



This assessment process helps Missouri Delta Medical Center focus their efforts around community health improvement and provide structure for addressing the determinants of health and illness in New Madrid County, MO.

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## **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 along with local residents to research and prioritize community health needs and to document community health delivery success. This particular document will cover the findings in the 2019 New Madrid County assessment.

#### Community Health Needs Assessment (CHNA) Process and Requirements

Missouri Delta Medical Center is a not-for-profit hospital in Sikeston, Missouri. The CHNA must be conducted every three years by not-for-profit hospitals to meet federal regulations. After collecting data from focus groups and surveys in each of the counties we serve, the hospital then implements a strategy to improve on the needs of the community that the information identifies. Missouri Delta Medical Center completed the 2019 Community Health Needs Assessment for Mississippi, New Madrid, and Scott County. The Scott County Community Health Needs Assessment was completed in collaboration with Saint Francis Medical Center (Lead) and Southeast Health. These health assessments for each county will serve as the foundation for Missouri Delta Medical Center's community health improvement efforts over the next three years in the counties we serve.

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.

## **Community Profile – New Madrid County**

New Madrid County is located in the bootheel of Southeast Missouri and they have a population of 18,030. The population median age is 41.3 which is higher than the Missouri median age of 38.4. Females make up the majority of the total population at 51.85% and the median household income is \$33,846. Twenty-five percent of the population is in the poverty guidelines, 17.83% have no insurance and the unemployment rate is 5.1%. The percentage of

population with a disability is 22.72% which is nearly twice as much as the state of Missouri at 12.59%. New Madrid County has seven medical clinics (none with after-hours care), an ambulance service, a health department, six long-term care facilities, and two retail pharmacies.

## **Health Outcomes – New Madrid County**

The leading causes of death in New Madrid County are:

- Heart Disease
- All Cancers (Malignant Neoplasms)
- Chronic lower respiratory Diseases
- Accidents
- Stroke

Missouri Resident Death -					
Leading Causes Profile					
Geography: COUNTY: New Madrid Demographic: ALL					
Leading Cause of Death Indicators					
	Data Years	Count	<u>Rate</u>	<u>State</u> <u>Rate</u>	
L	eading Causes of D	eath	T		
All Causes	2006 - 2017	2,946	1,047.10	818.88	
Heart Disease	2006 - 2017	892	313.21	201.43	
All Cancers (Malignant Neoplasms)	2006 - 2017	653	222.59	180.13	
Liver Cancer	2006 - 2017	20	6.75	5.89	
Lung Cancer	2006 - 2017	235	78.85	54.60	
Breast Cancer	2006 - 2017	44	15.20	12.68	
Colorectal Cancer	2006 - 2017	72	24.37	16.19	
Pancreas Cancer	2006 - 2017	34	11.63	11.20	
Prostate Cancer	2006 - 2017	26	8.78	7.64	
Chronic Lower Respiratory Disease	2006 - 2017	226	69.96	46.91	
Total Unintentional Injuries	2006 - 2017	160	68.06	49.96	
Accidental Poisoning	2006 - 2017	25	11.58	15.23	
Motor Vehicle Accidents	2006 - 2017	66	27.43	14.95	
Stroke/Other Cerebrovascular Disease	2006 - 2017	139	48.29	43.59	
Alzheimer's Disease	2006 - 2017	123	41.56	27.86	
Diabetes Mellitus	2006 - 2017	53	19.25	20.58	
Kidney Disease (Nephritis and Nephrosis)	2006 - 2017	91	31.56	18.72	
Pneumonia and Influenza	2006 - 2017	64	21.96	18.22	
Suicide	2006 - 2017	33	13.85	15.30	

Septicemia	2006 - 2017	42	15.51	11.35	
Chronic Liver Disease and Cirrhosis	2006 - 2017	25	9.56	8.20	

Source: Missouri Department of Health and Human Services, MICA, 2006-2017

#### **Primary Research**

A focus group was held in New Madrid County with involved community members that are familiar with the advantages and disadvantages of their county. The questions discussed are below (a summary of the group discussion is included in Chapter 5.

#### Focus Group Questions:

- 1. What do people in this community do to stay healthy? How do people get information about health?
- 2. In this group's opinion, what are the serious health problems in your community? What are some of the causes of these problems?
- 3. What keeps people in your community from being healthy?
- 4. What could be done to solve these problems?
- 5. Is there any group not receiving enough health care? If so, why?
- 6. Of all the issues we have talked about today, what issues do you think are the most important for your community to address?

#### **Summary of Findings**

This section summarizes the findings from the Community Health Needs Assessment and the tools and techniques used to make these determinations.

## **Key Findings**

The following lists represents the key findings per need from the Primary Data gathered for New Madrid County.

#### **Health Needs:**

- Obesity
  - Heart disease
  - Diabetes
- Mental Health

#### **Behavioral Needs**

- Wellness and prevention
- Smoking

#### **Community Needs:**

- Education of health issues/Communication
- Uninsured, can't afford it

### **Priority Needs**

In March 2018, the Missouri Hospital Association and Missouri Foundation for Health released ExploreMOhealth, a community health needs assessment platform developed through a partnership with the University of Missouri's Center for Applied Research and Engagement Systems. The platform was designed to assist community health stakeholders in the development in the development of impactful CHNAs using two rich sources of health-related data that are unique to Missouri – the Missouri County-Level Study from MFH, and the Missouri ZIP Health Rankings from the Hospital Industry Data Institute and Washington University School of Medicine. This site can be used to gain hyperlocal insights on the health and social well-being of their communities.

The Missouri County-level Study is a periodic survey of the health-related behaviors and attitudes of Missourians aged 18 and older. The survey design is based on questionnaires and methods employed by the Behavioral Risk Factor Surveillance System of the U.S. Centers for Disease Control and Prevention.

The most recent County-level Study survey was conducted during 2016 and produced detailed health-related information from approximately 52,000 Missouri adults who were randomly selected to participate in the study via telephone interview. Administered by the University of Missouri Health and Behavioral Risk Research Center, the interviews generated data on the county-specific prevalence of behavioral risk factors, existing medical conditions, environmental health factors and preventive practices.

The project was funded by the Robert Wood Johnson Foundation through a 2015 County Health Rankings Research Grant award.

Between the New Madrid County Focus Group, survey results and the ZIP Health Rankings data, the top five ranked diseases and conditions for New Madrid County are:

- 1. Depressive Disorder
- 2. Cancer
- 3. COPD
- 4. Stroke
- 5. Diabetes

The top five ranked health risk factors for New Madrid County are:

- 1. Obesity
- 2. Unhealthy diet
- 3. Smoking
- 4. Substance abuse
- 5. No transportation

Members of the Missouri Delta CHNA Team analyzed the focus group data and secondary data in the report to prioritize the community health needs for New Madrid County. The Priority Needs were first identified by the primary research or what the community finds important. The high priority needs were then validated by the secondary research by looking at the county's statistics against the states statistics.

#### The top five ranked Priority Health Needs for New Madrid County are:

- 1. Heart Disease
- 2. Respiratory Disease
- 3. Cancer (lung, Colon)
- 4. Health Education
- 5. Mental Health

#### Chapter 1

## **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.

#### **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 form persons who represent the broad interest of the community served by the hospital facility, including those with special knowledge o for 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 description of the sources and dates of the data and other information used in the assessment, including primary and secondary sources
  - The analytical methods applied to identify community health needs
  - Information gaps that affect the hospital's ability to assess the community's health needs.
  - 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
  - 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 description of when and how the organization consulted with these individuals (whether through meetings, focus groups, interviews, surveys, written correspondence, etc.)

- Community leaders who were consulted and/or collaborated in the planning and implementation process
- Justification of why data sources were used and selected
- Justification of the approach for primary data collection
- Explanation of successful and non-successful approaches to see broad-based community input, especially underserved or high-risk groups within the community
- If the hospital takes into account input form 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
- 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
  - Priorities identified through primary and secondary data
  - 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**

The IRS guidance specifies that the CHNA results must be used to develop and implementation strategy that must be adopted by the hospital. The implementation strategy is defined as a written plan that addresses each of the community health needs that were identified through the assessment. Each hospital organization must meet the requirement to adopt an implementation strategy separately with respect to each hospital facility it operates. 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 on the hospital facility does not intend to meet and explains why the hospital facility does not intend to meet the health need.

In describing how a hospital facility plans to meet a health need identified through a CHNA, the implementation strategy must tailor the description to the particular hospital facility, taking into account its specific programs, resources, and priorities. The implementation strategy should also describe any planned collaboration with governmental, non-profit, or other health care organizations, including related organizations, in meeting the health need.

The IRS will allow hospital organizations to develop implementation strategies for their hospital facilities in collaboration with other organizations, including related organizations, other hospital organizations, for-profit and government hospitals, state and local agencies, such as

local health departments. If a hospital does collaborate with other organizations in developing an implementation strategy, the strategy should identify all the organizations with which the hospital collaborated.

The implementation strategy is considered to be adopted on the date the implementation strategy is approved by an authorized governing body of the hospital organization. The authorized governing body means:

- 1. The governing body of the hospital organization (i.e. board of directors, board of trustees, or equivalent controlling body)
- 2. A committee of the governing body, which may be comprised of any individuals permitted under state law to serve on such committee, to the extent the committee is permitted by the state law to act on behalf of the governing body; or
- 3. To the extent permitted under state law, other parties authorized by the governing body of the hospital organization to act on its behalf by following procedures specified by the governing body in approving an implementation strategy

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

The Community Health Needs Assessment process should consist 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
  - Individuals with special knowledge or expertise in public health
  - Federal, tribal, regional, state or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility
  - Leaders, representatives, or members of medically underserved, low income and minority populations, as well as populations with chronic disease needs
- 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 in your community
- 7. Develop and implement a strategy to address the identified priority health issues
- 8. Widely disseminate the CHNA

#### **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 outpatient visits by patients that reside in New Madrid County. Thirty-two percent of MDMC patients come from New Madrid County. This information was provided by the Hospital Industry Data Institute (HIDI) that is founded by the Missouri Hospital Association. Each county differs from

one another in terms of demographics, healthcare accessibility, education and other aspects. Due to this difference, three separate written assessment reports are created. This makes for a much better explanation on specific needs per county.

#### Identifying Partners and Individuals Representing the Broad Interest of the Community

For primary research, the following individuals, with a broad interest of New Madrid County, included people from the following organizations.

- Amy Stinnett, Family Nurse Practitioner, Portageville Community Care Center
- Donna Fields, Medical Clinic(s) Office Manager, Missouri Delta Physician Services
- Scarlett Loomas, DAEOC, Division of Family & Community Development
- Macie Haggard, SEMO Health Network
- Adalyn Woodard, SEMO Health Network
- Tiffany Minnis, DAEOC, Benefits Specialist
- David McCarty, New Madrid County EMA
- Jerry Lathum, New Madrid County Health Department
- Joel Evans, DAEOC, President
- Taryn LeGrand-Lovett, Bootheel Counseling Services
- Sharon Urhahn, Missouri Delta Medical Center

Efforts were made to include at-risk, targeted populations and principle specialty areas that are served by the hospital and present within the community, such as the medically underserved, low income persons, minority groups, and those with chronic disease needs. The results from this Focus Group can be found in Chapter 5.

#### **Gather Available Data and Current Assessments**

Secondary research was obtained from several different credible sources listed below. Some areas that were researched include demographics, the physical environment, social factors, the economy, the transportation system, the education system, the health care system, and public safety. The assessment also includes existing health status and public health data.

Sources for secondary data:

- ExploreMOhealth
- U.S. Census Bureau
- Missouri Department of Health and Senior Services
- Hospital Industry Data Institute (HIDI)
- Missouri Information for Community Assessment (MICA)

#### **Development and Conduct Primary Research**

Primary data and data collected specifically for the purpose of answering project-specific questions. Primary data should be collected after the collection and initial review of secondary

data and should add breadth, depth, and qualitative information to the secondary data. Primary research was obtained in New Madrid County through focus groups.

#### **Focus Groups**

Group surveys in the form of focus groups were conducted. A focus group is defined as people who possess certain similar characteristics that are assembled as a group to participate in a focused discussion to help understand the topic of interest. The questions asked and the participants in in the New Madrid County focus group can be found in Chapter 5 Data was collected from the focus groups through note-taking.

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

From the analysis of this research, community needs were 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 were 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

The implementation strategy for New Madrid County will be developed separately and will address the needs identified in this CHNA.

#### Widely Disseminate the CHNA

The CHNA in 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 instruction for downloading.
- 2. The document is posted in a format that exactly reproduces the images of the report when accessed, downloaded, viewed and printed.
- 3. Allows individuals with Internet access 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.** The CHAN must remain widely available to the public until the next CHNA for that hospital is conducted and made widely available

# Chapter 2 New Madrid County and the Community

New Madrid County is located in the Bootheel of the U.S. state of Missouri. As of the 2010 census, the population was 18,956. The largest city and county seat is New Madrid, located on the northern side of the Kentucky Bend in the Mississippi River, where it has formed an oxbow around an exclave of Fulton County, Kentucky. This feature has also been known as New Madrid Bend or Madrid Bend, for the city.

The county was officially organized on October 1, 1812, and is named after Nuevo Madrid, a district located in the region. This area was under Spanish rule following France's cession of Louisiana after being defeated in the Seven Years' War. The Spanish named the district after Madrid, the capital of Spain.

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 had continued to produce smaller earthquakes with some frequency.

The county had its peak of population in 1940, according to US census records. Many residents left the rural county from 1950 to 1970, seeking better work opportunities in the North and Midwest. County population has continued to decline. In 2017 the county was featured in an episode of Madrid de sol a sol, a show from Spanish public channel Telemadrid exploring locations named "Madrid".

Source: Wikipedia

#### **ZIP Codes**

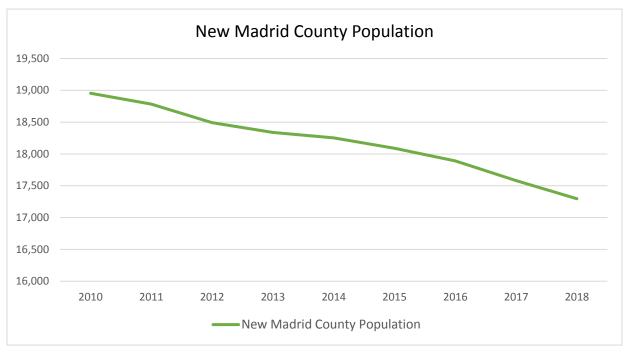
There are 13 ZIP Codes in New Madrid County.

ZIP Code	City	
63828	Canalou	
63833	Catron	
63848	Gideon	
63860	Kewanee	
63862	Lilbourn	
63866	Marston	
63867	Matthews	
63868	Morehouse	
63869	New Madrid	
63870	Parma	
63873	Portageville	
63874	Risco	
63878	Tallapoosa	
Data Source: US Census Bureau		

## **Demographic Characteristics**

## **Population Growth**

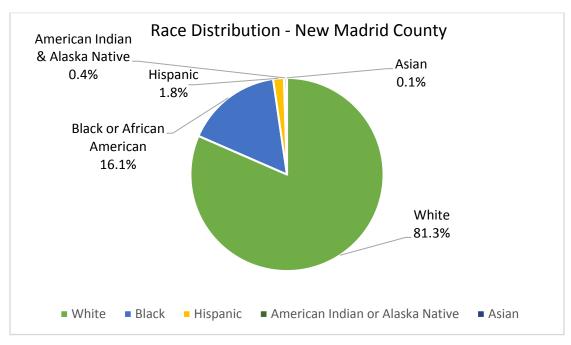
Based on data from the U.S. Census Bureau, there has been a steady population decline in New Madrid County, Missouri since 2010. In 2010, the population was 18,783 and in 2018 the population was 17,296 resulting in a decrease in population of 8.8% over an 8 year period of time.



Source: U.S. Census Bureau

#### Race

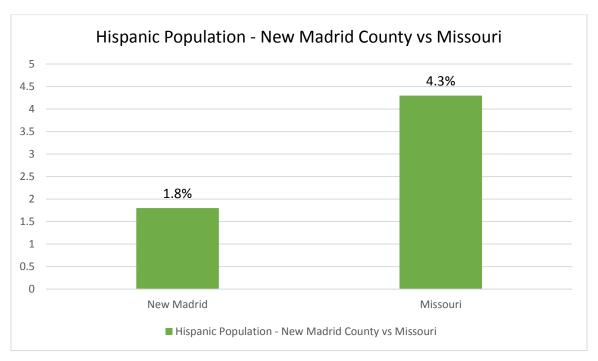
There is a larger amount of Black or African Americans (16.2%) in New Madrid County compared to the percentage in Missouri (11.8%).



Source: U.S. Census Bureau

## **Ethnicity**

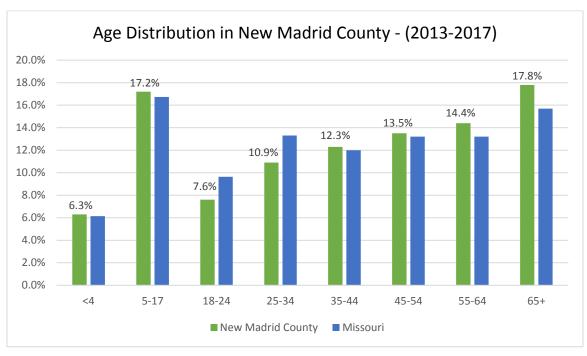
The Hispanic population in New Madrid County is much lower than in the state of Missouri as a whole.



Source: U.S Census Bureau

## **Age Distribution**

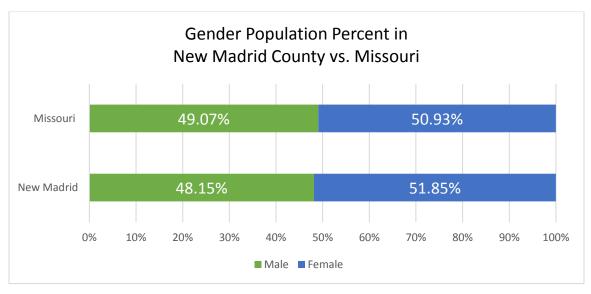
The age distribution in New Madrid County mimics the trends in Missouri except in the age ranges of 18-24 and 25-34, which shows much less in that category in New Madrid County compared to Missouri and the age range of 65+ where there are more in New Madrid County than Missouri.



Source: ExploreMOhealth.org

#### Gender

The percentage of females in New Madrid County is higher than males and higher than the state of Missouri.



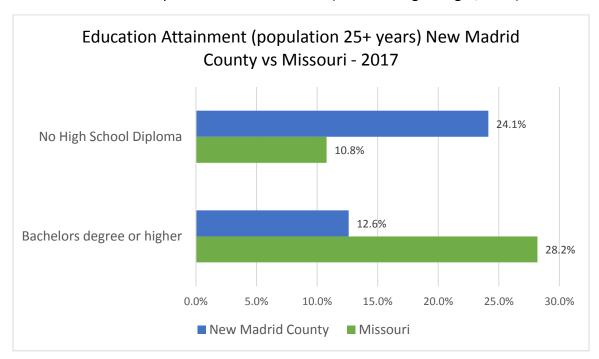
Source: ExploreMOhealth.org

#### **Social and Economic Characteristics**

Economic and social insecurity often are associated with poor health. Poverty, unemployment and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Ensuring access to social and economic resources provides a foundation for a healthy community.

#### Education

The education disparity between New Madrid County and Missouri is a gross amount. New Madrid County has more than double the amount of their population, compared to Missouri, with No high school diploma. Also, the amount of population with higher education is over two times less in New Madrid County than in Missouri. This data is relevant as educational attainment is linked to positive health outcomes (Freudenberg & Ruglis, 2007).



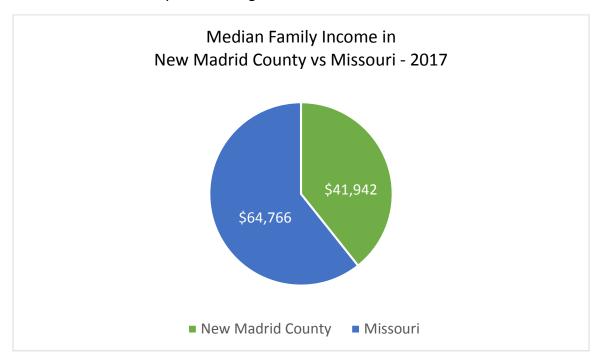
Source: ExploreMOhealth.org

#### Literacy

An inability to read English well is linked to poverty, unemployment, and barriers to healthcare access, provider communications, and health literacy/education. In New Madrid County, the percentage of children in grade 4 whose reading skills tested *below* the "proficient" level for the English Language Arts portion of the state-specific standardized test is 45.43%. This is higher than the state of Missouri at 35.29%

#### **Median Family Income**

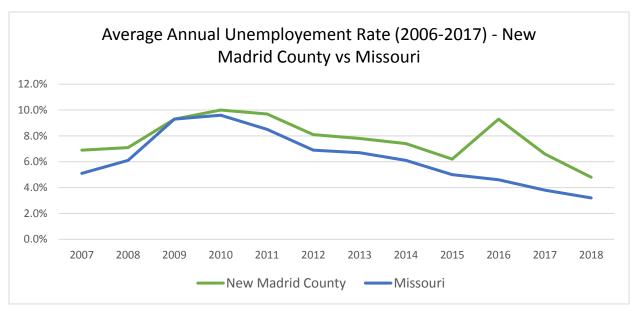
The median family income based on the latest 5-year American Community Survey estimates in New Madrid County is \$41,932. The median family income in Missouri based on the same study is \$64,776. A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. Family income includes the incomes of all family members age 15 and older.



Source: ExploreMOhealth.org

#### **Unemployment Rate**

In New Madrid County, the total unemployment for July 2019 is 5.3% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). Unemployment creates financial instability and barriers to health care access including insurance coverage, health services, healthy food, and other necessities that contribute to poor health status. New Madrid County unemployment rate goes along with the trend in Missouri except in 2016 when a large employer closed and left 900 people without employement. Overall, the percentage of unemployment is always higher in New Madrid County.



Source: ExploreMOhealth.org

#### Poverty - Population Below 200% FPL

In New Madrid County, 50.25% or 8,851 individuals are living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

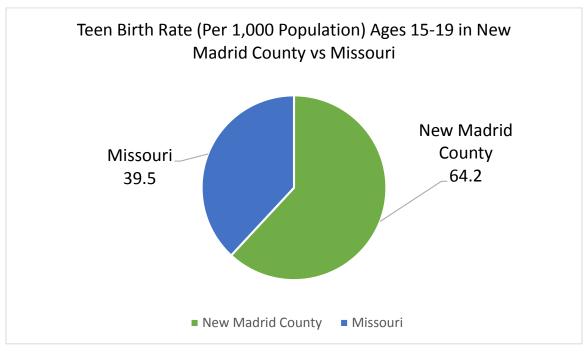
#### **Food Insecurity Rate**

Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food. In New Madrid County it is estimated that 19.7% of the population experience food insecurity at some point during the report year. This is over 5% higher than in the state of Missouri.

#### **Teen Pregnancy**

The rate of total births to women age of 15 - 19 per 1,000 female population in New Madrid County is 64.2. The rate in Missouri is 39.5. In many cases, teen parents have unique social,

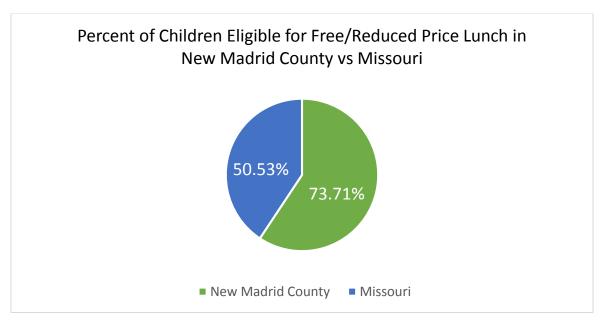
economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.



Source: ExploreMOhealth.org

## Children Eligible for Free/Reduced Price Lunch

Within New Madrid County, 1,887 public school students or 73.71% are eligible for Free/Reduced Price lunch out of 2,560 total students enrolled. In the state of Missouri that percent 50.53%. This study assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs.



Source: ExploreMOhealth.org

#### **Social or Emotional Support**

Data collected for this section identifies 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. 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. In New Madrid County, the percentage of Population without Adequate Social/Emotional Support (age 18+) is 23%. The rate in Missouri is 19.1%.

#### **Access to Healthcare**

Access to healthcare services is critical to good health, yet rural residents face a variety of access barriers. A 1993 National Academies report, Access to Healthcare in America, defined access as the timely use of personal health services to achieve the best possible health outcomes. A 2014 RUPRI Health Panel report on rural healthcare access summarizes additional definitions of access with examples of measures that can be used to determine access.

Ideally, residents should be able to conveniently and confidently access services such as primary care, dental care, behavioral health, emergency care, and public health services. According to Healthy People 2020, access to healthcare is important for:

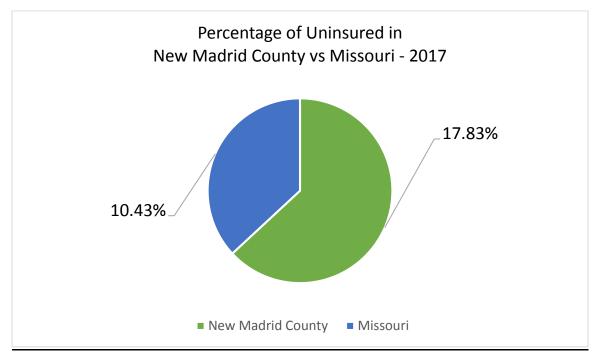
- Overall physical, social, and mental health status
- Disease prevention
- Detection, diagnosis, and treatment of illness
- Quality of life
- Preventable death
- Life expectancy

Rural residents often encounter barriers to healthcare that limit their ability to obtain the care they need. In order for rural residents to have sufficient access, necessary and appropriate healthcare services must be available and obtainable in a timely manner. Even when an adequate supply of healthcare services exists in the community, there are other factors to consider in terms of healthcare access. For instance, to have good healthcare access, a rural resident must also have:

- Financial means to pay for services, such as health or dental insurance that is accepted by the provider.
- Means to reach and use services, such as transportation to services that may be located at a distance, and the ability to take paid time off of work to use such services.
- Confidence in their ability to communicate with healthcare providers, particularly if the patient is not fluent in English or has poor health literacy.
- Trust that they can use services without compromising privacy.
- Belief that they will receive quality care.

#### Uninsured

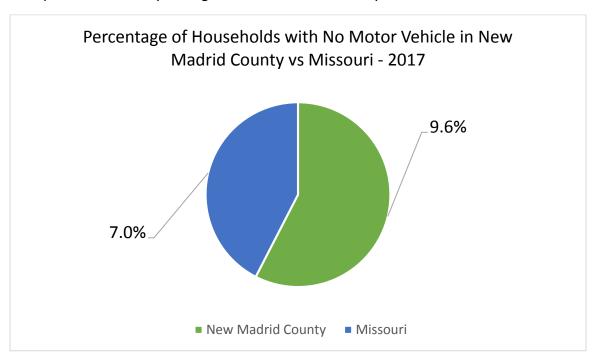
The lack of health insurance is considered a key driver of health status. In New Madrid County, 17.83% of the total civilian non-institutionalized population are without health insurance coverage. The rate of uninsured persons in New Madrid County is greater than the state average of 10.43%. Lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.



Source: ExploreMOhealth.org

#### Household with No Motor Vehicle

The number of households with no motor vehicle in New Madrid County is based on the latest 5-year American Community Survey estimates. Transportation is number 5 out of the top 5 health risks in New Madrid County. The percentage of households with no motor vehicle transportation is nearly 3% higher in New Madrid County than in Missouri.



Source: ExploreMOhealth.org

There is no hospital in New Madrid County. The closest hospital is Missouri Delta Medical Center and is approximately 22 miles away in Scott County. Missouri Delta Medical Center offers comprehensive medical care to residents in Scott, New Madrid and Mississippi Counties. Emergency department, orthopedics, geriatric behavioral health, obstetrics and pediatrics are just a few of the services offered.

#### Healthcare Providers – Primary Medical Care, Dental, Mental Health

The Health Professional Shortage Area (HPSA) is defined as a geographic area having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

The HPSA scores are developed for use by the National Health Service Corps (NHSC) in determining priorities for assignment of clinicians. This attribute is the SPSA Score as identified in the Application and Submission Process System (ASAPS). The scores range from 1 to 26 where the higher the score the greater the priority.

The table below shows the score for New Madrid County in each category.

Geographic Area	HPSA Score Primary Care	HPSA Score Dental	HPSA Score Mental Health
New Madrid County	20	19	19

Source: U.S. Health Resources and Services Administration, Centers for Medicare and Medicaid Services, Provider of Service File 2011.

The table below shows the population per physician, dentist and mental health provider. Primary care physicians include practicing physicians under the age of 75 specializing in general medicine, family practice medicine, internal medicine and pediatrics. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits. Untreated dental disease can lead to serious health effects including pain, infection and tooth loss. Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery. New Madrid County has a higher ratio in all categories compared to the state.

Coographic Area	Patient to Primary Care	Patient to Dentist	Patient to Mental Health
Geographic Area	Ratio	Care Ratio	Provider Ratio
New Madrid County	17,920:1	5,860:1	4,400:1
Missouri	1,418:1	1,806:1	588:1

Source: County Health Rankings & Roadmaps, County Health Rankings, healthypeople.gov/2020

#### Other

New Madrid County has two pharmacies and a health department location in the city New Madrid. The New Madrid County Health Department is a great resource for public health, environmental health, disaster and emergency management information. The health department also officers a wide range of services, regardless of the financial status, that are free of charge. Services offered are:

- Immunizations/Vaccinations
- Communicable Disease education
- Show-Me Healthy Women
- Tuberculosis (TB) screening
- STD/HIV testing
- Blood pressure/Blood sugar screenings
- Iron screening
- Lead screening
- Pregnancy testing
- Cholesterol screening
- Head lice treatment

- Water testing
- WIC
- Breastfeeding education
- Environmental/Sanitation
- Emergency Response Program
- Temporary Pregnancy Medicaid
- Chronic Disease Health Management Program
- Community Health Education
- Arthritis Exercise Program
- Aquatics program
- Birth/death certificates

Another resource in New Madrid County is 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 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

## Chapter 3 Health Outcomes

Health outcomes in the County Health Rankings represent measures of how long people live and how healthy people feel. Length of life is measured by premature death (years of potential life lost before age 75) and quality of life is measured by self-reported health status (percent of people reporting poor or fair health and the number of physically and mentally unhealthy days within the last 30 days) and the % of low birth weight newborns.

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 no exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

#### Mortality

<b>Leading Causes of Death</b>	Ne	New Madrid County		
2007-2017	Events	Rate	Compared with Missouri Rate	Rate
All Causes	2,720	1053.32	Н	815.85
Heart Disease	821	314	Н	199.32
All Cancers (Malignant Neoplasms)	609	226.34	Н	178.9
Lung Cancer	219	79.96	Н	54.06
Colorectal	70	25.91	Н	16.04
Chronic Lower Respiratory Disease	212	79.81	Н	51.81
Unintentional Injuries	149	69.22	Н	49.98
Motor Vehicle Accidents	61	27.88	Н	14.62
Alzheimer's Disease	113	41.52	Н	29.09
Kidney Disease (Nephritis and Nephrosis)	86	32.54	Н	18.85
Smoking-Attributable (estimated)	573	215.66	Н	138.93

Source: Missouri Department of Health & Senior Services

Mortality rates are per year per 100,000 population and are age-adjusted to the

U.S. 2000 standard population

## **Chronic Disease**

Chronic Disease	New Madrid County			Missouri
	Events	Rate	Compared with Missouri	Rate
Heart Disease			Rate	
Deaths (2007-2017)	821	314	Н	199.32
Hospitalizations (2011-2015)	1,432	137.32	H	109.46
ER Visits (2011-2015)	1,765	18.32	Н	15.12
Ischemic Heart Disease	1,703	10.52	11	13.12
Deaths (2007-2017)	680	232.63	Н	124.16
Hospitalizations (2011-2015)	429	36.53	H	32.53
ER Visits (2011-2015)	142	1.30	Н	0.57
Stroke/other Cerebrovascular	142	1.30	11	0.57
Disease				
ER Visits (2011-2015)	127	1.08	Н	0.77
All Cancers (Malignant	127	1.00		0.77
Neoplasms)				
Deaths (2007-2017)	609	226.34	Н	178.9
Colorectal Cancer				
Deaths (2007-2017)	70	25.91	Н	16.04
Lung Cancer				
Deaths (2007-2017)	290	79.96	Н	54.04
Hospitalizations (2011-2015)	70	5.62	Н	4.01
Diabetes Mellitus				
ER Visits (2011-2015)	330	3.31	Н	1.96
Chronic Obstructive				
Pulmonary Disease (excluding				
Asthma)				
Deaths (2007-2017)	129	66.66	Н	50.71
Hospitalizations (2011-2015)	235	27	Н	20.64
ER Visits (2011-2015)	659	6.31	Н	5.54
Smoking-Attributed				
Deaths (2007-2017)	573	215.66	Н	138.93

Source: Missouri Department of Health & Senior Services

### Cancer

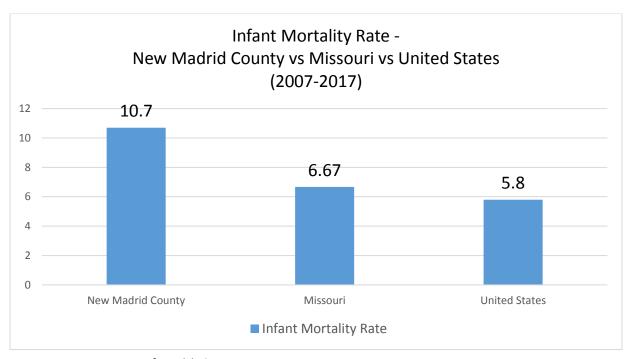
The table below shows that in females and males, the highest incidence of cancer is in the (lung). Together the highest incidence of cancer is also in the respiratory system (lung).

Cancer Incidence Rates (top 5) – New Madrid County (2005-2015)						
	Cancer Site	Rate				
	Respiratory System	118.18				
All Genders	Digestive System	96.63				
All Geliders	Urinary System	40.39				
	Lymphoma	18.60				
	Leukemia	14.10				
	Respiratory System	88.52				
	Digestive System	68.11				
	Female Genital System	60.72				
Females	Urinary System	21.54				
	Lymphoma	19.24				
	Breast "x" (The "x" symbol indicates the confidentiality rule	X				
	has been triggered)	^				
	Respiratory System	158.99				
	Male Genital System	134.27				
Males	Digestive System	131.83				
	Urinary System	66.43				
	Oral Cavity & Pharynx	20.19				

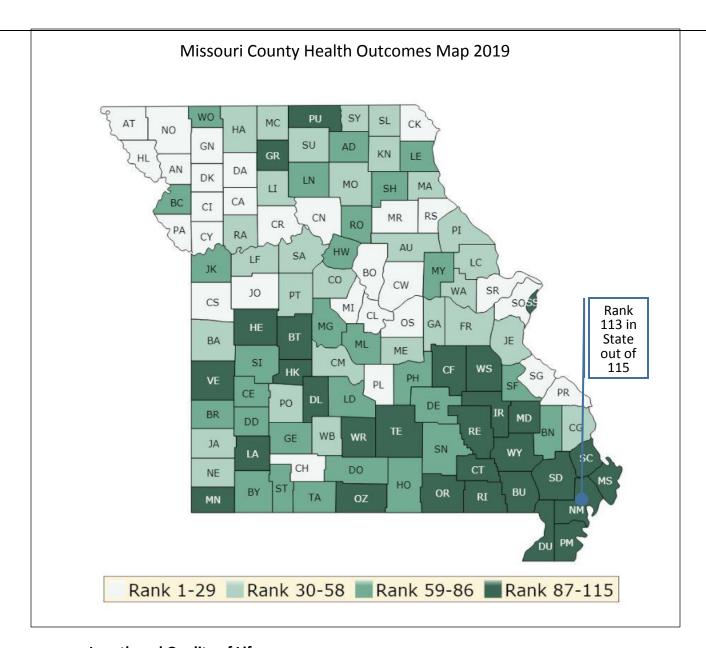
Source: DHSS - MOPHIMS - Cancer Incidence MICA

## **Infant Mortality**

The Infant Mortality Rate in New Madrid County (10.7) is much higher than the State of Missouri (6.67) and nearly double the rate in the United States.



Source: Department of Health & Senior Services



## **Length and Quality of Life**

The table below shows the Health Outcomes and Length of Life ranking for New Madrid County. Measures shown below.

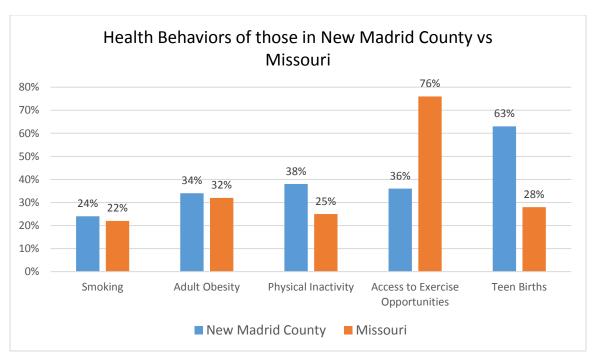
2019	New Madrid County	Missouri
Health Outcomes	Rank 113 out of 115 in State	
Length of Life	Rank 111 out of 115 in State	
Premature death	1300	7,700
Quality of Life		
Poor or fair health	21%	17%
Poor physical health days	4.8	4.1
Poor mental health days	4.2	4.2
Low birthweight	12%	8%

Source: County Health Rankings

## Chapter 4 Health Behaviors

Health behaviors, sometimes called health-related behaviors, are actions taken by individuals that affect health or mortality. These actions may be intentional or unintentional, and can promote or detract from the health of the actor or others. Actions that can be classified as health behaviors are many; examples include smoking, substance use, diet, physical activity, sleep, risky sexual activities, health care seeking behaviors, and adherence to prescribed medical treatments. Health behaviors are frequently discussed as individual-level behaviors, but they can be measured and summarized for individuals, groups, or populations. Health behaviors are dynamic, varying over the lifespan, across cohorts, across settings, and over time.

The table below shows New Madrid County not having the best Health Behaviors compared to the state of Missouri.



Source: County Health Rankings

#### Cigarettes, Electronic Cigarettes/Vaping Products and Smokeless Tobacco

Adult smoking prevalence is the estimated percent of the adult population that currently smokes every day or "most days" and has smoked at least 100 cigarettes in their lifetime. In New Madrid County, 27% of respondents smoke cigarettes every day. Respondents using electronic cigarettes/vaping products is 4% and smokeless tobacco usage is 5%. Twenty-four percent of pregnant mothers in New Madrid County smoke while pregnant compares to 14.46% in Missouri.

#### **Diet and Exercise**

When respondents were asked "During the past month, how many times per day, week or month did you: Drink 100% PURE fruit juices? Eat fruit? Eat cooked or canned beans? Eat dark green vegetables? Eat orange-colored vegetables? Eat other vegetables? Over 94% responded no to daily intake. When respondents were asked "During the past 30 days, other than your regular job, did you participate in any physical activities or exercise such as running, calisthenics, golf, gardening, or walking for exercise? Over 41% responded with no.

## Chapter 5 Primary Research

#### **Focus Group**

A focus group for New Madrid County was held on August 20, 2019 at Delta Area Economic Opportunity Corporation (DAEOC) in Portageville, Missouri. There were multiple participants (see listing below) from the health care and public fields. Sharon Urhahn, Marketing Director at Missouri Delta Medical Center, lead the focus group and collected data. The event lasted about an hour.

#### Methodology

Five questions were asked by the leader and paper copies of the questions were also given to the participants. The group stayed in active discussion.

#### **Group Participants**

Amy Stinnett, Family Nurse Practitioner, Portageville Community Care Center

Donna Fields, Medical Clinic(s) Office Manager, Missouri Delta Physician Services

Scarlett Loomas, DAEOC, Division of Family & Community Development

Macie Haggard, SEMO Health Network

Adalyn Woodard, SEMO Health Network

Tiffany Minnis, DAEOC, Benefits Specialist

David McCarty, New Madrid County EMA

Jerry Lathum, New Madrid County Health Department

Joel Evans, DAEOC, President

Taryn LeGrand-Lovett, Bootheel Counseling Services

Sharon Urhahn, Missouri Delta Medical Center

## Question 1: What do people in this community do to stay healthy? How do people get information about health?

In the city of New Madrid there is a gym that is free to those who use SEMO Health Network as their provider or if not their medical provider the fee to be a member is a small amount. The New Madrid County Health Department hold Chronic Disease Self-Help Classes for education. There isn't a good way to communicate to the public in New Madrid County.

Question 2: In this group's opinion, what are the serious health problems in your community? What are some of the causes of these problems?

The group agreed that the serious problems in their community include: obesity, mental health, drug problems, transportation, diabetes, dental health and hypertension. Some of the causes of these problems result from lack of information. Incorrect information in social media.

#### Question 3: What keeps people in your community from being healthy?

- Lack of knowledge of services or if they qualify
- Uninsured, can't afford it
- There is no place to send those struggling with drugs
- People calling ambulances for non-emergencies because they have no other form of transportation causes emergencies to wait

#### Question 4: What could be done to solve these problems?

- Educate the children about healthy habits in school
- Sharing info and understanding services that others offer in the area

## Question 5: Is there any group not receiving enough health care? If so why?

The population that can't afford health care or don't qualify for Medicaid. The group discussed the lack of resources effecting the mentally ill and those who are addicted to drugs.

## Question 6: Of all the issues we have talked about today, what issues do you think are the most important for your community to address?

Obesity and the chronic disease it leads to kept coming up in discussion. Education on health at younger age through the school system would be ideal

#### Checklist Exercise

Mississippi County Results	Occurrence
Obesity	16
Mental Health	14
Drug & Alcohol Abuse	12
Diabetes	10
Stroke	10
Cancer	12
Teen pregnancy	3
Transportation	12
Access to quality healthcare	2
Women's Health	1
Homelessness	2

# Chapter 6 Summary of Findings

#### **Using the Data to Determine Needs**

The secondary data are used to compare New Madrid County to Missouri by examining quantitative data such as percentages, rates and trends. If New Madrid County ranks worse than the state or a negative trend is occurring, then a need is presented. The primary data are qualitative and takes in consideration the thoughts and opinions of people in the community. If a consensus arises about a concern, then a need is established.

#### **Review of Secondary Data**

After a review of the secondary research found in chapters 2-5, it can be determined that New Madrid County does not do very well compared with the state of Missouri in many areas, so there are many areas of concern. The following describes the findings from the secondary data.

**Education**: In New Madrid County, the rate of those without a high school diploma is over twice as high as it is for the state. The county also has much fewer residents who have post-secondary education and/or a post-secondary degree.

**Income**: New Madrid County had a median income of \$41,932 which was nearly \$20,000 less than the state.

**Employment**: The unemployment rate of 5.3% in New Madrid County is higher than the rate in Missouri.

**Poverty:** In New Madrid County, 50% of the individuals are living in households with income below 200% of the Federal Poverty Level (FPL).

**Food Insecurity:** New Madrid County has a greater percent of Households Food Uncertainty with 19.7% compared with 14.2% for Missouri.

#### **Healthcare Providers:**

- New Madrid County has a **primary care physician ratio** of 17,920:1, whereas Missouri has a ratio of 1,418:1.
- New Madrid County has a **mental health provider ratio** of 4,400:1, whereas Missouri has a ratio of 588:1.
- New Madrid County has a dentist ratio of 5,860:1, whereas Missouri has a ratio of 1,806:1.

**Leading Causes of Death:** New Madrid County has a higher rate of all causes of death than Missouri. Specific causes of death in the county at a higher rate than Missouri include: heart disease, all cancers (in particular lung and colorectal cancer), smoking-attributable diseases,

chronic lower respiratory disease, stroke/other cerebrovascular disease, motor vehicle accidents, and kidney disease.

**Cancer:** New Madrid County has a higher rate of cancer incidence than Missouri in lung cancer and colorectal.

**Chronic Disease**: New Madrid County had higher rates for many of the chronic disease categories of death, hospitalizations and ER visits than the state, including:

- **Deaths** from heart disease, ischemic heart disease, all cancers, lung cancer, chronic obstructive pulmonary disease, diabetes and smoking-attributable.
- **Hospitalizations** from heart disease, ischemic heart disease, lung cancer, and chronic obstructive pulmonary disease.
- **ER visits** from heart disease, ischemic heart disease, stroke/other cerebrovascular disease, diabetes mellitus and chronic obstructive pulmonary disease.

#### **Health Status:**

- Twenty-one percent of respondents in New Madrid County reported they had **fair or poor health** and in Missouri the response was 17%.
- The average amount of **poor physical health days** in New Madrid County was 4.8 days and the average in Missouri is 4.1 days
- The average amount of **poor mental days** in New Madrid County was 4.2 days is the same as in Missouri at 4.2 days.

#### **Preventable Hospitalizations:**

• In 2015, New Madrid County had a rate of 205.90 **preventable hospital stays** compared with Missouri's rate for preventable hospital stays at 128.84. Preventable hospitalization rates are annualized per 10,000 residents under the age of 65 and are age adjusted to the U.S. 2000 standard population. The highest rate was for dehydration.

#### Diet and Exercise:

- Thirty-four percent of New Madrid County residents are **physically inactive** compared to Missouri residents at 25%.
- Thirty-six percent of New Madrid County respondents stated they had **adequate access to exercise opportunities** which is below the 76% of the population in Missouri that has access.

**Preventative Practices:** Several indicators were used to test preventive practices used by people in New Madrid County.

- 46% have not had a dental exam in the last 12 months.
- 15% don't have an established medical provider.
- 86% have had their cholesterol checked.

- Only 14% of women over age 40 haven't had a mammogram, but 32% haven't had one
  in at least 2 years.
- Only 7% have never had a Pap test, but 22% haven't had one in the last 3 years.
- 60% have never had a blood stool test and 89% of those that have had one reported haven't had one in the last 2 years.
- 40% of men and women age 50 and over have never had a colonoscopy and those that have had one, 46% report they haven't had in the past 10 years.

#### Child and Adolescent Health:

- Probable cause child abuse/neglect rate in New Madrid County is 8.59 while the Missouri rate is 4.52.
- Lead Testing Rate in children under age 6 in New Madrid County is 30, while the state rate is 13.

#### Senior Health:

- 14% of the population of Missouri are seniors
- 29% of those seniors living in Missouri are living alone
- 7% of Missouri senior households have an annual income of less than \$10k and 27% less than \$20k
- 23% of Missouri residents 60 and over received food stamps in the last year
- The average Social Security Income in Missouri is \$16,935/year
- The median household income for a Missouri senior is \$34,061

#### **Review of Primary Data**

After a review of the primary research results found in Chapter 5, it can be determined that New Madrid County has many areas of concern. The following lists the findings from the primary data (focus group). The issues were determined as a concern if the focus group participants were in agreement about the issue and/or if more than 50% of survey participants classified the issue as a moderate to serious problem.

#### **Health Problems** determined by primary research include:

- Mental health
- Diabetes
- Stroke
- Heart disease

## **Behavioral Problems** determined by primary research include:

- Alcohol/Drug abuse
- Wellness and prevention

## **Community Problems** determined by primary research include:

- Transportation
- Uninsured, can't afford it
- Access for those with addiction
- No good way of public communication

#### Conclusion

This CHNA is the product of a completed process of finding secondary data, performing primary research and presenting those findings. This compiled information will allow Missouri Delta Medical Center to create an implementation strategy designed to meet some particular needs that are specific to the New Madrid County community.