substance abuse, and lack of parenting skills. Services offered included parenting classes, life skills classes, adult basic education, and counseling. It became apparent very early on that the center was serving a large number of victims of domestic violence and sexual assault. The need for victim services programming was great and the nearest shelter program was 50 miles away thus a formal victim services program began. Services include:

- Victim Services
- Domestic Violence
- Sexual Assault Shelter
- Court advocacy
- Safe exchange and visitation
- Mental Health Counseling
- 24 hour crisis hotline
- Batterer intervention
- Youth Services
- After school activities
- Summer camps and programs
- Violence prevention
- Adult Development
- GED
- Parenting programs

**The Fresh Start Self Improvement Center** in Mississippi County gives underserved individuals a chance for a better life. They have a long list of programs and community events that seek to educate, empower, and uplift those vulnerable residents of the county. Programs include:

- Safe Haven Summer Camp - 4-week program that program that consists of arts and crafts, life skills, recreation and career exploration.

- Summer Food Program - The Bowden Center In Charleston is the central kitchen for the seven food sites that serve over 450 meals during the summer months.
- Basketball Camp - The Fresh Start Basketball Camp provides team building exercises and life skills training.
- HALO – HALO stands for "Healthy Alternatives for Little Ones". Mannerism skills as well as motor and body function skills are taught to students ranging from kindergarten through the 2nd grade.
- After School Tutoring – Providing assistance with kid’s homework as well as teaching different study techniques that are more helpful and appropriate regarding their individual learning style.

All 3 counties have a huge resource in the **Delta Area Economic Opportunity Corporation (DAEOC)**. DAEOC is a private not-for-profit Community Action Agency serving many counties, including New Madrid. DAEOC administers programs designed to combat poverty and provide economic opportunities in the Bootheel of Missouri. Head Start and The Early Head Start Program (EHS) are both DAEOC programs which support the mental, social and emotional development of children from birth to age 3 (EHS) and ages 3-5 years (Head Start). In addition to education and care services, this program provides children and their families with health, nutrition, social, and other services.

In addition to the above children’s services, DAEOC also provides:

- Family Assistance
  - *Back to School Fairs* are conducted allowing low-income children to start the school year with the materials necessary for educational success. Participants also receive services related to immunizations, hygiene, oral hygiene, head lice, bus safety, seat belt safety, WIC, MC+, effective discipline, proper nutrition, bicycle safety and importance on reading to your children.  
*Case Managers* meet weekly with low-income individuals and families who will overcome barriers leading to self-sufficiency in the areas of education and employment.
  - *Life Skills Classes* are offered to youth and adults to increase their knowledge in areas that will allow them to move toward self-reliance including achievements in education and employment. Classes are offered on a variety of topics, included but not limited to, financial literacy, improving self-esteem, job readiness/job search, leadership development, entrepreneurship development, health/nutrition, parenting skills, time management, stress/anger management, classroom bullying,

conflict resolution, goal setting, assertiveness, energy saving tips, youth structured and adult workshops.

- *Making the Grade* - A six-session curriculum for 5th - 8th grade students that takes place during normal school hours. These classes encourage students to set and achieve goals, including goals beyond high school.
  - *Stand Up Step Out of Poverty* - This is a three month program in which participants will be provided with the skills/competencies required to obtain employment.
  - *Targeted Coaching* - Low-income individuals and families will receive services and be referred to other resources in the community for needs in the areas of unemployment, inadequate housing, unmet emergencies, inadequate education and illiteracy, inadequate available income and malnutrition that would have otherwise been unidentified and unmet.
- Energy Assistance
  - Domestic Violence
    - Referrals/Resource Provision
    - Case Management/Life Coaching and Parenting Workshops
    - Victim/Court Advocacy
    - Crisis intervention, Safety planning
  - Weatherization
  - Homeless Services
  - Home Repair
  - Child Care Food Program

The **New Madrid County Family Resource Center** also offers opportunities that benefit children, families and communities. Through youth and parenting programs, employment assistance and community engagement, the Center, sponsored by the New Madrid County Caring Community Partnership, provides opportunities and support to meet today's many life challenges. Services include:

- Job Readiness Training
- Job Search Assistance
- Youth Mentoring
- GED Site
- School Readiness
- Education Assistance
- Career Assessment

- Parenting Activities
- Community Engagement Activities
- Job Applications
- Food Pantry

### *Emergency Services*

Scott County has two ambulance districts: North Scott County Ambulance District and South Scott County Ambulance District. The North Scott County District covers the northern half of Scott County and has two stations, one in Chaffee and one in Scott City. The South Scott County District runs out of Sikeston. Mississippi County and New Madrid County each have their own ambulance station.

There are Fire Protection Districts throughout Mississippi, New Madrid and Scott Counties:

- Sikeston Rural Fire Protection District (Sikeston)
- Sikeston Department of Public Safety (Sikeston)
- Mississippi/Scott/New Madrid Rural Fire Protection District (Charleston)
- Oran Fire District (Oran)
- New Hamburg/Benton/Commerce (Benton)
- Scott County Rural Fire Protection District (Sikeston)
- Anniston Fire Department (Charleston)
- Anniston Volunteer Fire Department (Anniston)
- Bertrand Fire Department (Bertrand)
- Charleston Department of Public Safety (Charleston)
- East Prairie Fire Department (East Prairie)
- Wyatt Fire Department (Wyatt)
- Wyatt Volunteer Fire Department (Wyatt)
- Bloomfield Fire Department (Matthews)
- Canalou Volunteer Fire Department (Canalou)
- Gideon Volunteer Fire Department (Gideon)
- Howardville Fire Department (New Madrid)

- Kewanee And Laforge Rural Volunteer Fire Department (New Madrid)
- New Madrid Fire Department (New Madrid)
- Lilbourn Volunteer Fire Department (Lilbourn)
- Marston City Fire Department (Marston)
- Matthews Volunteer Fire Department (Matthews)
- Missouri Department Of Conservation Forestry Division - Southeast Regional Field Fire Office (New Madrid)
- Morehouse Volunteer Fire And Rescue (Morehouse)

### *Long-Term Care Facilities*

Long-term care facilities generally fall into one of three categories:

- **Residential Care Facilities (RCFs)** – are facilities that provide long-term care to adults or children in a residential setting rather than the patient’s home.
- **Assisted Living Residences or Assisted Living Facilities (ALFs)** – are facilities that provide supervision or assistance with activities of daily living (ADLs), coordination of services by outside healthcare providers, and monitoring of resident activities to help to ensure their health, safety and wellbeing.
- **Skilled Nursing Facilities (SNFs)** such as nursing homes or convalescent homes – are facilities that provide a place of residence for people who require constant nursing care and have significant deficiencies with activities of daily living. Residents include the elderly and younger adults with physical or mental disabilities. After an accident or illness, residents in a skilled nursing facility may also receive physical, occupational and other rehabilitative therapies.

There are many Long-Term Care Facilities in the reported 3 county area.

**Table 18 | Long-Term Care Facilities in Scott, New Madrid and Mississippi Counties (by town)**

Facility Name	Level of Licensure	Location
Arbors at WestRidge Place	Assisted	Sikeston
Bertrand Nursing & Rehab Center	Assisted/Skilled	Bertrand
Big Prairie Assisted Living	Assisted	Sikeston
Chaffee Nursing Center	Skilled	Chaffee
Charleston Manor	Skilled	Charleston

Clearview Nursing Center	Skilled	Sikeston
Colonial Manor	Assisted	Sikeston
Cotton Point Living Center	Skilled	Matthews
Country Place	Assisted	Scott City
Delta South	Assisted/Skilled	Sikeston
East Prairie Nursing Center	Skilled	East Prairie
Heritage Gardens	Assisted	Sikeston
Hunter Acres Caring Center	Skilled	Sikeston
LaBonne Maison	Assisted	Sikeston
Miner Nursing Center (temporarily closed due to staffing shortages)	Skilled	Miner
New Madrid Living Center	Assisted	New Madrid
Sikeston Convalescent Center	Assisted/Skilled	Sikeston
Sunshine Villa	Assisted	Scott City

Source: Primary data collection, Community Health Needs Assessment 2022

### *Quality of Care*

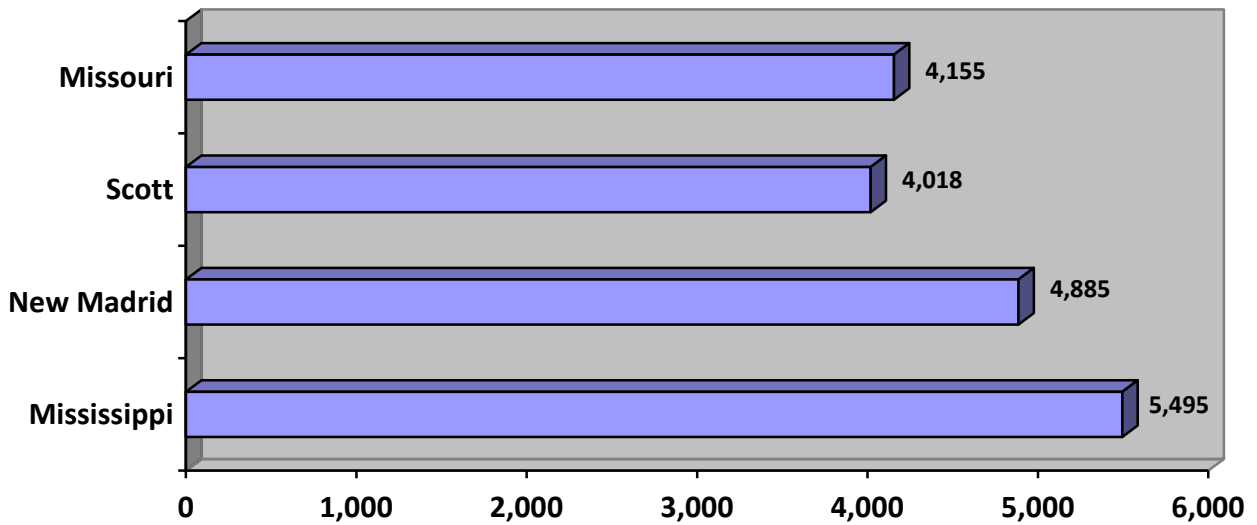
Evidence-based decisions, performance assessment, and explicit efforts to improve quality, reduce errors, and involve patients in care decisions are often components of high quality health care. Such care requires providers, health systems, and others to work together to improve health outcomes and patient satisfaction while containing costs. To measure quality of care, we looked at preventable hospital stays.

### *Preventable Hospital Stays*

Hospitalization for ambulatory-care sensitive conditions, diagnoses usually treatable in outpatient settings, suggests that quality outpatient care was not accessible. This measure may also represent a tendency to overuse emergency rooms and urgent care as a main source of care. Rates for our 3 counties are in the table below. Scott County has lower rate of preventable hospital stays than Missouri overall.



Chart 8 | Rate of Hospital Stays for Ambulatory-Care Sensitive Conditions per 100,000 Medicare Enrollees; By 3 County area Compared to Missouri.



Source: County Health Rankings

## SOCIAL AND ECONOMIC FACTORS

Social and economic factors, such as income, education, employment, community safety, and social support can significantly affect how well and how long we live. These factors affect our ability to make healthy choices, afford medical care and housing, manage stress, and more.

The social and economic opportunities we have, such as good schools, stable jobs, and strong social networks are foundational to achieving long and healthy lives. For example, employment provides income that shapes choices about housing, education, childcare, food, medical care, and more. In contrast, unemployment limits these choices and the ability to accumulate savings and assets that can help cushion in times of economic distress.

In the Social & Economic Factors of this CHNA we looked at:

- **Education**, showing high school completion and literacy rates.
- **Employment**, detailing unemployment statistics.
- **Income**, looking at median family income and children qualifying for free or reduced lunch price.
- **Food Insecurity**, limited or uncertain access to adequate food.
- **Family & Social Support**, providing information on children in single-parent households and access to social support.

- **Community Safety**, measuring violent crime and injury deaths.

### *Education*

More schooling is linked to higher incomes, better employment options, and increased social support that, together, support opportunities for healthier choices. Yet across the U.S. in 2017, about 10% of adults older than 24 had not graduated high school, and of those who had graduated high school, an additional 32% had no education beyond high school. As of 2012, 14% of Americans had only basic literacy and 4% lacked even basic literacy. Many more also lack health literacy, making it difficult to navigate health care.

Higher levels of education can lead to a greater sense of control over one's life, which is linked to better health, healthier lifestyle decisions, and fewer chronic conditions. Education is also connected to lifespan: on average, college graduates live nine more years than high school dropouts.

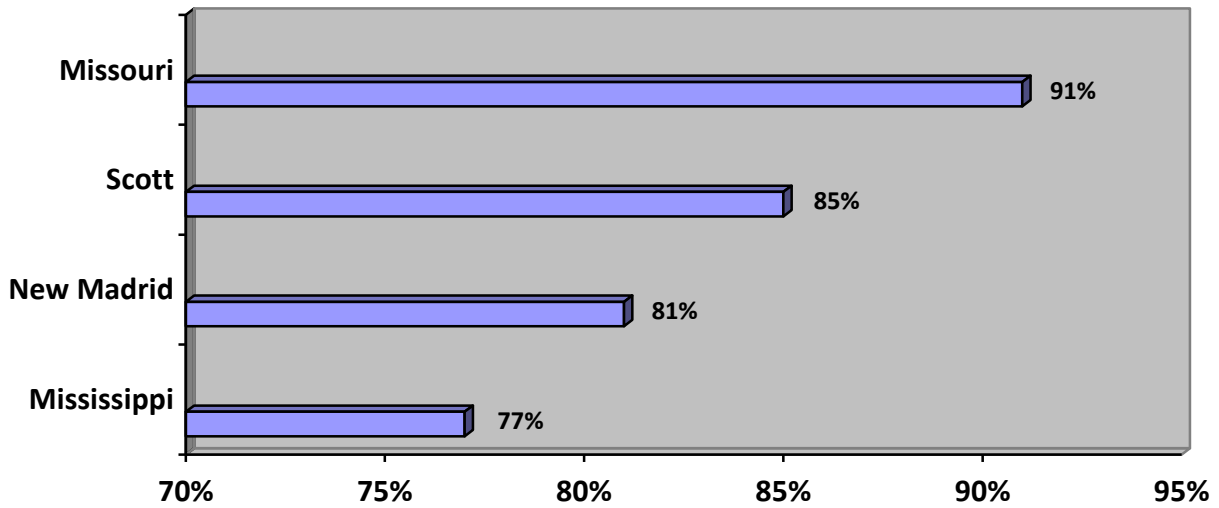
Researchers estimate that each additional year of schooling leads to about 11% more income annually. Higher paying jobs are more likely than lower paying jobs to provide workers with safe work environments and offer benefits such as health insurance and sick leave. More educated workers also fare better in economic downturns.

Parental education is linked to children's health and educational attainment. Children whose mothers graduated from college are twice as likely to live past their first birthday. Stress and poor health early in life, common among those whose parents have lower levels of education, is linked to decreased cognitive development, increased tobacco and drug use, and a higher risk of cardiovascular disease, diabetes, depression, and other conditions.

### *High School Completion*

The relationship between education and improved health outcomes is well known, with a high school degree correlating strongly with higher life expectancies and improved quality of life. Educational level is associated with smoking status, exercise habits, as well as better physical health, such as lower rates of diabetes and improved self-reported health. Adults with high school degrees are more likely to be employed and earn more, on average, than their less educated counterparts. Findings for the 3 county service areas show a much lower percentage of adults with a high school diploma compared to the state of Missouri.

**Chart 9 | Percentage of Adults Ages 25+ with a High School Diploma or Equivalent in 3 County Area Compared to Missouri (data from 2016-2020).**

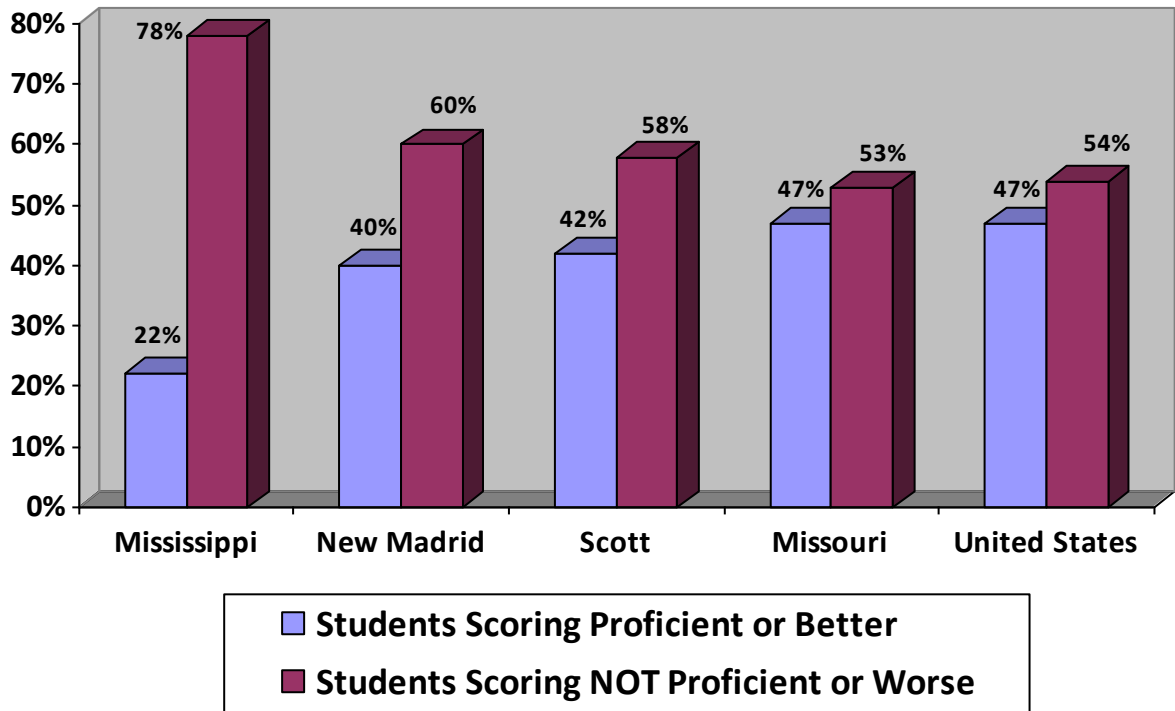


Source: County Health Rankings

### *Student Reading Proficiency (4th Grade)*

Information about student performance in the 4th grade English Language Arts portion of the state-specific standardized tests are displayed in the table below. All of the 3 counties tested below the "proficient" level, according to the latest data. Students in the report area tested worse than the statewide and United States rate in *Student Reading Proficiency (4th Grade)*

Chart 10 | Student Reading Proficiency (4<sup>th</sup> Grade) in each of the 3 Counties Compared to Missouri and U.S.



Source: US Department of Education, EDData. Additional data analysis by CARES. 2018-19. Source geography: School District

### Employment

Most adults spend nearly half their waking hours at work. Working in a safe environment with fair compensation often provides not only income, but also benefits such as health insurance, paid sick leave, and workplace wellness programs that, together, support opportunities for healthy choices.

These opportunities, however, are greater for higher wage earners - usually those with more education. The estimated 10 million workers who are part of the "working poor" face many challenges: they are less likely to have health insurance and access to preventive care than those with higher incomes, and are more likely to work in hazardous jobs. Working poor parents may not be able to afford quality child care, and often lack paid leave to care for their families and themselves.

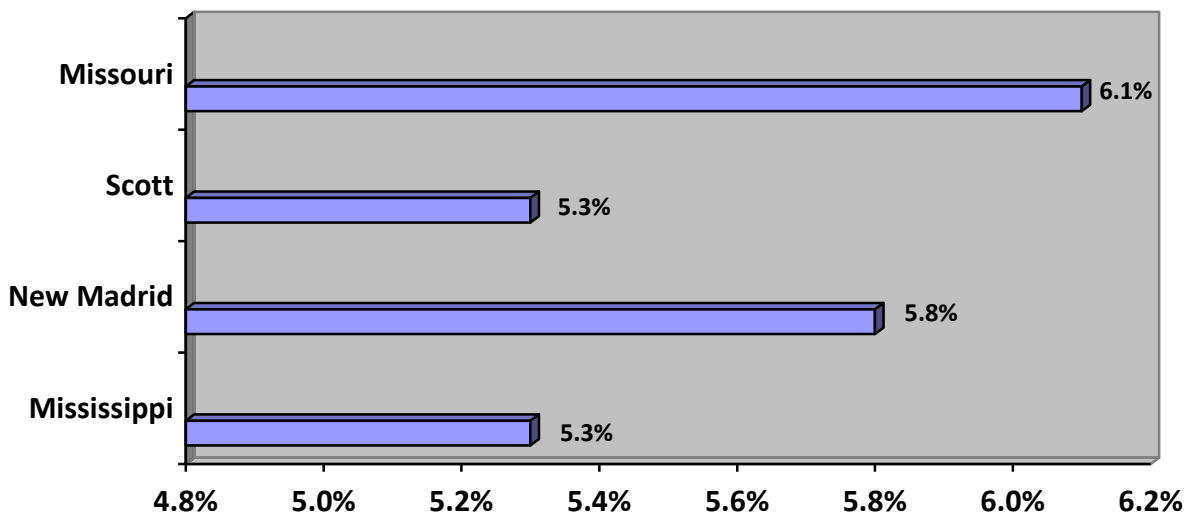
Those who are unemployed face even greater challenges to health and well-being, including lost income and, often, health insurance. Unemployed individuals are 54% more likely to be in poor or fair health than individuals who are employed, and are more likely to suffer from increased stress,

high blood pressure, heart disease, and depression. Racial and ethnic minorities and those with less education, often already at-risk for poor health outcomes, are most likely to be unemployed.

*Unemployment Rate (by percentage)*

Unemployment Rate includes civilian, non-institutionalized population age 16 and older (non-seasonally adjusted) who are unemployed but actively seeking employment and willing to work. Unemployment creates financial instability and barriers to access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status. The Unemployment Rate for Mississippi and New Madrid Counties are above Missouri rates, and Scott County rates are less than Missouri.

**Chart 11 | Percentage of Population Ages 16+ Unemployed but Seeking Work in 3 County Area Compared to Missouri. Data from 2020.**



*Source: County Health Rankings*

*Income*

Income can come from jobs, investments, government assistance programs or retirement plans. Income allows families and individuals to purchase health insurance and medical care, but also provides options for healthy lifestyle choices. Poor families and individuals are most likely to live in unsafe homes and neighborhoods, often with limited access to healthy foods, employment options, and quality schools.

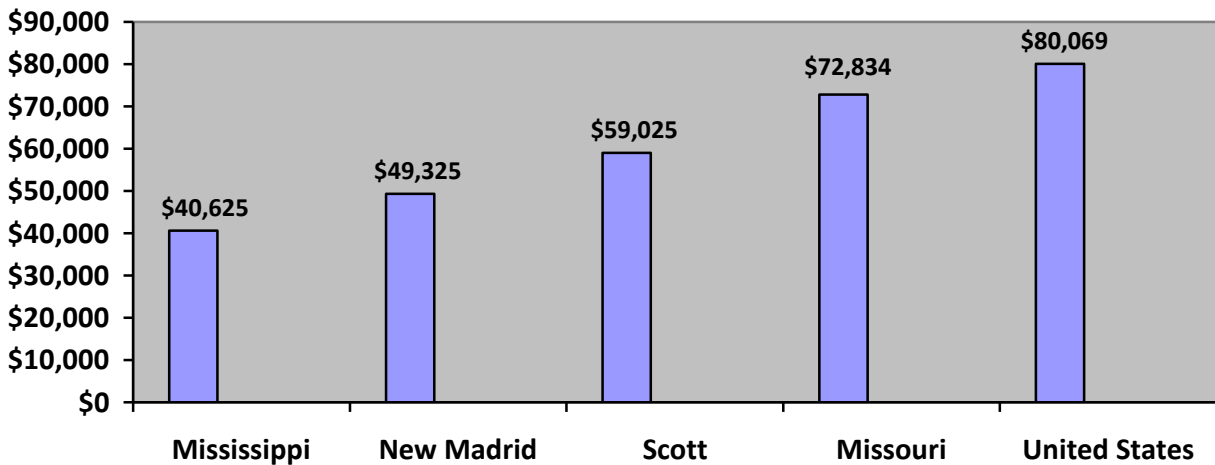
While the starkest difference in health is between those with the highest and lowest incomes, this relationship persists throughout all income brackets. Adults in the highest income brackets are healthier than those in the middle class and will live, on average, more than six years longer than those with the lowest incomes.

The ongoing stress and challenges associated with poverty can lead to cumulative health damage, both physical and mental. Chronic illness is more likely to affect those with the lowest incomes, and children in low income families are sicker than their high income counterparts. Low income mothers are more likely than higher income mothers to have pre-term or low birthweight babies, who are at higher risk for chronic diseases and behavioral problems.

### *Income - Median Family Income*

The following chart reports median family income based on the latest 5-year American Community Survey estimates. A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. Family income includes the incomes of all family members age 15 and older. The median incomes for all three counties in MDMC’s service area are well below the median household income for Missouri and the United States.

**Chart 12 | Median Family Income in 2021 for 3 county area compared to Missouri and United States.**

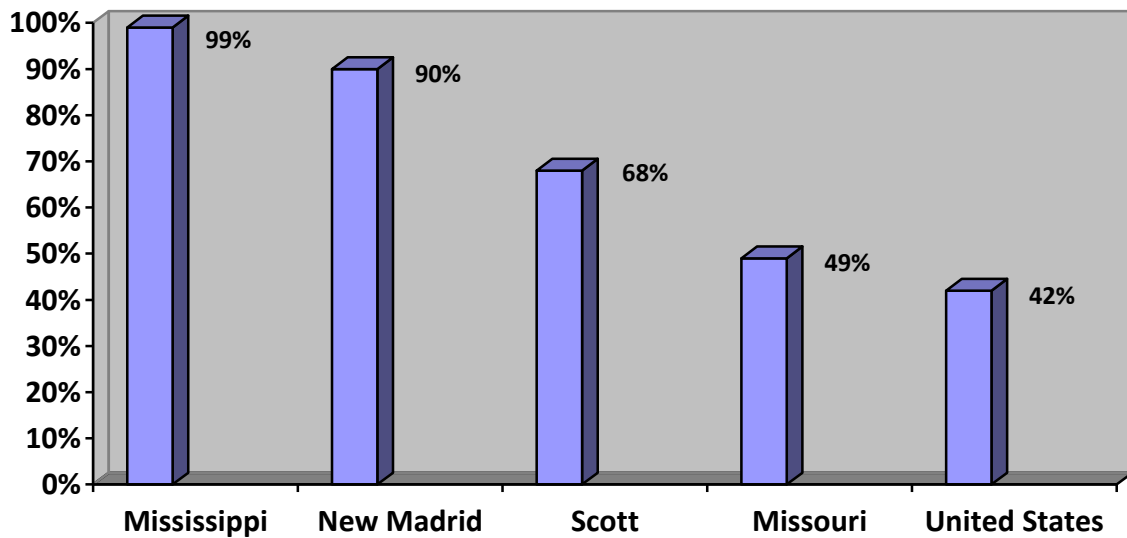


*Source: US Census Bureau, American Community Survey. 2021 Source geography*

### Children Eligible for Free/Reduced Price Lunch

Free or reduced price lunches are served to qualifying students in families with income under 185% (reduced price) or under 130% (free lunch) of the US federal poverty threshold as part of the federal National School Lunch Program (NSLP). This rate is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status and social support needs. The percent of students in Mississippi County, New Madrid County and Scott County who participate in free or reduced price lunches is significantly higher than the state and federal benchmark.

**Chart 13 | Percentage of Children Eligible for Free or Reduced Price Lunch by 3 county area compared to Missouri and United States.**



Source: National Center for Education Statistics, NCES - Common Core of Data. 2021 Source geography

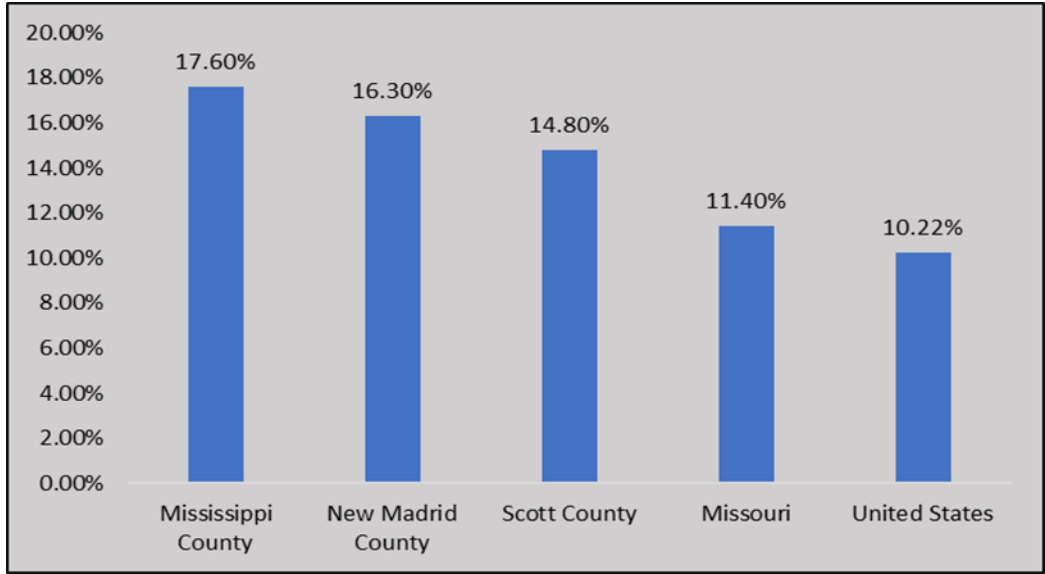
### Food Insecurity

Lacking consistent access to food is related to negative health outcomes such as weight-gain and premature mortality. Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

### Food Insecurity Rate

This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.

**Chart 14 | Percentage of Total Population with Food Insecurity, 2021 Data**



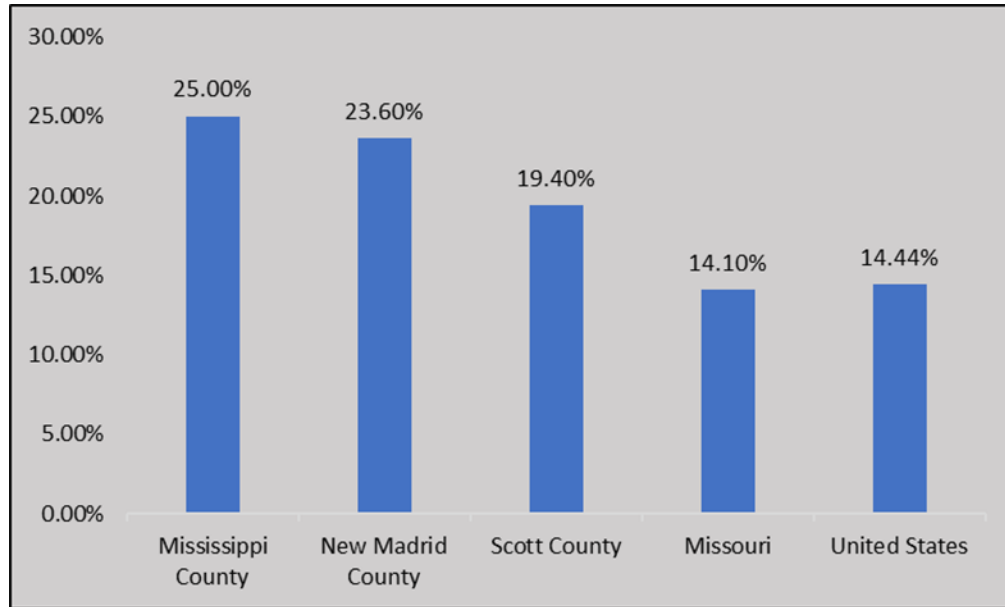
Source: Feeding America. 2021 Source geography: County

### Food Insecure Children

The following chart shows the estimated percentage of the population under age 18 that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.



**Chart 15 | Percentage of Children under Age 18 with Food Insecurity, 2021 Data**



Source: Feeding America. 2021 Source geography: County

*Food Insecure Population Ineligible for Assistance*

The following table reports the estimated percentage of the total population and the population under age 18 that experienced food insecurity at some point during the report year, **but are ineligible for State or Federal nutrition assistance**. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food. Assistance eligibility is determined based on household income of the food insecure households relative to the maximum income-to-poverty ratio for assistance programs (SNAP, WIC, school meals, CSFP and TEFAP).

**Table 19 | Percentage of Food Insecure Population Ineligible for Assistance, 2021 Data**

Geographic Area	Food Insecure Population Ineligible for Assistance	Food Insecure Children Ineligible for Assistance
Mississippi County	28%	20%
New Madrid County	22%	17%
Scott County	29%	28%
Missouri	37%	23%
United States	29%	22%

Source: Feeding America. 2021 Source geography: Count

### *Family & Social Support*

Social support stems from relationships with family members, friends, colleagues, and acquaintances. Social capital refers to the features of society that facilitate cooperation for mutual benefit, such as interpersonal trust and civic associations. Individual social support and cohesive, capital-rich communities help to protect physical and mental health and facilitate healthy behaviors and choices.

Socially isolated individuals have an increased risk for poor health outcomes. Individuals who lack adequate social support are particularly vulnerable to the effects of stress, which has been linked to cardiovascular disease and unhealthy behaviors such as overeating and smoking in adults, and obesity in children and adolescents.

Residents of neighborhoods with low social capital are more likely to rate their health status as fair or poor than residents of neighborhoods with more social capital, and may be more likely to suffer anxiety and depression. Neighborhoods with lower social capital may be more prone to violence than those with more social capital and often have limited community resources and role models. Socially isolated individuals are more likely to be concentrated in communities with limited social capital.

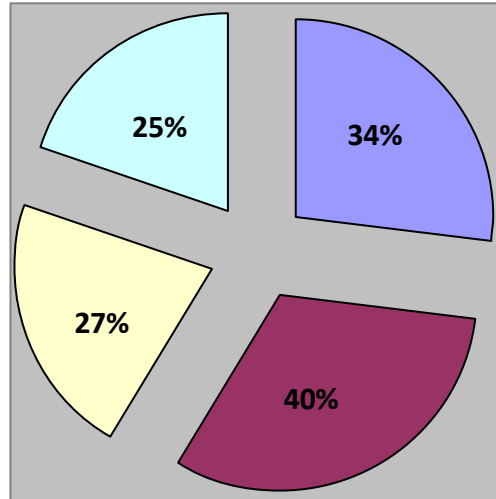
Individuals with higher educational attainment and higher status jobs are more likely to have greater social support than those with less education and lower incomes. Adults and children in single-parent households, often at-risk for social isolation, have an increased risk for illness, mental health problems and mortality, and are more likely to engage in unhealthy behaviors than their counterparts.

### *Children in Single-Parent Households*

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use, food insecurity). Self-reported health has been shown to be worse among lone mothers than for mothers living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households.

The percentage of children living in single-parent households is higher in all 3 counties we are reporting, particularly New Madrid County at 40%. See following chart.

**Chart 16 | Percentage of Children Living in Single-Parent Households in 3 county area compared to Missouri. Based on data from 2016-2020.**



Source: County Health Rankings

### *Social or Emotional Support*

Social and emotional support is critical for navigating the challenges of daily life as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability. The table below reports the percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time. New Madrid County has insufficient data while Mississippi and Scott Counties are both above Missouri and the U.S. with percentages of adults reporting insufficient social and emotional support.

**Table 20 | Percentage of Adults Reporting Insufficient Social and Emotional Support in 3 County Area Compared to Missouri and United States.**

<b>Geographic Area</b>	<b>Percent of Adults Reporting INSUFFICIENT Social and Emotional Support</b>
<b>Mississippi County</b>	29%
<b>New Madrid County</b>	Not enough data
<b>Scott County</b>	24%
<b>Missouri</b>	19%
<b>United States</b>	21%

*Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System  
Department of Health & Human Services, Health Indicators Warehouse. 2021 Source geography: County*

## **Community Safety**

Community safety reflects not only violent acts in neighborhoods and homes, but also injuries caused unintentionally through accidents. Many injuries are predictable and preventable, yet about 30 million Americans receive medical treatment for injuries each year, and more than 243,000 died from these injuries in 2017.

In 2017, unintentional injuries were the leading cause of death among individuals ages 1 through 44. Among these unintentional injury deaths, drowning was the leading cause of death for children ages 1-4, motor vehicle traffic accidents were the leading cause of injury death for individuals ages 5–24, and unintentional poisoning was the leading cause of injury death for individuals ages 25-64. Unintentional injury was the fifth leading cause of death for infants, and among these deaths, suffocation was most common.

In 2016, approximately 5.7 million violent crimes such as assault, robbery, and rape, were committed across the U.S. Each year, 19,000 children and adults are victims of homicide and more than 1,700 children die from abuse or neglect. Children in unsafe circumstances can suffer post-traumatic stress disorder and exhibit more aggressive behavior, alcohol and tobacco use, and sexual risk-taking than peers in safer environments.

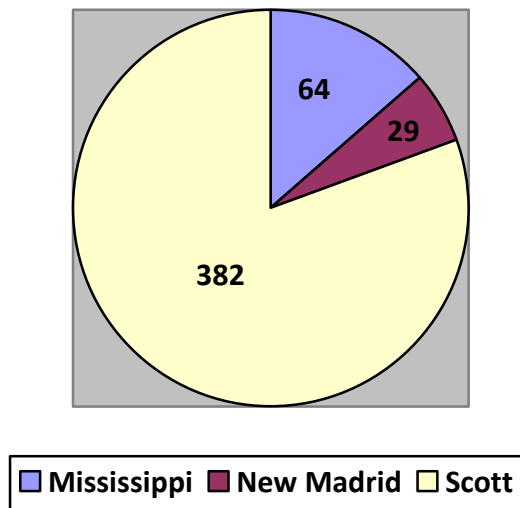
The chronic stress associated with living in unsafe neighborhoods can accelerate aging and harm health. Unsafe neighborhoods can cause anxiety, depression, and stress, and are linked to higher rates of pre-term births and low birthweight babies, even when income is accounted for. Fear of violence can keep people indoors, away from neighbors, exercise, and healthy foods. Companies may be less willing to invest in unsafe neighborhoods, making jobs harder to find.

One in four women experiences intimate partner violence (IPV) during their life, and more than 4 million are assaulted by their partners each year. IPV causes 2,000 deaths annually and increases the risk of depression, anxiety, post-traumatic stress disorder, substance abuse, and chronic pain.

### Violent Crime

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence. Exposure to chronic stress also contributes to the increased prevalence of certain illnesses, such as upper respiratory illness, and asthma in neighborhoods with high levels of violence. Below is the number of violent crimes committed annually per county. Data is used from the years 2014 and 2016. Note differences in population for each county.

**Chart 17 | Number of Reported Violent Crime Offenses per County in 2014 & 2016. Note Population Differences.**



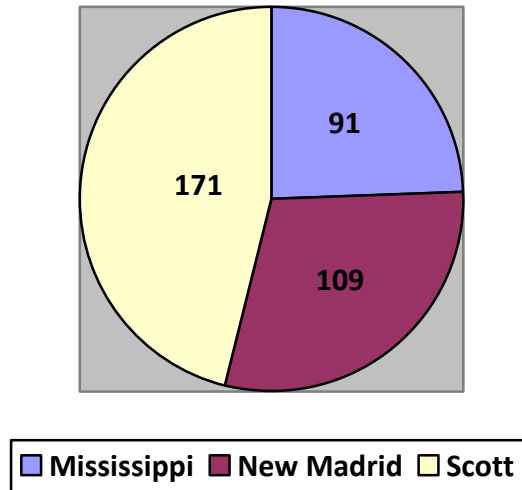
Source: County Health Rankings

### Injury Deaths

Injuries are one of the leading causes of death; unintentional injuries were the third leading cause, and intentional injuries were the 10th leading cause, of U.S. mortality in 2019. The leading causes of death in 2019 among unintentional injuries, respectively, were: poisoning, motor vehicle traffic

deaths, and falls. Among intentional injuries, the leading causes of death in 2019, respectively, were: firearm suicides, suffocation suicides, and firearm homicides. Unintentional injuries are a substantial contributor to premature death. In 2019, unintentional injuries were the leading cause of death for all groups under age 45. Injuries account for 21.7% of all emergency department visits, and falls account for more than one-quarter of those visits.

**Chart 18 | Number of Deaths Due to Injury per County from 2016-2020. Note Population Differences.**



Source: County Health Rankings

### *Physical Environment*

The physical environment is where individuals live, learn, work, and play. People interact with their physical environment through the air they breathe, water they drink, houses they live in, and the transportation they access to travel to work and school. Poor physical environment can affect our ability and that of our families and neighbors to live long and healthy lives.

Clean air and safe water are necessary for good health. Air pollution is associated with increased asthma rates and lung diseases, and an increase in the risk of premature death from heart or lung disease. Water contaminated with chemicals, pesticides, or other contaminants can lead to illness, infection, and increased risks of cancer.

Stable, affordable housing can provide a safe environment for families to live, learn, grow, and form social bonds. However, housing is often the single largest expense for a family and when too

much of a paycheck goes to paying the rent or mortgage, this housing cost burden can force people to choose among paying for other essentials such as utilities, food, transportation, or medical care.

In the Physical Environment area of this CHNA we looked at:

- **Air & Water Quality**, providing information on the safety of the air and water for a community.
- **Transportation**, residents who do not own a motor vehicle.

### *Air and Water Quality*

Clean air and water support healthy brain and body function, growth, and development. Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, carbon monoxide, and greenhouse gases can harm our health and the environment. Excess nitrogen and phosphorus run-off, medicines, chemicals, lead, and pesticides in water also pose threats to well-being and quality of life.

In 2016, 43 million people—more than 1 in 8 Americans—had been diagnosed with asthma. Air pollution is associated with increased asthma rates and can aggravate asthma, emphysema, chronic bronchitis, and other lung diseases, damage airways and lungs, and increase the risk of premature death from heart or lung disease. Using 2009 data, the CDC’s Tracking Network calculates that a 10% reduction in fine particulate matter could prevent over 13,000 deaths per year in the US.

While drinking water safety is improving, a 2012 study estimates that contaminants in drinking water sicken up to 1.1 million people per year. Improper medicine disposal, chemical, pesticide, and microbiological contaminants in water can lead to poisoning, gastro-intestinal illnesses, eye infections, increased cancer risk, and many other health problems.

### *Air Pollution - Particulate Matter*

The relationship between elevated air pollution (especially 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 table below shows daily average data from 2018 by county compared to Missouri.

**Table 21 | Average Daily Density of Fine Particulate Matter in micrograms per cubic meter (PM2.5) by 3 County Area Compared to Missouri.**

Average Daily Density of Fine Particulate Matter in micrograms per cubic meter (PM2.5)				
	Mississippi	New Madrid	Scott	Missouri
	9.3	9.2	9.6	8.2

Source: County Health Rankings

### Drinking Water Violations

Ensuring the safety of drinking water is important to prevent illness, birth defects, and death. Other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, kidney, liver, and nervous system damage. An increase in drinking water violations has also been shown to increase health care expenditures. Between 3 and 10% of community water systems across the U.S. experience a violation each year.

Data from 2020 shows that Mississippi and New Madrid Counties both had a presence of health-related drinking water violations. Scott County showed no violations.

### Transportation

The majority of residents in this 3 county area rely on personal forms of transportation. The very limited public transportation includes Scott County Transit System, Mississippi County Transit, and New Madrid Transit (just within the city of New Madrid). These systems can take patients to and from medical appointments, the grocery store, senior centers, etc. as long as it is during regular business hours and pre-scheduled.

**Table 22 | Percentage of Households with NO MOTOR VEHICLE by county based on data from 2016-2020.**

Percentage of Households with NO MOTOR VEHICLE by County			
	Mississippi	New Madrid	Scott
	16%	8%	8%

Source: ExploreMOHealth



## Chapter 2: Health Outcomes

Health Outcomes represent how healthy a county is right now. They reflect the physical and mental well-being of residents within a community through measures representing not only the length of life but quality of life as well.

In this CHNA we looked at:

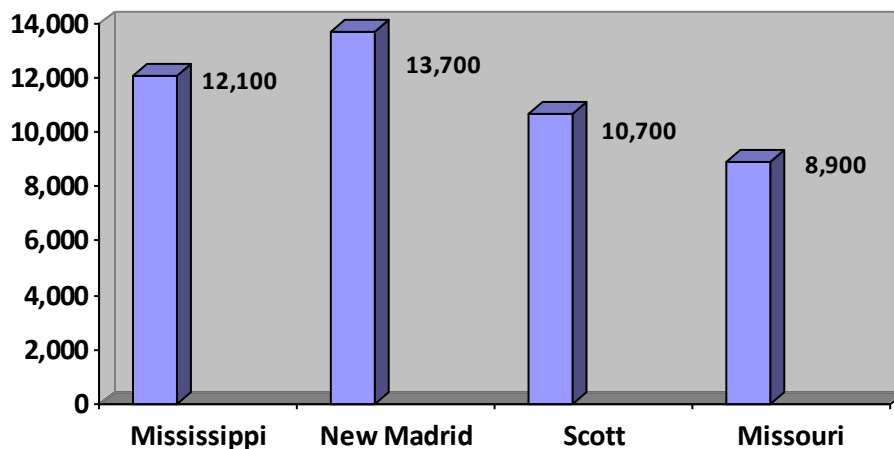
- **Length of Life**, measuring premature death.
- **Quality of Life**, percentage of adults reporting fair or poor health, physically unhealthy days, and poor mental health days.

### Length of Life

#### *Years of Potential Life Lost*

Years of Potential Life Lost (YPLL) is a widely used measure of the rate and distribution of premature mortality. Measuring premature mortality, rather than overall mortality, focuses attention on deaths that might have been prevented. YPLL emphasizes deaths of younger persons, whereas statistics that include all mortality are dominated by deaths of the elderly. For example, using YPLL-75, a death at age 55 counts twice as much as a death at age 65, and a death at age 35 counts eight times as much as a death at age 70. In total for the 3 counties, between the years of 2018-2020, there were 154,300 Years of Potential Life Lost. See table below.

**Chart 19 | Years of Potential Life Lost (YPLL) before age 75 per 100,000 population in 3 county area compared to Missouri. Based on data from 2018-2020.**



Source: County Health Rankings

## Quality of Life

### Poor or Fair Health

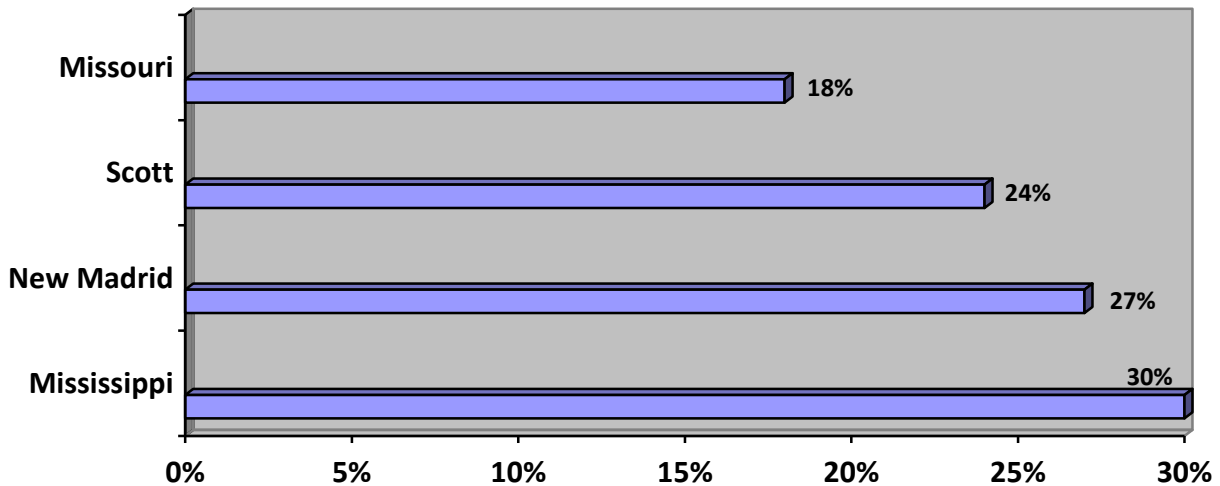
Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. Measuring HRQoL helps characterize the experience of people with disabilities and people living with chronic conditions in a population. Self-reported health status is a widely used measure of people’s health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how well people live.

The use of self-rated health as a measure to compare health status benefits from its comprehensive, inclusive, and non-specific nature. Furthermore, a meta-analysis of the association between mortality and a single item assessing self-rated health found that people who reported “poor” self-rated health had twice as higher mortality risk as people who reported “excellent” self-rated health.

*Self-reported health outcomes differ by race and ethnicity, in part, because cultural differences in reporting patterns due to different definitions of health may exist.*

The percentage of adults reporting fair or poor health is much higher in all 3 counties compared to Missouri.

**Chart 20 | Percentage of Adults Reporting Fair or Poor Health in 3 county area compared to Missouri. Data used from 2019.**

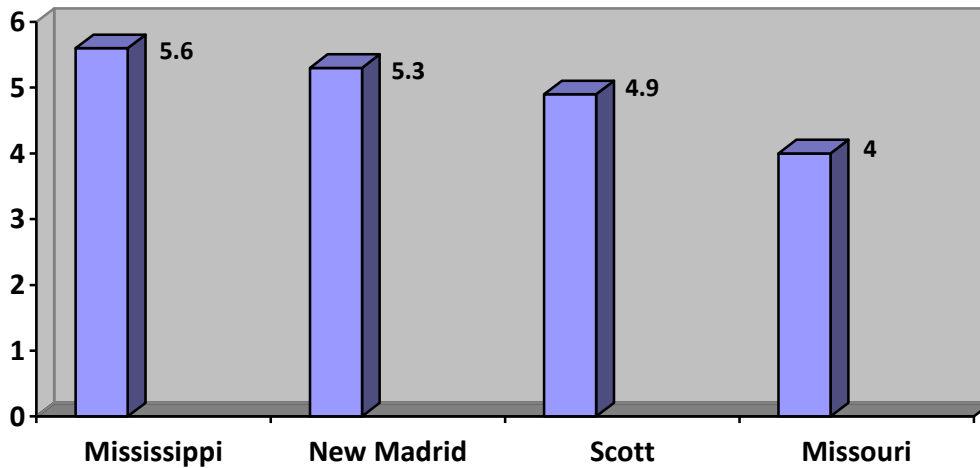


Source: County Health Rankings

### Poor Physical Health Days

Reliability for the healthy days measures in the Behavioral Risk Factor Surveillance System is high. In addition, a study examining the validity of healthy days as a summary measure for county health status found that counties with more unhealthy days were likely to have higher unemployment, poverty, percentage of adults who did not complete high school, mortality rates, and prevalence of disability than counties with fewer unhealthy days. See data in graph below.

**Chart 21 | Average Number of Physically Unhealthy Days Reported in Last 30 Days in 3 county area compared to Missouri.**



Source: County Health Rankings

### Poor Mental Health Days

Poor mental health days measures the number of self-reported “not good” mental health days in the past 30 days. The measure is designed to assess health related quality of life and is used by the CDC’s Behavioral Risk Factor Surveillance System (BRFSS) and Robert Wood Johnson Foundation’s County Health Rankings to describe the burden of disease in a population.

The prevalence of poor mental health quality of life is measured by asking respondents about the number of days in the past 30 days that their mental health was not good. Age is a non-modifiable risk factor, and as age increases, poor health outcomes are more likely. This report has an age-adjusted rate in order to fairly compare counties with differing age structures.

The average number of mentally unhealthy days reported in the 3 county areas are more than Missouri.

**Table 23 | Average Number of Mentally Unhealthy Days Reported in Last 30 Days per County Compared to Missouri.**

	Average Number of Mentally Unhealthy Days Reported in Last 30 Days
<b>Mississippi</b>	5.6 days
<b>New Madrid</b>	5.6 days
<b>Scott</b>	5.3 days
<b>Missouri</b>	4.9 days

*Source: County Health Rankings*

### Chapter 3: HEALTH MEASURES

Measuring morbidity and mortality rates allow assessing linkages between social determinants of health outcomes. By comparing the prevalence of certain chronic diseases to indications in other categories (e.g., poor diet and exercise) with measures (e.g., high rates of obesity and diabetes), various casual relationships may emerge, allowing a better understanding of how certain community health needs may be addressed. Various subject areas, such as cause of death, chronic diseases, unintentional injuries, are covered in this chapter.

#### Morbidity

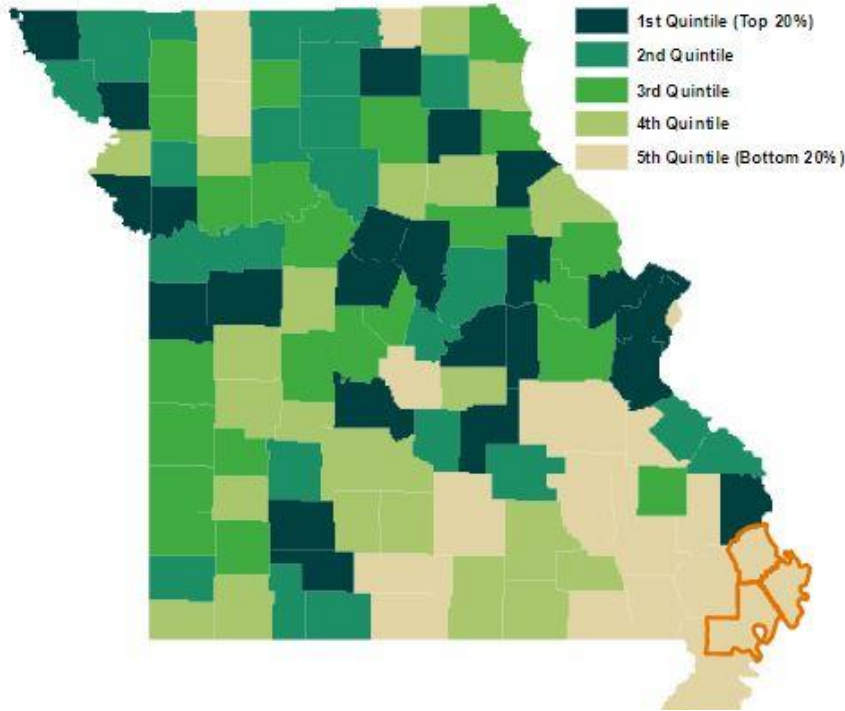
The definition of morbidity is having a disease or a symptom of disease, or the amount of disease within a population. Below are graphs showing the chronic disease prevalence for each county, compared to the state of Missouri, and the level of significance in the difference.

#### Obesity

According to the Centers for Disease Control and Prevention (CDC) the rate of adult obesity continues to rise in the U.S. The rate of severe obesity is also on the rise. The COVID-19 pandemic will likely add to this crisis due to social distancing, quarantining and fewer activities. Obesity serves as a proxy metric for poor diet and limited physical activity and has been shown to have very high reliability. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems (such as asthma), osteoarthritis, and poor health status.

All 3 counties, Mississippi, New Madrid and Scott, are in the bottom 20% of the state when ranking for Obesity.

**Chart 22 | Ranking of the Counties in the State of Missouri on Obesity.**



Source: County Health Rankings

According to the County Health Rankings developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, Mississippi County has 42% prevalence of obesity, New Madrid County has 41% and Scott has 39%.

**Table 24 | Percentage of Obese Adult Population per 3 County Area Compared to the state (based on 2016 data).**

Mississippi	New Madrid	Scott	Missouri
39%	28%	38%	31%

Source: County Health Rankings

## Diabetes

According to the Centers for Disease Control and Prevention, diabetes is the leading cause of kidney failure, non-traumatic lower-limb amputations and new cases of blindness among adults in the United States, and it is also a major cause of heart disease and stroke. Other complications that can be caused by diabetes include hypertension, nervous system disease, dental disease, and pregnancy complications.

Diabetes refers to a group of diseases that affect how the body uses blood sugar (glucose). Diabetes can lead to serious complications and premature death, but people with diabetes, working together with their support network and their healthcare providers, can take steps to control the disease and lower the risk of complications.

There is more than one type of diabetes:

- **Type 1 diabetes** develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. To survive, people with Type 1 diabetes must have insulin delivered by injection or pump.
- **Type 2 diabetes** accounts for a vast majority of cases of diabetes. Type 2 is associated with older age, obesity, family history, impaired glucose metabolism, physical inactivity and ethnicity.
- **Gestational diabetes** is a form of glucose intolerance diagnosed during pregnancy. It is more common among some racial/ethnic groups, among obese women and those with a family history of diabetes. During pregnancy, treatment is necessary to optimize maternal blood glucose levels and lessen the risk of complications to the infant.
- **Other types of diabetes** result from specific genetic conditions, surgery, medications, infections, pancreatic disease and other illnesses.

Table 25 | Percentage of Adults ages 18+ with Diagnosed Diabetes in 3 county area compared to Missouri in 2016.

Mississippi	New Madrid	Scott	Missouri
16%	11%	16%	11%

Source: County Health Rankings

### High Blood Pressure

High blood pressure increases the risk for heart disease and stroke, two leading causes of death for Americans. Tens of millions of adults in the United States have high blood pressure, and many do not have it under control. Blood pressure is measured using two numbers: The first number, called *systolic* blood pressure, measures the pressure in the arteries when the heart beats. The second number, called *diastolic* blood pressure, measures the pressure in the arteries when the heart rests between beats. High Blood Pressure is defined as a systolic blood pressure greater than 130 mmHg or a diastolic blood pressure greater than 80 mmHg or the person is taking medication for hypertension.

The percentage of the population with high blood pressure for the reported 3 counties is significantly higher compared to Missouri as a whole.

**Table 26 | Percentage of Adult Population in 3 county area with High Blood Pressure compared to the state (based on 2016 data).**

Mississippi	New Madrid	Scott	Missouri
39%	39%	45%	34%

Source: County Health Rankings

### High Cholesterol

Blood cholesterol is a waxy, fat-like substance made by the liver. Blood cholesterol is essential for good health. The body needs it to perform important jobs, such as making hormones and digesting fatty foods. The body makes all the blood cholesterol it needs, which is why experts recommend that people eat as little dietary cholesterol as possible while on a healthy eating plan.

Strong evidence shows that eating patterns that include less dietary cholesterol are associated with reduced risk of cardiovascular disease. Too much cholesterol circulating within our bloodstream leads to fatty deposits developing in the arteries. This causes the vessels to narrow and they can eventually become blocked. This can lead to heart disease and stroke.

The populations in Mississippi and New Madrid Counties have less percentage of those with high cholesterol than Missouri. Scott county percentage is much higher than the state.

**Table 27 | Percentage of Adult Population in 3 county with High Cholesterol compared to the state (based on 2016 data).**

Mississippi	New Madrid	Scott	Missouri
30%	32%	43%	35%

*Source: County Health Rankings*

## **Mortality**

Mortality, in terms for this CHNA, is a death rate, or the number of deaths in a certain group of people in a certain period of time.

### *Leading Causes of Death*

According to the Missouri Department of Health & Senior Services, Mississippi, New Madrid and Scott Counties have a higher death rate compared to Missouri in all of the causes listed in these tables. Following are tables by County showing the leading causes of death by events and rate as well as the Missouri rate. Each cause is indicated whether the severity difference between county and the state. A “H” indicates the rate is HIGH compared to the state of Missouri, “L” indicated the rate is LOW compared to the state of Missouri, and “N/S” indicates the rate difference is Not Significant.



## Mississippi County

Table 28 | Mortality rates in *Mississippi County* per year, per 100,000 population. “H” indicates the rate is HIGH compared to the state of Missouri.

Leading Causes of Death  <i>(Data Years 2009-2019)</i>	Mississippi County			Missouri
	Events	Rate	Compared with Missouri Rate	Rate
All Causes	1,985	1,060.30	H	809.76
Heart Disease	6339	337.11	H	193.95
All Cancers (Malignant Neoplasms)	445	229.48	H	173.88
Lung Cancer	160	81.12	H	51.08
Colorectal	43	22.13	H	15.37
Chronic Lower Respiratory Disease	139	71.26	H	51.03
Unintentional Injuries	108	64.94	H	52.44
Motor Vehicle Accidents	38	24.05	H	14.37
Stroke	107	56.43	H	41.02
Alzheimer’s Disease	81	43.13	H	29.21

Source: Missouri Department of Health & Human Services

***New Madrid County***

**Table 29 | Mortality rates in *New Madrid County* per year, per 100,000 population. “H” indicates the rate is HIGH compared to the state of Missouri.**

Leading Causes of Death  <i>(Data Years 2009-2019)</i>	New Madrid County			Missouri
	Events	Rate	Compared with Missouri Rate	Rate
All Causes	2,724	1,050.30	H	809.76
Heart Disease	739	280.47	H	193.95
All Cancers (Malignant Neoplasms)	597	220.01	H	173.88
Lung Cancer	214	77.19	H	51.08
Colorectal	63	23.26	H	15.37
Chronic Lower Respiratory Disease	232	86.08	H	51.03
Unintentional Injuries	149	69.22	H	52.44
Motor Vehicle Accidents	59	27.78	H	14.37
Alzheimer’s Disease	131	47.59	H	29.21
Kidney Disease (Nephritis and Nephrosis)	90	34.15	H	18.85

*Source: Missouri Department of Health & Human Services*

## Scott County

Table 30 | Mortality rates in Scott County per year, per 100,000 population. “H” indicates the rate is HIGH compared to the state of Missouri. “N/S” indicates the rate is Not Significant.

Leading Causes of Death  <i>(Data Years 2009-2019)</i>	Scott County			Missouri
	Events	Rate	Compared with Missouri Rate	Rate
All Causes	4,825	920.08	H	809.76
Heart Disease	1,155	215.92	H	193.95
All Cancers (Malignant Neoplasms)	1,081	197.90	H	173.88
Lung Cancer	370	66.89	H	51.08
Colorectal	108	20.45	H	15.37
Chronic Lower Respiratory Disease	436	80.38	H	51.03
Unintentional Injuries	241	55.12	H	52.44
Motor Vehicle Accidents	80	19.18	H	14.37
Stroke	246	46.81	N/S	41.02
Alzheimer’s Disease	208	38.58	H	29.21
Kidney Disease (Nephritis and Nephrosis)	140	25.96	H	18.85
Suicide	91	23.08	H	16.46

Source: Missouri Department of Health & Human Services

### Leading Causes of Death in Children and Adolescents

According to Missouri Department of Health & Senior Services Resident Child Health Profiles, the 3 counties in our service area death rate (per 100,000 population) for the period 2008-2019 exceed the Missouri rates in several categories. The following tables 30 and 31 detail death rates per cause for children ages 1 to 14 and adolescents ages 15 to 18. Some rates are considered unstable due to a limited number of events and are marked with \*.

**Table 31 | Causes of Death in Children 1-14 by 3 county area compared to State, 2009-2019, rate per 100,000 population.**

<b>Ages 1-14</b>	<b>Mississippi</b>	<b>New Madrid</b>	<b>Scott</b>	<b>Missouri</b>
<b>All Causes</b>	7.65*	27.4*	28.42	19.29
<b>Total Unintentional Injuries</b>	0	16.44*	7.41*	6.3
<b>Motor Vehicle Deaths</b>	0	8.22*	6.18*	2.93
<b>All Cancer (Malignant Neoplasms)</b>	3.83*	5.48*	2.47*	2.26
<b>Birth Defects</b>	0	5.48*	1.24*	1.53
<b>Homicide</b>	0	0	4.94*	1.9
<b>Heart Disease</b>	0.65*	0	0	0.65

\*rate may be unstable

Source: Missouri Department of Health & Human Services

**Table 32 | Causes of Death in Adolescents 15-17 by 3 county area compared to State, 2009-2019, rate per 100,000 population.**

<b>Ages 15-17</b>	<b>Mississippi</b>	<b>New Madrid</b>	<b>Scott</b>	<b>Missouri</b>
<b>All Causes</b>	69.12*	80.65*	70.16*	65.29
<b>Total Unintentional Injuries</b>	11.52*	56.45*	29.58*	27.15
<b>Motor Vehicle Deaths</b>	11.52*	16.13*	18.49*	19.03
<b>All Cancer (Malignant Neoplasms)</b>	11.52*	0	14.79**	12.73
<b>Birth Defects</b>	11.52*	0	3.70*	11.87
<b>Homicide</b>	0	0	0	2.53
<b>Heart Disease</b>	0	0	7.40*	1.42

\*rate may be unstable

Source: Missouri Department of Health & Human Services

## **Conclusion**

The Community Health Needs Assessment is an exercise of finding secondary data, performing primary research and presenting those findings. This information will allow Missouri Delta Medical Center to create an implementation strategy designed to meet particular needs that are specific to the Scott County Community.

## Appendix A | Pre-Survey for Focus Groups

**Instructions:** From your professional perspective, on a scale from 1 to 10 with 1 being least concerning and 10 being most concerning, please rate each health topic for this community and county, then prioritize your top five concerns from 1 to 5.

	Rate 1 to 10*	Prioritize top 5**
Affordability of healthcare and prescription drugs		
Cancer		
Childcare accessibility		
Communicable disease		
Community safety		
Diabetes and other chronic disease		
Disaster preparedness		
Environmental quality, climate change		
Healthcare availability		
Injury and violence, including gun violence		
Lack of or inadequacy of insurance		
Maternal and child health		
Mental and behavioral disorders		
Neurological or Alzheimer’s disease		
Obesity, nutrition, activity		
Oral health		
Preventive and screening services		
Racial and health equity		
Reproductive and sexual health		
Smoking, vaping and tobacco use		
Stroke and cerebral disorders		
Substance use/abuse (alcohol, drugs)		
Suicide		
Transportation		
Vaccines		
Other (list)		
Other (list)		

\*All fields in this column should contain a number from 1 to 10

\*\*Five fields of your choice will contain the numbers 1 through 5

## Appendix B | Data Sources

Missouri Department of Health & Senior Services
County Health Rankings (University of Wisconsin’s Population Health Institute, The Robert Wood Johnson Foundation)
U.S. Census Bureau
ExploreMOHealth
Centers for Disease Control and Prevention (CDC)
U.S. Department of Education
National Center for Education Statistics

### List of Tables

Table 1. Scott County Pre-Survey Top Ten Most pressing Health Issues	11
Table 2. Scott County Health Issues Receiving Top Five Priority Ratings	12
Table 3. Mississippi County Pre-Survey Top Ten Most Pressing Health Issues	12
Table 4. Mississippi County Health Issues Receiving Top Five Priority Ratings	13
Table 5. New Madrid County Pre-Survey Top Ten Most Pressing Health Issues	13
Table 6. New Madrid County Health Issues Receiving Top Five Priority Ratings	14
Table 7. Zip Codes by County	21
Table 8. Age & Gender Percentage per County Compared to Missouri and U.S.	22
Table 9. Percentage of Adults who are Current Smokers per County Compared to Missouri	26
Table 10. Percentage of Adults reporting No Leisure-Time Physical Activity per County Compared to Missouri	27
Table 11. Percentage of Population Who Lack Adequate Access to Food per County Compared to Missouri	27
Table 12. Number of Teen Births in 2019 by County and Age	31
Table 13. Ratio of Population to Primary Care Physicians per County Compared to Missouri	34
Table 14. Ratio of Population to Primary Care Providers other than Physicians per County Compared to Missouri	34
Table 15. Ratio of Population to Mental Health Providers per County Compared to Missouri	38
Table 16. Ratio of Population to Dentists per County Compared to Missouri	39
Table 17. Dentists per County	39
Table 18. Long-Term Care Facilities in Scott, New Madrid and Mississippi Counties (by town)	46
Table 19. Percentage of Food Insecure Population Ineligible for Assistance	56
Table 20. Percentage of Adults Reporting Insufficient Social and Emotions Support per County Compared to Missouri and U.S.	59

Table 21. Average Daily Density of Fine Particulate Matter in micrograms per cubic meter (PM2.5) per County Compared to Missouri	63
Table 22. Percentage of Household with NO MOTOR VEHICLE by County Based on Data from 2016-2020	63
Table 23. Average Number of Mentally Unhealthy Days Reported in Last 30 Days per County Compared to Missouri	67
Table 24. Percentage of Obese Population per County Compared to Missouri	68
Table 25. Percentage of Adults with Diagnosed Diabetes per County Compared to Missouri in 2018	69
Table 26. Percentage of Adult Population per County with High Blood Pressure Compared to Missouri	70
Table 27. Percentage of Adult Population per County with High Cholesterol Compared to Missouri	71
Table 28. Mortality Rates in Mississippi County	72
Table 29. Mortality Rates in New Madrid County	73
Table 30. Mortality Rates in Scott County	74
Table 31. Causes of Death in Children 1-14 by County Compared to Missouri	75
Table 32. Causes of Death in Adolescents 15-17 by County Compared to Missouri	75

## List of Charts

Chart 1. Population of Each County According to 2020 Census	20
Chart 2. Percentage of Race & Ethnicity per County Compared to Missouri and U.S.	23
Chart 3. Percentage of Race & Ethnicity for MDMC per County	24
Chart 4. Percentage of Adults Reporting Binge or Heavy Drinking Compared to Missouri	29
Chart 5. Percentage of Driving Deaths with Alcohol Involvement per County Compared to Missouri	29
Chart 6. Number of Newly Diagnosed Chlamydia Cases per 100,000 Population	32
Chart 7. Percentage of Uninsured Population per County Compared to Missouri and U.S.	35
Chart 8. Rate of Hospital Stays for Ambulatory-Care Sensitive Conditions per 100,000 Medicare Enrollees	48
Chart 9. Percentage of Adults Ages 25+ with a High School Diploma or Equivalent per County Compared to Missouri	50
Chart 10. Student Reading Proficiency per County Compared to Missouri	51
Chart 11. Percentage of Population Ages 16+ Unemployed but Seeking Work per County Compared to Missouri	52
Chart 12. Median Family Income in 2021 per County Compared to Missouri and U.S.	53
Chart 13. Percentage of Children Eligible for Free or Reduced Price Lunch per County Compared to Missouri and U.S.	54
Chart 14. Percentage of Total Population with Food Insecurity	55
Chart 15. Percentage of Children under Age 18 with Food Insecurity	56
Chart 16. Percentage of Children Living in Single-Parent Households per County Compared to Missouri	58
Chart 17. Number of Reported Violent Crime Offenses per County	60



Chart 18. Number of Deaths Due to Injury per County	61
Chart 19. Years of Potential Life Lost before age 75 per County Compared to Missouri	64
Chart 20. Percentage of Adults Reporting Fair or Poor Health per County Compared to Missouri	65
Chart 21. Average Number of Physically Unhealthy Days Reported in Last 30 Days per County Compared to Missouri	66
Chart 21. Ranking of the Counties in the State of Missouri on Obesity	68