

# **Cape Girardeau County, Missouri**



## **2022 Community Health Assessment Full Report**

# Community Health Assessment 2022

This assessment was commissioned by the Cape Girardeau County Public Health Center.

Cape Girardeau County Public Health Center  
1121 Linden Street  
Cape Girardeau, MO 63703



Mission: To promote good health and protect the county's public health through assessment of health and environmental needs; policy development, community education, prevention, assurance, evaluation.

This assessment was prepared by:

**Beverly Triana-Tremain, PhD, CLSSGB**

Public Health Consulting, LLC

[btremain@publichealthconsulting.net](mailto:btremain@publichealthconsulting.net)

[www.publichealthconsulting.net](http://www.publichealthconsulting.net)

**Ashley Rampley, BSN, RN**

Master of Public Health Intern

University of Missouri-Columbia

<http://www.linkedin.com/in/ashley-rampley-04175890>

Funding for this assessment was made possible through funds from the Missouri Department of Health and Senior Services (DHSS). DHSS received funding from the Centers for Disease Control and Prevention (CDC) National Initiative to Address COVID-19 Health Disparities Among populations and Rural Communities. The project is titled the Statewide Health Disparities Initiative. The local title of the project is the Health and Wellness Community Project. The timeline for the project is from May 2022 to May 2023.

**Cover Image:** Summary, L J. (2006). *Common pleas court house* [jpg]. Cape Girardeau County, Missouri courthouse. Cape Girardeau, Missouri.

[https://en.wikipedia.org/wiki/Cape\\_Girardeau\\_Court\\_of\\_Common\\_Pleas#/media/File:CommonPleasCourt.JPG](https://en.wikipedia.org/wiki/Cape_Girardeau_Court_of_Common_Pleas#/media/File:CommonPleasCourt.JPG)

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# About the Community Health Assessment

## Purpose of this Report

This Community Health Assessment (CHA) details a collection of indicators used to measure the health and well-being of Cape Girardeau County, Missouri. The CHA is part of a larger assessment effort, called a Community Health Profile, which also includes a Local Public Health Assessment (LPHSA), Community Themes and Strengths Assessment (CTSA), Forces of Change Assessment (FCA). The Community Health Profile is the assessment arm of the MAPP. MAPP stands for Mobilization for Action in Partnerships and Planning. This document provides only the results of the CHA. A community health assessment (CHA) refers to "a state, tribal, local, or territorial health assessment that identified key health needs and issues through systematic, comprehensive data collection analysis" (Centers for Disease Control and Prevention, para. 1, 2018).

## Background

This work is the result of a funding award received by Cape Girardeau County Public Health Center in Cape Girardeau, Missouri. The Missouri Department of Health and Senior Services (DHSS) received funding from the Centers for Disease Control and Prevention (CDC) National Initiative to Address COVID-19 Health Disparities Among populations and Rural Communities. The project is titled the Statewide Health Disparities Initiative. The local title of the project is the Health and Wellness Community Project. The timeline for the project is from May 2022 to May 2023. The partners for this project are Cape Girardeau County Public Health Center and Bollinger County Health Department. The purpose of the CHA is to determine the existing inequities in Cape Girardeau County, Missouri compared to state and national levels. The CHA is an epidemiological survey of various indicators in the geographical community.

## Methodology

For this project, a variety of data analysis tools were used including Tableau Public and Excel®. A collection of 11 dimensions provides the depth necessary to plan for community health improvement (Figure 1). In Attachment A, example sources of secondary data for these health dimensions and indicators are provided.

## Major Indicators of the Community Health Assessment

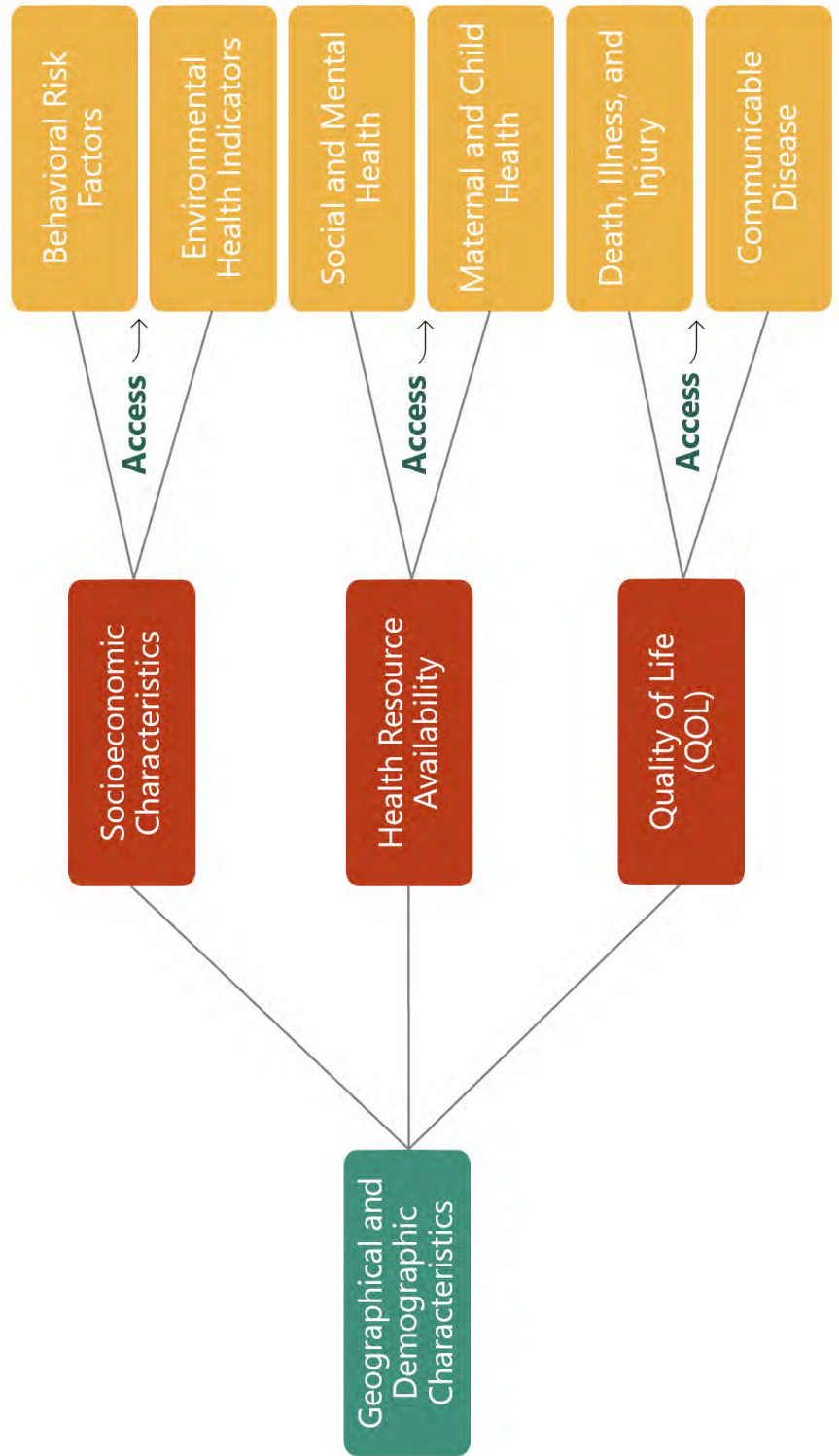


FIGURE 1

## Metrics Used in this Report

### Geographical and Demographic Characteristics

- Historical and Geographical Context
- Major Cities
- Population
- Population Trends
- Race and Ethnicity

### Socioeconomic Characteristics

- Severe Housing Problems
- Employment
- Veteran Characteristics
- Income, Type of Worker and Commuting

### Quality of Life (QOL)

- Poor health days
- Opportunity
- Incarceration

### Behavioral Risk Factors

- Smoking
- Obesity
- Inactivity
- Excessive Drinking
- Alcohol-Impaired Driving Deaths
- Insufficient Sleep
- Quality
- 

### Health Resource Availability

- Shortage of Medical Personnel
- Healthcare facilities
- Health Insurance

### Environmental Health Indicators

- Overall Physical Environment
- Water
- Driving Alone and Long Commute
- Traffic Volume
- Near Roadway and Industrial Pollution
- Energy Monitored by Environmental Protection Agency
- UV Index
- Toxic Chemical Release
- Social Vulnerability and Disaster
- 

### Social and Mental Health

- Social Associations
- Crime Offenses
- Crime by City
- Hate Crimes and Groups
- Frequent Poor Mental Distress
- Domestic Partner Violence
- Depression
- Deaths of Despair - Suicide, Alcohol-Related Disease Deaths, and Drug Overdoses
- 

### Maternal and Child Health

- Teen Births
- Infant and Child Mortality
- Single-Parent Household
- Homelessness
- Disconnected Youth, Reading and Math Scores
- Percentage in Free or Reduced Lunch

### Death, Illness, and Injury

- Overall Health Factors and Health Outcomes
- Births and Deaths
- Death and Leading Causes
- Traffic Crashes Injury and Death
- Years of Potential Life Lost
- Preventable Hospital Stays

### Communicable Disease

- Chlamydia Rates
- Human Immunodeficiency Virus (HIV)
- COVID-19

### Access

- Food Environment
- Alcohol Establishments
- Income Inequality/Income Ratio
- Child Care Availability and Costs
- Internet Access
- Access to Various Services

# Major Findings of the Community Health Assessment

Major findings of this CHA by dimension are as follows:

## Geographical and Demographic Characteristics

1. Age cohort 25 to 34 is the most populous.
2. Those who identify as White are 82% of the population, followed by 8% Black and 3% Latino, and 2% Asian.
3. Overall socioeconomic factors are in Quartile 1.
4. Asian residents (54%) are below the FPL, where as 36% of Blacks, 31% of Hispanic or Latino, and 24% of two or more races. Thirteen percent of White residents are below the FPL.
5. The age group of 18 to 34 years (27%) is below the FPL.
6. As the level of education increases, the number of residents decreases.

## Socioeconomic Characteristics

7. There is a negative linear relationship between education attainment and poverty.
8. Over 49% of the households are married with family; 4% are male with family; 10% are female with family, and 38% are a nonfamily household.
9. Oak Ridge community has a higher housing cost per month (\$1,132) compared to other cities.
10. Gordonville, Old Appleton, and Pocahontas have lower availability of multi-family housing (3% to 10%) compared to other cities.
11. Oak Ridge has a higher percentage income spent on housing (20%) compared to other cities.
12. Fourteen percent (Quartile 3) of households have a severe housing problem, defined as overcrowding, high housing costs, lack of kitchen facilities, and lack of plumbing facilities.
13. The most prevalent income category is \$50,000 to \$74,999.
14. Most of the county population drives alone to work (81%).

## Health Resource Availability

- 15. Clinical care (access and quality) is rated in Quartile 1 (best).
- 16. The whole county is considered a shortage area for primary care, mental health, and dental care.
- 17. A lack of health insurance is experienced by 12% of the population (Quartile 1).

## Quality of Life

- 18. On Quality of Life (e.g., number of poor/fair health days, poor physical health days, poor mental health days, and low birthweight) ranks 39<sup>th</sup> out of 115 counties/cities (rank of 1 is best).
- 19. The county received a B- on individual indicators for opportunity (e.g., economy, education, community, and health).
- 20. The 16 indicators of opportunity were measured for the county. Variables that were worse than the state, comparison county, and/or national levels were median household income, poverty, number of children ages 3 and 4 in preschool, number of associate degree or higher, violent crime, and grocery stores and produce vendors.
- 21. Jail and prison incarceration is high (1,137 per 100,000 or 5<sup>th</sup> quantiles out of 6), but much of the state is in the same quantile or worse.

## Behavioral Risk Factors

- 22. Although health behaviors received a Quartile 1, there are a percentage of populations with behavioral risk factors, such as 35% with insufficient sleep, 33% obesity, 29% physical inactivity, 21% adult smoking, 24% alcohol-impaired driving deaths, and 19% drinking.

## Environmental Health Indicators

- 23. Overall physical environment receives a Quartile 4 (worse), which includes particulate matter, drinking water violations, severe housing problems, driving alone to work and long commutes. Areas of concern are a 61% airborne cancer risk, .41 potential risk of developing serious respiratory complications (range of 0 to 1; lower is better), and a relative health risk of 15 Toxic Release Index Score (TRIS). The



United States, comparison peer groups, and Missouri have TRIS scores of .04, .08, and .75, respectively.

- 24. About 19% of the population using the public water system with at least one water violation.
- 25. Particulate matter is measured at 9.6, which is in the 4th quartile. Particulate matter for the United States is 7.5 and for Missouri is 8.2.
- 26. All months except January and December have a high ultraviolet (UV) Index (3 or higher with a range of 0 to 12).
- 27. Social Vulnerability is a term used to describe the risk to a community if a disaster occurs (e.g., tornado, hurricane, warfare). Factors are socioeconomic status, disability, minority status, and housing type and transportation. Census tracts that received at least three flags for disproportionate scores were 8808, 8816, 8809, and 8814.

## Social and Mental Health

- 28. The county has many active social organizations and places them in the Quartile 3.
- 29. The crime rate is 33 per 1,000 residents and is in the 4<sup>th</sup> Quartile.
- 30. Simple assault was the highest rate at 795 per 100,000 per population followed by aggravated assault (342 per 100,000).
- 31. Crimes against society were reported as 1,199 per 100,000 for the county. Drug/narcotic violations (593 per 100,000), weapon law violations (308 per 100,000), and drug equipment violations (257 per 100,000) were highest.
- 32. Crimes against property were 3,184 per 100,000 in the county. Destruction of property (730 per 100,000), larceny (655 per 100,000), and theft from a motor vehicle (318 per 100,000) had high rates compared to other offenses.
- 33. Simple assault was the highest rates for under 18 years (98 per 100,000) and over 18 years (587 per 100,000).
- 34. There were 117 court cases in 2021 involving alcohol and drugs; 43% related to alcohol and 56% were related to drugs. Delivery and/or possession of controlled substances, driving while Intoxicated (DWI), endangering the welfare of a child, trafficking drugs, possession of paraphernalia, use of weapons were the top crimes for Cape Girardeau County related to drugs and alcohol.
- 35. In crime by city, violent crimes have an upward trend for both Cape Girardeau and Jackson, Missouri.
- 36. Domestic violence occurs for 73 per 10,000 population above the state rate of 70 per 10,000. Simple (15 per 10,000) and aggravated assault (6.36 per 10,000) are the highest for those in an intimate relationship and are above the state rates.

- 37. Sixteen percent of individuals reported 14 or more days of poor mental health per month (Quartile 1). The county has continued to be below the Missouri rate for domestic violence crime per 10,000 until 2020 (73 per 10,000). Most domestic violence incidents are simple assault and between intimate partners. Others are within the family. Aggravated assault between intimate partners is next highest.
- 38. Suicide accounted for 52 deaths in the county placing it in the 3<sup>rd</sup> quartile (22 per 100,000). Forty-eight of these were identified as White. Cass County, Missouri has 27 suicides per 100,000 (highest), whereas, St. Louis City, Missouri had 14 suicides per 100,000 (lowest).
- 39. The county was not represented in the data for alcohol-related disease deaths.
- 40. Unintentional deaths by drug overdose in the county occurred for 21 per 100,000 population. St. Louis City had 83 overdoses per 100,000 population, whereas the lowest was Platte County with 12 per 100,000 population.

## Maternal and Child Health

- 41. A negative linear trend in crude birth rates has occurred since 2012 until 2020.
- 42. Preterm gestation (less than 37 weeks) was more prevalent in the Asian/NHOPI population (23 per 100), followed by Black (13 per 100).
- 43. A small weight for gestational age for the baby was noted as a greater prevalence for Asian/NHOPI (19 per 1,000) and Black women (15 per 100).
- 44. Sixty-seven out of 100 women of another race and 43 per 100 Hispanic women have less than 12 years of education.
- 45. Sixty percent of women giving birth were married.
- 46. Races were somewhat even with respect to smoking during pregnancy, although Black women smoked more during pregnancy.
- 47. All races, Black, and White (20 per 100 each) gained more than 44 pounds during gestation
- 48. Overweight (20% +) is a concern for almost 50 to 60 per 100 women across race and ethnicity (except Asian/NHOPI). Obesity (BMI 30 +) is experienced by women (30 to almost 40 per 100) across races and ethnicities (except Asian/NHOPI).
- 49. Teen births are low in Quartile 1. Missouri has a teen birth rate of 23 per 1,000 as the county has a rate of 17 per 1,000.
- 50. Infant and child mortality are noted as high with 7 per 1,000 live births (Quartile 3) and 70 per 100,000 population (Quartile 3).
- 51. Under one quarter (22%) of children live in a single-parent household. In Osage County and St. Louis City, 10% and 48% of children live in a single-parent household, respectively.
- 52. There were 309 students reported as homeless in 2019 to 2020.

## Death, Illness, and Injury

53. For overall health factors and health outcomes, the county ranks in the 1<sup>st</sup> and 2<sup>nd</sup> quartile. These overall rankings include for health factors: health behaviors, clinical care, social and economic factors and physical environment for health factors. For health outcomes the health variables are premature death, self-reported health status, and percent of low-birth-weight babies.
54. Cape Girardeau has had a natural decrease (births minus deaths) between -300 and -151 from 201 to 2021. In 2020-2021, COVID-19 influenced births and deaths.
55. The top disease groups prevalent according to crude rates per 100,000 were diseases of the circulatory system, neoplasms (i.e., cancer), diseases of the respiratory system (e.g., pneumonia, bronchitis, tuberculosis), nervous system (Alzheimer's, Epilepsy, Parkinson's), external causes (accidents, intentional self-harm), genitourinary system (e.g., renal failure), codes for special purposes (COVID-19), digestive system (e.g., irritable bowel syndrome, celiac disease), and others. Neoplasms of significance were the lung, pancreas, prostate, colon, breast, kidney. Ischemia diseases include myocardial infarction, an atherosclerosis. Accidental poisoning had a significant rate. Other forms of heart disease were congestive heart failure, cardiac arrhythmia, cardiac arrest, heart failure, atrial fibrillation and flutter. Notable rates for intentional self-harm were firearm discharge and strangulation and suffocation. Mental disorders of importance are dementia.
56. For the incorporated part of the county, ranking for type of population (e.g., older driver, young driver) and type of offense (e.g., no seat belt, alcohol, speeding) during a traffic accident yielded top concerns as follows: a young driver, alcohol and drugs. Others were young driver and distraction, distraction, older driver, young driver and alcohol and young driver. The range of rankings for this data was a 7 to 15 (1 is worst ranking out of 114 counties and 1 city) of all the type of offenses and populations. For the unincorporated part of the county, types of populations and offense during a traffic accident yielded concerns, such as: young driver, alcohol, and drugs; young driver and alcohol, young and distraction. The range of rankings for this data was 5 to 7 (1 is worst ranking out of 114 counties and 1 city). Most accidents occur during the daylight (75%) and with a motor vehicle in transport (71%).
57. Years of Potential Life Lost (YPLL) indicates the amount of time lost because of early death. The YPLL is 8,872 years per 100,000 which is in Quartile 2.
58. Preventable hospital stays are placed in Quartile 1.

## Communicable Disease

- 59. Sexually transmitted diseases, such as chlamydia are ranked high with 577 cases per 100,000 population (Quartile 4). HIV surveillance yielded a rate of 100 per 100,000 population (Quartile 3).
- 60. On March 17, 2020, the county received report of its first case of COVID-19. The crude death rate per 100,000 (2018 to 2020) was 48 (113 deaths). The age cohorts who had the best compliance with vaccination uptake was the 65 and older group as fully vaccinated (85%) and fully vaccinated and first booster (71%). Only 29% of those 50 and older were fully vaccinated with 1<sup>st</sup> and 2<sup>nd</sup> booster. Only 35% of those 65 and older were fully vaccinated with 1<sup>st</sup> and 2<sup>nd</sup> booster.

## Access

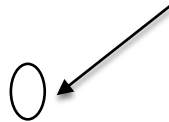
- 61. Census tracts with some concern for food accessibility (one red flag) are 8804, 8805, 8806, 8813, 8815. Census tracts with more serious concern (2 + red flags) for food accessibility are 8808, 8809, 8810, 8814, 8816. Typically, tracts of concern were in larger population areas.
- 62. Across the county, there are 248 active alcohol establishments. As expected, the smaller cities have fewer establishments than the larger cities, however, the rate of establishments per 1,000 population are higher in the smaller cities (Pocahontas and Old Appleton) than the larger cities.
- 63. Income inequality was rated in Quartile 2 (4.2), where the range in Missouri is 3.5 to 6.5.
- 64. There was a decrease in the number of childcare facilities from 2021 to 2022. The estimated population of children less than 5 years of age is 4,498. The percentage of income required for childcare (19%) is in the 3<sup>rd</sup> quartile (higher is more expensive).
- 65. Broadband is 100% available and is in the 4<sup>th</sup> quartile.
- 66. Livability was rated from 1 to 100. Cape Girardeau (46) and Jackson (43) scored higher than smaller cities, such as Delta (23), Dutchtown (27), Gordonville (26), Oak Ridge (24), Old Appleton (24), Pocahontas (27), and Whitewater (22).

# How to Read this Report

There are several features and characteristics of this report. Provided below is the feature and an explanation that may be helpful in understanding the results of this report.

## Location of Cape Girardeau County, Missouri

Many maps are used through the C



## Dimensions

Throughout the report, there are 11 dimensions that cover a range of issues necessary for good public health. At the beginning of each section (dimension), a paragraph is dedicated to providing background about how that dimensions fits into overall community health.

## Data Visualization

The data presented in this CHA are described through narrative and accompanied by an infographic, map, bar chart, table, or other type of image (Table 1). The purpose of the images is to illustrate the important information about the data in an easy to understand format.

## Quartiles

Thoroughout this report, colorful maps are presented with quartile rankings from 1 to 4. To obtain quartiles, a dataset is divided into four groups or quartiles (i.e., 1, 2, 3, and 4) to show which counties have low scores on a variable and high scores on a variable. Typically, green indicates best outcomes (1<sup>st</sup> Quartile) and red indicates the worst outcomes (4<sup>th</sup> Quartile) on a variable.



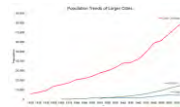


## Table 1. Types of Data Visualization in this Report

### Map



### Line graph

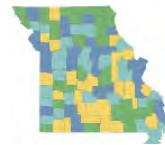


### Table

Table 8. Number of Physicians by Type for United States, Missouri, and Cape Girardeau County

	United States	Missouri	Cape Girardeau County
Primary Care Physicians	406,923	9,944	70
Specialists	578,693	11,066	252

### Quartile Map



### People Chart



### Infographic



### Single Number



## Rates

Most of the data presented in this report are in the form of rates. Rates are very important to understand the true comparison between one county to another county. All counties have different populations. All counties experience a disease or mortality to varying degrees. By using rates (e.g., crude death rates, age-adjusted rates), we take into consideration the population of the geographic area where the health problems occurred or the population the disease affected. For example, St. Louis County, Missouri has a population of 996,179 people. Cape Girardeau County, Missouri has a population of 78,834 people.

If we are tracking an outbreak of an infectious disease and learn that 10,000 cases were reported in St. Louis County and 10,000 cases were reported in Cape Girardeau County, this would cause alarm and mean different things to the counties. To calculate a rate, use the following formulas. Both counties experience the same number of cases, but each has different populations. The disease is statistically more of a problem in Cape Girardeau County per 10,000 people. The rate is higher in Cape Girardeau County even though the number of cases is the same. Inserting the population into the picture gives an understanding of the disease or public health problem given the context of population.

<b>St. Louis County</b>	$\frac{10,000}{996,179} \times 10,000$	<b>= Rate of 100 per 10,000</b>
		$\updownarrow$
<b>Cape Girardeau County</b>	$\frac{10,000}{78,834} \times 10,000$	<b>= Rate of 1,268 per 10,000</b>

## Evaluation Utilization

The purpose of a CHA is to generate findings about a community and areas of needed focus by the public health system. The CHA also documents what is going well in a community and its assets. A focus on evaluation use from the beginning provides a clear path for action through a review of the important findings and what strategies will be implemented. Table 4 provides a template for a listing of all findings and their priority or need for action. Findings from the CHA are intensely reviewed, discussed, and prioritized. Strategies or evidence-based practices, through a Community Health Improvement Plan (CHIP), are considered, assigned responsibility, and the date of completion for the program or intervention is indicated.

# Major Indicators of the Community Health Assessment (CHA)

## Geographical and Demographic Characteristics

Geographic indicators include history, location in state and country, neighboring cities and towns, physical features, major highways and routes. Demographic characteristics include measures of total population as well as percent of total population by age group, gender, race and ethnicity, where these populations and subpopulations are located, and the rate of change in population density over time, due to births, deaths and migration patterns.

### Historical and Geographical Context

Cape Girardeau County, incorporated on October 1, 1812, is located in the Midwest in the United States (Figure 2) and as shown in Figure 3, southeast Missouri (TUBS, 2011).

The county shares a border with Illinois and is north of the Kentucky state line (Benbennick, 2006). The county borders other counties: Perry, Scott, Stoddard, and Bollinger. Union and Alexander Counties are in Illinois.

Ensign Sieur Jean Baptiste de Girardot is the county's namesake. As a French Officer, he founded a trading post on the Mississippi, which is at the site of present-day Cape Girardeau (Eaton, 1916). The county has a total area of 586 square miles of which 7.8 square miles is water (U.S. Census Bureau, 2012).



FIGURE 2



FIGURE 3

The geography of Cape Girardeau County varies in topography with flood plains around Delta and Dutchtown, which used to be cotton plantations. The western and northern areas are situated with hills and forests.

### Major Cities

The major cities within the County are Cape Girardeau, Delta, and Jackson. The county seat is Jackson (Figure 4). Villages include Allentown, Dutchtown, Gordonville, Oak Ridge, Old Appleton, Pocahontas, and Whitewater. There are about 27 unincorporated communities (U.S. Census Bureau, 2021a).

### Population

The total population of Cape Girardeau County is 82,113 (U.S. Census Bureau, 2021a). A steady population incline has occurred since 1820 (Figure 1) with the highest percent change (49%) occurring in the 1850s and the lowest change of 1.6% in 1950s (U.S. Census Bureau, 2022a). The Rural-Urban Continuum Code is 3, which is a metro defined as counties of fewer than 250,000 population (U.S. Department of Agriculture, 2022a). Demographically, the gender ratio is 48% male and 52% female.

### Population Trends

Figures 5 and 6 provide the population trends of most cities from 1820 (U.S. Census Bureau, 2020). Cape Girardeau has exponentially grown and is more populous than Jackson. Smaller cities in the county have generally remained between 100 and 300 people, whereas Delta and Gordonville have increased in population.

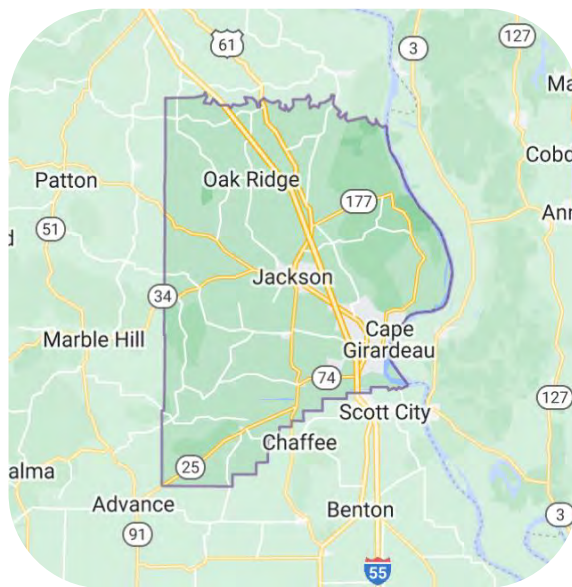


FIGURE 4

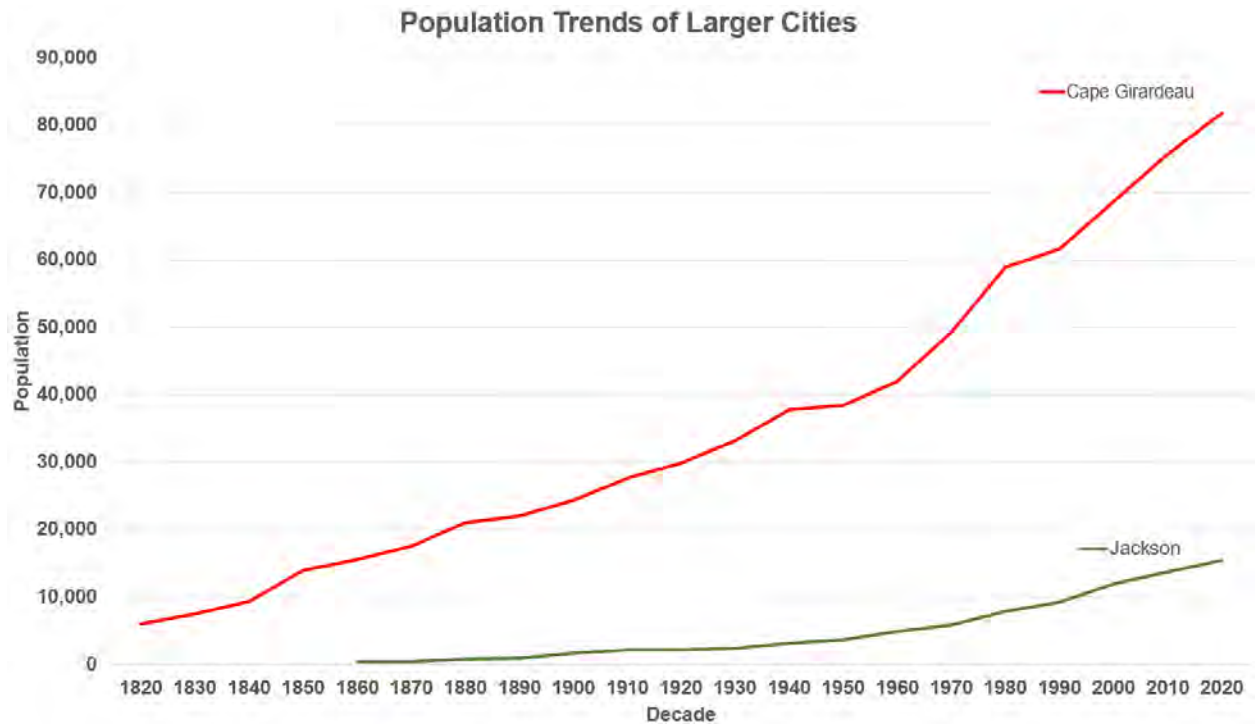


FIGURE 5

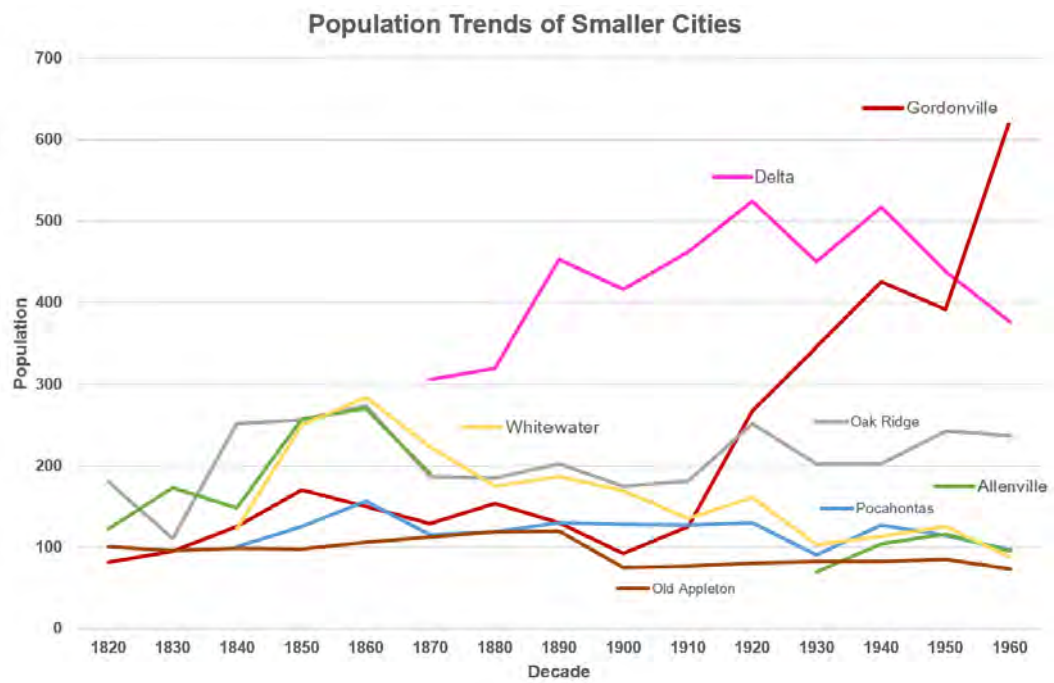


FIGURE 6



Figure 7 provides an illustration of rural and urban counties converted into quartiles. Quartile 1 is most populous, whereas Quartile 4 is more rural. Percent rural in the state ranges from 0% (St. Louis County) to 100% (Worth County). Cape Girardeau is a more urban county and is in Quartile 1.

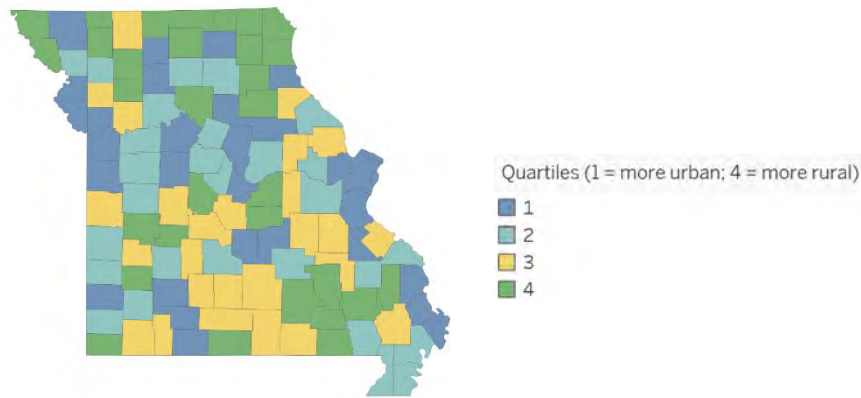


FIGURE 7

## Race and Ethnicity

The people graph in Figure 8 shows that 85 years and over is the smallest cohort and the cohort 25 to 34 years is the most populous. Figure 9 provides data on race and ethnicity. The population consists of those who identify as White (82%), Black (8%), followed by Hispanic or Latino ethnicity (3%) and Asian alone (2%) residents. Just under 5% of the county identifies as two or more races.

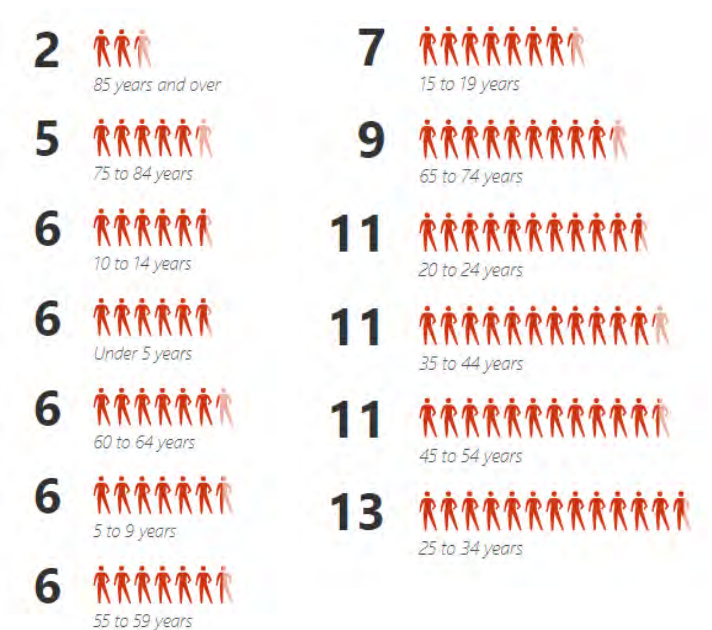


FIGURE 8

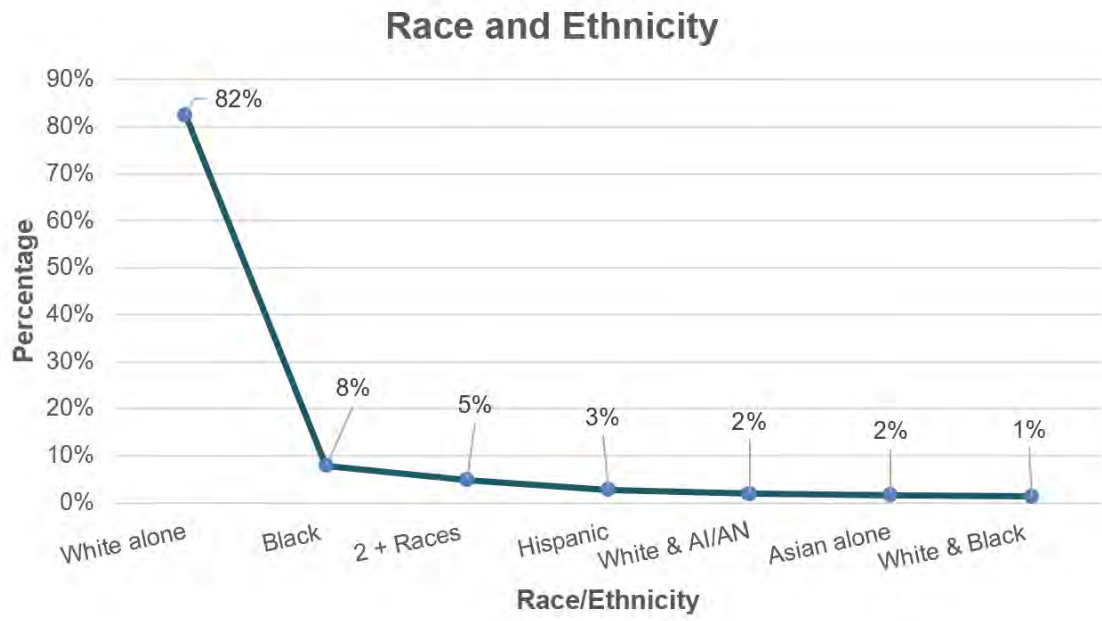


FIGURE 9

## Socioeconomic Characteristics

Socioeconomic characteristics include measures that have been shown to affect health status, such as income, education, and employment, and the proportion of the population represented by various levels of these variables.

Figure 10 illustrates the quartiles of social and economic characteristics (1 = top ranks) for the county as a whole. Social and economic factors include education levels, employment and income, family and social support, and community safety. Cape Girardeau is in Quartile 1. Later in this assessment, an analysis is conducted by census tracts (County Health Rankings, 2022a).

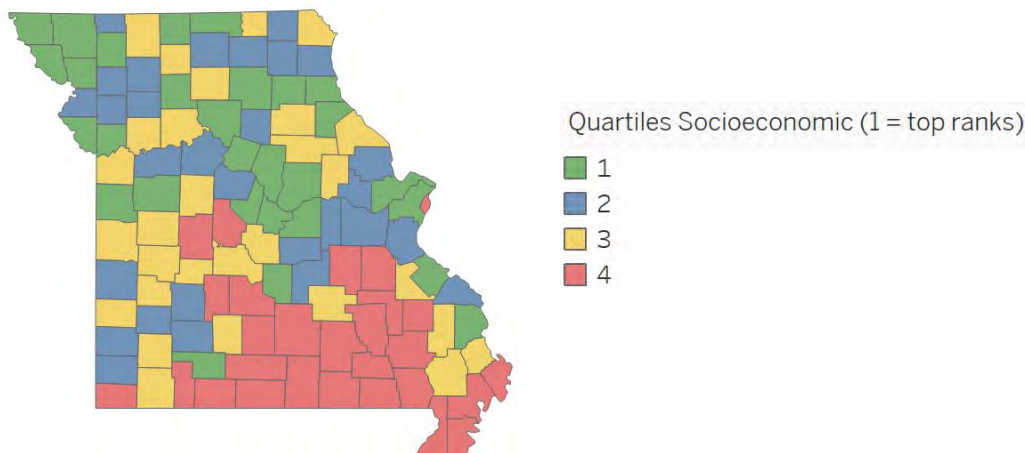


FIGURE 10

About 16% of residents are below the federal poverty level. Table 2 describes the race/ethnicity and poverty levels.

Table 3 describes the age ranges and genders with federal poverty levels. For a family of four, the federal poverty level for 2022 is \$27,750 (U.S. Centers for Medicare and Medicaid Services, 2022). The age cohort of 18 to 34 years has the highest percentage below federal poverty level at over 26%.

Figure 11 provides educational achievement for those over 25 years. Higher education levels are achieved less. Figure 12 demonstrates the relationship between education levels, gender, and age. Among those over 25 years, 32% have a high school graduate degree, while 23% have some college, but no degree. Over 90% of total population, males, and females and any age cohort are a high school graduate, except in the oldest age cohort (over 65 years) where they fall to high 80% with a high school graduate

degree. In all age cohorts, females had more bachelor's degrees than males, except for the population 65 and over

Figure 13 illustrates the relationship between education, gender, and poverty level. The lower the poverty status, the higher the educational attainment. Males have a higher percentage poverty than women for less than a high school degree. Although the poverty rate is lower for a bachelor's degree or higher, as education increases, women are at a higher poverty rate than men. Again, as educational attainment increases, median income increases (U.S. Census Bureau, 2022b).

Table 4 provides the housing livability from the American Association for Retired Persons (AARP). Cities are provided in the county. No policies existed at the state level for local inclusive design laws, local housing trust funds, manufactured housing protections, foreclosure prevention and protection, accessory dwelling unit support, and local plans to create age-friendly communities (American Association for Retired Persons, 2022).

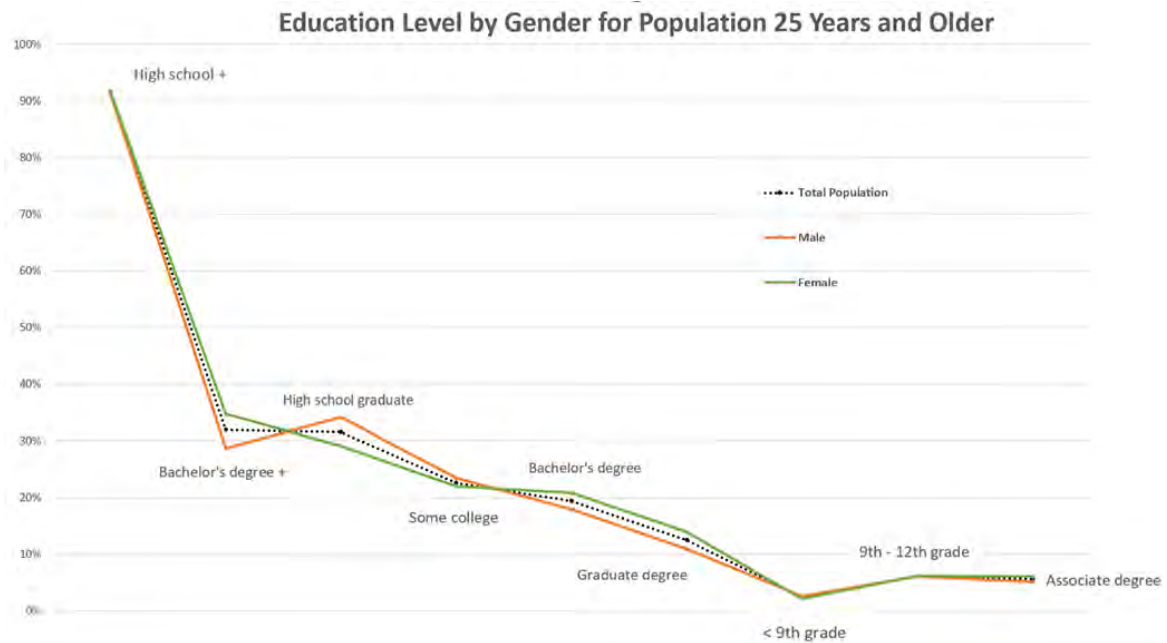
**Table 2. Race/Ethnicity and Poverty Level**

<b>Race/Ethnicity</b>	<b>% Below the Federal Poverty Level</b>
<b>Asian alone</b>	54%
<b>Black or African American alone</b>	36%
<b>Hispanic or Latino origin (of any race)</b>	31%
<b>Two or more races</b>	24%
<b>White alone</b>	13%
<b>Some other race alone</b>	12%
<b>White alone, not Hispanic or Latino</b>	13%
<b>Native Hawaiian and Other Pacific Islander alone</b>	9%
<b>American Indian and Alaska Native alone</b>	0%

**Table 3. Age, Gender, and Percent Below Federal Poverty Level**

Age and Sex	% Below Federal Poverty Level
<b>Age</b>	
Under 18 years	18.5%
Under 5 years	17.6%
5 to 17 years	18.8%
18 to 64 years	16.7%
18 to 34 years	26.3%
35 to 64 years	10.0%
60 years +	10.7%
65 years +	8.9%
<b>Gender</b>	
Male	15.3%
Female	16.3%

Federal Poverty Levels by Size of Family: 1 person \$13,590; 2 people \$18,310; 3 people \$23,030; 4 people \$27,750; 8 people \$46,630 (Office of the Assistant Secretary for Planning and Evaluation, 2022).



**FIGURE 11**



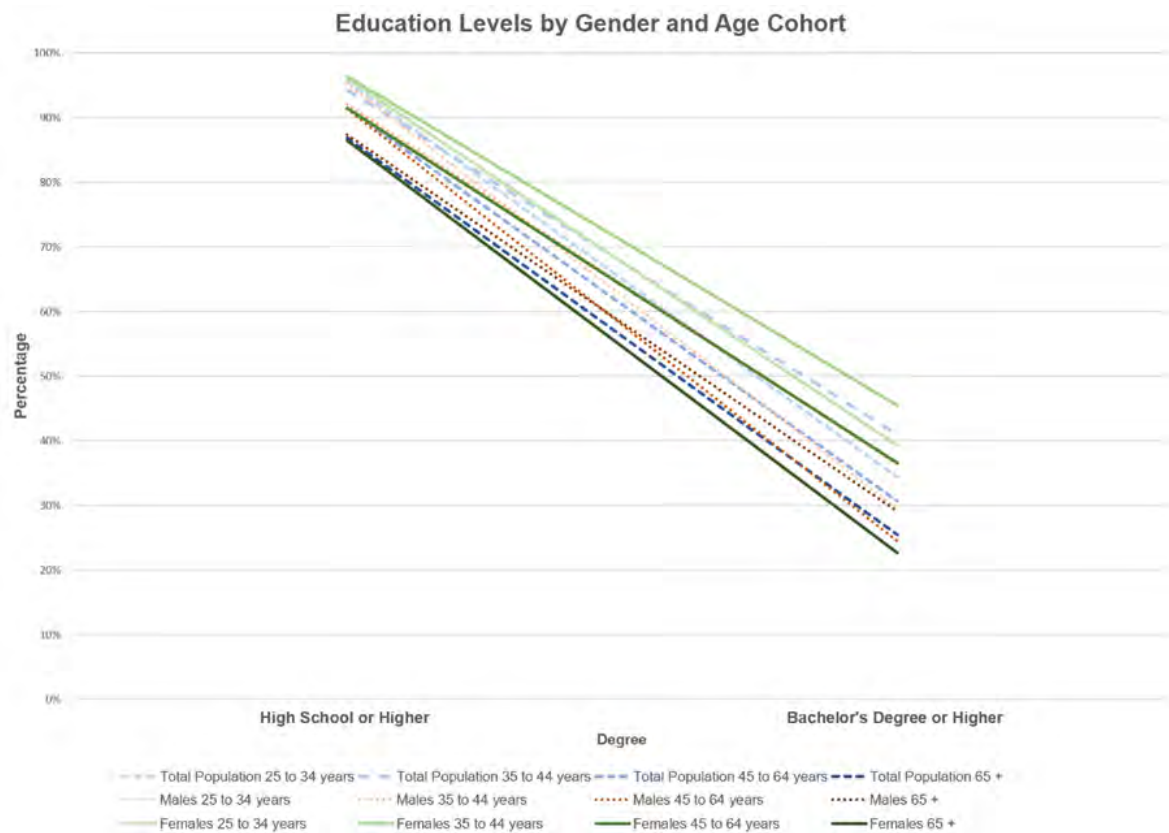


FIGURE 12

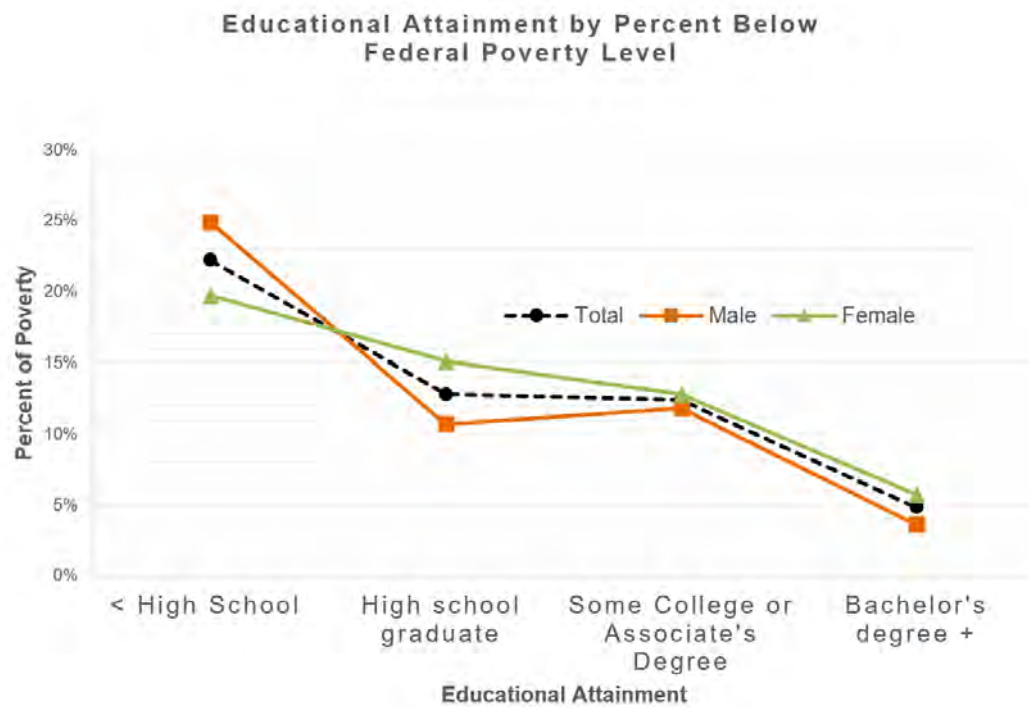


FIGURE 13

Table 4. Housing Livability for Cities in Cape Girardeau, Missouri (American Association for Retired Persons, 2022)										
	City in Cape Girardeau County, Missouri									
Housing Metric	Cape Girardeau	Jackson	Delta	Dutchtown	Gordonville	Oak Ridge	Old Appleton	Pocahontas	Whitewater	U.S. Median
Availability of multi-family housing	33%	25%	13%	14%	6%	30%	3%	10%	0.2%	18%
Housing costs (per month)	<b>\$878</b>	<b>\$842</b>	\$678	\$897	\$621	<b>\$1,132</b>	\$596	<b>\$886</b>	\$682	\$1,057
% Income spent on housing (burden)	<b>16%</b>	<b>17%</b>	12%	19%	14%	20%	13%	<b>16%</b>	12.2%	16.3%
Subsidized units per 10,000 people	140	102	0	82	7	0	0	0	69	0

### Severe Housing Problems

Housing is foundation to productive individuals, families, and societies. Housing can improve the economy. Housing is considered an upstream factor to many poor health and social outcomes. Further, the U.S. Department of Health and Human Services states that:

The quality of a home's neighborhood is shaped in part by how well individual homes are maintained, and widespread residential deterioration in a neighborhood can negatively affect mental health. Both home design and structure significantly influence housing quality and may affect mental and physical health. (Office of Disease Prevention and Health Promotion, 2022)

Severe housing problems is defined as “the percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, and lack of plumbing facilities” (p. 8). The U.S. value is 17%; Missouri is 13% with a minimum of 5% and a high of 21%. Cape Girardeau County has 14% severe housing problems and is in the third quartile (Figure 14).

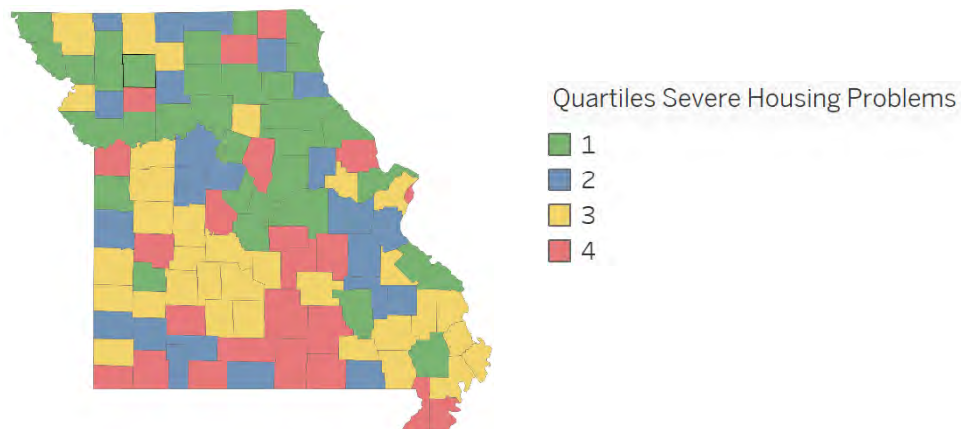


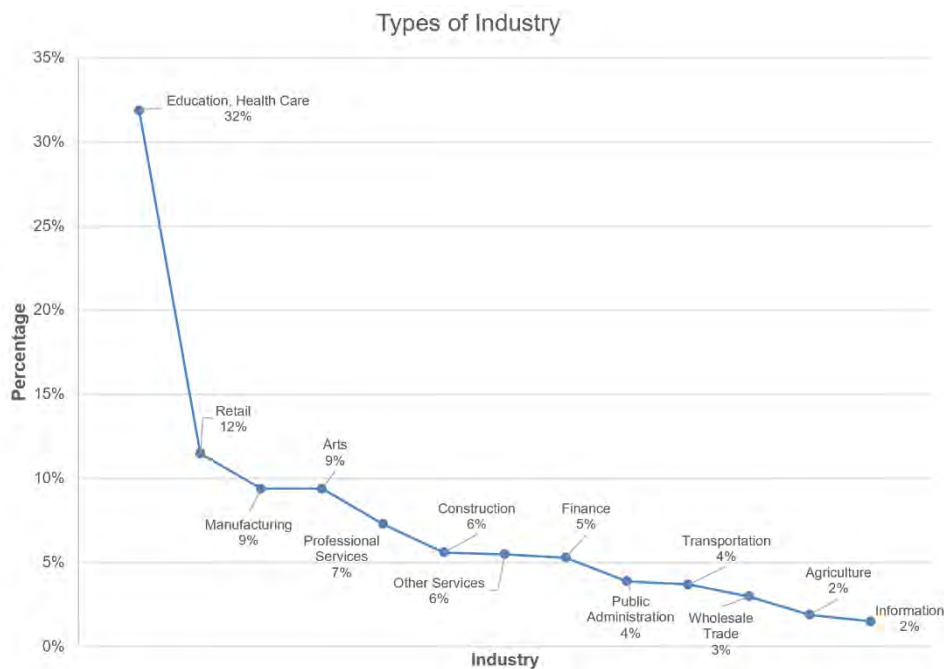
FIGURE 14

## Employment

The employment status in Table 5 considers 16 years and over with a population of 63,744. Sixty-four percent are in the labor force. The unemployment rate for civilians is low at 4%. Under three-fourths of females over 16 years are in the labor force. Figures 15 identifies the types of industry, with education and health care comprising 32% of the workforce (U.S. Census Bureau, 2022c).

**Table 5. Employment Status**

Characteristic	Number/Percent
<b>Population 16 years and over</b>	<b>63,744</b>
<b>In labor force</b>	64%
<b>Civilian labor force</b>	<b>40,532</b>
<b>Unemployment Rate</b>	4%
<b>Females 16 years and over</b>	<b>33,386</b>
<b>In labor force</b>	61%



**Details Of Industry:** **Education** - Educational Services, and Health Care and Social Assistance; **Arts** - Arts, Entertainment, and Recreation, and Accommodation and Food Services; **Professional Services** - Professional, Scientific, and Management, and Administrative and Waste Management Services; **Other Services** - Other Services, Except Public Administration; **Finance** - Finance and Insurance, and Real Estate and Rental and Leasing; **Transportation** - Transportation and Warehousing, and Utilities; **Agriculture** - Agriculture, Forestry, Fishing and Hunting, and Mining

**FIGURE 15**

## Veteran Characteristics

As shown below, more veterans are from the Vietnam era (38%). There are 4,246 veterans in the county (about 7%). More veterans are male (96%), White (92%), and at or above the FPL (91%). Under three fourths are without a disability (65%). Age cohorts for veterans are 65 to 74 years (29%), 75 years or more (26%), and 35 to 54 years (22%). Most have some college or associate degree (34%), a high school degree (33%), or a bachelor's degree or higher (28%). Table 6 provides the percentages by war era (U.S. Census Bureau, 2022c).

**Table 6. War Era and Percentage Served who Live in Cape Girardeau County, Missouri**

War Era	Percentage Served
Vietnam Era 1954 to 1975	38%
Gulf War September 2001 or later	20%
Gulf War August 1990 to August 2001	20%
Korean War 1950 to 1953	8%
World War II 1939 to 1945	4%

## Income and Type of Worker, and Commuting

The highest income category for the county is \$50,000 to \$74,999, followed by \$75,000 to \$99,999. There are 38,745 people considered in the type of worker. There are 37,823 commuting workers. Most workers are private workers (80%) and most (81%) drive alone (Figures 16, 17, and 18).



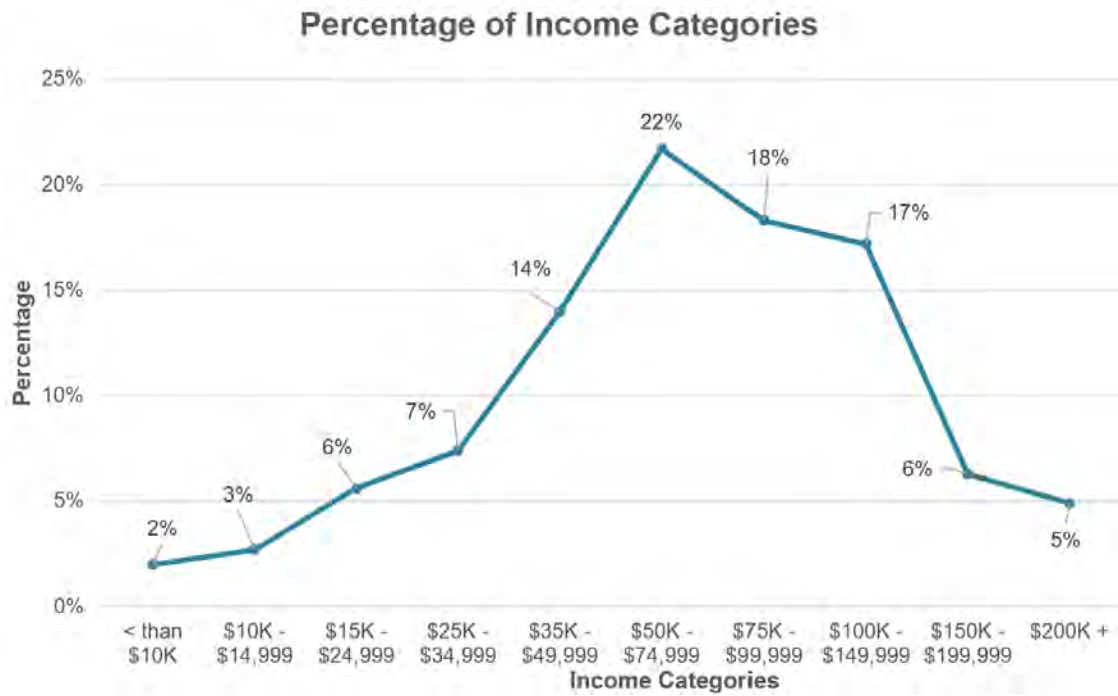


FIGURE 16

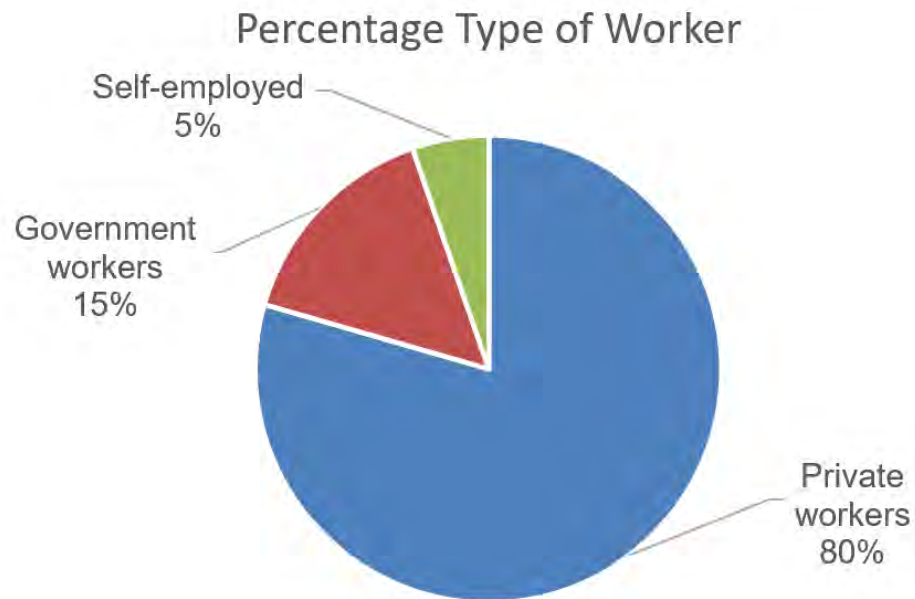


FIGURE 17

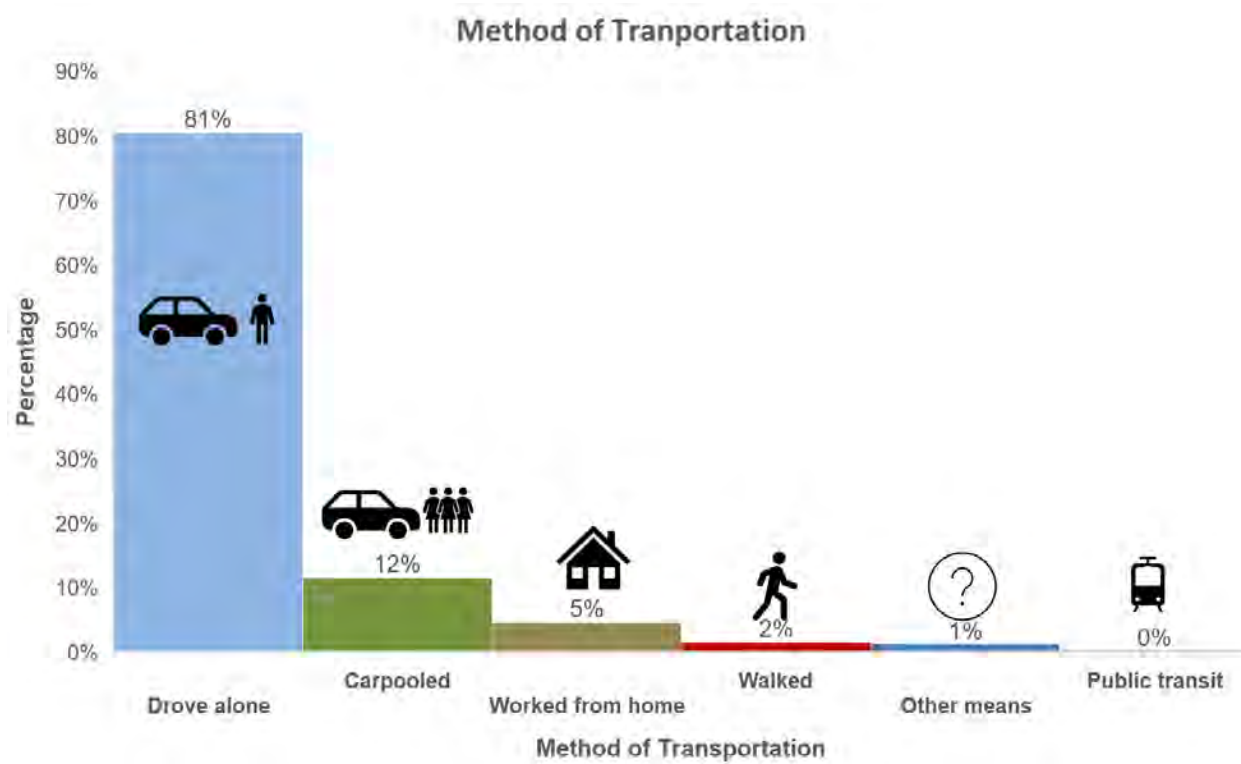


FIGURE 18

## Health Resource Availability

This domain represents factors associated with health system capacity, which may include both the number of licensed and credentialed health personnel and the physical capacity of health facilities. In addition, the category of health resources includes measures of access, utilization, cost and quality of health care and prevention services. Service delivery patterns and roles of public and private sectors as payers and/or providers may also be relevant. This section will focus on primary physicians and specialist, hospitals, clinics, mental health treatment facilities, and dental care.

As of May 2022, in the United States, there were 496,923 primary care physicians and 576,693 specialist physicians. In Missouri, there are 9,944 primary care physicians and 11,966 specialists (Kaiser Family Foundation, 2022). Primary Care Physicians include Internal Medicine, Family Medicine/General Practice, Pediatrics, Obstetrics & Gynecology, Geriatrics. Specialist physicians include Psychiatry, Surgery, Anesthesiology, Emergency Medicine, Radiology, Cardiology, Oncology (Cancer), Endocrinology, Diabetes, and Metabolism and all other specialties (Rural Health Information Hub, 2022).

Overall, clinical care is measured by access to care and quality of care. In Figure 19 below, clinical care rankings are converted into quartiles (1 = better access and quality scores). Clinical care considers number uninsured, primary care physicians, dentists, mental health providers, prevention hospital stays, mammography screening, and flu vaccinations. Cape Girardeau County is in Quartile 1.

For Cape Girardeau County, there are 70 primary care physicians for a ratio of 1,130:1. Missouri's ratio is 1,400:1 with a range of 23,920:1 to 700:1 (Robert Wood Johnson Foundation, 2022).

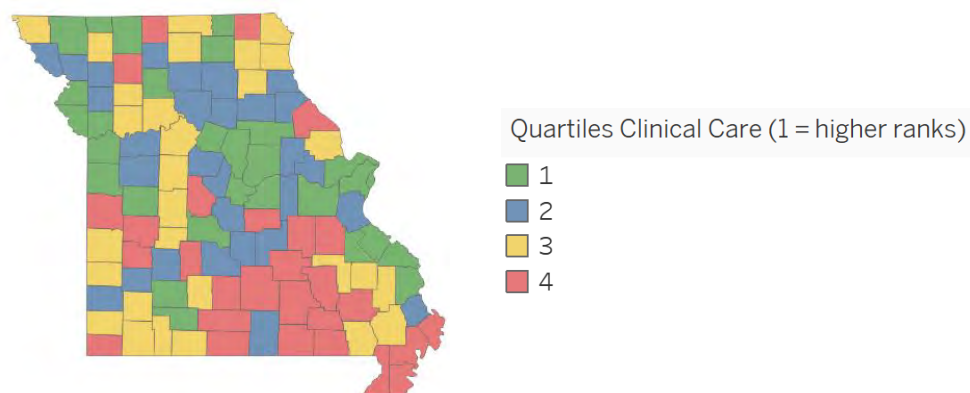


FIGURE 19

### Shortage of Medical Personnel

The county is a Health Professional Shortage Area (HPSA) for primary care, behavioral health, and dental care (Figure 20). Approximately 93% of Missouri counties are considered full shortage areas for primary care. For mental health, the county is one of the 98% of counties in Missouri that are HPSAs. Cape Girardeau is one of the 91% of counties where the whole county is a HPSA for dental care (Rural Health Information Hub, 2022).

Table 7 outlines the type of medical care provider for the county by 10,000 population. It also gives the state range (Rural Health Information Hub, 2022). Calculations, called the Cooper Demand-Based Model, have been performed that estimate the ideal number of physicians necessary for a population of 100,000. For family medicine the suggested ratio is just above 30 and for general surgery the ratio is 7.9 (Merritt Hawkins Team, 2018). Figures 21 provides maps with the rate of physicians, dentists, and mental health professionals per 100,000 across the state. Cape Girardeau County's rate of all types of providers are in Quartile 4 (best). The red counties (1<sup>st</sup> quartile) have the least number of providers per 100,000 (County Health Rankings, 2022).

Table 8 provides opportunities for access to hospital care by type (American Hospital Directory, 2022). According to the American Hospital Directory, the county has one long-term facility, two psychiatric facilities, and two short-term acute facilities. There is one Federally Qualified Health Center (FQHC) in Cape Girardeau, Missouri listed as follows (Health Research and Services Administration, 2022):

#### **Cross Trails Clinic**

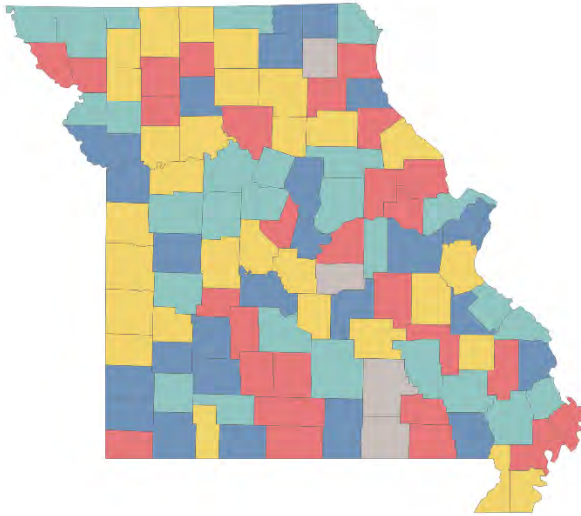
408 S. Broadview St  
Cape Girardeau, MO 63703  
Medical:(573)339-1196  
Dental: (573)334-4753

**Table 7. Types of Medical Providers in Cape Girardeau County (2019 to 2020)**

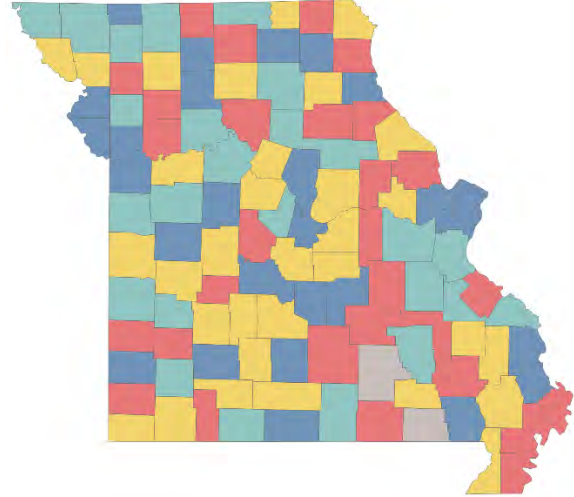
<i>Type of Provider</i>	<b>Number per 10,000 population</b>	<b>State Range</b>
<i>Total Physicians</i>	41	122 to 1
<i>Primary Care Physicians</i>	9	14 to 0
<i>Doctor of Medicine</i>	32	118 to 0
<i>Doctors of Osteopathy</i>	9	63 to 0
<i>Physician Assistant</i>	31	45 to 0
<i>Nurse Anesthetists</i>	7	8 to 0
<i>Nurse Practitioners</i>	24	37 to 0
<b><i>Dentists</i></b>	<b>3</b>	<b>6 to 0</b>

**Figure 20. Cape Girardeau County Rates of Providers**

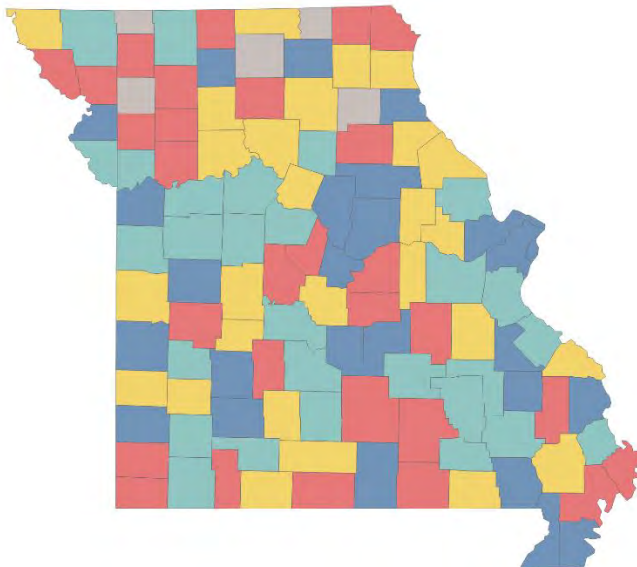
**89 Physicians per 100,000 Population**



**75 Dentists per 100,000 Population**



**294 Mental Health Professionals per 100,000 Population**

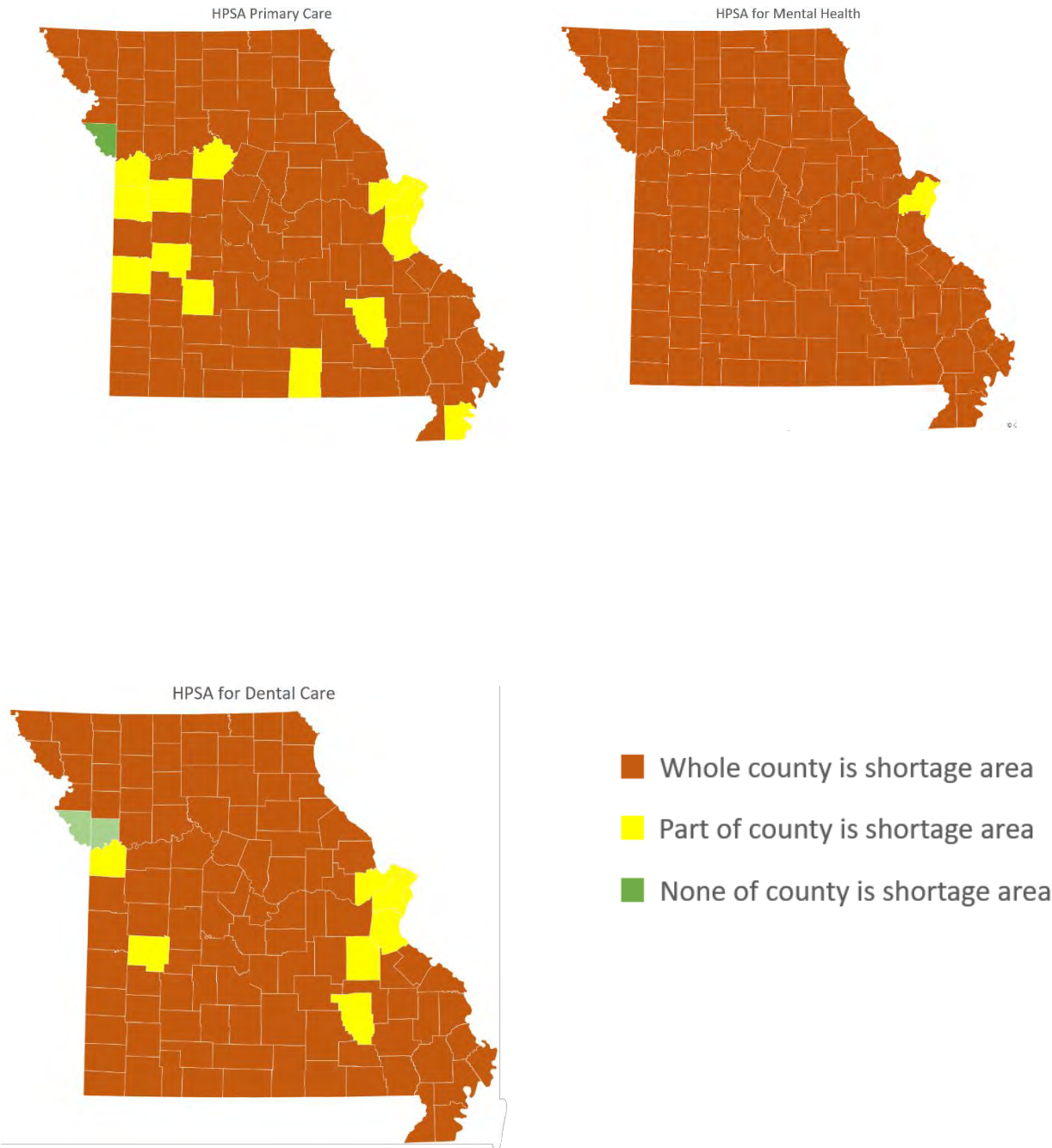


Quartiles

- 1
- 2
- 3
- 4
- 5



**Figure 21. Health Professional Shortage Areas for Primary Care, Mental Health and Dental Care**



**Table 8. Hospital Access by Type and City**

<b>Name</b>	<b>Type</b>	<b>City</b>
1. Saint Louis Children's Hospital	Children's	Saint Louis
2. Shriners Children's St. Louis	Children's	Saint Louis
3. SSM Health Cardinal Glennon Children's Hospital	Children's	Saint Louis
4. Kindred Hospital Saint Louis	Long Term	Saint Louis
5. Kindred Hospital Saint Louis South	Long Term	Saint Louis
6. Landmark Hospital of Cape Girardeau	Long Term	Cape Girardeau
7. Peace Haven Association	Other	Saint Louis
8. Barnes-Jewish Hospital Psychiatric Support Center	Psychiatric	Saint Louis
9. Cottonwood Residential Treatment Center	Psychiatric	Cape Girardeau
10. Hawthorn Children's Psychiatric Hospital	Psychiatric	Saint Louis
11. Metropolitan Saint Louis Psychiatric Center	Psychiatric	Saint Louis
12. Saint Louis Psychiatric Rehabilitation Center	Psychiatric	Saint Louis
13. Southeast Behavioral Hospital	Psychiatric	Cape Girardeau
14. The Rehabilitation Institute of Saint Louis	Rehabilitation	Saint Louis
15. Barnes-Jewish Hospital	Short-term Acute Care	Saint Louis
16. Christian Hospital	Short-term Acute Care	Saint Louis
17. Mercy Children's Hospital Saint Louis	Short-term Acute Care	Saint Louis
18. Mercy Heart and Vascular Hospital Saint Louis	Short-term Acute Care	Saint Louis
19. Mercy Hospital Jefferson	Short-term Acute Care	Festus
20. Mercy Hospital Saint Louis	Short-term Acute Care	Saint Louis
21. Mercy Hospital South	Short-term Acute Care	Saint Louis
22. Missouri Baptist Medical Center	Short-term Acute Care	Saint Louis
23. Missouri Delta Medical Center	Short-term Acute Care	Sikeston
24. Saint Francis Medical Center	Short-term Acute Care	Cape Girardeau
25. Saint Luke's Des Peres Hospital	Short-term Acute Care	Saint Louis
26. South City Hospital	Short-term Acute Care	Saint Louis
27. Southeast Hospital	Short-term Acute Care	Cape Girardeau
28. SSM Health Saint Louis University Hospital	Short-term Acute Care	Saint Louis
29. SSM Health Saint Mary's Hospital - Saint Louis	Short-term Acute Care	Saint Louis
30. VA St. Louis Health Care System John Cochran Division	Short-term Acute Care	Saint Louis

## Health Insurance

Health insurance is a gatekeeper for optimum health. Medical care is expensive and can be unexpected. Health insurance can cover procedures at a reduced cost. Health insurance helps cover outpatient care, emergency services, hospital stays, baby care, mental health and substance misuse, prescriptions, disability care, lab tests, preventive services, and dental and vision (Jacobson et al., n.d.). Having health insurance promotes a relationship with primary care so health issues can be prevented or examined before they become more serious. The United States has 11% of the population uninsured, whereas Missouri has 12% uninsured. In Figure 22, the Missouri county minimum uninsured is 7%, while the maximum uninsured is 23%. Cape Girardeau County has 12% uninsured and is in the 1<sup>st</sup> Quartile (County Health Rankings, 2022).

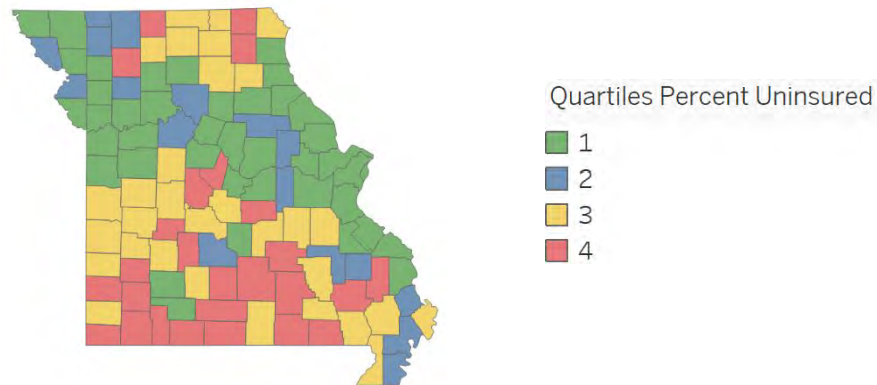


FIGURE 22

## Quality of Life (QOL)

The World Health Organization (WHO) defines Quality of Life (QOL) as an

individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept incorporating in a complex way the persons' physical health, psychological state, level of independence, social relationships, personal beliefs and their relationships to salient features of the environment. QOL is a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life. (World Health Organization, 2012, p. 14)

The County Health Rankings (2022b) defines QOL as “how healthy people feel while alive...the well-being of a community, and underscores the importance of physical, mental, social, and emotional health from birth to adulthood” (para. 1). Four measures are used to rank each county. Cape Girardeau County ranks 33<sup>rd</sup> out of 114 counties and 1 city (Figure 23). A complete picture of QOL includes more indicators as shown in Table 9.



*Ranking for Cape Girardeau County for  
Quality of Life Indicators. Includes*

*Poor or Fair Health*

*Poor Physical Health Days*

*Poor Mental Health Days*

*Low Birthweight*

FIGURE 23

**Table 9. Quality of Life Indicators for Cape Girardeau County, Missouri and Missouri (2018-2020)**

Indicator		Definition	Cape Girardeau County	Missouri
1.	Poor or Fair Health	Percentage of adults reporting fair or poor health (age-adjusted).	18%	18%
2.	Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	4.2	4
3.	Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	4.8	4.9
4.	Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams).	9%	9%
5.	Frequent Physical Distress	Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted).	13%	12%
6.	Frequent Mental Distress	Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted).	16%	16%
7.	Diabetes Prevalence	Percentage of adults aged 20 and above with diagnosed diabetes (age-adjusted).	10%	9%
8.	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population	100	248

*Note: Only first four indicators are included in ranking. Indicators 1-7 are data from Behavioral Risk Factor Surveillance System; Indicator 8 is from National Center for HIV/AIDS.*

## Opportunity

The Opportunity Index was developed by the Opportunity Nation (2022). The founders of this Index state:


Many factors influence the kinds of opportunity people have, starting with unchangeable characteristics such as gender, race and ethnicity, genetic factors and family background. The quality of parenting, a family's income and individual health as well as the health and safety of neighborhoods, the quality of schools and the inclusiveness of one's community—all of these can respond to improvement efforts at personal, institutional and societal levels. These conditions vary from place to place, as well as over time, and that is why these conditions are the focus of the Opportunity Index. (para 3)

The Index is multidimensional in nature and describes more than only the economic opportunities in a community. Many of these individual indicators are presented in other areas of this assessment. This combination of factors provides an indication of all the factors that define opportunity in a community. This can influence the potential for quality of life.

Missouri's Index Score is 52.6 out of 100 with a rank of 28<sup>th</sup> out of 51 states and the District of Columbia (Table 10). The highest rank is Minnesota with an overall Opportunity Score of 63.1 and the lowest rank is New Mexico with an overall Opportunity Score of 42.4. The 2019 Index includes indicators within four dimensions of community well-being:



Table 11 provides more detail for the 16 indicators that form the Index. The county receives a B- on individual indicators (Benbennick, 2006).

Table 10. State Rank and County, State and National Dimension Scores for Opportunity Index (2019)					
State Rank		<div>28</div> 			
Geography	Opportunity Score	Economy Score	Education Score	Community Score	Health Score
Cape Girardeau County	54.8	58.4	56.0	51.0	53.8
Missouri	52.6	59.3	56.6	47.8	46.6
United States	53.2	57.0	56.1	47.8	52.0

**Table 11. Detailed Opportunity Index Data for by County, Similar Demographics, Missouri and National**

<b>Economy</b>	<b>Cape Girardeau County</b>	<b>Counties With Similar Demographics</b>	<b>Missouri</b>	<b>National</b>
Unemployment Rate (%)	2.50%	3.30%	3.00%	3.30%
Median Household Income (\$)	\$44	\$47,053	\$47	\$53
Poverty (% below poverty line)	17.70%	14.50%	13.40%	13.40%
80/20 Ratio (household income at the 80th percentile to that of the 20th percentile)	4.6	4.5	4.5	4.9
Banking Services (per 10,000)	5.2	4.4	4.5	3.7
Households Spending < than 30% of Household Income on Housing Costs (%)	72.90%	73.50%	74.00%	68.30%
Percent Broadband Internet Subscription	84.80%	83.80%	81.60%	83.80%
<b>Education</b>				
Preschool (% ages 3 and 4 in school)	38.00%	43.10%	46.10%	48.00%
% On-Time High School Graduation (4 years)	91.90%	90.10%	88.50%	84.80%
Associate Degree or Higher (% of adults 25 and older)	35.90%	34.10%	36.90%	40.50%
<b>Community</b>				
Youth Not in School and Not Working (% ages 16-24)	6.20%	12.50%	10.90%	11.50%
Volunteering (% of adults ages 18 and older)	-	-	27.70%	27.50%
Voter Registration (% of population 18 and older registered to vote)	-	-	71.30%	62.70%
Violent Crime (per 100,000 population)	362.3	228.2	530.3	382.9
Medical Doctors (per 100,000 population)	93.4	69.7	70	75.5
Grocery Stores and Produce Vendors (per 10,000 population)	1.3	1.6	1.7	2.1
<b>Health</b>				
Low Birth Weight (% of infants born weighing less than 5.5 lbs.)	-	7.60%	8.70%	8.30%
% under age 65 without health insurance)	8.60%	8.30%	9.10%	8.70%
Deaths Related to Alcohol / Drug Abuse or Suicide (per 100,000 population)	28.6	38.6	40.6	34.9



## Incarceration

According to Vera Institute of Justice (2022), 1.8 million people were incarcerated in the United States in the Spring of 2021. More than 11 million people are sent to jails and prisons each year. In Cape Girardeau County, the following statistics apply for 2020 (rate per 100,000 residents 15 to 64 years):

- **386** people were in jail pretrial
- **13,090** people were admitted to jail
- **301** people were jailed
- **814** were sent to prison
- **1,137** total people in jail and prison

Figure 24 shows the state and the combination of jail and prison incarceration at a rate of 100,000 residents for ages 15 to 64 years. Cape Girardeau County (darker purple) is in the higher sextiles (6 quantiles from yellow shading to dark blue) at 1,137 per 100,000 population incarcerations in jail and prison.

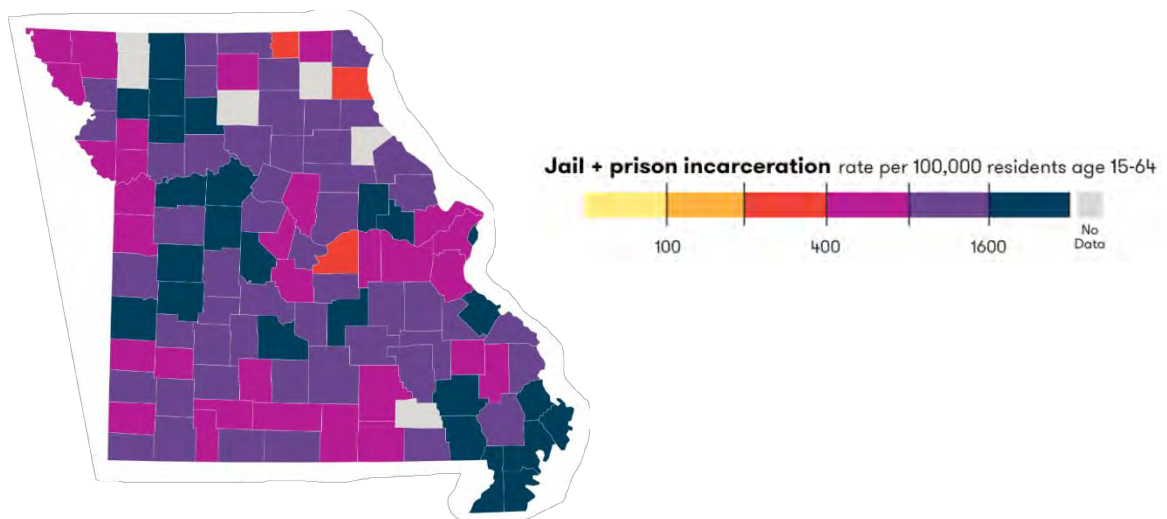


FIGURE 24

## Behavioral Risk Factors

The American Psychological Association (2022) defines behavioral risk factors as “any specific behavior or pattern of behaviors (e.g., overeating or smoking) that increases an individual’s likelihood of developing a disorder, disease, or syndrome” (para. 1).

Overall, in Figure 25, behavior is illustrated through quartiles (1 = top quartiles). Health behaviors includes tobacco use, obesity, food access, inactivity, exercise opportunities, drinking, alcohol-impaired driving deaths, sexually transmitted infections, and teen births. Cape Girardeau County is in Quartile 1.

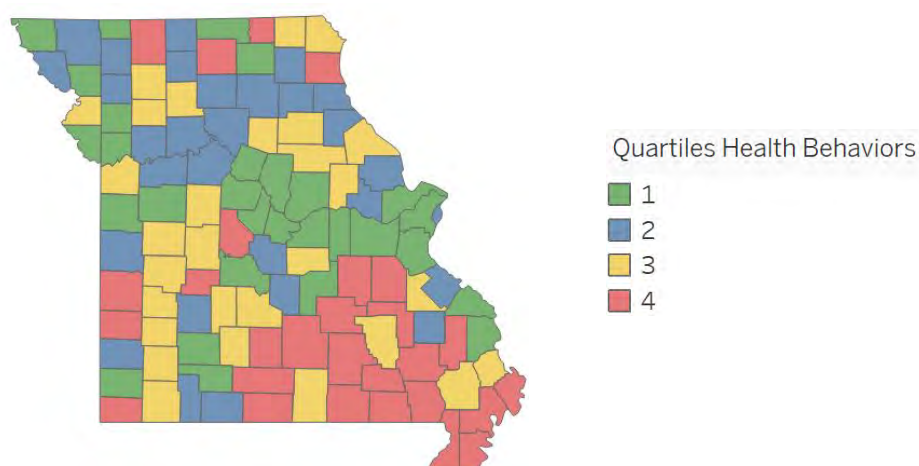


FIGURE 25

Risk factors in this category include behaviors which are believed to cause, or to be contributing factors to, injuries, disease, and death during youth and adolescence and significant morbidity and mortality in later life. Behaviors included for this report are tobacco use, diet and exercise, alcohol and drug use, and sleep. Research shows these behaviors lead to symptoms and then poor health outcomes, such as disease and death. For Cape Girardeau County, as shown in Figure 26, all values are aligned with the state values (County Health Rankings, 2022; Centers for Disease Control and Prevention, 2022a). Figure 27 shows the values for the more defined variables.

## Behavioral Risk Factors and Definitions

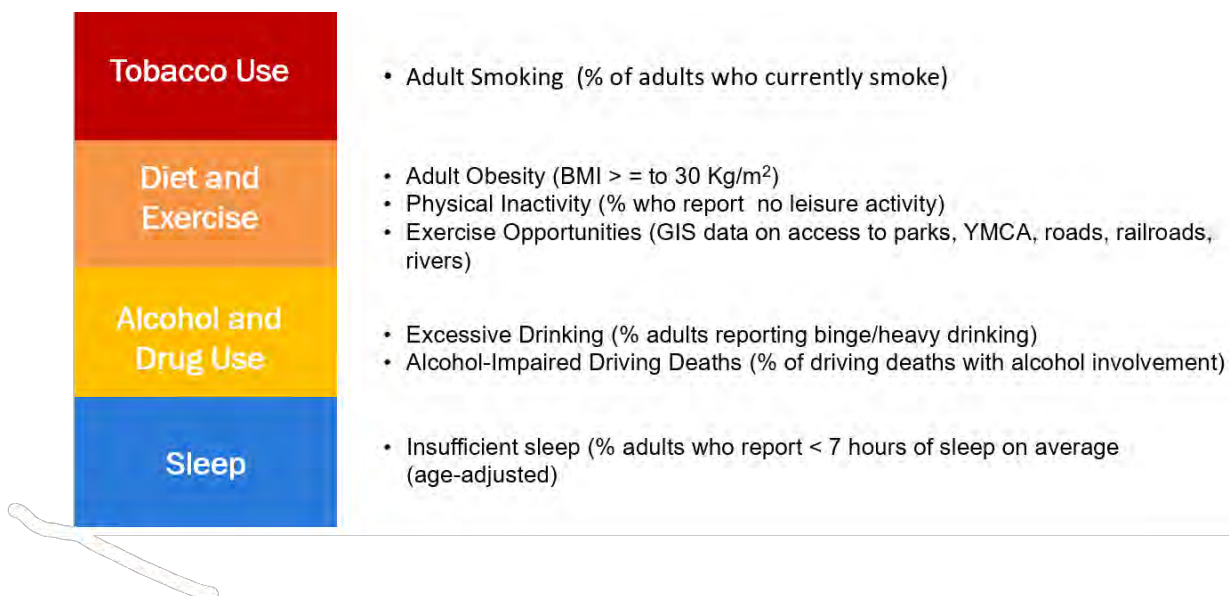


FIGURE 26

### Percentage of Behavioral Risk Factors and State Ranges

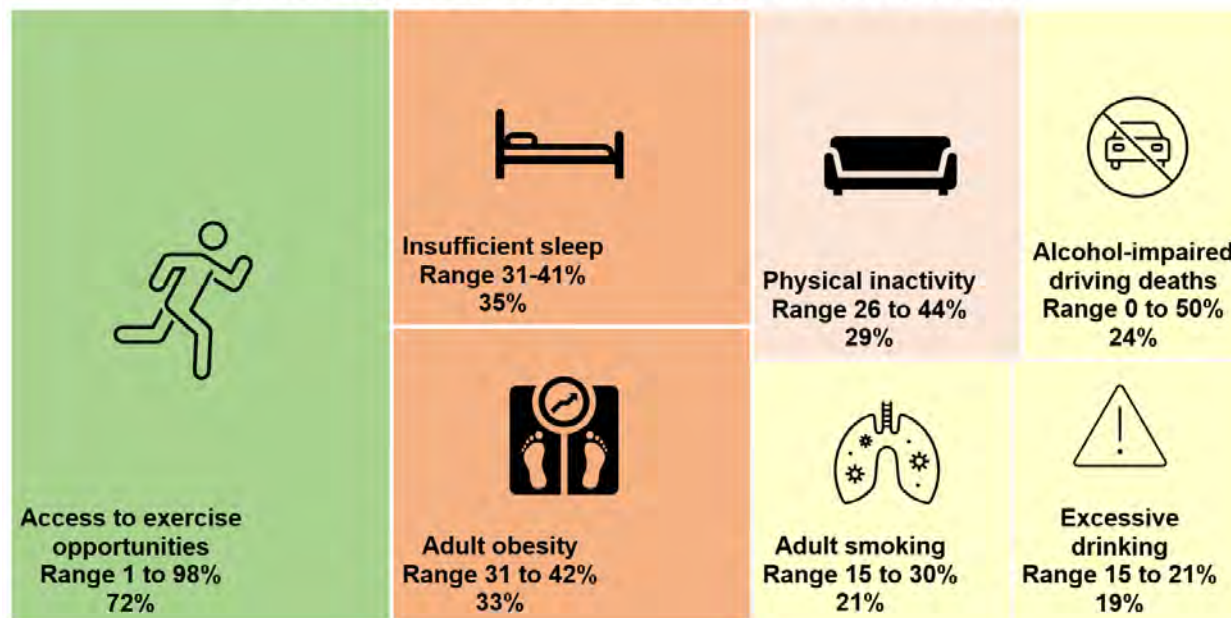


FIGURE 27

## Environmental Health Indicators

The physical environment directly impacts health and quality of life. Clean air and water, as well as safely prepared food, are essential to physical health. Exposure to environmental substances such as lead or hazardous waste increases risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.

### Overall Physical Environment

Figure 28 illustrates the overall physical environment quartiles. Overall physical environment includes air pollution (particulate matter), drinking water violations, severe housing problems, driving alone to work, and long commute (driving alone). Cape Girardeau County is in Quartile 4 (County Health Rankings, 2022).

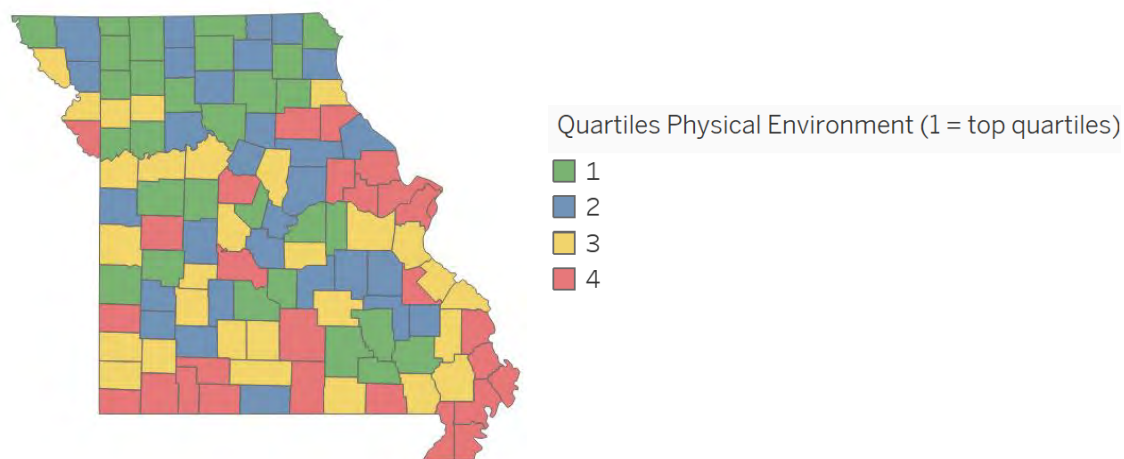


FIGURE 28

The U.S. News and World Report (2022) in partnership with the University of Missouri Extension Center for Applied Research and Engagement Systems (CARES) is another source for overall environmental climate. They state that the environment category “assesses the health of a community's natural surroundings by including measures of air and water quality, access to parks and natural amenities, and environmental risks” (para. 7). Cape Girardeau County’s overall environmental score is 34 out of 100 (higher is better). Table 12 provides individual metrics for the environmental score. Unfavorable scores include airborne risk of cancer, respiratory complications, and Toxic Release Index.

<b>Table 12. Environmental Metrics</b>					
<b>Metric</b>	<b>Definition</b>	<b>Cape Girardeau County</b>	<b>United States</b>	<b>Peer Group<sup>1</sup></b>	<b>Missouri</b>
Airborne Cancer Risk (%)	Probability of contracting cancer over the course of a lifetime based on air toxics health risks; per 1M population	<b>61</b>	26	27	32
Air Quality Hazard	Potential risk of developing serious respiratory complications over the course of a lifetime; smaller values indicate reduced risk	<b>.41</b>	.34	.36	.42
Drinking Water Violation Rate	Violation points, according to EPA standards, per 1,000 population	.01	.03	.01	.02
Toxic Release Index Score	Relative health risk from exposure to toxic chemicals	<b>15</b>	.04	.08	.75
Trees	Area with a tree canopy	15	21	19	19
Natural Amenities Index Score	Higher score indicates a community has milder summers and winters, as well as more sunshine and topographic diversity; index range is approximately -2 to 11	.91	.22	.24	.04
FEMA National Risk Index Score	Higher score on scale of zero to 100 indicates more risk from natural hazards relative to other communities	16	9	10	18
Homes in Flood Hazard Zone	Number of homes	5	4	3	4

## Water

Drinking water quality is defined as the percentage of the population getting water from public water systems with at least one health-based violation during the past year. Lower values are better. Measured at the county level, Cape Girardeau County has the presence of water violations (County Health Rankings, 2022; U.S. Environmental Protection Agency, 2022a).

<sup>1</sup> Peer groups are based on urban rural status and economic performance to allow for comparisons among similar communities.

### Driving Alone and Long Commute

This variable is the percentage of the workforce that drives alone to work and the percentage who drives more than 30 minutes to work. In the United States, 75% of the workforce drives alone and 37% drive more than 30 minutes to work. In Missouri, 81% drive alone and 32% drive more than 30 minutes. The Missouri minimum is 61% for those driving alone and 14% for those driving more than 30 minutes. The maximum in the state is 88% for those driving alone and 57% for those driving more than 30 minutes. The figures below indicate that Cape Girardeau County is in the 2<sup>nd</sup> Quartile with 81% driving alone and in the 1<sup>st</sup> Quartile with 19% commuting a long distance (Figures 29 and 30).

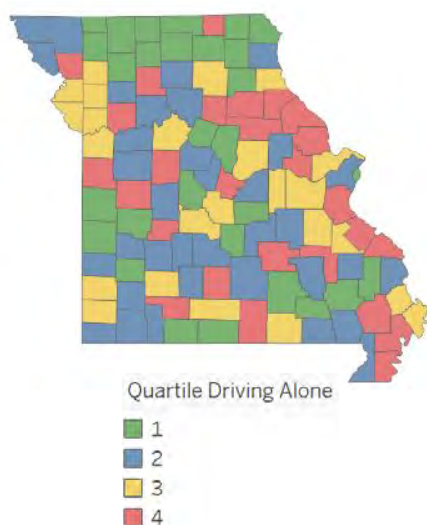


FIGURE 29

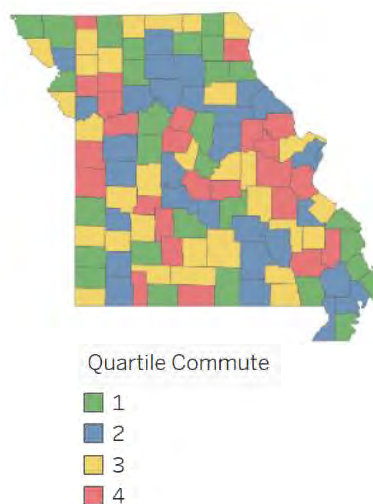


FIGURE 30

### Traffic Volume

Traffic volume provides an indication of proximity to vehicles. This is related to noise pollution, toxic gases, particulate matter. Being as close as 100 to 300 meters is more stressful and is related to poor health outcomes, such as asthma, cardiovascular disease, coronary heart disease, myocardial infarction, and increased mortality rates.

These 2019 data are provided by the Environmental Justice Screening and Mapping Tool (County Health Rankings, 2022).



#### Cape Girardeau County Traffic Volume

Average traffic volume per meter of major roadways in the county.

State Range 0 to 1,238



Air Pollution Particulate Matter is defined as the average daily density of fine particulate matter in micrograms per cubic meter (PM<sub>2.5</sub>). Particles such as dirt, dust, soot, smoke are all in the air and some can be seen with the naked eye. These particles can be emitted from construction sites, unpaved roads, smokestacks, and fires. Other sources are emitted from power plants, industries and automobiles. The particles can enter the lungs and the bloodstream increasing the likelihood for serious illness and disease (U.S. Environmental Protection Agency, 2022d). Air pollution in the United States is 7.5; Missouri is 8.2. The minimum for Missouri counties is 6.1 and the highest is 10.7. Cape Girardeau County has a particular matter of 9.6, which is in the 4<sup>th</sup> quartile (Centers for Disease Control and Prevention, 2018-2020; County Health Rankings, 2022). Environmental Regional Air Quality is measured as the number of days per year that are unhealthy for sensitive populations. Lower values are better (Figure 31). Cape Girardeau County has 4.4 unhealthy air quality days per year (American Association for Retired Persons, 2022). In 2015 it was 14.3 unhealthy air quality days per year.

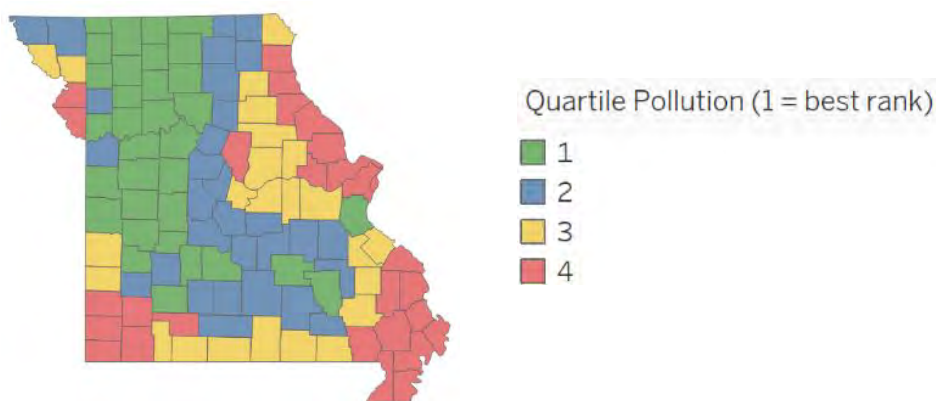


FIGURE 31

### Near Roadway and Industrial Pollution

Near Roadway Pollution and Local Industrial Pollution are provided by city in Cape Girardeau County. Values are shown in Table 13. Roadway pollution is defined as the percentage of the population living within 200 meters of a high-traffic road with more than 25,000 vehicles per day. Lower values are better. Industrial pollution is measured as the toxicity of airborne chemicals released from nearby industrial facilities. Values range from 0 to 9,070. Lower values are better (American Association of Retired Persons, 2022; U.S. Department of Transportation, 2015; U.S. Environmental Protection Agency, 2019).



**Table 13. Environmental Metrics by City for Cape Girardeau County, Missouri**

City	Near -Roadway Pollution (%)	Local Industrial Pollution (0 to 9,070)
Cape Girardeau	4.75	.22
Jackson	3.25	12.04
Delta	0	0
Dutchtown	1.55	0
Gordonville	.47	0
Oak Ridge	0	0
Old Appleton	0	0
Pocahontas	0	0
Whitewater	0	0
2022 U.S. Median Neighborhood	0	0

#### Energy Monitored by Environmental Protection Agency

Types of energy monitored by EPA includes coal, geothermal, hydropower, natural gas, nuclear, oil, other fossil fuels, solar, wind, and unknown sources. Greenhouse gasses are carbon dioxide, methane, nitrous oxide, PFCs, sulfur hexafluoride. There are, by 2020 emissions, 68,414,567 metric tons CO<sub>2</sub>e reported in the state of Missouri. A majority (78%) of greenhouse gases emissions in 2020 were from the power plant sector for the state of Missouri. A majority of the gas type emitting greenhouse gases in 2020 was carbon dioxide (U.S. Environmental Protection Agency, 2022b).

The county did not have any sources of energy from any of the types except those listed in Table 14. See Table 15 for the top 25 sites monitored by EPA in the county.

**Table 14. Sources of Energy**

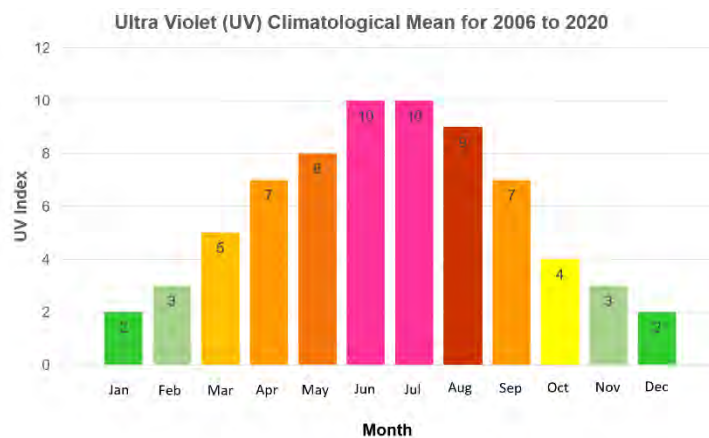
Source	Location
1. <b>Natural Gas</b>	• Viaduct Cape Girardeau, MO
2. <b>Oil</b>	• Jackson, Missouri; Cape Girardeau, MO
3. <b>Superfund Sites</b>	• Missouri Utilities Company South Highway 61 Cape Girardeau, Missouri 63701

**Table 15. Top Sites Monitored by Environmental Protection Agency in Cape Girardeau County, Missouri**

1. Ameren - Grand Tower Power Station	11. Perry Ridge Landfill
2. Baldwin Energy Complex	12. Pinckneyville Power Plant
3. Consolidated Grain And Barge Co.	13. Prairie Eagle Mine
4. Continental Tire	14. Procter & Gamble Paper Products Co.
5. Cottonwood Hills Recycling & Disposal Facility	15. Sabc Innovative Plastics Mt Vernon LLC
6. Countrymark Refining & Logistics LLC	16. Saline County Landfill
7. Gibson Generating Station	17. Southern Il Reg. Landfill
8. Green Plains Mount Vernon	18. TG Missouri Corporation
9. New Future Mine	19. Valero Mount Vernon Plant
10. Peabody Gateway North Mining LLC	

### UV Index

The UV Index scale used in the United States conforms with international guidelines for UVI reporting established by the World Health Organization. The UV Index scale ranges from 0 to 11. The higher the index, the more dangerous and high exposure to ultra-violet rays are likely very high to extreme (U.S. Environmental Protection Agency, 2022c). Figure 32 provides the mean UV Index scale values for Cape Girardeau County from 2006 to 2020. The county has a high value of 10 (very high to extreme) in June and July and a low value of 2 (low risk) in January and December. Protection is needed starting at a value of 3 (Moderate to high), therefore, residents of the county need protection in 10 months of the year.



**FIGURE 32**

### Toxic Chemical Release

The Environmental Protection Agency's (EPA) Toxics Release Inventory (TRI) provides data on quantities of chemicals released from industrial facilities into the environment, managed as waste, and transferred from one facility to another for release of additional waste management. Cape Girardeau County's analysis revealed the top 15 facilities in this inventory. A multisystem search was conducted to determine the facilities that have toxic chemical releases, water discharge, hazardous waste handling processes, Superfund status, and air emission estimates (U.S. Environmental Protection Agency, 2022c). Facilities are ordered by RSEI score from highest to lowest. EPA's RSEI model uses chemical quantity (pounds) data reported to the TRI to produce RSEI scores, which are estimates of potential human health risk that can be used for comparison and ranking. The top five chemicals represented are chromium and chromium compounds, ethylene oxide, nickel and nickel compounds, polycyclic aromatic compounds, and lead and lead compounds (Table 16).

**Table 16. Ranking of Facilities in Cape Girardeau County by Pounds of Toxic Release**

<b>Rank: RSEI Score</b>	<b>Facility Name</b>	<b>Street</b>	<b>City/State</b>	<b>RSEI Score</b>	<b>TRI Pounds</b>
1	Midwest Sterilization Corp	1204 Lenco Ave	Jackson	4,452,916	3,795,339
2	Greenbrier Central LLC	1305 Lenco Ave	Jackson	368,936	796,669
3	Buzzi Unicem USA-Cape Girardeau	2524 S Sprigg St	Cape Girardeau	6,732	2,102,328
4	Mid South Steel Products	2071 Corporate Circle	Cape Girardeau	978	28,809
5	The Procter & Gamble Paper Products Co	14484 State Hwy 177	Jackson	355	21
6	QC Corp	5566 Nash Road	Cape Girardeau	185	8,226
7	Polyone Corp	4753 Nash Rd	Cape Girardeau	156	21,646
8	Mondi Jackson LLC	14591 State Hwy. 177	Jackson	151	654,296
9	NLC Inc	319 W Main	Jackson	7	847,263
10	Kasten Clay Products Inc	713 Kasten Dr	Jackson	4	28
11	Biokyowa Inc	5469 Nash Rd	Cape Girardeau	1	5,782,718
12	Leggett & Platt Inc	4614 Nash Rd	Cape Girardeau	0	12,385
13	Safety-Kleen Systems Cape Girardeau (Cap)	201 Lasalle St	Cape Girardeau	0	1,668,552
14	Polyone Corporation	2500 Spartech Drive P.O. Box 758	Cape Girardeau	0	84
15	Rapco International Inc	3581 Larch Ln	Jackson	0	860

## Social Vulnerability and Disaster

Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado or disease outbreak, or a human-made event such as a harmful chemical spill. A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability. ATSDR's (Agency for Tox Substances and Disease Registry, 2022) Geospatial Research, Analysis & Services Program (GRASP) created databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event.

The data considers census tracts and their performance on four themes:

1. Socioeconomic Status
2. Household Composition and Disability
3. Minority<sup>2</sup> Status and Language
4. Housing Type and Transportation

Each major theme (e.g., Socioeconomic Status) has several subthemes as illustrated in Figure 33 (e.g., below poverty).

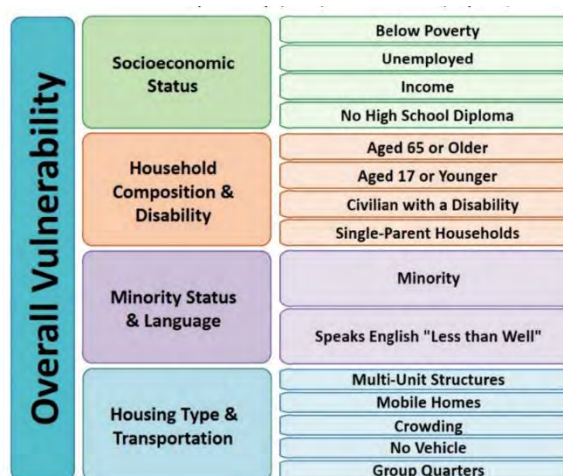


FIGURE 33

Table 17 on the percentile rank for theme have values in each cell ranging from a 0 to 1, with higher values indicating more problematic areas for that theme. The percentile ranking averages the four theme values. All percentile rankings were quartiles and the dashboard provides a quick indication of which census tracts have lower averages (✓) or higher averages closer to 1(!).

Values for the subthemes, provided in Table 18, are given a 1 if they are above the 90th percentile for the variable (indicating worse performance) and a 0 if they are below the 90th percentile (indicating better performance). Subthemes that are flagged (a high value of concern) are provided for each census tract. Additionally, the total number of flags for all subthemes and themes are provided.

The data indicate that census tracts 8807, 8801, 8802, 8811, 8803, 8805, 8806, 8812, 8804, 8813 have no flags assigned to a subtheme. Census tracts 8808, 8816, 8809, and 8814 have three flags across the four dimensions. Figure 34 provides the location

<sup>2</sup> The term "communities of color" is preferred.

of census tracts for Cape Girardeau County. Percentile ranking values range from 0 to 1, with higher values indicating greater vulnerability.

Census Tract	Themes				Overall	
	Theme 1: Socioeconomic	Theme 2: Household Composition	Theme 3: Minority Status/Language	Theme 4: House Type/Transportation	Percentile Ranking	Dashboard
8807	0.22	0.15	0.32	0.25	0.14	✓
8801	0.39	0.18	0.08	0.37	0.20	✓
8802	0.39	0.43	0.51	0.06	0.21	✓
8811	0.33	0.05	0.29	0.61	0.23	✓
8803	0.37	0.34	0.26	0.24	0.23	✓
8805	0.33	0.52	0.20	0.31	0.28	◆
8806	0.24	0.22	0.24	0.75	0.31	◆
8812	0.22	0.32	0.79	0.45	0.38	◆
8815	0.41	0.63	0.06	0.92	0.53	☀
8810	0.77	0.06	0.68	0.82	0.64	☀
8804	0.68	0.76	0.08	0.85	0.69	☀
8808	0.90	0.05	0.75	0.89	0.76	!
8816	0.96	0.23	0.43	0.81	0.79	!
8813	0.47	0.56	0.75	0.97	0.79	!
8809	0.94	0.21	0.90	0.80	0.87	!
8814	0.95	0.92	0.87	0.81	0.98	!

Table 18. 90% Percentile Variables Indicating Concern for a Census Tract

Census Tract	Number of Flags (more flags = worse values)	
	Number of Subthemes (1 flag)	Total Number of Flags
8815	1. Age 65+ 2. Institutionalized	2
8810	3. Poverty	1
8808	4. Poverty 5. Income 6. Institutionalized	3 (!)
8816	7. Poverty 8. Income 9. Crowded Households	3 (!)
8809	10. Poverty 11. Income 12. Unemployment	3 (!)
8814	13. Poverty 14. Income Unemployment	3 (!)



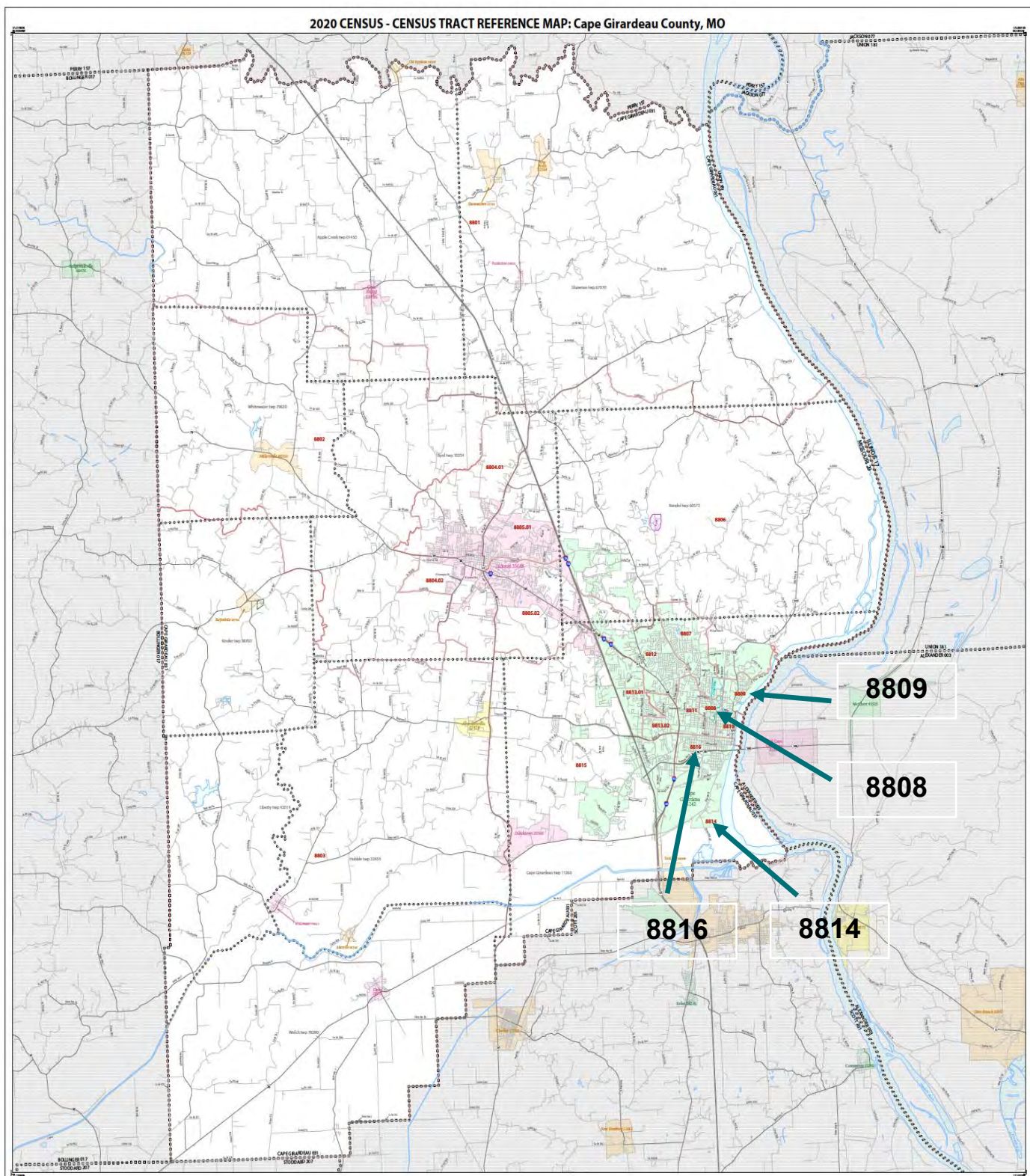


FIGURE 34

## Social and Mental Health

This category represents social and mental factors and conditions which directly or indirectly influence overall health status and individual and community quality of life. Mental health conditions and overall psychological well-being and safety may be influenced by substance abuse and violence within the home and within the community. Waters (2022) states, “our social health depends on connection to others. And social health supports health” (para. 5). Social health is about how connected you are to people. The Centers for Disease Control and Prevention (2021, June 21) stated that:

mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental illness and mental health are different. Mental illness is clinically diagnosed. (para. 1)

### Social Associations

The number of social associations is a good indicator of the potential for citizen outreach and engagement. Figure 35 shows that Cape Girardeau County is in the 3rd quartile (4<sup>th</sup> is highest rate) and has 102 active organizations in the county for a rate of 12.9 per 10,000 residents (U.S. Census Bureau, 2019).

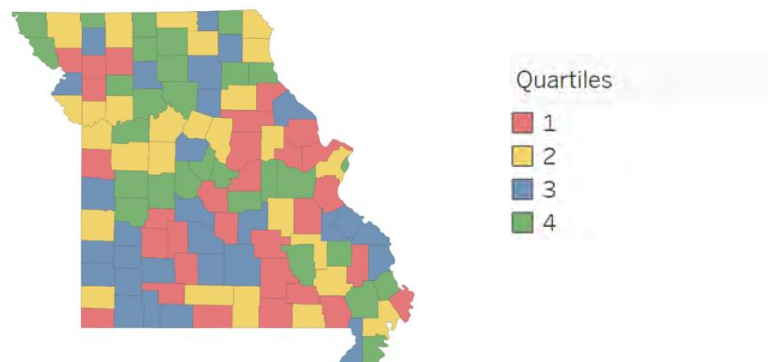


FIGURE 35



### Frequent Poor Mental Distress

Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted) is reported by the County Health Rankings (2022). Figure 36 provides the quartiles of poor mental distress for Missouri by county. The higher the quartile, the more days reported of mental distress. Cape Girardeau County is in the 1<sup>st</sup> quartile and 16% of individuals reported 14 or more days of poor mental health per month.

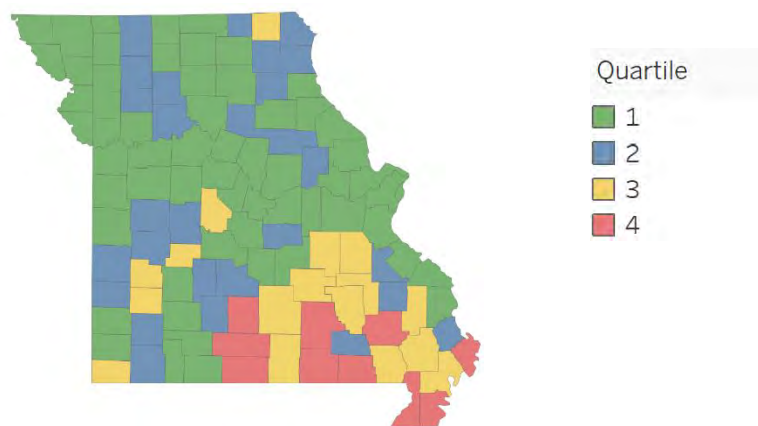


FIGURE 36

### Depression

Depression, as defined by the National Institute of Mental Health (2022), is a serious mood disorder. It is also called major depressive disorder or clinical depression. Symptoms can influence the way you feel, think, and function during the day and can also affect one's sleep, nutrition, and productivity at work. The New Mexico Department of Health (2022) stated that:

Mental health disorders also have a serious impact on physical health and are associated with the prevalence, progression, and outcome of some of today's most pressing chronic diseases, including diabetes, heart disease, and cancer. Mental health disorders can have harmful and long-lasting effects—including high psychosocial and economic costs—not only for people living with the disorder, but also for their families, schools, workplaces, and communities. (para. 3)

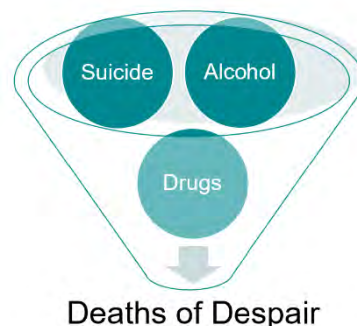
Mental Health America (2022) in 2020 to 2022 used the Patient Health Questionnaire 9 (PHQ-9). This survey asks questions related to interest in doing things, feelings, sleep habits, energy, appetite, personal feelings, concentration, physical movement, and thoughts about hurting yourself (Kroenke et al., 2001).

- 99 per 100,000 people scored severe depression in Missouri
- 115 per 100,000 people scored severe depression in Cape Girardeau County

## Deaths of Despair

All data in this section are exported from the Centers for Disease Control and Prevention (2018-2020) WONDER database. Deaths of despair include deaths from the following:

- Suicide
- Alcohol-related disease
- Drug overdoses



### *Deaths of Despair - Suicide*

The term originated with Princeton economists Anne Case and Angus Deaton who sought to determine the reason for U.S. life expectancies not seen since the early 1990s. The rise was because of these three causes of death (Case & Deaton, 2020).

Suicide is a major public health problem. The American Public Health Association (2021) states that:

This is a major public health concern that impacts individuals, families, and communities. It's a complex issue with multiple contributing factors. So prevention measure must also be multifaceted. The public health approach aims to reduce the factors that increase the likelihood of suicide and uplift those that protect against it. We must work together to reduce stigma and ensure everyone has access to mental health care. (para. 2)

Suicide is a leading cause of death worldwide. In 2019, more than 700,000 people died by suicide, one in every 100 deaths. The highest rates of suicide in 2022 is Lesotho at 72.4 at 100,000 which is a country surrounded by South Africa. The lowest suicide rate is Antigua and Barbuda at .4 per 100,000, which lies between the Caribbean Sea and the Atlantic Ocean (World Population Review, 2022a).

Suicide is a leading cause of death (12<sup>th</sup>) in the United States in ages 1 to 85+ years with 45,979 deaths in 2020. Table 19 provides statistics on suicide (Substance Abuse and Mental Health Administration, 2021).

<b>Table 19. National Suicide Statistics</b>
• 12.2 million American adults thought about suicide
• 3.2 million planned a suicide attempt
• 1.2 million attempted suicide
• 1 suicide occurs every 11 minutes
• Ages 10 to 64 years, suicide was among the top 9 leading causes of death
• Ages 10 to 14 years and 25 to 34 years, suicide was the second leading cause of death

In the State of Missouri, there were 3,496 deaths by suicide from 2018 to 2020 with a state crude rate of 19 per 100,000.

- St. Louis City, Missouri had 14 suicides per 100,000 (1<sup>st</sup> quartile).
- Cass County, Missouri had 27 suicides per 100,000 (4<sup>th</sup> quartile).
- Cape Girardeau County, with 52 suicides, was in the 3<sup>rd</sup> quartile (yellow shading) with 22 suicides per 100,000 population (Figure 37).

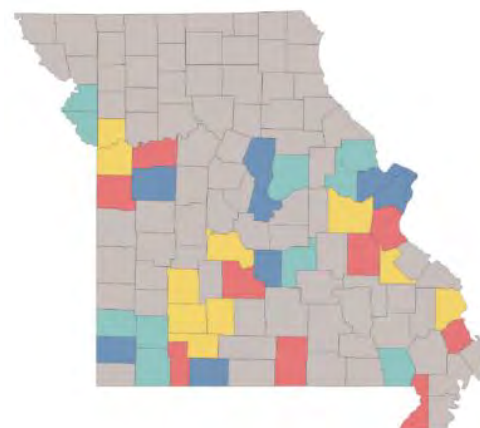


FIGURE 37

The counties shaded gray are either data suppressed counties (i.e., less than 10 counts) or are unreliable counts (i.e., less than 19).

By race, forty-eight of the 52 deaths by suicide were White.

Current suicide data provides the ability to examine mechanisms for suicide (e.g., cut/pierce, drowning, firearm, poisoning). For Cape Girardeau County, two mechanisms were reported with raw data. There were 33 deaths by suicide from firearms and 12 deaths by suicide from suffocation. Other death mechanisms were suppressed.



### *Deaths of Despair - Alcohol-Related Disease Deaths*

Only 18 counties had values represented (Table 20). Counties with less than 19 values are either suppressed or unreliable. These deaths, using data from 2018 to 2020, are coded as X45, X65 and Y15 under the ICD-9 Codes (International Classification of Disease and Death). Values in Missouri ranged from 1.2 persons per 100,000 (Jackson County) to 19.1 per 100,000 (St. Louis City). Cape Girardeau County values were unreliable (less than 19) for alcohol-related disease deaths.

**Table 20. Crude Rates of Alcohol-Related Disease Deaths**

<b>County</b>	<b>Crude Rate per 100,000</b>	<b>County</b>	<b>Crude Rate per 100,000</b>	<b>County</b>	<b>Crude Rate per 100,000</b>
<i>St. Louis City</i>	19.1	Platte	13.1	Jasper	8.3
<i>Camden</i>	18.8	Cole	11.3	Cass	8.2
<i>Greene</i>	17.6	Jefferson	10.8	St. Charles	8
<i>Butler</i>	15.7	Clay	10.3	St. Louis	7.8
<i>Christian</i>	14.3	Franklin	9	Boone	6.6
<i>Jackson</i>	14.3	Buchanan	8.4	Jackson	1.2

### *Deaths of Despair - Drug Overdoses*

Unintentional drug poisoning (overdoses) employed ICD-9 Codes X40-X44 for years 2018 to 2020. These codes include noxious substances; nonopioid analgesics, antipyretics and antirheumatics, antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified; narcotics and psychodysleptics [hallucinogens], not elsewhere classified; other drugs acting on the autonomic nervous system; other and unspecified drugs, medicaments and biological substances.

Figure 38 shows the counties that provide data (i.e., are not suppressed). Cape Girardeau County has a crude rate of 21 per 100,000. The highest geographic area is St. Louis City with 83 overdoses per 100,000. The lowest is Platte County with 12 per 100,000 population.

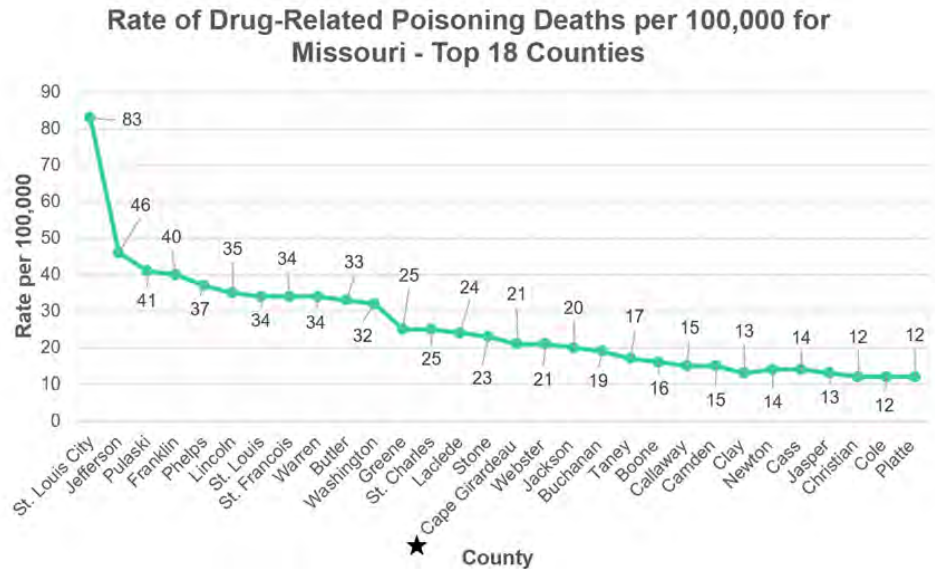


FIGURE 38

## Crime

### Offenses

The 2021 crime rate for Missouri is 36 per 1,000 residents with 224,668 offenses. (Missouri State Highway Patrol, 2022a). Figure 39 shows the quartiles for crime rates by county. Counties not shaded have missing data. The yellow and red counties have the highest crimes rates. Cape Girardeau County has a crime rate of 33 per 1,000 residents (with 2,653 offenses) and is in the 4th quartile (highest crime).

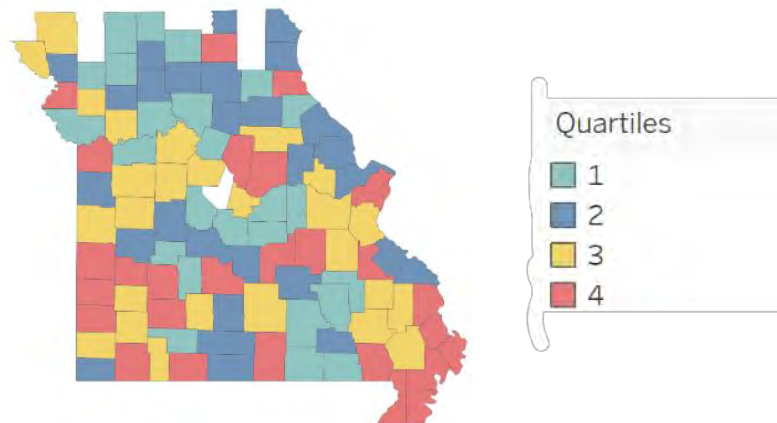


FIGURE 39

Related to offenses against people in 2021, in Figure 40, Cape Girardeau County was highest in simple assault (795 per 100,000) and aggravated assault (342 per 100,000).

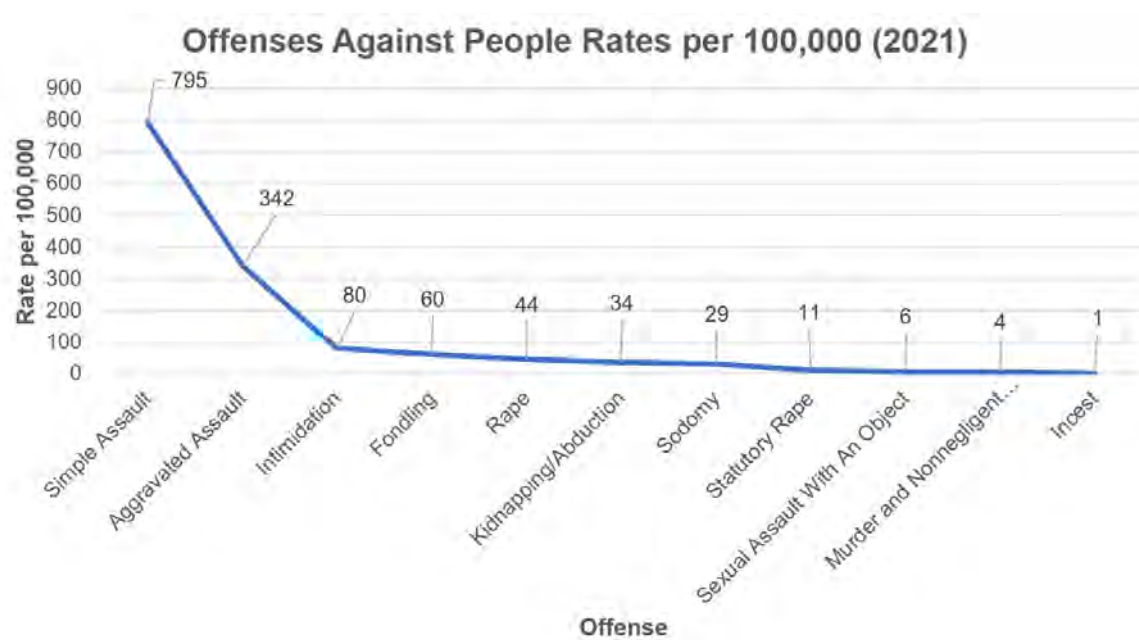


FIGURE 40

Crimes against society (Figure 41) were reported as 1,199 per 100,000 for the county. Drug/narcotic violations (593 per 100,000), weapon law violations (308 per 100,000), and drug equipment violations (257 per 100,000) were highest. Figure 42 illustrates the crimes against property (3,184 per 100,000) in the county (2021). Destruction of property (730 per 100,000), larceny (655 per 100,000), and theft from a motor vehicle (318 per 100,000) had high rates compared to other offenses. Figure 43 provides the offense type by age cohort (i.e., under 18 and over 18 years). Simple assault was the highest rates for all age groups.

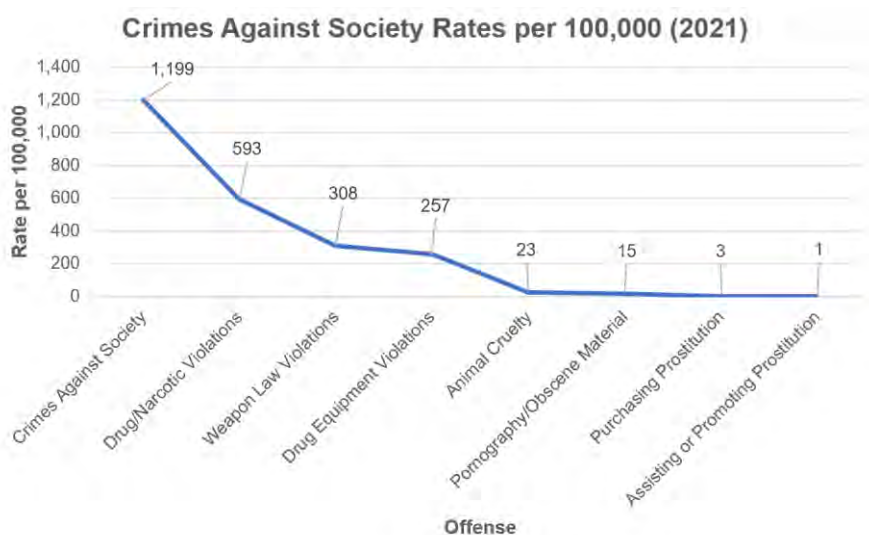


FIGURE 41



FIGURE 42



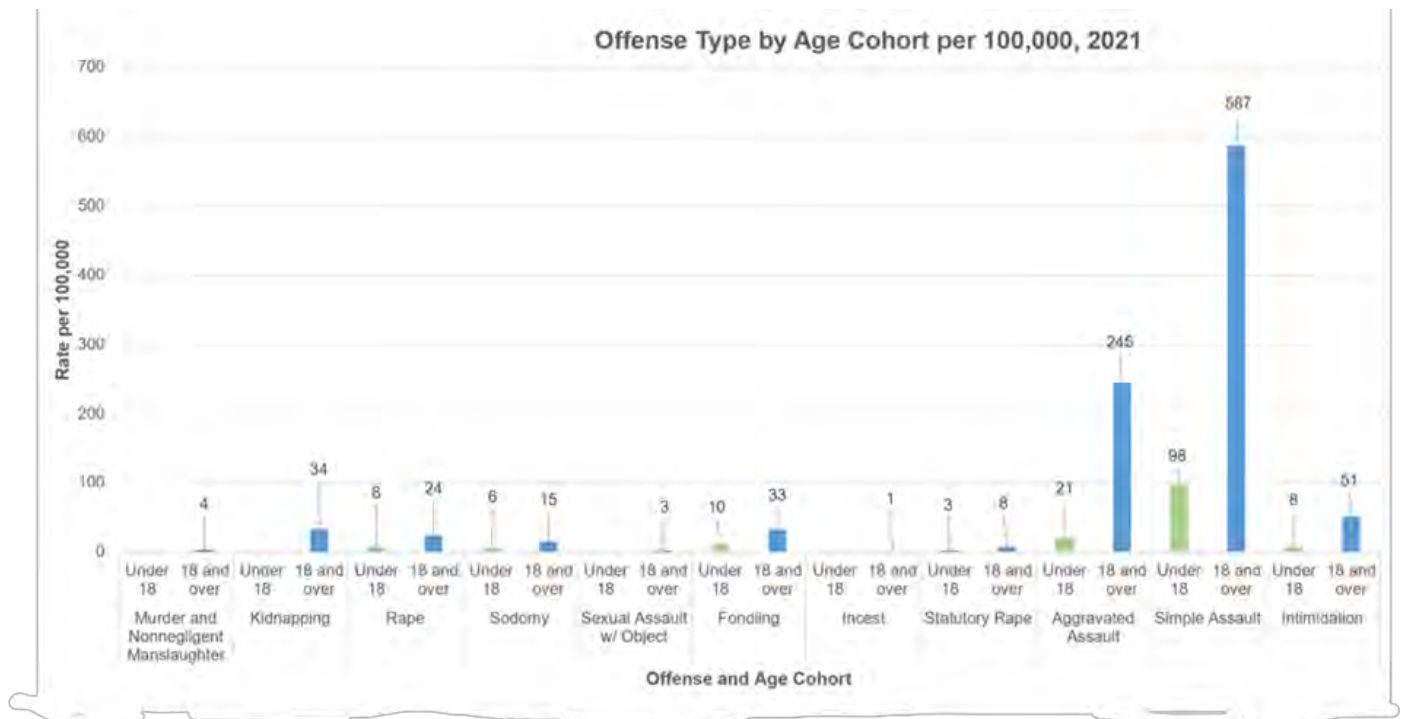


FIGURE 43

Data related to alcohol and drugs were provided by the Missouri Courts online repository of 2021 drug and alcohol charges filed and disposed (Missouri Courts, 2022). For Cape Girardeau County in 2021, there were 117 court cases involving alcohol and drugs. Fifty-six percent were held in associate court, while 43% were held in circuit court.

- 43% related to alcohol
- 56% related to drugs

For Table 21, delivery and/or possession of controlled substances, driving while Intoxicated (DWI), endangering the welfare of a child, trafficking drugs, possession of paraphernalia, use of weapons were the top crimes for Cape Girardeau County (2021). Those offenses totaled 61% of all 117 offenses.

**Table 21. Missouri Judiciary Criminal System – Alcohol and Drug Related Charges (Filed and Disposed) 2021**

<b>Offense</b>	<b>Frequency</b>	<b>Percent</b>	<b>Offense</b>	<b>Frequency</b>	<b>Percent</b>
Delivery Or Possession Of A Controlled Substance At County/Private Jail/Correctional Center Except With Prescription	4	3.4	Purchase/Attempt To Purchase Or Possession Of Liquor By Minor - 1st Offense	3	2.6
Delivery Of 35 Grams Or Less Of Marijuana Or Synthetic Cannabinoid	4	3.4	Unlawful Use Of Weapon - Subsection 5 - While Intoxicated - Loaded Weapon	3	2.6
Delivery Of Controlled Substance Except 35 Grams Or Less Of Marijuana Or Synthetic Cannabinoid	4	3.4	Delivery Of 35 Grams Or Less Of Marijuana Or Synthetic Cannabinoid - Person Less Than 17 Years of Age and 2 Years Younger	2	1.7
DWI	4	3.4	Delivery Or Possession Of Alcohol Or Spirituous Or Malt Liquor At A County/Private Jail Or Correctional Facility	2	1.7
DWI - Aggravated	4	3.4	DWI - Alcohol	2	1.7
DWI - Habitual	4	3.4	DWI - Chronic	2	1.7
DWI - Persistent	4	3.4	DWI - Person Less Than 17 Years of Age In Vehicle	2	1.7
DWI - Physical Injury	4	3.4	DWI - Serious Physical Injury	2	1.7
DWI - Prior	4	3.4	Failure To Comply With Ignition Interlock Device Requirements	2	1.7
Endangering The Welfare Of A Child Involving Drugs- 1st Degree - 1st Offense	4	3.4	Manufacture Of 35 Grams Or Less Marijuana/Synthetic Cannabinoid	2	1.7
Possession Of Controlled Substance Except 35 Grams Or Less Of Marijuana/Synthetic Cannabinoid	4	3.4	Manufacture Of A Controlled Substance - Except 35 Grams Or Less Marijuana/Synthetic Cannabinoid	2	1.7
Possession Of Marijuana/Synthetic Cannabinoid Of 10 Grams Or Less	4	3.4	Minor Visibly Intoxicated/Blood Alcohol Content More Than .02% - 1st Offense	2	1.7
Possession Of Marijuana/Synthetic Cannabinoid Of 10 Grams Or Less - Prior Drug Offense	4	3.4	Stealing - Controlled Substance/Meth Manufacturing Material	2	1.7
Possession Of Marijuana/Synthetic Cannabinoid Of 11-35 Grams	4	3.4	Supplying Liquor To A Minor Or Intoxicated Person	2	1.7
Trafficking Drugs - 2nd Degree	4	3.4	Unlawful Possession Of Drug Paraphernalia - Amphetamine Or Methamphetamine	2	1.7
Unlawful Possession Of Drug Paraphernalia	4	3.4	Take Or Attempt To Take Wildlife With Illegal Firearm, Ammunition Or Method On Department Area	1	0.9
Unlawful Possession Of Drug Paraphernalia - Prior Drug Offense	4	3.4	Bac - Habitual Offender	1	0.9
Unlawful Use Of Weapon - Subsection 11 - Possess Weapon	4	3.4	Possession Of An Imitation Controlled Substance	1	0.9
And A Felony Controlled Substance Consumption Of Alcoholic Beverage While Driving	3	2.6	Possession Of Controlled Substance Except 35 Grams Or Less Of Marijuana	1	0.9
Delivery of a Controlled Substance Except 35 Grams Or Less Of Marijuana/Synthetic Cannabinoid – Person less Than 17 Years of Age & 2 Years Younger	3	2.6	Trafficking Drugs Or Attempt- 1st Degree-Over Statutory Amount	1	0.9

## Crime by City

Table 22 provides the data for crimes reported and cleared by the Cape Girardeau County Sheriff's Department, Cape Girardeau's Police Department, Southeast Missouri State University Police (SEMO), Jackson Police Department (Federal Bureau of Investigation, 2022). Spark lines are provided to show the trends from 2010 to 2020.

**Table 22. Sparklines in Cape Girardeau County Law Enforcement for Violent and Property Crimes, 2010 to 2020**

Year	Cape Girardeau Sheriff Violent Crimes	Cape Girardeau Sheriff Property Crimes	Cape Girardeau Police Department Violent Crimes	Cape Girardeau Police Department Property Crimes	SEMO Violent Crimes	SEMO Property Crimes	Jackson Police Department Violent Crimes	Jackson Police Department Property Crimes
2010	50	197	117	1937	0	31	2	283
2011	0	215	139	1959	2	45	4	272
2012	1	274	102	1957	1	34	1	272
2013	10	180	147	1505	0	44	2	212
2014	8	214	135	1356	1	29	4	183
2015	17	240	141	1367	1	25	1	219
2016	11	150	140	1139	5	34	5	176
2017	11	169	154	1121	2	67	2	145
2018	10	176	132	1197	6	44	1	125
2019	13	148	174	1181	0	22	3	173
2020	43	168	270	1070	1	23	20	208
Sparklines								

### Intimate, Family, and Non-Intimate Violence

Domestic violence is a public health problem. It is also called intimate partner violence, battery, or spousal abuse. In Figure 44, the state rates are slightly above the county rates. Figure 45 provides the number of incidents by offense and victim to offender relationship for the county. Murder, kidnapping, rape, sodomy, sexual assault with an object, fondling, human trafficking sex and labor, extortion, and robbery were not included because of extremely low rates. Rates slightly higher than state rates are Cape Girardeau County intimate and family simple assault and rates above the state rate are Cape Girardeau County intimate aggravated assault (Missouri State Highway Patrol, 2022a).

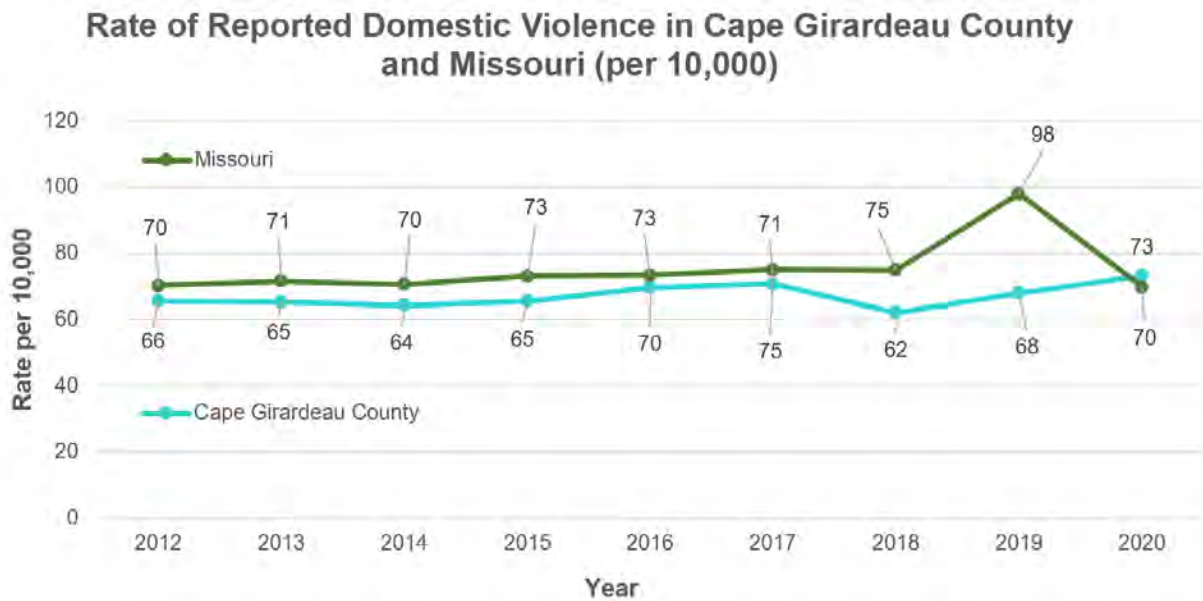


FIGURE 44

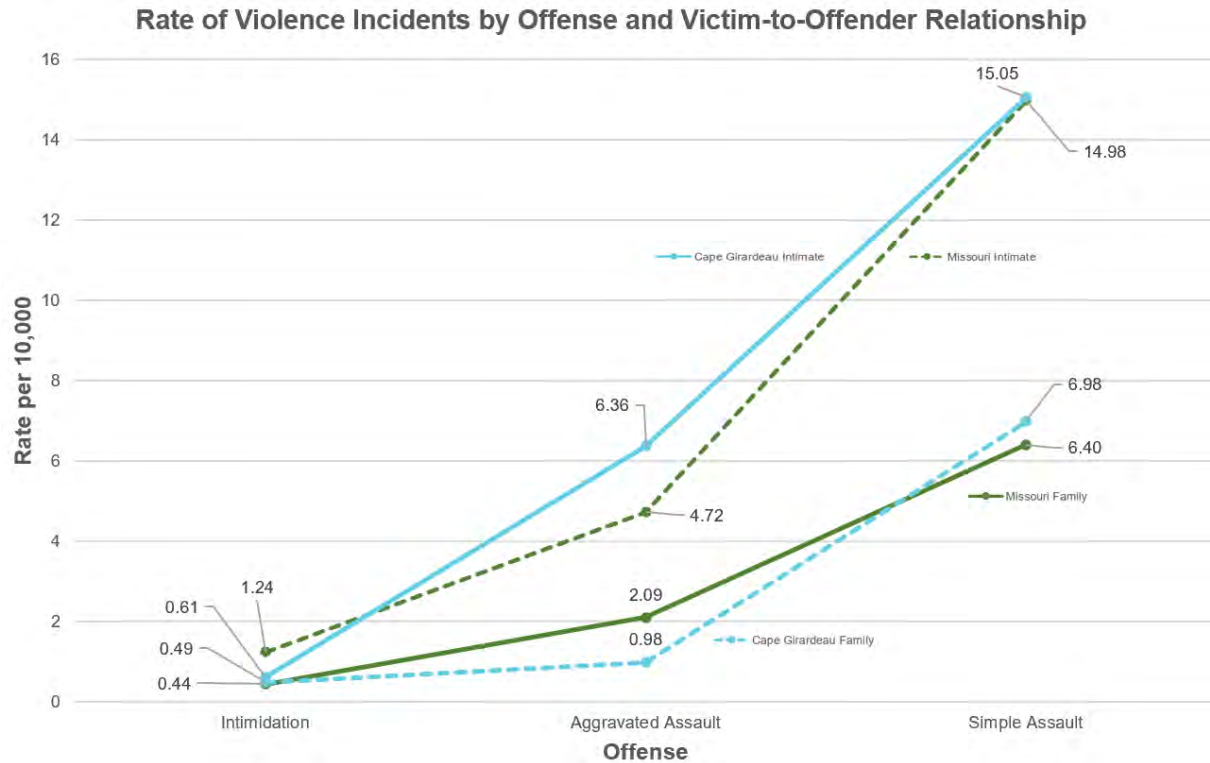


FIGURE 45

## Maternal and Child Health

Ngũgĩ wa Thiong’o stated that “the condition of women in a nation is the real measure of its progress” (Ngũgĩ wa Thiong’o, 2006).

One of the most significant areas for monitoring and comparison relates to the health of vulnerable populations: infants and children. This category focuses on birth data and outcomes as well as mortality data for infants and children. Because maternal care is correlated with birth outcomes, measures of maternal access to, and/or utilization of, care is included. Births to teen mothers are a critical indicator of increased risk for both mother and child.

For Cape Girardeau County, Missouri, the crude birth rate (number of live births divided by the total population) has declined in the last decade from 11.93 per 1,000 residents to 11.10 per 1,000 residents (Figure 46). The data in this section are from the Missouri Department of Health and Human Services (2022), World Population Review (2022b), U.S. Census Bureau (2022e).

### Crude Birth Rate per 1,000

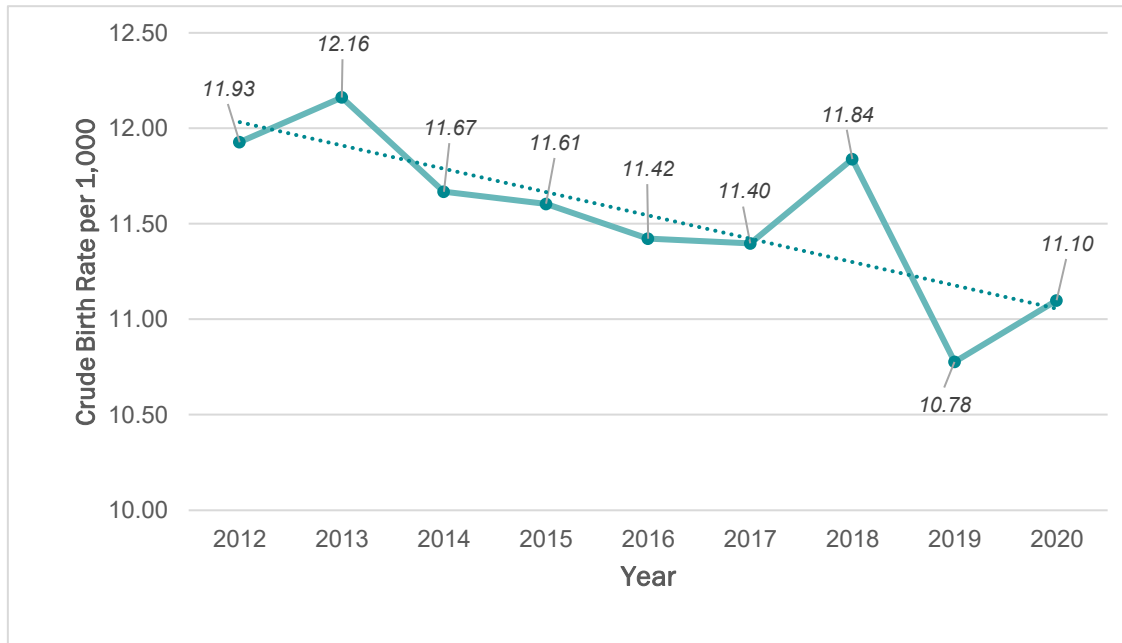


FIGURE 46

Table 24 relates to pregnancy rates and live births by age cohort. Fertility rate is the number of live births born to mothers of a given age per 1,000 females of that age group for a given year. In 2020, there were

- 911 deliveries
- 907 live births
- 4 fetal deaths.

For the county, there were 54 pregnancies per 1,000 and 53 live births per 1,000. The highest rates of pregnancies and live births are in the age cohort of 20 to 34 years (Missouri Department of Health and Human Services, 2022).

Figure 47 presents live births by race and ethnicity.

Figure 48 illustrates some of the characteristics about prenatal care in Cape Girardeau county. Variable values are ordered from low to high on the trend line. Inadequate prenatal care is a concern (76%) for women of all races and ethnicities. Black women

are receiving services with Medicaid but are not accessing nutritional services (19%). Hispanic women rate high in inadequate prenatal care (60%). White women are accessing prenatal care in the first trimester than other races/ethnicities.

In Figure 49, overweight (20% +) is a concern for almost 50 to 60 per 100 women across race and ethnicity (except Asian/NHOPI). Obesity (BMI 30 +) is experienced by women (30 to almost 40 per 100) across races and ethnicities (except Asian/NHOPI).

For Figure 50, preterm gestation (less than 37 weeks) was more prevalent in the Asian/NHOPI population (23 per 100), followed by Black (13 per 100). A small weight for gestational age for the baby was noted as a greater prevalence for Asian/NHOPI (19 per 1,000) and Black women (15 per 100). Figure 51 shows that 67 out of 100 women of other race and 43 per 100 Hispanic women have less than 12 years of education.

Figure 52 shows the marital status of women at time of the child's birth. Sixty percent of women at time of giving birth are married. There is substantial research on the outcomes of single-parent homes and child well-being. The Annie E. Casey Foundation (2022) stated that, "Kids from single-parent families are more likely to face emotional and behavioral health challenges – like aggression or engaging in high-risk behaviors – when compared to peers raised by married parents. ...parental stress, lost social networks, witnessing conflict, moving homes, and socioeconomic hurdles are examples of the challenges" (para. 19). Children experiencing Adverse Childhood Experiences (ACES) can have long-term traumatic effects. However, six protective factors (e.g., meeting basic needs, affection, positive relationships, positive coping skills, social connections, and respectful communication) can form the foundation for a thriving and successful home. Research has shown that one caring adult can make a difference in the life of a child, whether that be the parent(s), coaches, teachers, or neighbors (Prevent Child Abuse, n.d.; Murphey, Bandy, Schnitz, & Moore, 2013).

Races were somewhat even with respect to smoking during pregnancy (Figure 53).



**Table 24. Pregnancy Rates and Live Birth Rates by Age Cohort (2020)**

Age	Pregnancy Rate per 1,000	Live Birth Rate per 1,000
10 - 14	0.42	0.42
15 - 19	16	16
20 - 34	82	82
35 - 44	21	21
45 - 64	0.00	0.00
<b>Total</b>	<b>54</b>	<b>53</b>

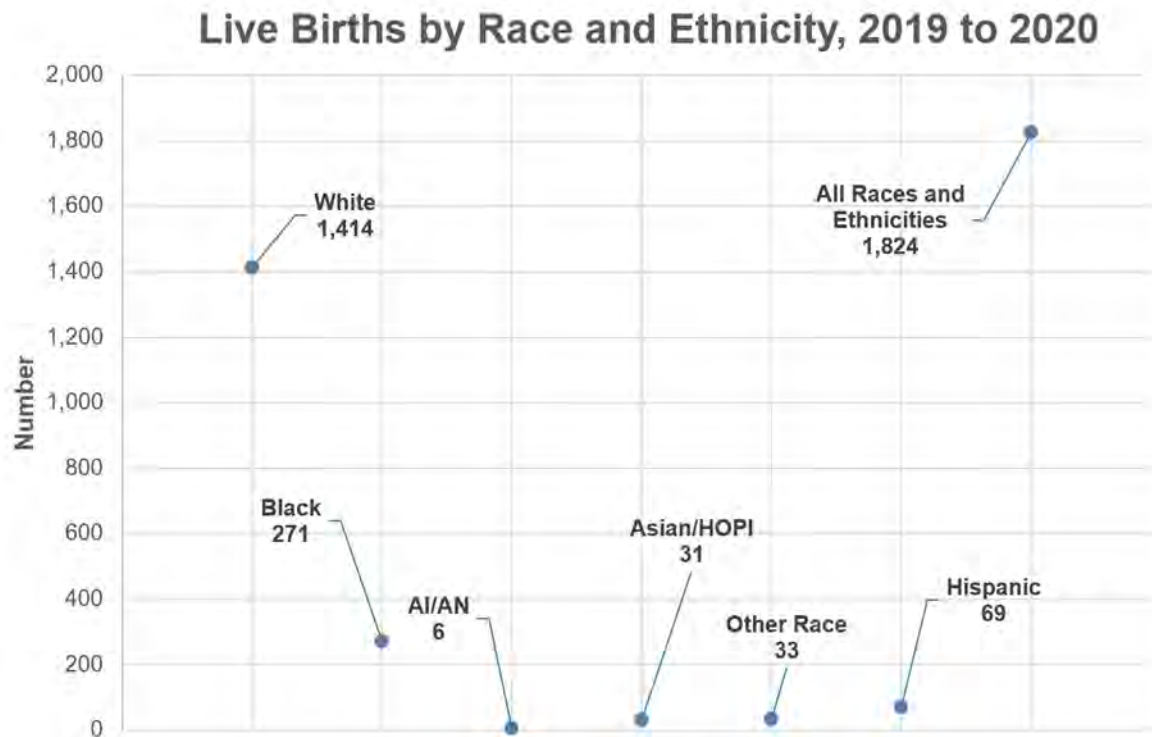


FIGURE 47

Women's Prenatal Characteristics (per 100)

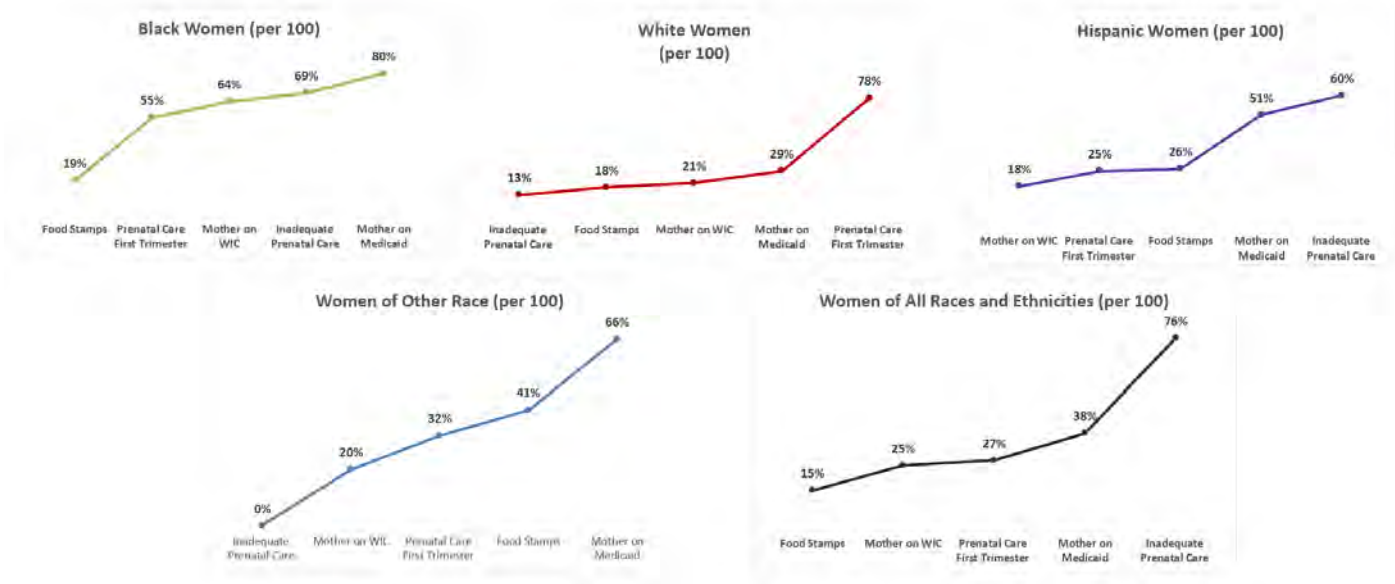


FIGURE 48

Mother's Weight and BMI Status by Race/Ethnicity, 2019 to 2020 (per 100)

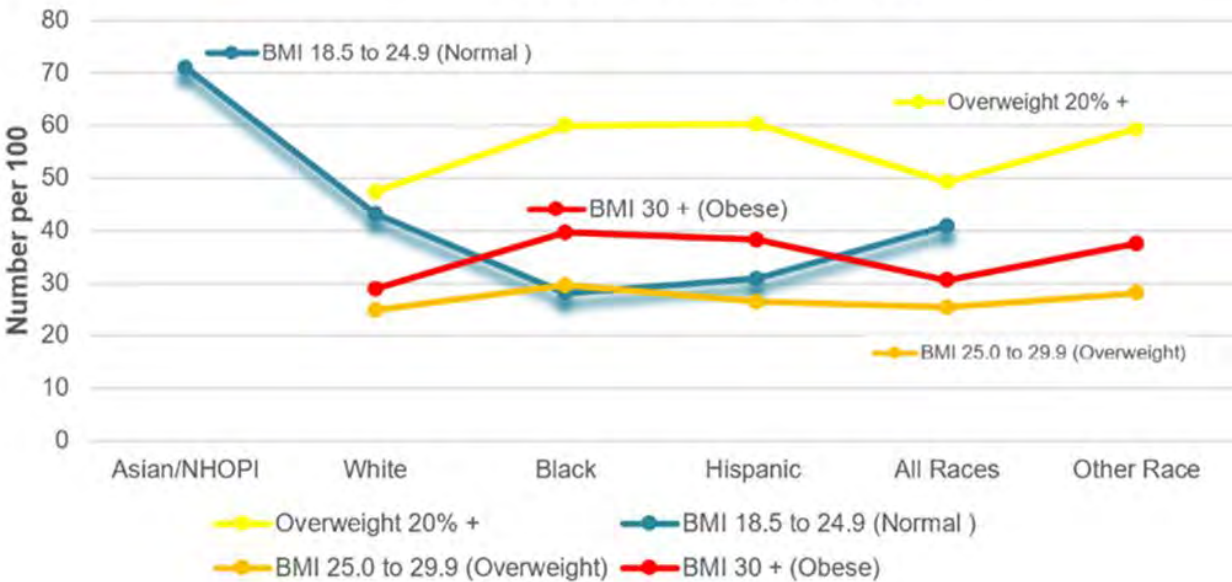


FIGURE 49

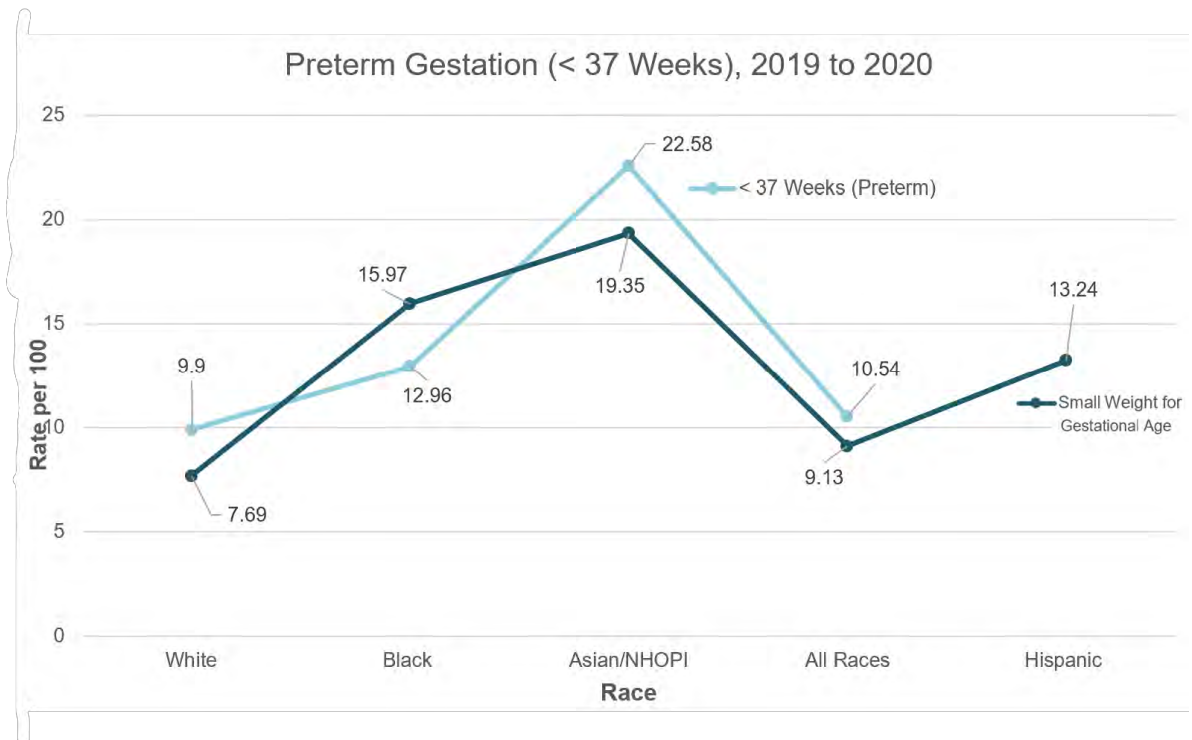


FIGURE 50

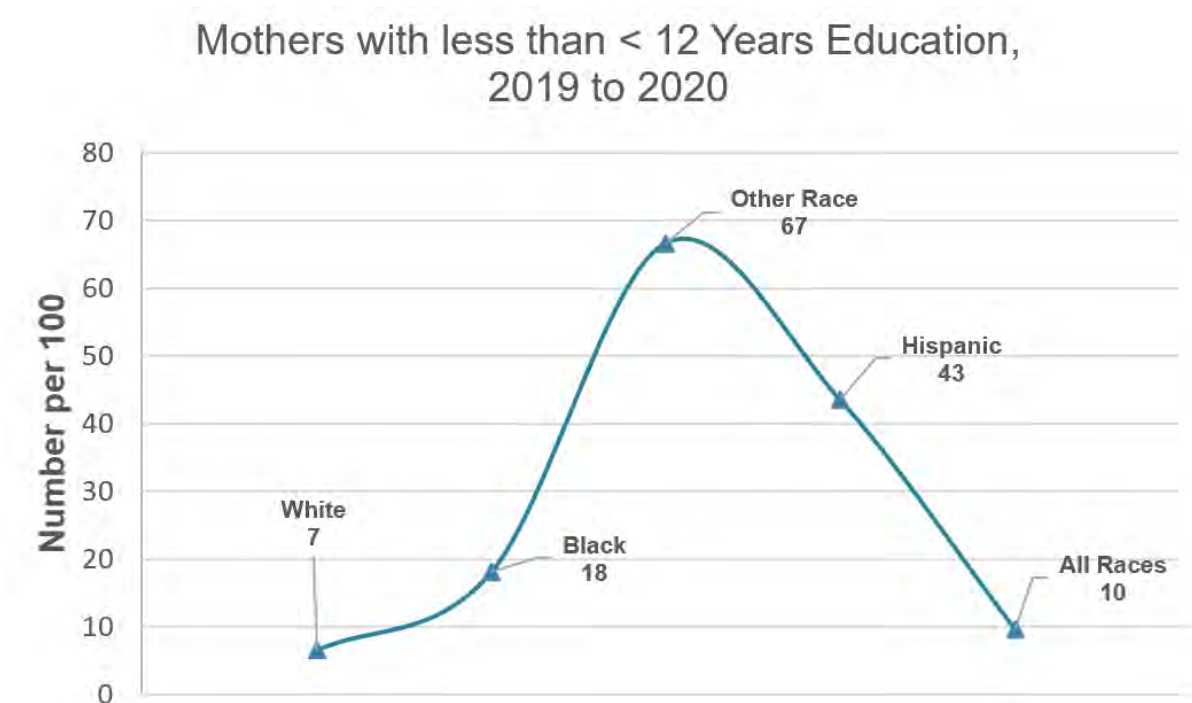


FIGURE 51

## 60% of Women Giving Birth are Married

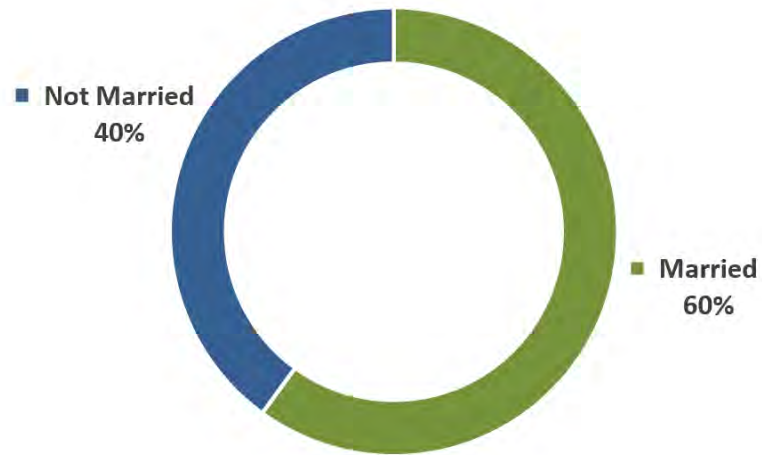


FIGURE 53

## Women who Smoked During Pregnancy (per 100) 2019 to 2020

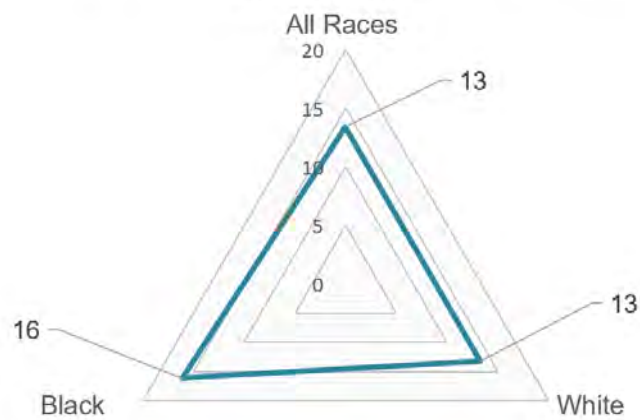


FIGURE 52

## Teen Births

Birth to teen mothers can be a trauma producing event and can lead to serious health and social outcomes for the mother and child. Teen pregnancy disrupts education, social development, and increases physical stress. Teen births is the number of births to females ages 15-19 per 1,000 females in a county. Missouri has a teen birth rate of 23 per 1,000, while Cape Girardeau County (Figure 54) has a rate of 17 per 1,000 which places it in Quartile 1 (National Center for Health Statistics, 2022).

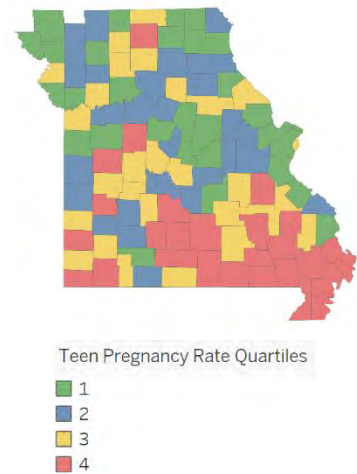


FIGURE 54

## Infant and Child Mortality

Infant (less than 1 year) and child mortality (less than 18) has serious consequences for individuals, families, and society. Of note, there has been a 23% reduction in overall child fatalities in Missouri over the last 20 years. When an infant or child dies, this is a loss of years of potential. Missouri has an infant mortality rate of 6 per 1,000 live births (2014 to 2020) and a child mortality of 57 per 100,000 (2017 to 2020). Cape Girardeau County, in the third quartile, has an infant mortality rate of 7 per 1,000 (Figure 55) and a child mortality rate (in the third quartile) of 70 per 100,000 (Figure 56) population (National Center for Health Statistics, 2022). In 2020, for example, there were 408 deaths with indicators for review by the Child Fatality Review Program. The reasons for death were found to be Natural (Sudden Infant Death Syndrome), Natural, Unintentional, Injury (homicide), Injury (suicide), Injury (undetermined), and Undetermined (Missouri Department of Social Services State Technical Assistance Team, 2022).

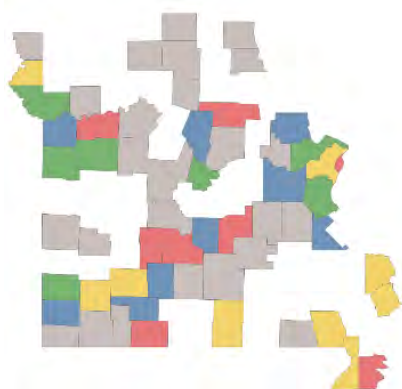


FIGURE 55

### Infant Death Quartiles

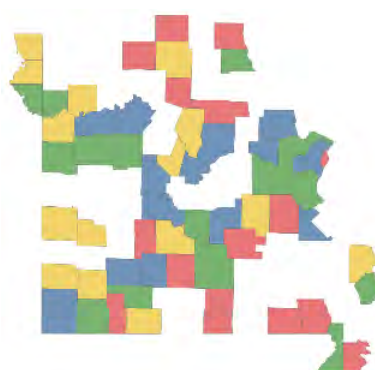
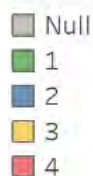


FIGURE 56

### Child Death Quartiles



## Single-Parent Household

The U.S. Census Bureau (2022) reported that in the United States, 25% of children live in single-parent homes. In the state of Missouri, over 25% of children (i.e., 338,267 children out of 1,372,817 children in households) live in a single-parent household. As shown in Figure 57, Cape Girardeau County, with 16,693 children in households, is in the third quartile with 22% of children in single-parent households (N = 3,653). For comparison, Osage County, Missouri and St. Louis City, Missouri have just over 10%



(minimum) and 48% (maximum) of children living in a single-parent household, respectively (2016-2020).

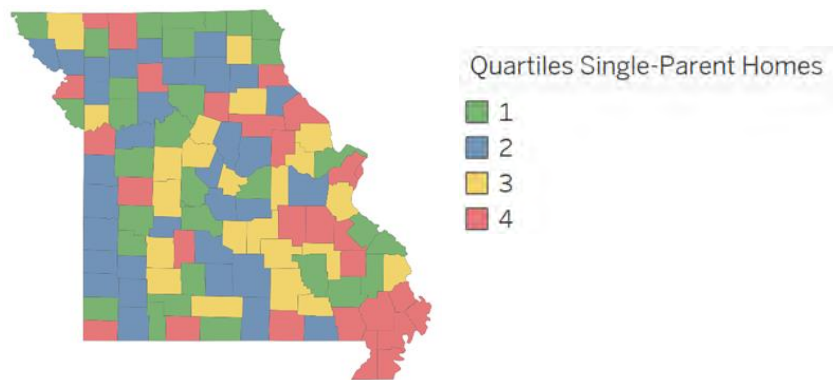


FIGURE 57

## Homelessness

Homelessness has tragic outcomes for children. Nationally, between 2012 and 2013, homelessness grew by 8% among children. Each year, an estimated 4.2 million youth and young adults experience homelessness in the United States. As of January 2019-2020, in Missouri (Missouri Department of Elementary and Secondary Education, 2022) there were 34,942 enrolled homeless students. Other characteristics include:

- 2,072 were in shelters
- 29,965 were doubled up
- 812 were unsheltered
- 2,093 were living in hotels/motels

This experience can be traumatic, dangerous, and lead to dropping out of school (Substance Abuse and Mental Health Administration, 2022). According to data from the Missouri Department of Elementary and Secondary Education (2022), there are 296 homeless students in Cape Girardeau County Schools in a 2019 to 2020 census (Table 25).

**Table 25. Homelessness Count and Percentage by Cape Girardeau County Cities, Missouri School District (2019 to 2020)**

<b>School District</b>	<b>Count</b>
<i>Delta R-V</i>	13
<i>Jackson</i>	154
<i>Cape Girardeau School District</i>	129
<i>Delta C-7</i>	0
<i>Total</i>	296

#### Disconnected Youth, Reading and Math Scores, Percentage in Free or Reduced Lunch

Students possess risk factor for poor health outcomes and future success, such as connectedness, reading and math scores, and enrolled percentage in a free or reduced lunch program. Disconnectedness is defined as a percentage of teens and young adults ages 16-19 who are neither working nor in school (2016 to 2020). Reading score is defined as the average grade level performance for 3rd graders on English Language Arts standardized tests (2018). Math score is termed the average grade level performance for 3rd graders on math standardized tests (Fahle et al., 2018).

Feeling a connection to the community and peer groups is necessary for a student to feel supported and increases the likelihood of prosocial behavior. Reading and math scores establish a foundation for learning and increase confidence Reading is a skill used across curriculum areas. Math skills increase critical thinking and fosters the ability to solve problems through numbers and symbols. In Table 26, the county is lower than the state percentage on disconnected youth, and on grade with reading scores. They are above the percentage enrolled in free or reduced lunch (County Health Rankings, 2022).

**Table 26. Characteristics of Youth in Cape Girardeau County, Missouri**

<b>Geography</b>	<b>Percentage Disconnected Youth</b>	<b>Reading Scores</b>	<b>Math Scores</b>	<b>% Enrolled in Free or Reduced Lunch</b>
<i>Cape Girardeau County</i>	5	3	3	63
<i>Missouri</i>	7	3	3	50

## Youth Mental Health and Substance Misuse (6<sup>th</sup> through 12<sup>th</sup> Graders)

Youth experience with alcohol can begin at a very early age. Tables 27, 28, 29, and 30 provide details on substances, use, and perception (Missouri Department of Mental Health, 2022). Concerning values are shaded red.

**Table 27. Missouri Student Survey (2022) Used Substances in the Past 30 Days**

<i>Approximate Sample Size</i>	<b>2022 County Data 72</b>	<b>2022 MO Data 1804</b>	<b>2020 County Data 357</b>
<i>Used tobacco (cigarettes or chew)</i>	0%	3%	3%
<i>Used electronic cigarettes</i>	1%	11%	20%
<i>Used hookahs or water pipes</i>	0%	1%	1%
<i>Used alcohol</i>	3%	15%	19%
<i>Used marijuana</i>	1%	8%	3%
<i>Used inhalants</i>	0%	1%	1%
<i>Used Rx not prescribed for you by a doctor</i>	1%	1%	6%
<i>Used `OTC` to get high</i>	1%	1%	1%
<i>Used synthetic drugs</i>	0%	1%	.3%

**Table 28. Missouri Student Survey: Behaviors in the Last 30 Days**

<i>Behavior</i>	<b>Cape Girardeau County (N = 72)</b>	<b>Missouri (N = 1804)</b>	<b>2020 County Data (N = 357)</b>
<i>Used cocaine or `crack`</i>	0%	0%	0%
<i>Used heroin or `smack`</i>	0%	0%	0%
<i>Used hallucinogens such as LSD, PCP, or magic mushrooms</i>	0%	1%	1%
<i>Used methamphetamine (meth, crank, crystal, ice)</i>	0%	0%	0%
<i>Used `club drugs` such as ecstasy</i>	0%	0%	0%
<b><u>Behavior: Last 30 Days (% reflects "1+" answer)</u></b>			
<i>Missed whole day(s) of school because you skipped or cut</i>	38%	34%	22%
<i>Did not go to school because you felt you would be unsafe at school or on your way to or from school</i>	3%	10%	4%
<i>Rode with someone who was drinking alcohol</i>	40%	15%	31%
<b><u>Behavior: Last 3 Months (% reflects "1+" answer)</u></b>			
<i>Spread mean rumors or lies about other kids at school</i>	6%	14%	39%
<i>Posted online or sent text that might embarrass/hurt another student</i>	6%	17%	19%
<i>Made fun of other people</i>	50%	44%	63%
<i>Hit, shoved, pushed another student and were not just fooling around</i>	7%	14%	12%
<b><u>Behavior: Last 12 Months (% reflects "1+" answer)</u></b>			
<i>Were in a physical fight</i>	10%	18%	14%
<i>Been threatened or injured with a weapon on school property</i>	1%	8%	3%
<i>Seriously considered suicide</i>	3%	11%	8%
<i>Planned suicide</i>	2%	8%	6%
<i>Attempted suicide</i>	1%	4%	2%
<b><u>Depression Scale (% often or always in Past Month)</u></b>			
<i>Were very sad</i>	45%	28%	27%
<i>Were grouchy or irritable, or in a bad mood</i>	18%	36%	38%
<i>Felt hopeless about the future</i>	8%	16%	15%
<i>Felt like not eating or eating more than usual</i>	14%	24%	21%
<i>Felt like sleeping a lot more or a lot less than usual</i>	47%	38%	30%
<i>Had difficulty concentrating on school work</i>	47%	37%	28%

**Table 29. Missouri Student Survey: Perceptions**

<b><u>Parents' Perception of wrongness (% reflects wrong + very wrong)</u></b>			
<b>Perception</b>	<b>Cape Girardeau County (N = 72)</b>	<b>Missouri (N = 1804)</b>	<b>2020 County Data (N = 357)</b>
<b>Parents feel it would be "wrong" or "very wrong to...</b>			
smoke tobacco	97%	94%	95%
take one or two drinks of an alcoholic beverage nearly every day	95%	95%	92%
smoke marijuana once or twice a week	98%	93%	96%
use Rx drugs that have not been prescribed to you	99%	97%	96%
<b><u>Friends' perception of wrongness (% reflects wrong + very wrong)</u></b>			
<b>Friends feel it would be "wrong" or "very wrong to...</b>			
smoke cigarettes	94%	81%	85%
take one or two drinks of an alcoholic beverage nearly every day	90%	76%	73%
smoke marijuana	93%	71%	74%
use RX drugs not been prescribed to you	97%	90%	91%
<b><u>Perception of Availability (% very easy + sort of easy)</u></b>			
'Very' or 'sort of easy' to get cigarettes	44%	35%	42%
'Very' or 'sort of easy' to get e-cigarettes	11%	46%	40%
'Very' or 'sort of easy' to get alcohol	48%	51%	55%
'Very' or 'sort of easy' to get marijuana	38%	34%	27%
'Very' or 'sort of easy' to get RX drugs that have not been	7%	20%	17%
<b><u>Friends' perception of coolness (% reflects pretty cool + very cool)</u></b>			
Peers believe someone your age would be 'pretty cool' or 'very cool' if they smoked cigarettes	3%	71.0%	6%
Peers believe someone your age would be 'pretty cool' or 'very cool' if they used e-cigs, mods, or vapes	5%	15.0%	21%
Peers believe someone your age would be 'pretty cool' or 'very cool' if they drank alcohol	36%	20%	29%
Peers believe someone your age would be 'pretty cool' or 'very cool' if they smoked marijuana	36%	17%	24%

**Table 30. Perception of Harm (% reflects slight risk + no risk at all)**

	Cape Girardeau County (N = 72)	Missouri (N = 1804)	2020 County Data (N = 357)
<i>used e-cigarettes</i>	45	33	35
<i>smoke one or more packs of cigarettes /day</i>	11	18	22
<i>drink alcohol (no dosage specified)</i>	49	45	53
<i>take one or two drinks of an alcoholic beverage nearly every day</i>	52	32	43
<i>have 5+ drinks, once or twice a week</i>	46	22	25
<i>smoke marijuana once or twice a week</i>	46	40	31
<i>use any other illegal drugs or club drugs</i>	8	10	7
<i>use synthetic drugs</i>	10	16	13
<i>use Cold/ Cough Medicines or OTC medicines to get high</i>	11	22	21
<i>use Rx drugs that have not been prescribed to them</i>	7	11	12



# Death, Illness, and Injury

Health status in a community is measured in terms of mortality (rates of death within a population) and morbidity (rates of the incidence and prevalence of disease). Mortality may be represented by crude rates or age-adjusted rates (AAM); by degree of premature death (Years of Productive Life Lost or YPLL); and by cause (disease - cancer and non-cancer or injury - intentional, unintentional). Morbidity may be represented by age-adjusted (AA) incidence of cancer and chronic disease.

## Overall Health Factors and Health Outcomes

The County Health Rankings (2022) provides data that describes counties according to grouped variables, such as health factors and health outcomes. Figure 58 defines the variables involved in measuring health factors, such as health behaviors, clinical care, social and economic factors and physical environment (13 variables used in ranking).<sup>3</sup> Health Outcomes use variables to describe length of life and quality of life (5 variables used in ranking).<sup>4</sup>

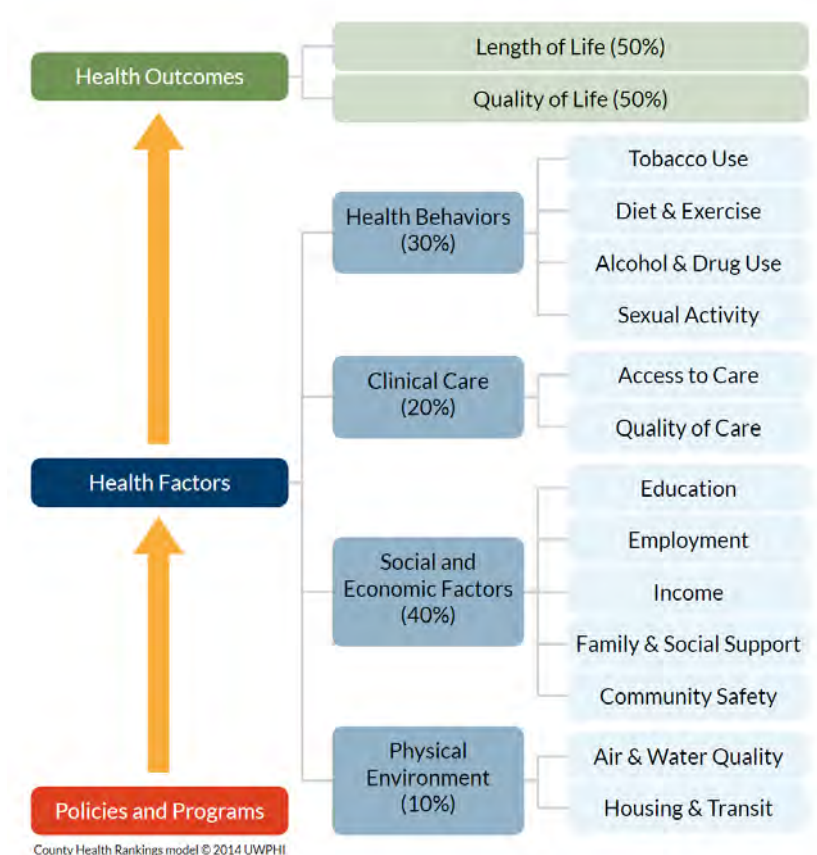


FIGURE 58

<sup>3</sup> Health Factors variables are tobacco use, diet and exercise, alcohol and drug use, sexual activity, access to care, quality of care, education, employment, income, family and social support, community safety, air and water quality, and housing and transit.

<sup>4</sup> Health Outcomes variables are length of life (e.g., premature death, COVID-19 Age-Adjusted Mortality, life expectancy, premature Age-Adjusted Mortality, child mortality, and infant mortality). Only premature death is included in rank. Quality of life includes poor or fair health, poor physical health days, poor mental health days, low birth weight, frequent physical distress, frequent mental distress, diabetes prevalence, HIV prevalence. Only poor or fair health, poor physical health days, poor mental health days, low birth weight are included in rankings.

Quartile maps for Health Factors and Health Outcomes are displayed in Figures 59 and 60 for the counties in the state. These ranks were converted into quartiles with a 1 indicating better health factor and outcomes scores. Cape Girardeau County is in the 1st quartile for health factors and 3rd quartile for health outcomes (County Health Rankings, 2022).

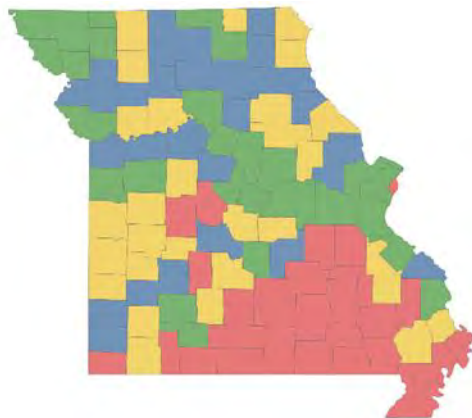


FIGURE 59

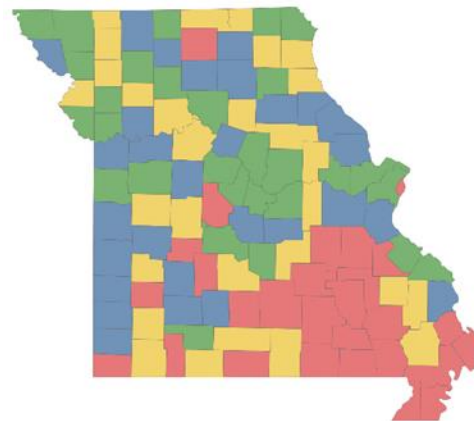


FIGURE 60



### Births and Deaths

According to the Census Bureau, half of all states and nearly three quarters of all countries experiences more deaths than births in their residents between July 1, 2020 and June 30, 2021. Natural change is defined as a measure of the relationship between births and deaths.

↑ **Natural Increase = births > than deaths**

↓ **Natural Decrease = deaths > than births**

In Missouri, there were 81% of counties experiencing a natural decrease from 2011 to 2021. The 2020-2021 period was unique because it was the first time the COVID-19 pandemic affected both births and deaths (Johnson & Sabo, 2020).

In Figure 61, a state view reveals by county those areas that had a natural increase or a natural decrease. Cape Girardeau County had a natural decrease between -300 to -151 (births minus deaths).

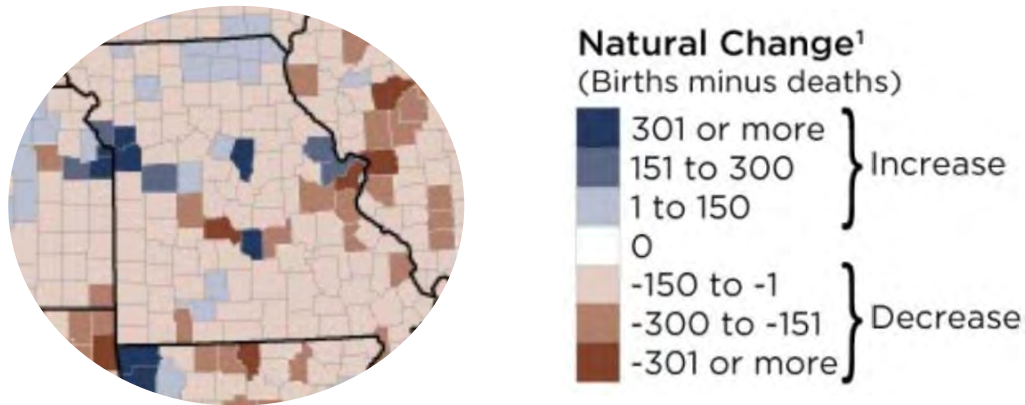


FIGURE 61

### Death and Leading Causes

The 15 leading causes of death (2010 to 2020) in Missouri are represented in Figure 62 by age cohort. Heart disease is the top leading cause of death, followed by malignant neoplasms, and chronic lower respiratory diseases (Centers for Disease and Control and Prevention, 2022 ).

In Table 31, the top causes of death by ICD Chapter are provided that had values. Other death causes were not included because they were suppressed (less than 10) or unreliable (less than 20). The top disease groups prevalent according to crude rates per 100,000 were diseases of the circulatory system, neoplasms (i.e., cancer), diseases of the respiratory system (e.g., pneumonia, bronchitis, tuberculosis), nervous system (Alzheimer's, Epilepsy, Parkinson's), external causes (accidents, intentional self-harm), genitourinary system (e.g., renal failure), codes for special purposes (COVID-19), digestive system (e.g., irritable bowel syndrome, celiac disease), and others.

Providing further detail of deaths is Table 32 with ICD Sub-Chapters. The highest number of deaths was caused by neoplasms, heart diseases and other forms, nervous system, lower respiratory diseases, cerebrovascular diseases, unknown etiology, COVID-19, renal failure, accidental injury. A narrower focus of external causes of harm is shown in Table 33, where accidental poisoning and intentional self-harm by firearm crude rates are noted (Centers for Disease Control and Prevention, 2022).

Figure 62. Top 10 Leading Causes of Death in Missouri (2010 to 2020)

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
1	Congenital Anomalies 91	Unintentional Injury 27	Unintentional Injury 12**	Unintentional Injury 18**	Unintentional Injury 115	Unintentional Injury 240	Unintentional Injury 729	Unintentional Injury 712	Heart Disease 861	Malignant Neoplasms 2,439	Malignant Neoplasms 3,897	Heart Disease 3,730	Heart Disease 5,386	Heart Disease 15,934
2	Short Gestation 60	Homicide 10**	Congenital Anomalies	Suicide 13**	Homicide 79	Suicide 117	Homicide 252	Heart Disease 306	Malignant Neoplasms 682	Heart Disease 2,332	Heart Disease 3,186	Malignant Neoplasms 3,558	Covid-19 2,591	Malignant Neoplasms 12,907
3	Unintentional Injury 55	Congenital Anomalies --	Homicide --	Homicide 12**	Suicide 40	Homicide 116	Suicide 216	Malignant Neoplasms 195	Unintentional Injury 537	Covid-19 701	Covid-19 1,472	Covid-19 2,079	Malignant Neoplasms 2,036	Covid-19 7,137
4	SIDS 17**	Malignant Neoplasms --	Malignant Neoplasms --	Malignant Neoplasms --	Malignant Neoplasms 12**	Heart Disease 17**	Heart Disease 92	Suicide 191	Covid-19 197	Chronic Low Respiratory Disease 550	Chronic Low Respiratory Disease 1,022	Chronic Low Respiratory Disease 1,259	Alzheimer's Disease 1,804	Unintentional Injury 4,418
5	Placenta Cord Membranes 15**	Heart Disease --	Heart Disease --	Diabetes Mellitus Heart Disease	Heart Disease --	Malignant Neoplasms --	Malignant Neoplasms 59	Homicide 158	Suicide 192	Unintentional Injury 535	Cerebrovascular 625	Cerebrovascular 967	Cerebrovascular 1,195	Chronic Low Respiratory Disease 3,876
6	Bacterial Sepsis 10**	Influenza & Pneumonia --	Chronic Low Respiratory Disease	--	Congenital Anomalies --	Complicated Pregnancy --	Diabetes Mellitus 26	Liver Disease 94	Liver Disease 154	Diabetes Mellitus 326	Diabetes Mellitus 506	Alzheimer's Disease 843	Chronic Low Respiratory Disease 908	Cerebrovascular 3,275
7	Circulatory System Disease --	Cerebrovascular --	Diabetes Mellitus --	--	Covid-19 Chronic Low Respiratory Disease	Covid-19 --	Liver Disease 22	Covid-19 68	Diabetes Mellitus 117	Cerebrovascular 318	Unintentional Injury 411	Diabetes Mellitus Nephritis	Unintentional Injury 594	Alzheimer's Disease 2,873
8	Respiratory Distress Homicide	--	--	Cerebrovascular Influenza & Pneumonia	--	Chronic Low Respiratory Disease --	Covid-19 20**	Diabetes Mellitus 52	Cerebrovascular 116	Liver Disease 252	Nephritis 355	486	Nephritis 529	Diabetes Mellitus 1,844
9	--	Acute Bronchitis Benign Neoplasms	--	--	Cerebrovascular Influenza & Pneumonia	Benign Neoplasms --	Influenza & Pneumonia 15**	Cerebrovascular 31	Chronic Low Respiratory Disease 95	Nephritis 203	Septicemia 237	Unintentional Injury 433	Influenza & Pneumonia 451	Nephritis 1,682
10	Alteclasis --	Meningitis Septicemia	--	--	--	Congenital Anomalies Nephritis	Cerebrovascular Complicated Pregnancy	Chronic Low Respiratory Disease Septicemia	Homicide 77	Suicide 165	Liver Disease 222	Parkinson's Disease 382	Parkinson's Disease 336	Influenza & Pneumonia 1,167
11	Maternal Pregnancy Comp. --	--	--	--	Aortic Aneurysm Nephritis	--	14**	26	Nephritis 71	Septicemia 156	Influenza & Pneumonia 214	Influenza & Pneumonia 287	Diabetes Mellitus 324	Suicide 1,125
12	Diarrhea --	--	--	Anemias Covid-19	--	--	Septicemia 11**	Nephritis 24	Septicemia 61	Influenza & Pneumonia 138	Alzheimer's Disease 198	Septicemia 255	Hypertension 253	Septicemia 951
13	Intrauterine Hypoxia Necrotizing Enterocolitis	--	--	Chronic Low Respiratory Disease Complicated Pregnancy	--	--	Nephritis 10**	Complicated Pregnancy 17**	Influenza & Pneumonia 36	Hypertension 58	Parkinson's Disease 132	Hypertension 149	Nutritional Deficiencies 213	Liver Disease 900
14	--	--	--	Congenital Anomalies	--	Cerebrovascular Diabetes Mellitus	Hypertension --	Influenza & Pneumonia 16**	Hypertension 21	Homicide 56	Suicide 88	--	Pneumonitis 208	Parkinson's Disease 872
15	Congenital Pneumonia Hematological Disorders Hernia And Intestinal Obstruction Hydrops Fetalis Maternal Toxic Substance Neonatal Hemorrhage --	--	--	Nutritional Deficiencies Perinatal Period --	--	Influenza & Pneumonia Pneumonitis --	--	--	--	--	--	Benign Neoplasms Pneumonitis	126 Septicemia 202	Homicide 803

**Table 31. Cause of Death by ICD Chapter for Cape Girardeau County, Missouri**

<b>ICD Chapter</b>	<b>Deaths</b>	<b>Crude Rate per 100,000</b>
<i>Diseases of the circulatory system</i>	849	358
<i>Neoplasms</i>	479	202
<i>Diseases of the respiratory system</i>	339	143
<i>Diseases of the nervous system</i>	299	126
<i>External Causes</i>	216	91
<i>Diseases of the genitourinary system</i>	135	57
<i>Codes for Special Purposes</i>	113	48
<i>Diseases of the digestive system</i>	89	38
<i>Endocrine, nutritional and metabolic diseases</i>	53	22
<i>Certain infectious and parasitic diseases</i>	52	21
<i>Mental and behavioral disorders</i>	44	19
<i>Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified</i>	33	14

Note: From 2018 to 2020, Cape Girardeau County had 2,409 deaths with a population of 237,136 (cumulative years count) with a crude rate of 1,016 per 100,000. Codes for special purposes are uncertain etiology, terrorism-assault homicide, sequelae of terrorism, terrorism intentional suicide, SARS, codes for emergency use.



**Table 32. Cause of Death by ICD Sub-Chapter for Cape Girardeau County, Missouri (2018-2020)**

<i>Cause of Death (ICD-10 Code)</i>	<b>Number of Deaths</b>	<b>Crude Rate per 100,000<sup>5</sup></b>
<i>Malignant neoplasms</i>	468	197
<i>Ischaemic heart diseases</i>	312	132
<i>Other forms of heart disease</i>	279	118
<i>Other degenerative diseases of the nervous system</i>	229	97
<i>Chronic lower respiratory diseases</i>	161	68
<i>Cerebrovascular diseases</i>	134	57
<i>Provisional assignment of new diseases of uncertain etiology</i>	113	48
<i>COVID-19 (Codes for Special Purposes)</i>	113	48
<i>Renal failure</i>	112	47
<i>Other external causes of accidental injury</i>	103	43
<i>Other diseases of the respiratory system</i>	84	35
<i>Influenza and pneumonia</i>	54	23
<i>Intentional self-harm</i>	52	23
<i>Diseases of arteries, arterioles and capillaries</i>	48	20
<i>Diseases of liver</i>	44	19
<i>Extrapyramidal and movement disorders</i>	43	18
<i>Hypertensive diseases</i>	40	17
<i>Other bacterial diseases</i>	37	16
<i>Organic, including symptomatic, mental disorders</i>	37	16
<i>Transport accidents</i>	34	14
<i>Pulmonary heart disease and diseases of pulmonary circulation</i>	33	14
<i>Diabetes mellitus</i>	23	10
<i>Lung diseases due to external agents</i>	21	9
<b>Total</b>	<b>2738</b>	<b>1155</b>

<sup>5</sup> Cumulative population is 237,136

**Table 33. More Detailed Causes of Deaths from ICD Sub-Chapter (2018 to 2020)**

<b>Neoplasms</b>		<b>Rate per 100,000</b>
	<i>Bronchus or lung</i>	49
	<i>Pancreas</i>	14
	<i>Prostate</i>	13
	<i>Colon</i>	12
	<i>Breast</i>	11
	<i>Without Site</i>	9
	<i>Kidney</i>	9
<b>Ischemia</b>		
	<i>Acute myocardial infarction</i>	83
	<i>Atherosclerosis</i>	41
<b>Accidental Injury</b>		
	<i>Accidental poisoning</i>	15
<b>Other Forms of Heart Disease</b>		
	<i>Congestive heart failure</i>	41
	<i>Cardiac arrhythmia</i>	25
	<i>Cardiac arrest</i>	13
	<i>Heart failure</i>	13
	<i>Atrial fibrillation and flutter</i>	11
<b>Intentional Self-Harm</b>		
	<i>Unspecified Firearm Discharge</i>	12
	<i>Intentional self-harm by hanging, strangulation and suffocation</i>	Unreliable
<b>Organic, including symptomatic, mental disorders</b>		
	<i>Dementia</i>	13



## Traffic Crashes Injury and Death

An analysis of traffic crashes in the incorporated and unincorporated parts of Cape Girardeau County from 2018 to 2020 was conducted. In Figure 63, the red shading is the incorporated part of the county. The U.S. Census Bureau indicates that incorporated places have “legally prescribed relationships with governmental entities such as States, counties, and minor civil division. Incorporated places have geographic relationships with nongovernmental statistical entities such as census tracts, block numbering areas (BNAs), block groups and census blocks, census county divisions (CCDs), and urbanized areas (UAs)” (U.S. Census Bureau, n.d., p. 9-1). Missouri’s requirement for an incorporated place is 500 for a city.

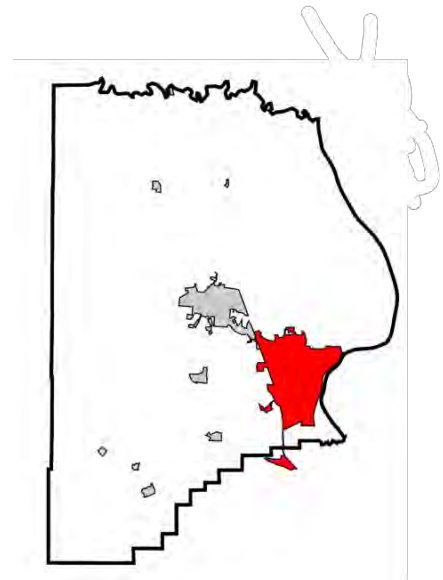


FIGURE 63

Figure 64 and 65 provides type of population and offense rank for traffic crashes in incorporated and unincorporated Cape Girardeau County from 2018 to 2020 (Missouri Highway Patrol, 2022b). Note the rank is given at the end of the bar (e.g., older driver and no seat belt is a rank of 15 out of 98 ranks). The number of rankings is at the end of the population and offense. Several states may hold the same rank because of the same number of offenses. Only 23 counties had values for young driver with alcohol and drugs. Cape Girardeau County had no values for older driver with alcohol and drugs.

### Type of Population and Offense Rank for Traffic Accidents in Incorporated Cape Girardeau County

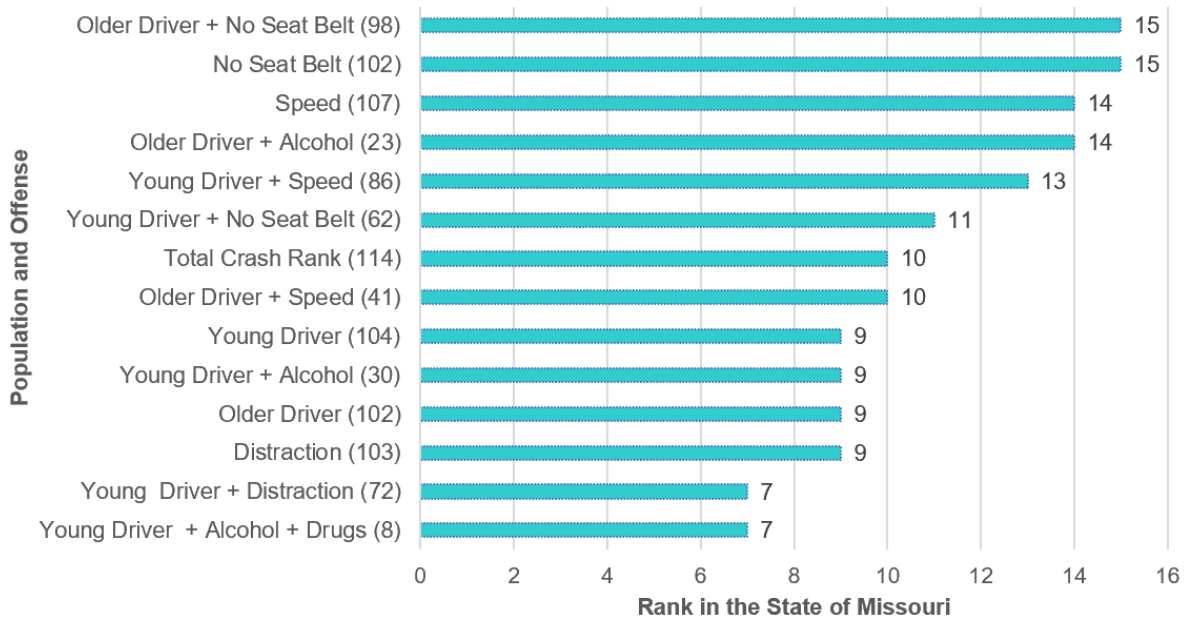


FIGURE 64

### Type of Population and Offense Rank for Traffic Accidents in Unincorporated Cape Girardeau County

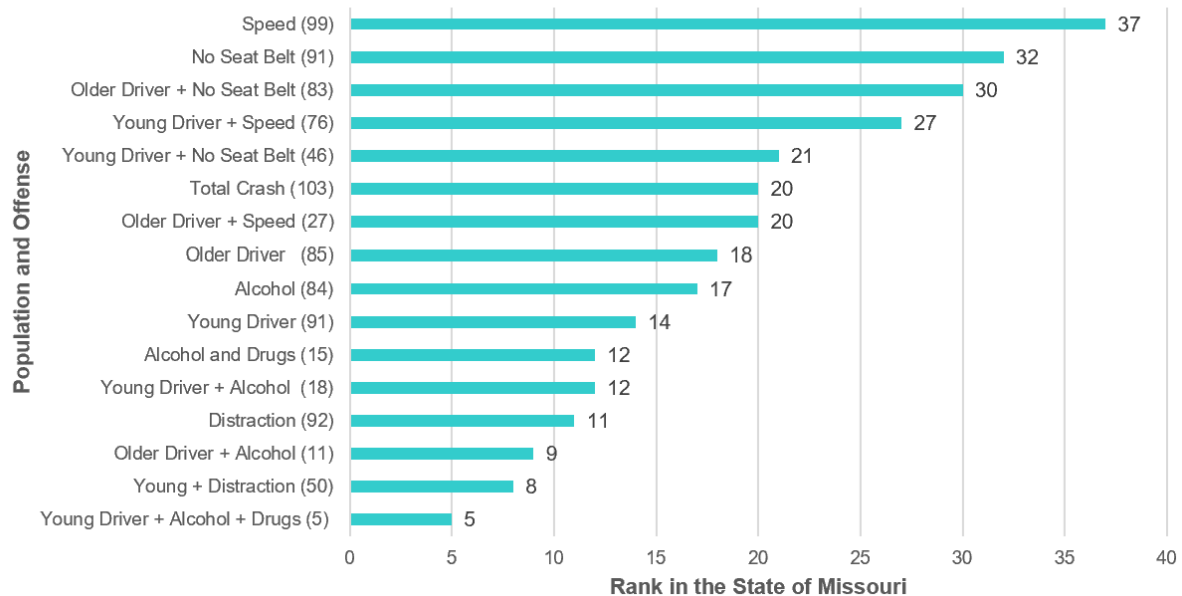


FIGURE 65

In Table 34, another analysis of traffic accidents from August 19, 2021 to August 20, 2022 indicated there were a total of 2,223 traffic crashes in Cape Girardeau County (Missouri State Highway Patrol, 2022c). Table 35 provides the cities in Cape Girardeau County with the greatest frequency and percentage of traffic accidents by day of week. Cape Girardeau and Jackson had the most geographically identifiable accidents.

**Table 34. Cities in Cape Girardeau County, Missouri and number of Traffic Accidents from August 20, 2021 to August 19, 2022**

<b>City</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Cape Girardeau</i>	1,486	67%
<i>Non-City Or Unincorporated</i>	383	17%
<i>Jackson</i>	328	15%
<i>Allenville</i>	1	.0%
<i>Gordonville</i>	18	.8%
<i>Dutchtown</i>	3	.1%
<i>Delta</i>	1	.0%
<b>Total</b>	<b>2,223</b>	<b>100%</b>

Several characteristics about traffic accidents in Cape Girardeau County are as follows:

- Friday is the day for the most traffic accidents, followed by Thursday (Table 35)
- Motor vehicle in transport (71%) and fixed object (17%) are the highest type of accident (Table 36)
- No circumstance (8.4%) and improper lane usage/change (2.2%) were the most type of circumstances surrounding the accident (Table 37)
- There were 14.2% fatalities (Table 38).
- Most accidents (75.3%) occur during daylight conditions (Figure 66).

The accidents by road in Cape Girardeau city are listed below:

- Broadway (at this road) was the top location with 56 accidents (Table 39).
- U.S. 61 (on this road) was the top location with 181 accidents (Table 40).
- The intersection of Mt. Auburn Road and Route K has 27 accidents (Table 41).

The accidents by road in Jackson are listed below:

- US 61 EJ (at this road) was the top location for accidents with 22 (Table 42).
- US 61 (on this road) was the top location for accidents with 133.
- The intersection with the highest number of accidents is Old Orchard Road and US 61 with 11 (Table 43).

**Table 35. Day of Week of Number of Accidents by City**

City	Weekday								Total
	Fri	Mon	Sat	Sun	Thu	Tue	Unk	Wed	
Allenville	0	0	1	0	0	0	0	0	1
Cape Girardeau	293	209	175	145	247	191	6	220	1486
Delta	0	0	0	1	0	0	0	0	1
Dutchtown	0	0	0	0	0	2	0	1	3
Gordonville	2	4	1	1	1	3	0	6	18
Jackson	52	41	27	27	63	60	0	58	328
Non-City Or Unincorporated	59	51	48	37	68	67	5	48	383
Oak Ridge	0	1	0	0	0	0	0	0	1
Pocahontas	0	0	0	0	1	0	0	0	1
Total	406	306	252	211	380	323	11	333	2222

**Table 36. Frequency of Type of Accident**

	Frequency	Percent
<i>Motor Vehicle in Transport</i>	1578	71
<i>Fixed Object</i>	375	17
<i>Parked Motor Vehicle</i>	136	6
<i>Animal</i>	62	3
<i>Overturn</i>	24	1
<i>Other Object</i>	16	1
<b><i>Pedestrian</i></b>	<b>16</b>	<b>1</b>

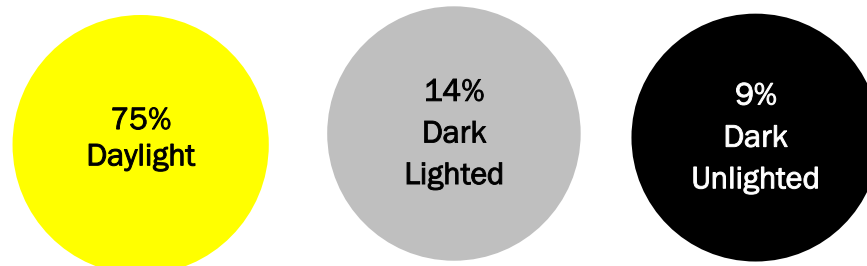
**Table 37. Circumstances Surrounding the Accident**

<b>Circumstance</b>	<b>Frequency</b>	<b>Percent</b>
None	186	8
Improper Lane Usage/Change	48	2
Distracted/Inattentive	36	2
Failed to Yield	36	2
Too Fast for Conditions	22	1
Unknown	20	1
Alcohol	18	1
Following Too Close	17	1
Violation Signal/Sign	13	1
Physical Impairment	11	1
Other	10	0.4
<b>Speed Exceeded Limit</b>	<b>9</b>	<b>0.4</b>

**Table 38. Number of Injuries and Fatalities**

	<b>Frequency</b>	<b>Percent</b>
None apparent	1812	82
Fatal	315	14
Disabling Injury	79	4
Evident Injury (Not Disabling)	13	.6
<b>Total</b>	<b>2223</b>	<b>100.0</b>

**Figure 66. Light Conditions at Time of  
Accident in  
Cape Girardeau County**



**Table 39. Roads in Cape Girardeau Involved in at Least 22 Accidents from August 21, 2021 to August 20, 2022**

<b>At This Road</b>	<b>Traffic Accidents</b>
<i>Broadway</i>	56
<i>Independence St</i>	48
<i>Rt K</i>	47
<i>Mt Auburn Rd</i>	42
<i>US 61</i>	41
<i>West End Blvd</i>	40
<i>William St</i>	40
<i>Sprigg St</i>	27
<i>Pacific St</i>	26
<i>Silver Springs Rd</i>	26
<i>Themis St</i>	25
<i>Siemers Dr</i>	25
<i>Kingshighway</i>	24
<i>MO 74</i>	22

**Table 40. Roads in Cape Girardeau Involved in at Least 83 Accidents from August 21, 2021 to August 20, 2022**

<b>On This Road</b>	<b>Traffic Accidents</b>
<i>U.S. 61</i>	181
<i>Route K</i>	112
<i>Interstate 55</i>	107
<i>William Street</i>	92
<i>Independence Street</i>	86
<i>Broadway</i>	85
<i>Sprigg Street</i>	84
<i>Mt. Auburn Road</i>	83

**Table 41. Intersections in Cape Girardeau, Missouri with at least 10 Accidents from August 21, 2021 to August 20, 2022.**

<b>Intersection of</b>	<b>Number of Accidents</b>	<b>Intersection of</b>	<b>Number of Accidents</b>
<i>Mt. Auburn Road and Route K</i>	27	<i>Mt. Auburn Road NJ and U.S. 61</i>	12
<i>Broadway and U.S. 61</i>	18	<i>Mt. Auburn Road NJ and U.S. 61</i>	12
<i>West End Boulevard and William Street</i>	16	<i>Kingshighway and Independence</i>	10
<i>Lambert Drive and Siemers Drive</i>	13	<i>William Street and Mt. Auburn Road</i>	10
<i>Independence Street and U.S. 61</i>	13	<i>Campster Drive and Siemers Drive</i>	10
<i>Gordonville Drive and Mt. Auburn Road</i>	12	<i>West End Boulevard and MO 74</i>	10
<i>Siemers Drive and Route K</i>	12		

**Table 42. Roads in Jackson, Missouri Involved in at Least 5 Accidents from August 21, 2021 to August 20, 2022**

<b>On This Road</b>	<b>Traffic Accidents</b>
U.S. 61	133
Missouri 72	34
Main Street	29
Missouri O5	16
Farmington Road	11
Route D	11
Georgia Street	7
Old Cape Road	6
Adams Street	5
Hope Street	5
Shawnee Avenue	5

**Table 43. Intersections in Jackson, Missouri with at least 5 Accidents from August 21, 2021 to August 20, 2022.**

<b>Intersection of</b>	<b>Number of Accidents</b>
Old Orchard Road and U.S. 61	11
K Land Drive and U.S. 61	10
Shawnee Avenue and U.S. 61	9
Walton Drive and U.S. 61	9
Missouri 25 and U.S. 61	7
Blache Street and U.S. 61	7
Missouri 72 and Farmington	6
Donna Drive and U.S. 61	6
Lacy Street and Main Street	5
Lee Avenue and Missouri 72	5
Oklahoma Street and Missouri 72	5



### Years of Potential Life Lost

When a death occurs, depending upon the age, a person has lost potential years to live, enjoy and flourish. In a community, if residents die prematurely, a Years of Potential Life Lost (YPLL) calculation is averaged across those who died. Typically, the age of 75 is used as a threshold for YPLL. Individually, if a 15 year old dies, the calculation would be  $75 - 16.5 = 58.5$ ). The 15 year old is in the age cohort of 15 to 17, with an average of 16.5 years. Those who are younger have a higher YPLL (Missouri Department of Health and Senior Services, 2022).

The United States has a YPLL rate of 7,300 per 100,000. Missouri had 92,687 deaths (2018 to 2020) with a 8,860 per 100,000 YPLL rate. The Missouri minimum is 5,700 per 100,000 and the maximum is 17,200 per 100,000. Figure 67 shows the quartiles of the state and specifically Cape Girardeau County where YPLL is 8,872 years per 100,000. The higher the quartile, the more years of potential life lost per 100,000. Cape Girardeau County is in the 2<sup>nd</sup> Quartile (County Health Rankings, 2022).

### Preventable Hospital Stays

Hospital stays can be prevented with disease management, seeking treatment for symptoms early in a primary care setting, and effective management by primary care providers in outpatient settings. Hospital stays are costly, and stays are an indicator of health system efficiency. Diabetes, dehydration, hypertension, congestive heart failure, angina without procedure, asthma, bacterial pneumonia, and urinary infections are examples (Moy, 2013). This value is based on Medicare beneficiaries ages 18 years or older enrolled in Part A (U.S. Centers for Medicaid and Medicare Services, 2022; County Health Rankings, 2022). The range in Missouri is 1,333 to 8,358 per 100,000 with an overall rate of 4,155 per 100,000. Preventable hospitalization rate (2019) was converted into quartiles. Cape Girardeau County is in the first quartile with a rate of 2,779 stays per 100,000 (Figure 68).

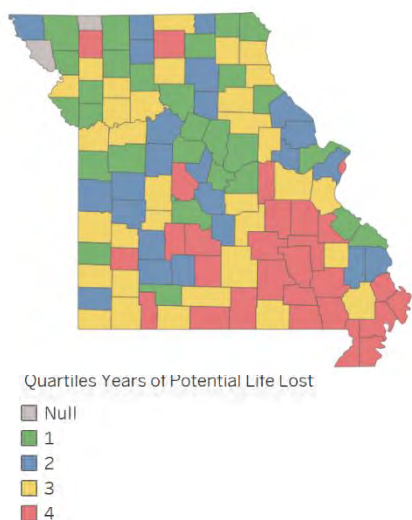


FIGURE 67

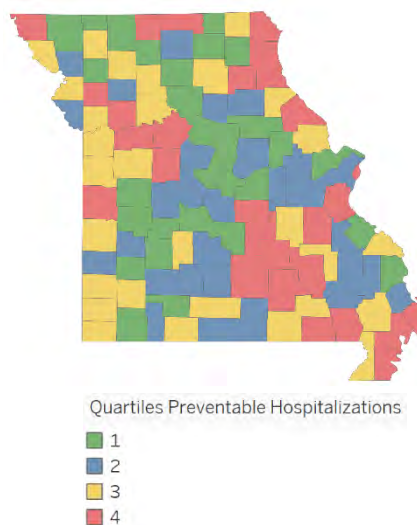


FIGURE 68

# Communicable Disease

Measures within this category include diseases which are usually transmitted through person-to-person contact or shared use of contaminated instruments / materials. Many of these diseases can be prevented through a high level of vaccine coverage of vulnerable populations, or using protective measures, such as condoms for the prevention of sexually transmitted infections.

## Chlamydia Rates

Chlamydia is a result of unsafe sex and has many poor health outcomes. Medical costs for managing chlamydia are very expensive and tends to disproportionately affect women poor communities, such as minority women. Missouri has a chlamydia rate of 561 per 100,000 (2019). Cape Girardeau County has a chlamydia rate of 577 per 100,000, making it higher than the state value. Figure 69 shows the chlamydia rate quartile for Cape Girardeau County as 4 (highest) with data from the National Center for HIV/AIDS, Viral Hepatitis, STD Prevention, and TB (2022).

## Human Immunodeficiency Virus (HIV)

The measurement of HIV in a community can indicate unsafe drug use, unsafe sexuality activity, lack of treatment, and prophylaxis availability. HIV rates are defined as the number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population (2019). Those counties with up to four cases are termed missing data (white counties) and are not included. The state rate for HIV is 248.3 per 100,000. Cape Girardeau County (Figure 70) has an HIV rate of 100 per 100,000 and in the 3<sup>rd</sup> quartile (National Center for HIV/AIDS, Viral Hepatitis, STD Prevention, and TB, 2022; County Health Rankings, 2022).

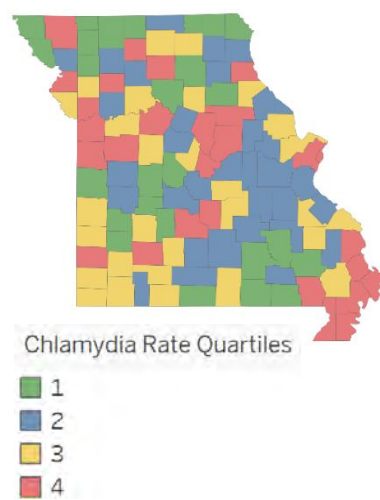


FIGURE 69

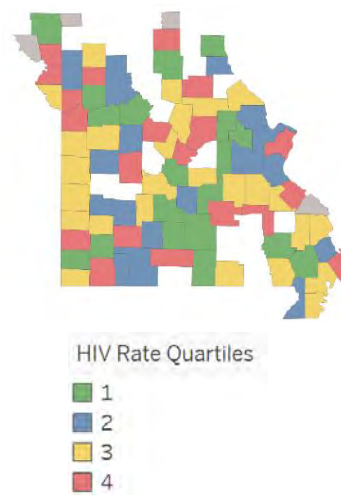


FIGURE 70

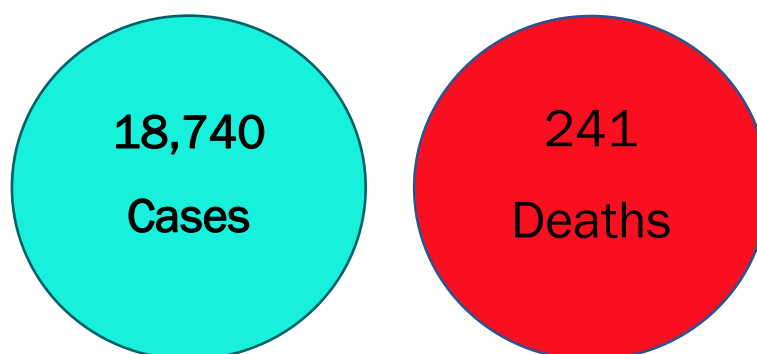
## COVID-19

COVID-19 (coronavirus disease 2019) is caused by a virus named SARS-CoV-2. It was discovered in December 2019 in Wuhan, China. It is contagious and spreads quickly. The symptoms are mostly respiratory and feels much like a cold or pneumonia. On January 20, 2020, the first laboratory confirmed case of the virus was found in Washington State. Globally, as of September 22, 2022 there have been (World Health Organization, 2022):

- 610,866,075 confirmed cases of COVID-19
- 6,510,139 deaths
- 12,640,866,343 vaccine doses have been administered (as of September 20, 2022)

Figure 71 provides the cumulative cases and deaths since January 22, 2020 for Cape Girardeau County (Centers for Disease Control and Prevention, 2022b).

**Figure 71. Cape Girardeau County All Time COVID-19 Cases and Deaths** (since January 22, 2020)



There were no confirmed cases in Cape Girardeau County from January 22, 2020 until March 16, 2020. On March 17, 2020, the county reported its first case. Figure 72 illustrates the timeline of COVID-19 confirmed cases until August 25, 2022 with 7-day rolling averages of cases. Figure 73 provides the number of deaths on a 7-rolling average. Note that suppressed/unreliable cases were omitted, but 0 cases were kept. The highest point of cases is early December 2022 with 4.85 deaths per 100,000 (Centers for Disease Control and Prevention, 2018-2020).

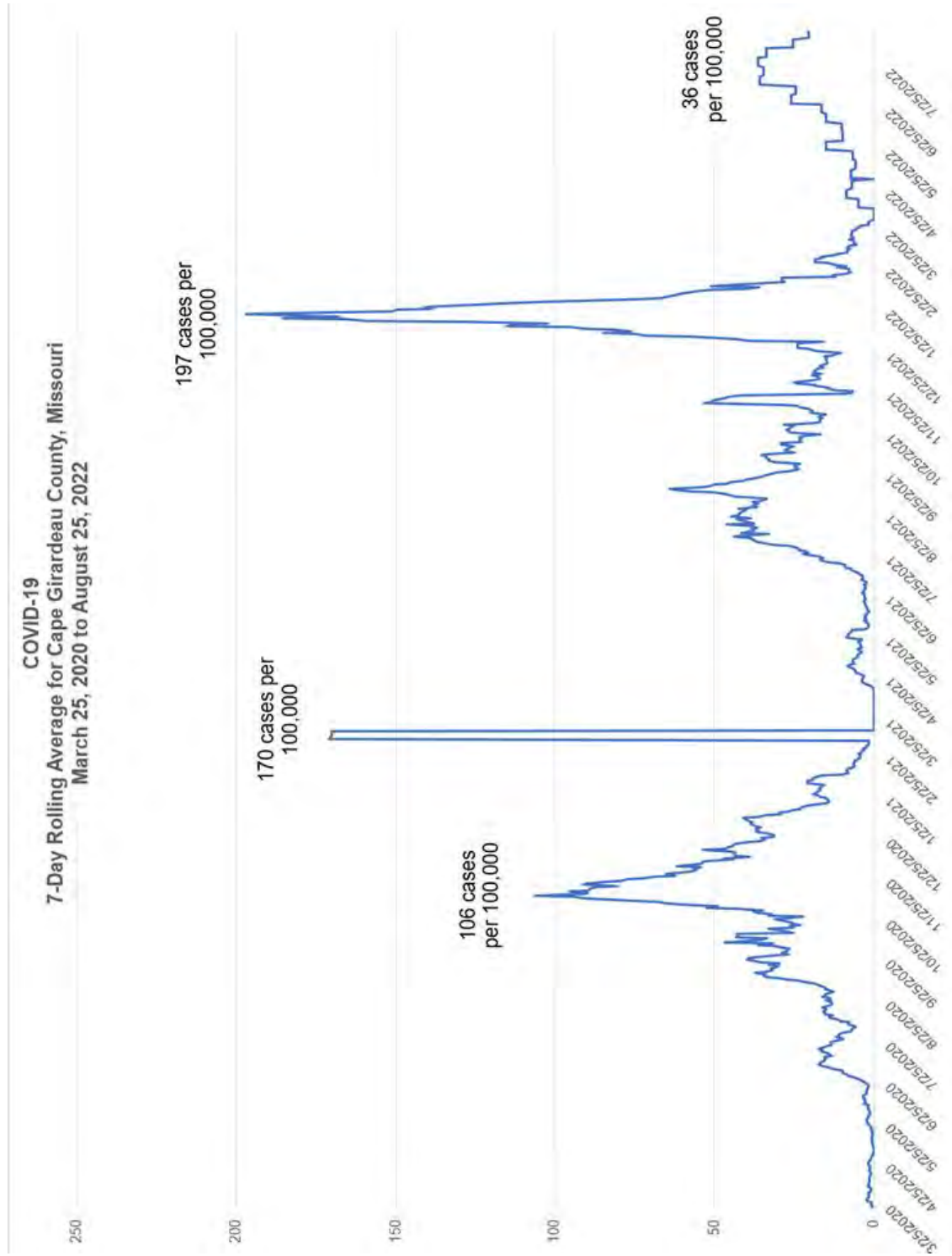
In Figure 74, the percentage of adult inpatient beds and adult ICU beds utilized were placed on a timeline. At the peak, 62% of ICD beds were utilized, whereas 19% of inpatient beds were utilized by confirmed COVID-19 cases.

In Figure 75 stacked bar charts, the community levels of transmission for COVID-19 are shown for 2020, 2021, and 2022. Seven-day rolling averages were obtained through the year and the level of transmission were noted. For each year, the number of times the community was in low, high, moderate, and substantial transmission is noted. A significant number of 7-day intervals were spent in high transmission as depicted by the yellow shading for all 3 years (Centers for Disease Control and Prevention, 2018-2022).

Figure 76 illustrates the uptake of vaccinations with the county population by age cohort and vaccination status. Those fully vaccinated and those fully vaccinated with a first booster are highest in those 65 years and older at 85% and 71%, respectively. The status of those fully vaccinated with a first and second booster were tabulated for those 50 years and older (29%) and those 65 years and older (35%). The line graph shows that the groups of fully vaccinated, fully vaccinated and first booster are higher as people age. However, fully vaccinated with first and second booster percentages are lower than those two groups.

Figure 77 illustrates the 7-day rolling case count (ending September 22, 2022) across the state. Cape Girardeau County is in Quartile 4 with a case count 187 per 100,000. The 7-day rolling death counts for all counties in Missouri were either 0 or suppressed, meaning counts were less than 10 deaths for those 7 days.

FIGURE 72



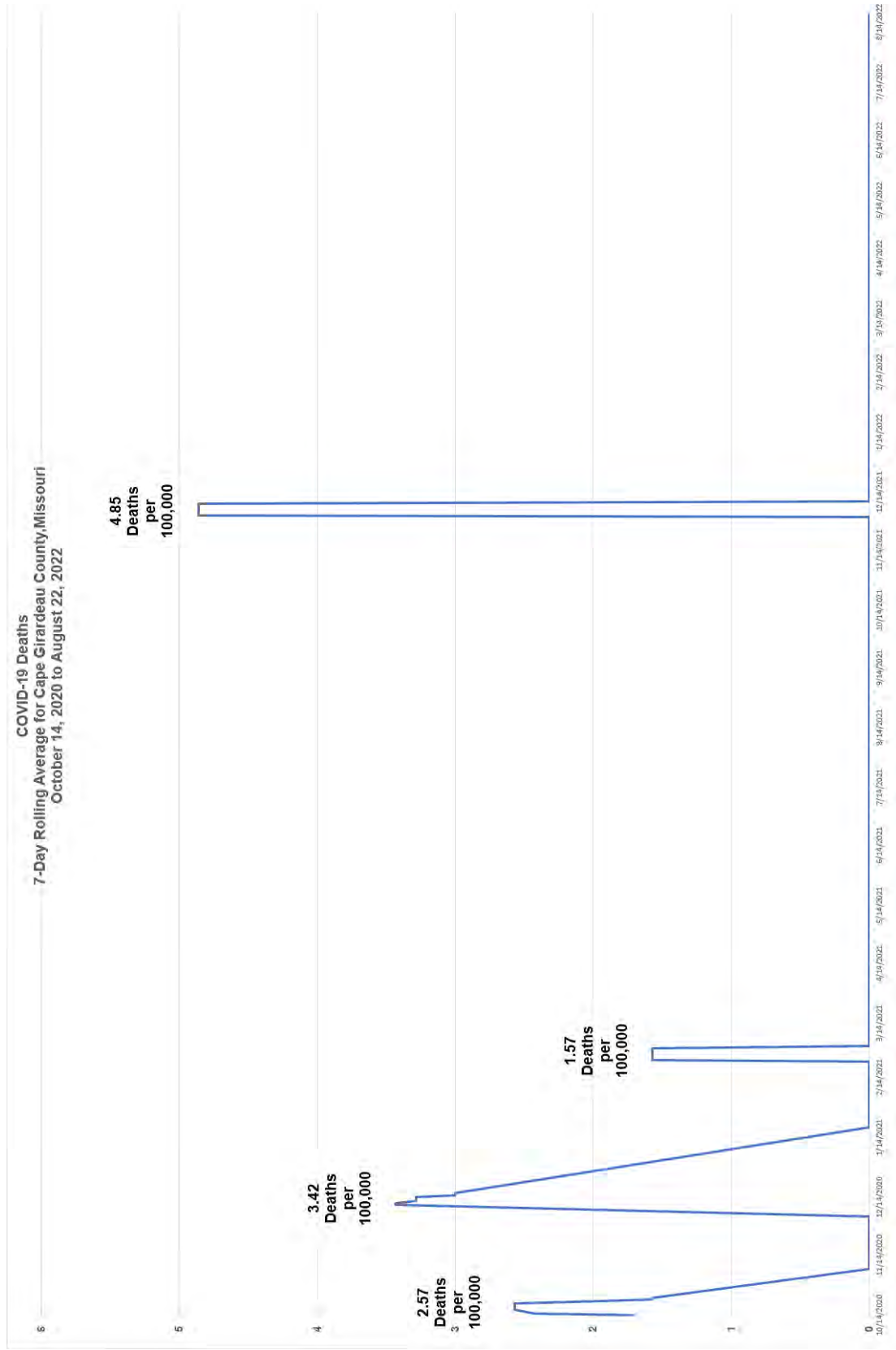


FIGURE 73

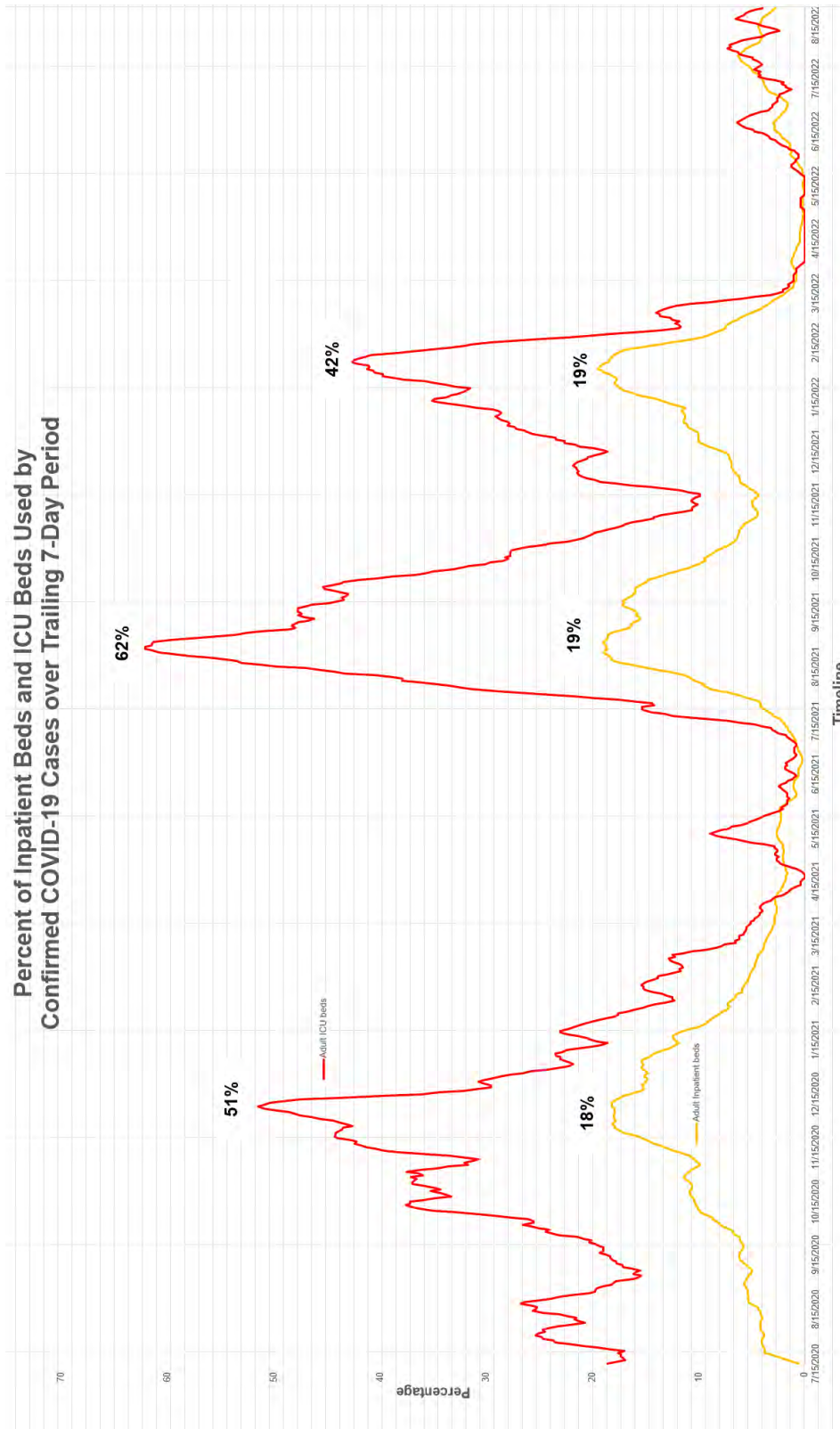


FIGURE 74



# Community Levels of Transmission in Cape Girardeau County, Missouri March 24, 2020 to June 14, 2022

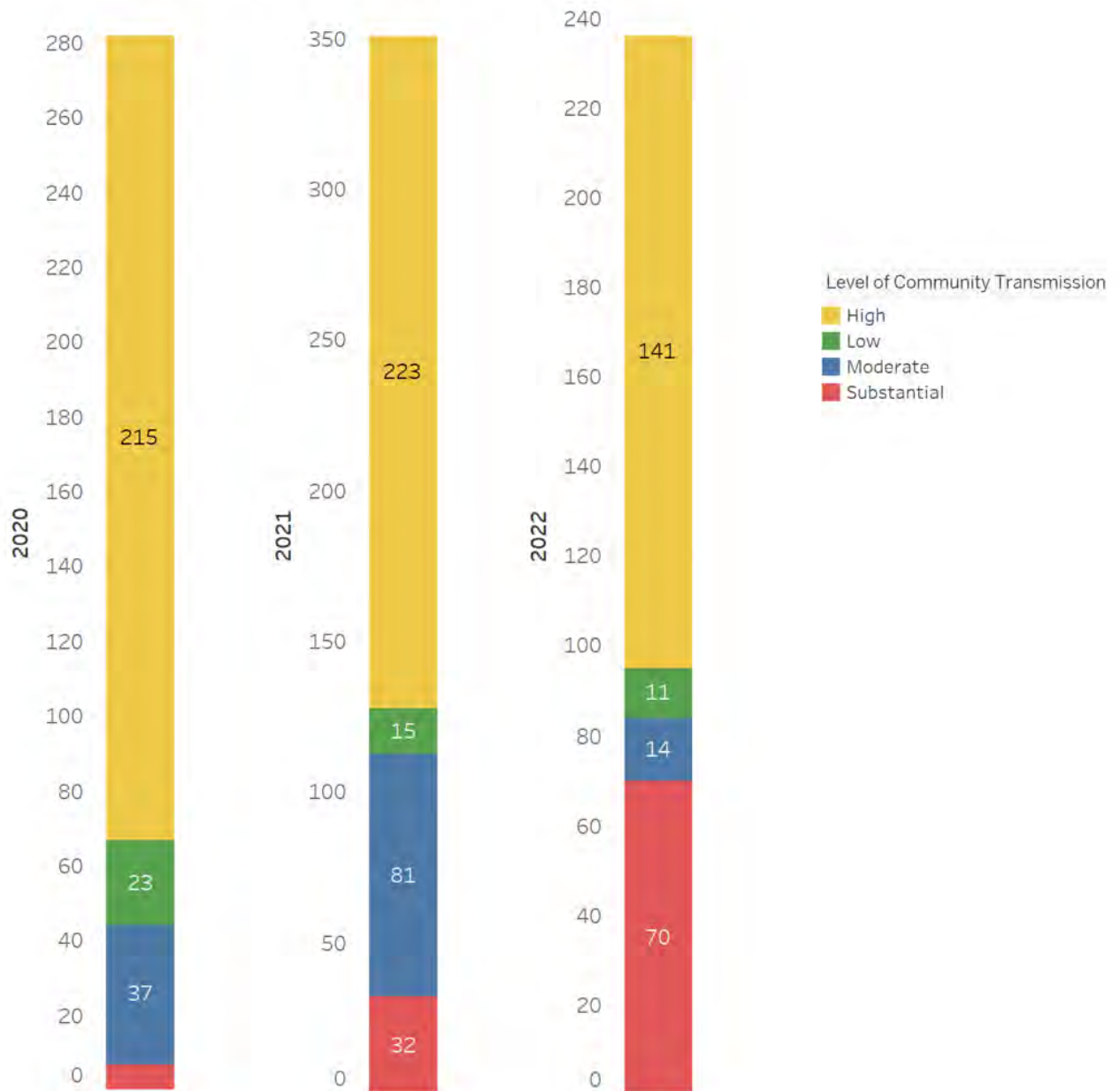


FIGURE 75

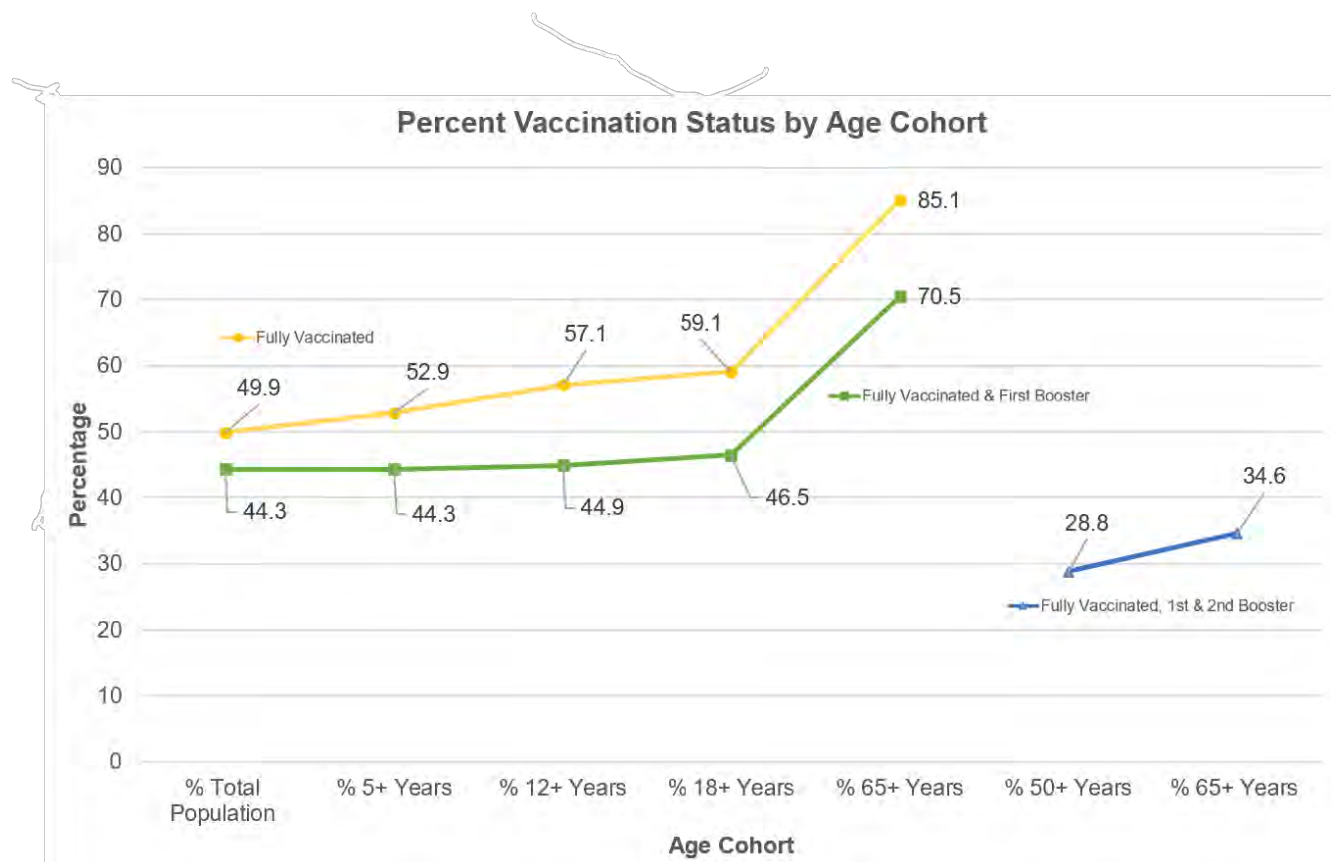
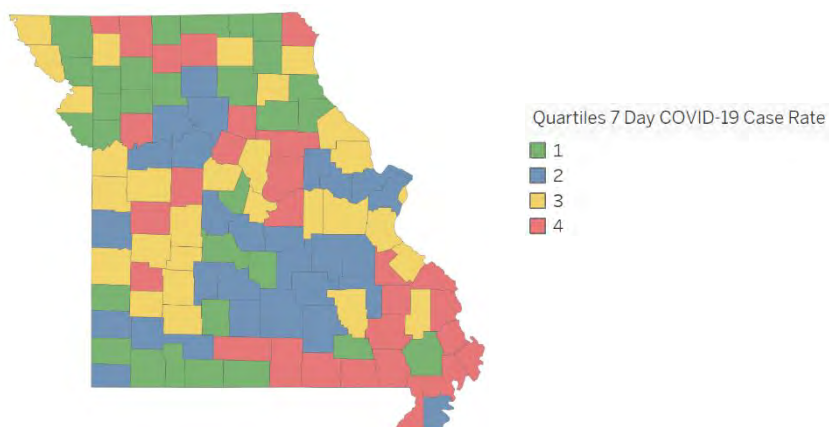


FIGURE 76

**Figure 77. 7-Day COVID-19 Case Rate per 100,000 Population**



# Access

## Food Environment

Access to healthy foods weighs heavily on overall health. The food environment index considers proximity to healthy foods and income. The Food Environment Index gives equal weight to:

- percentage of the population that is low income (< than 200% of the federal poverty threshold for family size) and does not live close to a grocery store (< 10 miles in rural areas; < 1 mile for nonrural areas).
- percentage of population that did not have access to a reliable source of food in the past year.

The index ranges from a scale of 0 (worst) to 10 (best). Missouri counties range from 3.9 (Schuyler County) to 8.8 (St. Charles). Cape Girardeau's County's Food Environment Index is 7.3 (County Health Rankings, 2022).

The U.S. Department of Agriculture defines food security as a "means to access by all people at all times to enough food for an active, healthy life" (U.S. Department of Agriculture, 2022b, para. 1). When children and families do not have to enough to eat, this results in many adverse physical, mental, and social issues. Drivers of food insecurity are access to stores, employment, and poverty. Cape Girardeau County has a population of 82,113. As shown in Figure 78, twelve percent (N = 9,570) of the county residents are food insecure (Gundersen et al., 2021).

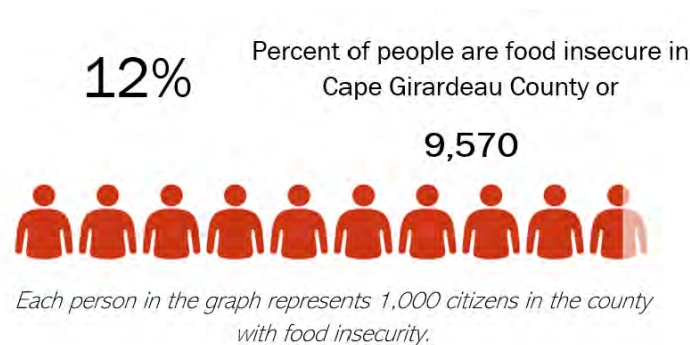


FIGURE 78

Figure 79 (U.S. Department of Agriculture, 2022) visualizes the areas of the county where a significant share of residents is low income and more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket (green) and where a significant share of residents is more than ½ mile (urban) or 10 miles (rural) from the nearest supermarket (orange).

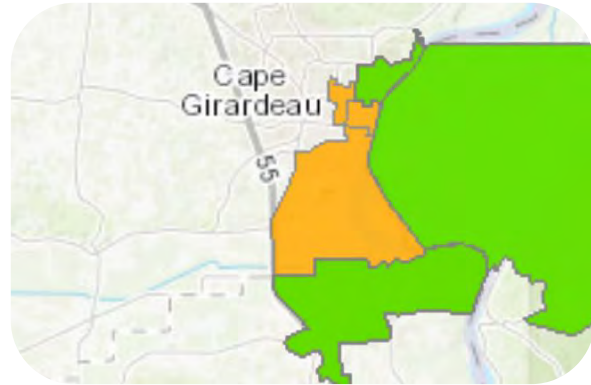


FIGURE 79

Figure 80 indicates the location of the census tracts for Cape Girardeau County (outside of Jackson and Cape Girardeau cities). Table 44 provides more detail about low income, low accessibility by census tract (U.S. Department of Agriculture, 2022c; U.S. Census Bureau, 2022f). For Cape Girardeau and Jackson, census tracts are in Figure 81 and Figure 82.

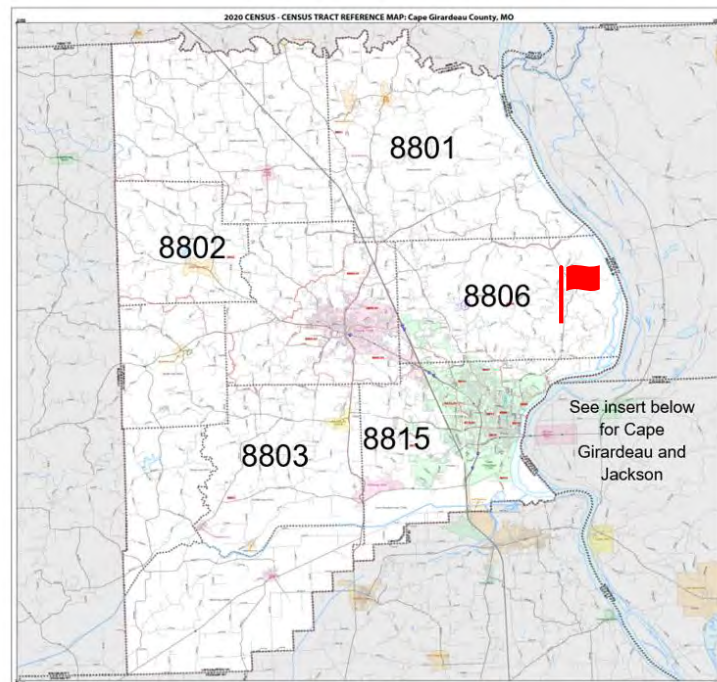


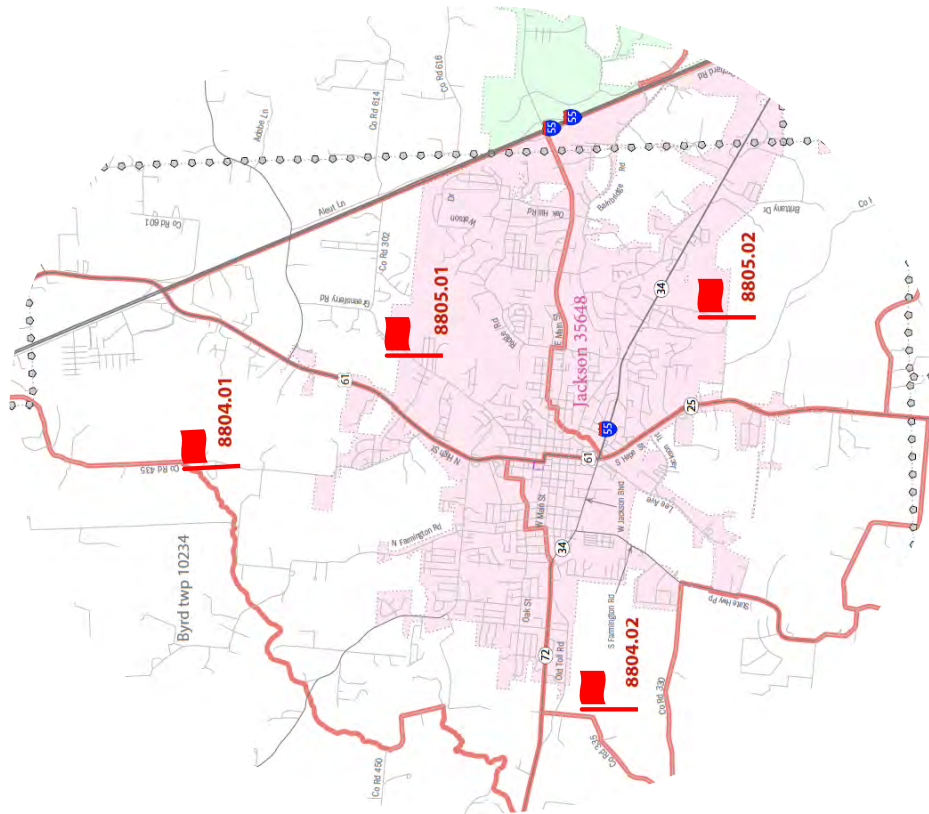
FIGURE 80

**Table 44. Food Accessibility, Poverty, Income by Census Tract**

Tract	Urban	Tract Population	% Living below FPL	Low Income Tract	Median Family Income	LI/LA 1 - 10 miles	LI/LA .5 - 10	LI/LA 1 - 20	LI/LA no vehicle or at 20	> 100 households no vehicle and .5
8801	No	5,738	7		64,479					
8802	No	3,822	7		70,357					
8803	No	4,387	10		63,276					
8804*	Yes	<b>6,908</b>	18		57,865					
8805*	Yes	<b>9,040</b>	9		78,482					
8806*	No	<b>6,347</b>	11		84,953					
8807	Yes	4,362	12		76,667					
8808*	Yes	<b>4,620</b>	<b>38</b>		51,500					
8809*	Yes	<b>2,618</b>	<b>56</b>		29,750					
8810*	Yes	<b>1,932</b>	<b>42</b>		57,283					
8811	Yes	3,255	18		75,000					
8812	Yes	6,361	11		75,696					
8813*	Yes	6,511	16		57,600					
8814*	Yes	<b>2,522</b>	<b>36</b>		37,396					
8815*	No	4,483	11		70,357					
8816*	Yes	<b>2,768</b>	<b>51</b>		30,970					

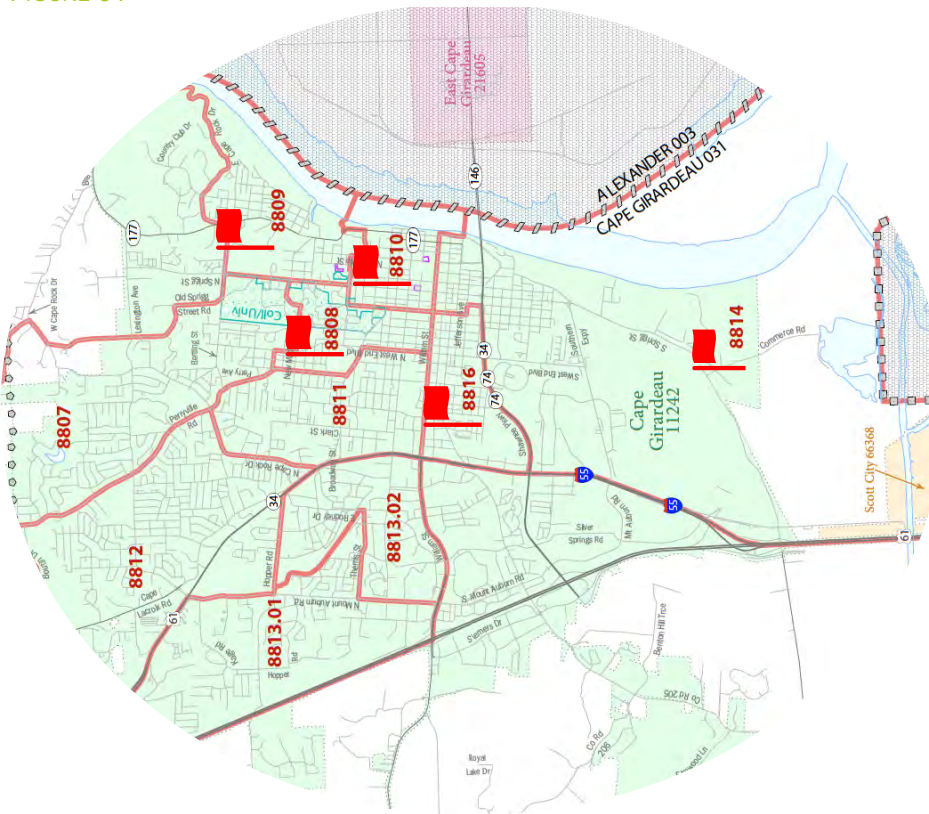
Note: Red shaded cells indicate a flag/concern for that variable. LI/LA = Low Income, Low Access; .5 - 10, 1 - 10, 1- 20 are mile ranges to food access. \* indicates a potential concern or needed intervention for the census tract.





**Jackson**

**FIGURE 81**

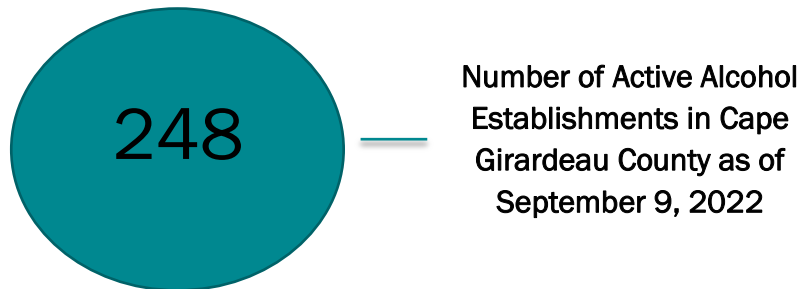


**Cape Girardeau**

**FIGURE 82**

## Alcohol Establishments

According to the Missouri Active Alcohol License Data files (State of Missouri, 2022), there are 248 active establishments in Cape Girardeau County, Missouri (as of September 9, 2022). Table 45 provides the number of people per establishment, that is, 29 people share two establishments in Pocahontas. The table also compares the number of establishments with the population and presents them as rates. Rates consider the population of the city compared to the number of establishments. Further inspection of the table below indicates that low population does not necessarily equate to low number of active alcohol establishments. Pocahontas, and Old Appleton have low populations (29 to 72) but have higher rates of establishments per 1,000 people.



**Table 45. Comparison of Number of Active Alcohol Establishments by City in Cape Girardeau County, Missouri and Rate per 1,000**

City	Number of Establishments	Population	Number of People per Establishment	Rate of Establishments per 1,000 Population
<i>Pocahontas</i>	2	29	14.5	68.97 !
<i>Old Appleton</i>	3	72	24	41.67!
<i>Burfordville</i>	1	83	83	12.05
<i>Delta</i>	4	464	116	8.62
<i>Friedheim</i>	3	481	160	6.24
<i>Cape Girardeau</i>	177	40,100	227	4.41
<i>Oak Ridge</i>	1	241	241	4.15
<i>Jackson</i>	53	14,893	281	3.56
<i>Millersville</i>	1	363	363	2.75
<i>Gordonville</i>	1	473	473	2.11
<i>Chaffee</i>	1	3,077	3,077	0.32



### Income Inequality/Income Ratio

Income inequality is defined as the ratio of household income at the 80<sup>th</sup> percentile to income at the 20<sup>th</sup> percentile. The Pew Research Center (2022) indicates that economic inequality matters because it diminishes opportunity and mobility. They cite technological change, globalization, decline of unions, and the eroding value of the minimum wage as reasons for income inequity. The income ratio is 4.9 in the United States, 4.5 in Missouri. The minimum for Missouri is 3.5 and the maximum is 6.5.

Shown in Figure 83, Cape Girardeau County's Income Ratio is 4.2 (higher ratio indicator means greater disparity in the top and bottom ends of the income range) and is in Quartile 2 (County Health Rankings, 2022).

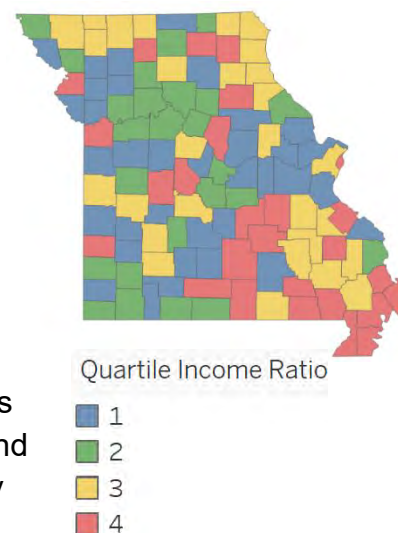


FIGURE 83

### Child Care Availability and Costs

Having social support with child care and acceptable childcare costs is beneficial for the entire community. Table 46 identifies the number of facilities in Cape Girardeau County as of September 21, 2022 (Missouri Department of Elementary and Secondary Education, 2022). The estimated population of children less than 5 years of age is 4,659. The percentage for the county is 19% of income needed for childcare with a range in Missouri of 11% to 33%. The county is in the 3<sup>rd</sup> quartile for the percentage of income required for childcare expenses (or known as the childcare cost burden). The higher the quartile and percentage the more income needed to pay for childcare.

**Table 46. Number of Facilities for Infants and Children**

Type	Number
Family Homes	5
Subsidy Summer Camps	0
Group Home	8
Subsidy School Based Care	0
Child Care Center	11
Registered Family Home	0
License Exempt Program	2
<b>Total</b>	<b>26</b>

### Internet Access

Broadband Access is the percentage of the population with fixed access to the Internet at speeds of 25 megabits per second (mbps) download and 3 mbps upload or higher (Federal Communications Commission, 2022). Hudson and Lancaster (2018) state that:

broadband access is required to efficiently support employment opportunities, workforce development, education, health care (telehealth), and access to/enrollment in state and federal programs (e.g. SNAP). Broadband access can foster social connectedness, particularly among older populations, reducing the burden of social isolation, strengthening community support, and decreasing loneliness. (County Health Rankings, 2022; Hudson, 2018)

Missouri has 83% broadband access with a range of 57 to 92% (2016 to 2020). Figure 84 shows the access to broadband across the state. Cape Girardeau County has 86% with access to broadband, which places it in the 4th quartile. The lower quartiles indicates less access (County Health Rankings, 2022). Table 47 shows the characteristics of internet access in the county (National Telecommunications and Information Administration, 2022).

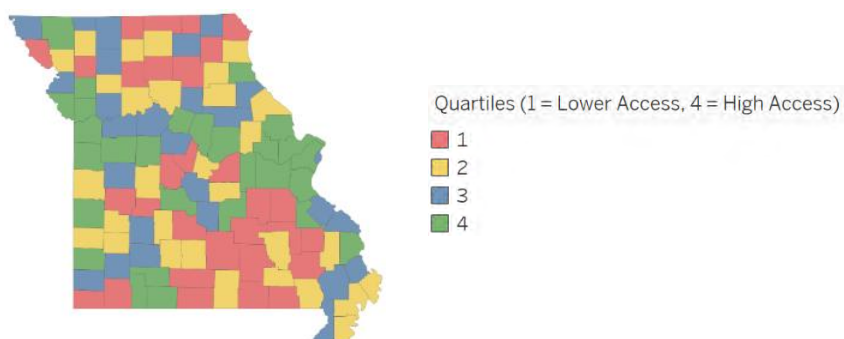


FIGURE 84

**Table 47. Characteristics of Internet Access**

<b>Characteristics</b>	<b>Value</b>
<i>Population (FCC 2019 Estimate):</i>	78,871
<i>ACS Percentage of Households without Internet Access:</i>	14.40%
<i>ACS Percentage of Households without Computer, Smartphone or Tablet:</i>	10.00%
<i>M-Lab Speed Test Median (Mbps):</i>	41.10/8.83
<i>Ookla Speedtest Median (Mbps):</i>	57.93/10.51
<i>Microsoft Percentage of Downloads Completed Over 25 Mbps or Higher:</i>	54

### Access to Various Services

Neighborhood is measured by metrics and policies focused on proximity to key destinations, safety, and supporting mixed-use development. Table 48 provides the accessibility to neighborhood livability. Proximity to the metric is provided for each major city in Cape Girardeau County. Higher scores are better (American Association of Retired Persons, 2022).

<b>Table 48. Neighborhood Livability Characteristics for Cities in Cape Girardeau County, Missouri</b>										
<b>Proximity to Metric</b>	<b>Cape Girardeau</b>	<b>Jackson</b>	<b>Delta</b>	<b>Dutchtown</b>	<b>Gordonville</b>	<b>Oak Ridge</b>	<b>Old Appleton</b>	<b>Pocahontas</b>	<b>Whitewater</b>	<b>U.S. Median</b>
<b>Neighborhood Overall Livability</b>	<b>46</b>	<b>43</b>	<b>23</b>	<b>27</b>	<b>26</b>	<b>24</b>	<b>24</b>	<b>27</b>	<b>22</b>	
Number of stores within .5 miles	.8	.4	0	0	0	0	0	0	0	0
Number of parks within .5 miles	1.8	.9	0	0	0	0	0	0	0	1
Number of libraries within .5 mile (0 to 1)	.1	.1	0	0	0	0	0	0	0	0
Number of jobs within a 45-minute transit commute	0	0	0	0	0	0	0	0	0	0
Number of jobs within a 45-minute auto commute	14,038	8,302	4,986	10,644	7,351	3,711	3,711	3,760	2,923	44,198
Diversity of destinations within 1 mile scored 0 to 1	.73	.66	0	0	0	0	0	.14	0	.65

**Attachment A**

**Data Sources for CHA Health Indicators**

United States Census Bureau	National Institute on Alcohol Abuse and Alcoholism	Fatal Analysis Reporting System (FARS)	Human Rights Campaign
Opportunity index by Opportunity Nation	National Alliance for Model State Drug Laws	Missouri Highway Patrol Crash Data	Campaign for Tobacco Free Kids
Bureau of Labor statistics	Robert Wood Johnson Foundation Prescription Drug Abuse Scores by State	Local School System (homeless census, free/reduce lunch, school surveys)	Community Commons
County Health Rankings	Centers for Disease Control and Prevention WONDER Database Detailed Mortality Tables	State Prescription Drug Monitoring Program	Behavioral Risk Factor Surveillance System
U.S. Department of Justice	Centers for Disease Control and Prevention WISQARS	Synar Amendment Reports (tobacco data)	University of Missouri, Center of Applied Research and Environmental Systems
Health Resources and Services Administration	Missouri Department of Mental Health Missouri's Substance Use and Mental Health	STOP Act State Reports (alcohol data)	Missouri Department of Health & Senior Services, Tobacco Control
Missouri Hospital Association	Missouri State Highway Patrol Crime Data	Annie E. Case Foundation Kids Count	National Center for Chronic Disease Prevention and Health Promotion.
Missouri Department of Health and Senior Services	Federal Bureau Investigation	National Child Traumatic Stress Network	Missouri Department of Health and Senior Services. MICA Datasets
American Association for Retired Persons Livability Index	Missouri Information for Community Assessment (MICA)	America's Health Rankings for Adverse Childhood Experiences (ACES)	State Epidemiological Workgroup Student Surveys
National Consumer Law Center		State of the Nation's Cities Database	Google searches (alcohol outlets)
Corporation for Enterprise Development	Missouri Department of Education	National School Climate Center	Local School Districts
World Health Organization Global Network for Age-Friendly Cities and Communities	Centers for Disease Control County Level Teen Pregnancy Data	Diversity Data Kids	Local Sherriff's Department
Smart Growth America	National Vital Statistics System (NVSS)	Health Landscape	Local Police Departments
National Conference of State Legislatures	Healthcare Cost and Utilization Project (HCUP)	MyEnvironment	Local Hospitals
Air Quality Data for the CDC national Environmental Public Health Tracking Network	National Association of Community Health Centers	Federal Emergency Management Administration	Medical Examiner
Treatment Episode Data Set (TEDS)	Emergency Room Data (DAWN)	Americans for Nonsmokers' Rights Foundation	

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