

# Washington County Rural Health Network Community Health Needs Assessment 2023

## Introduction

In 2015, the Washington County Rural Health Network was established to bring community leaders together to discuss the needs and health of Washington County residents. The individual organizations that formed the network are designated as “key stakeholders” within the community. Network members include the following:

1. Washington County Memorial Hospital
2. GMHC Health Center
3. Washington County Health Department
4. Washington County Ambulance District
5. Washington County Community Partnership

These partners have a history of working together to address health care needs in the area, particularly for those that are under- and uninsured. The strength of this partnership lies in its ability to develop collaborative relationships. Together, the Network can utilize the strengths of each organization to develop stronger and more integrated programs and services.

**Purpose.** The Washington County Rural Health Network’s purpose is to:

1. Integrate health care services.
2. Improve health care delivery systems.
3. Increase access to coordinated and quality essential health care services.
4. Improve population health for the region.

The first health priority the Network focused on was improving access to care for those with substance use disorders and/or mental health disorders. This priority was selected because of community feedback regarding health care needs. It was identified that there was a need for more education, awareness, and treatment options in Washington County. As a result, two sub-committees were formed to oversee community constructed action plans in both areas.

The Network continues to focus on developing and implementing programs that are responsive to the specific health care needs of the residents in Washington County. Program progress is measured by tracking specific health status indicators for each identified need. The Network members have identified behavioral health, including substance use disorder (SUD) and opioid use disorder (OUD), as one of its highest priorities.

**Planning and Implementation Funding.** Partners of the Washington County Rural Health Network are constantly working to respond to the community's needs and improve access to care. Several of the partners have served as lead applicants for federal grants that have been awarded over the past several years. These awards actively respond to need by developing and expanding upon current solutions that benefit the network and the community. Following is a summary of these key awards

**2018.** Washington County Memorial Hospital (WCMH) was awarded a Health Resources & Services Administration (HRSA) Rural Communities Opioid Response Program (RCORP) Planning grant. This was a one-year project to strengthen the capacity of the Network to develop plans to begin and sustain services for the prevention, treatment, and recovery of individuals with SUD and/or OUD in Washington County.

**2019.** WCMH was awarded a HRSA RCORP Implementation grant. The hospital received \$1 million over a three-year period to strengthen and expand the prevention, treatment, and recovery services developed because of the 2018 Planning grant.

**2020.** Washington County Ambulance District (WCAD) received a one-year Substance Abuse and Mental Health Administration (SAMHSA) EMS training grant in the amount of \$200,000 to provide trainers and tuition assistance to support local training on Fundamentals of Critical Care Transport (FCCT) for EMS and nursing personnel.

**2021.** WCMH applied for and was awarded a three-year HRSA RCORP award in the amount of \$500,000 to address psychostimulant use through prevention, treatment, and recovery services.

This same year, WCAD received a second year of EMS Training funds (\$200,000) from SAMHSA to continue FCCT training and education in Washington County and also received a grant from the Centers for Disease Control and Prevention in the amount to of \$3,000,000 to address COVID response by increasing the local CHW and EMS workforce through education and training resources provided through the grant.

GMHC Health Center (GMHC) also applied for and received an award from HRSA's Rural Health Outreach Program- Healthy Rural Hometown Initiative in the amount of \$1,000,000 million over four years to implement mobile integrated healthcare (MIH) services in Washington County, with high-risk heart disease patients as the focus of grant. MIH provides services to individuals in their home or other mobile environment, with community paramedics services as physician extenders. The community paramedics are a member of the care team that consists of the provider, the community paramedic, a community health worker, and other service providers necessary to provide whole person care.

GMHC received the Delta Regional Authority which facilitated a collaboration with the National Rural Health Resource Center and provided for the position of Community Champion for both WCMH and Great Mines. Part of the mandate of the program was to convene new and existing community partners in a series of meetings to strengthen the Washington County Health Coalition and select healthcare priorities, as well as highlight other community initiatives and provide resource coordination. The group selected behavioral health as the main priority, specifically substance abuse and mental health issues.

The Community Champion positions have subsequently evolved and expanded into a Director of Community Engagement at WCMH and a Community Resource Specialist at Great Mines.

The position at WCMH coordinates health coalition meetings and facilitates grants, amongst a host of other duties. The position at GMHC acts as a direct community liaison, allowing service on a variety of boards, attending broadband coalition and opioid initiative meetings as well as addressing quality of life issues, especially in our more impoverished communities. For instance, the awarding of a three-million-dollar Missouri Department of Natural Resources American Rescue Plan Act Grant to repair the failing sewer system in the Village of Mineral Point and a Delta Regional Authority States Economic Development Assistance Program Grant to replace a failing and dangerous bridge in the same community (both awarded in 2022). Subsequent successful funding (2023) includes a Community Development Block Grant for a Community Center in a renovated hall in the historic scout camp in the City of Irondale, which will additionally be used for mobile health services and other programming.

**2022.** WCMH was awarded a second three-year HRSA RCORP Implementation grant as well as a four-year HRSA RCORP Behavioral Health grant in the amount of \$2,000,000. All the RCORP resources to dedicated to improving access to prevention, treatment, and recovery for individuals with behavioral, SUD, and/or OUD needs.

This same year, WCAD applied for and was awarded a four-year SAMHSA First Responder-Comprehensive Addiction and Recovery Act (FR-CARA) grant in the amount of \$3.2 million to implement MIH services for individuals with behavioral health, SUD and/or OUD needs.

In 2022, GMHC Health Center also applied for and was awarded \$1,545,000 from HRSA for a three-year Rural Public Health Workforce Training grant to implement a workforce development project in the six-county Delta region (Iron, Madison, Perry, Reynolds, St. Francois and Washington). The project provides tuition assistance and employment opportunities for EMTs, CHWs, paramedics and nurses that wish to enter or advance in the healthcare industry.

All the above grants include participation of the Network partners, sharing funding, personnel, in-kind resources and leveraging other local state and federal dollars to impact population health in Washington County.

**Mission:** The mission of the Washington County Rural Health Network is to improve the health of the public and individual health outcomes in Washington County that support a healthier community.

**Vision:** Washington County should have adequate opportunities for its residents to live a healthy lifestyle, have access to wellness and preventative health care, substance abuse prevention and treatment, nutritious foods, safe neighborhoods, parks, trails, and recreational activities for all ages and physical abilities.

## **Service Area**

Washington County Rural Health Network's service area is defined in two ways for the purposes of this report. The first is the main area of Washington County, with a total population of 23,791.<sup>1</sup> The second is the zip-code service area, which shows a total population of 23,450, according to US Census ACS 5-year-estimates (2017-2021). This minor difference in population reflects how the service area may overlap into neighboring counties or may exclude areas when a sizable portion of the zip-code is outside the

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<sup>1</sup> US Census Bureau, American Community Survey. 2017-21. Source geography: Tract

county. Data points have been gathered using both the county and the zip-code service area definitions and are identified as appropriate.

The Washington County Rural Health Network primarily serves the area of eleven zip codes that are provided in the table below.

### Zip Codes in Network Service Area (UDS 2022)

63071	63622	63626	63630	63631	63648
63080	63660	63664	63674	63030	65441

Within this zip-code service area, 19.2%, or approximately 4,499 people, are living in households with income below the Federal Poverty Level (FPL), and 44.2% (10,354 people) have income below 200% of the FPL.<sup>2</sup>

Washington County is a healthcare provider shortage area, with GMHC Health Center, a Network member, holding Federally Qualified Health Center (HPSA) designations of 22 for primary care, 25 for dental health and 22 for mental health.

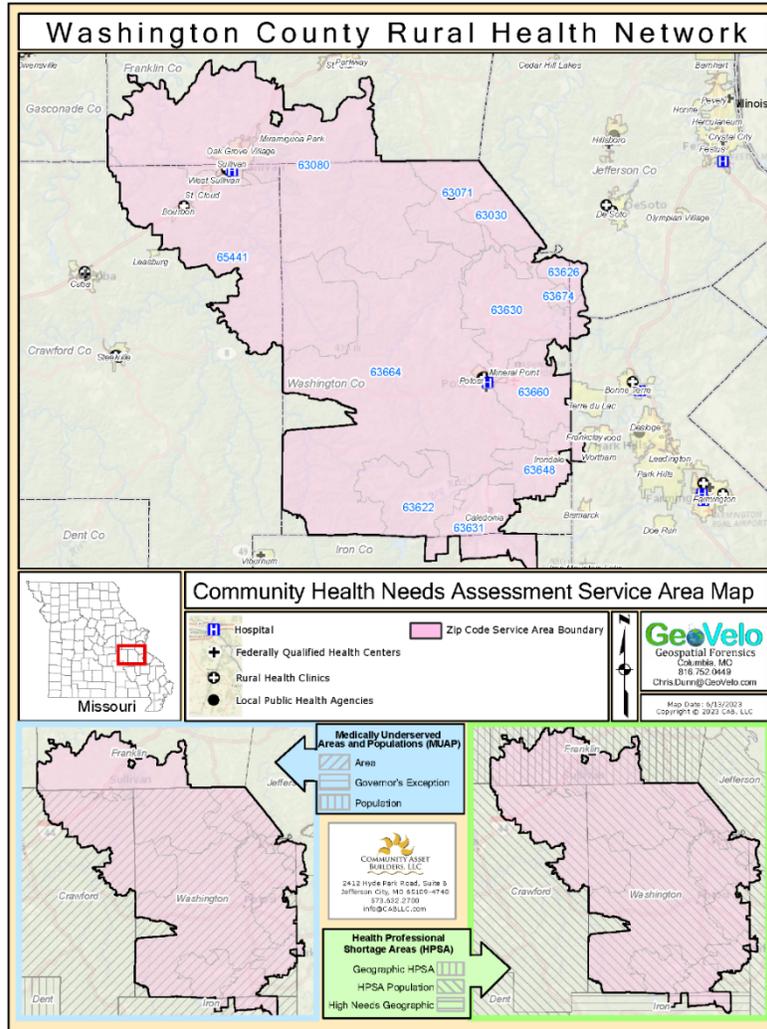
Washington County is also located in the Delta region. The Delta region is an economically challenged and underserved region that has tremendous challenges in recruiting and retaining healthcare personnel at all levels. Due to the economic challenges within the region, both GMHC Health Center and Washington County Memorial Hospital were selected to participate in the Delta Region Community Health Systems Development Program, to receive assistance in identifying and addressing health care needs while strengthening the local health care systems.

### Service Area Map

The service area map below highlights the zip codes within the Washington County Rural Health Network region, shows areas that are Medically Underserved Areas (MUAs) and shows areas with Health Professional Shortage Areas (HPSAs).

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<sup>2</sup> US Census Bureau, American Community Survey. 2017-21. Source geography: Tract



## Target Population

The Washington County Rural Health Network’s target population includes all members of the community, with an emphasis on low-income community members at or below 200% of the Federal Poverty Level (FPL). As previously stated, an estimated 44.2% of the population is living in households with income below 200% of poverty.

## Income and Poverty

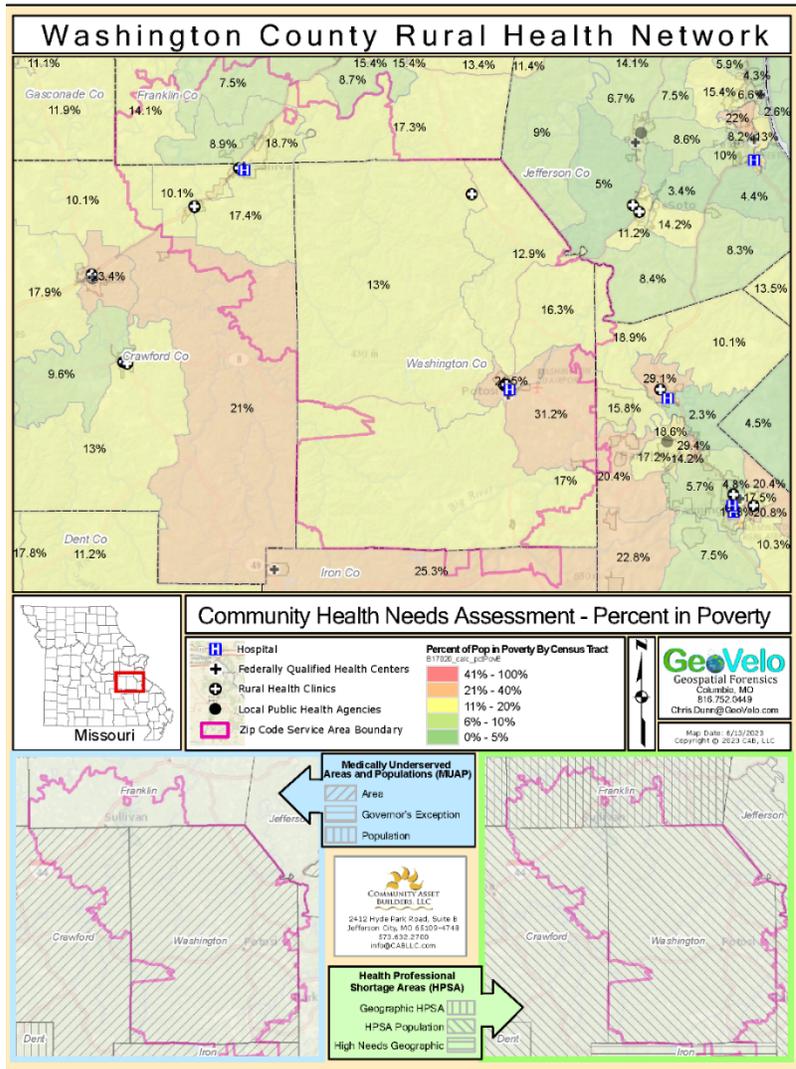
People in Washington County have lower wages and have less economic opportunity than other Missourians. According to the 2017-2021 American Community Survey five-year estimates, the median household income in the county is significantly lower than state and national rates, as shown in the following table.

Report Area	Total Households	Average Household Income	Median Household Income
Washington County	8,801	\$68,538	<b>\$44,955</b>

Report Area	Total Households	Average Household Income	Median Household Income
Missouri	2,433,819	\$83,153	\$61,043
United States	124,010,992	\$97,196	\$69,021

Approximately 21.3% of area residents commute to work for over sixty minutes each direction, higher than state (5.36%) and national (9.06%) rates. The high rates of long commutes, combined with low-income levels, impacts residents in numerous ways. Long travel times limit the opportunities for residents to access healthcare, as well as negatively impacting health status due to being sedentary while driving. **Poverty levels:** The zip code service area is a remarkably extreme poverty area with limited access to services. An estimated 44.2% of the area population are living in households with income below 200% FPL. This is approximately 10,354 individuals who are likely to be unserved or underserved. The map to the right provides a visual representation of the areas experiencing significant poverty.

**Disproportionate impact of poverty:** Poverty impacts certain members of the community more than others, particularly children and older adults. Approximately 25.56% of children under the age of 18 in Washington County are living in households with income below the federal poverty level, or 1,396 out of 5,462 children.



Approximately 16.44% of the population in the county are age 65 or older according to the U.S. Census Bureau American Community Survey 2017-2021 5-year estimates, or 3,911 people. The youth and elderly populations have unique health needs that should be considered separately from other age groups. These unique health needs include higher rates of medical care, such as immunizations and illnesses for children, and chronic diseases for the elderly. The elderly may have higher needs for medications and medication management. Older adults may also face greater risks of social isolation as well as possible transportation barriers.

*Free and reduced lunch program utilization:* There are 20 public school districts in Washington County, serving 3,332 public school students. Of those, 89.0% are eligible for the Free/Reduced Price Lunch program.<sup>3</sup> This indicator is relevant because it assesses vulnerable populations that are more likely to have multiple health access, health status, and social support needs. Additionally, when combined with poverty data, this measure may identify gaps in eligibility and enrollment.

*Insurance status:* Approximately 12.66% of Washington County residents do not have health insurance, higher than state (9.53%) and national (8.77%) rates. The lack of health insurance is a primary barrier to accessing primary and specialty care, as well as other health services. Along with a high rate of uninsured residents, the area also has a high rate of residents with publicly funded health coverage (45.0%), including 54.7% of children 18 and younger with Medicaid coverage. The inability to access services due to financial limitations contributes to poor health outcomes.

### Language

The percentage of the population age five and older who speak a language other than English at home and speak English less than “very well” is 0.0% in the county, with fewer than 40 individuals considered to have limited English proficiency.<sup>4</sup> Although the population size is extremely limited, the inability to communicate clearly creates barriers to healthcare access, provider communication and health literacy/education.

### Disabilities

Washington County is home to a large disabled population with 24.44% of residents having a disability as compared to state (14.36%) and national (12.64%) rates.<sup>5</sup> Healthy People 2020 reports that until recently, people with disabilities have been overlooked in public health surveys, data analyses, and health reports, making it difficult to raise awareness about their health status and existing disparities. Emerging data indicate that individuals with disabilities, as a group, experience health disparities in public health arenas, such as health behaviors, clinical preventive services, and chronic conditions. Compared with individuals without disabilities, individuals with disabilities are:

- Less likely to receive recommended preventive health care services, such as routine teeth cleaning and cancer screenings.
- Are at substantial risk for poor health outcomes, such as obesity, hypertension, falls-related injuries, and mood disorders, such as depression.
- More likely to engage in unhealthy behaviors that put their health at risk, such as cigarette smoking and inadequate physical activity.

The following graph reflects the percent, by age group, of the disabled population in Washington County as compared to state and national rates.<sup>6</sup> The graph clearly shows the higher rates of disabilities across all ages in the county.

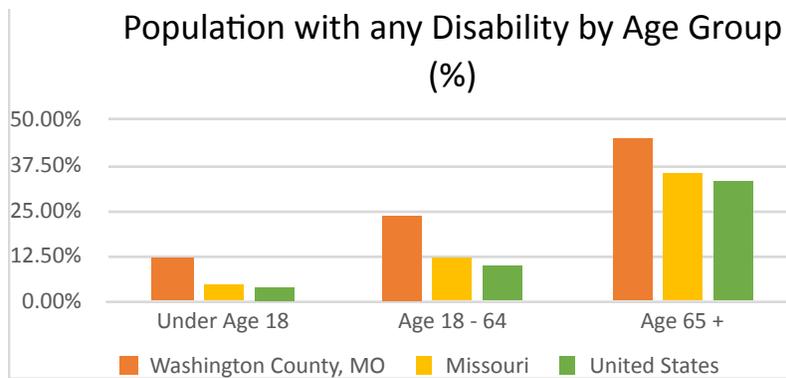
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<sup>3</sup> National Center for Education Statistics, NCES - Common Core of Data. 2020-2021. Source geography: Address

<sup>4</sup> US Census Bureau, [American Community Survey](#). 2017-21. Source geography: Tract

<sup>5</sup> US Census Bureau, [American Community Survey](#). 2017-21. Source geography: Tract

<sup>6</sup> US Census Bureau, [American Community Survey](#). 2017-21. Source geography: Tract



### Homelessness and Housing

According to the 2019 Missouri Balance of State Continuum of Care, Point-In-Time Sheltered and Unsheltered Homeless Count Report, issued by the Governor’s Committee to End Homelessness, there were no homeless individuals in the region. Because of the limitations of participating in the Point-In-Time project, some partners started collecting data at the local level to have a clear representation of the situation. The Washington County Community Partnership (WCCP) reports that the number of unsheltered individual encounters for Fiscal Year 2022 was 78. For Fiscal Year 2023 through 03/31/23 is 176. These numbers do not represent the total number of unsheltered, but the total of encounters that the WCCP assisted. In January of 2022 a warming center/shelter was opened due to winter weather at a church in Potosi. The church served 15 to 25 homeless individuals during a six-week period.

### Public Housing

There are 315 subsidized housing units available in the county that are currently occupied by approximately 503 people. Wait lists are long for those needing subsidized housing, with an average wait time of 13 months. For those in public housing, the average yearly household income is \$12,496. Women and disabled individuals are highly represented in the subsidized housing population. The majority of subsidized households in Washington County have a female head of household (66%), with 24% of residents having a female head of household along with children. Approximately 45% of subsidized households with residents aged 61 or younger include someone with a disability (head of household, spouse, or co-head). This percentage jumps to 75% for residents aged 62 and older. These populations (women and the elderly) are disproportionately represented in subsidized housing, with their extremely low incomes creating additional barriers to care.

### Jobs and Unemployment

The largest employment sector in Washington County is government and government services, with about 1,632 employees and an average wage of \$56,371. Retail trade is the next largest sector, employing approximately 795 residents, with an average wage of \$22,225.<sup>7</sup> The area is experiencing significant growth in business creation, with a net gain of 190 businesses, for a change rate of 43.18%. This rate is significantly higher than the state (4.29%) and national (4.02%) rates.<sup>8</sup> Data on business creation is from 2019, so the impacts of COVID-19 are not yet reflected.

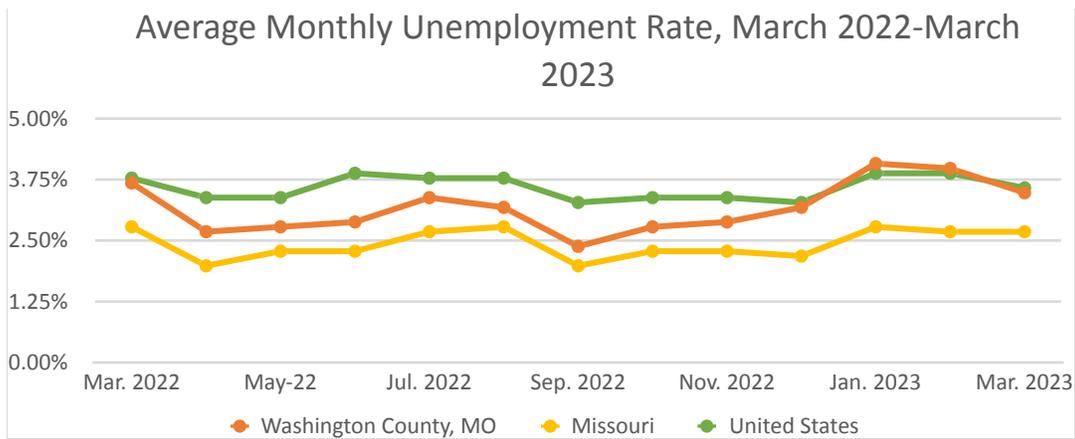
While businesses are growing, both median household income and per capita income are below state and national levels. The area also has a gender pay gap reflecting that a female earns approximately 69 cents for every dollar a male earns. This is lower than the national average of 80 cents and the state

<sup>7</sup> US Department of Commerce, [US Bureau of Economic Analysis](#). 2019. Source geography: County

<sup>8</sup> US Census Bureau, [Business Dynamics Statistics](#). 2019-2020. Source geography: County

average of 79 cents.<sup>9</sup> According to County Health Rankings, “Unequal pay by gender can harm women’s health and wellbeing. Women who earn a lower income for the same work are more likely to suffer from mood disorders, including depression and anxiety. Larger gaps in pay and gender inequities are also associated with worse mortality outcomes, poorer self-rated health, and increased disability. Eliminating the gender pay gap, on the other hand, could significantly reduce poverty, especially among single, female-headed households.”

As of March 2023, the annual average unemployment rate in Washington County was 3.5%, higher than the state (2.7%) and national (3.6%) rates.<sup>10</sup> Overall, average unemployment in the area is consistently higher than state rates and lower than national rates, as shown in the chart. Rates have fluctuated in accordance with state and national trends.



## Demographics

The following data provide a demographic overview of the Washington County Rural Health Network’s service area, to include population by age group, gender, race/ethnicity, and vulnerable populations. State and national rates are provided for comparison purposes.

### Total Population

Total Population (County based)	23,791
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### Population by Age

Age Groups	Percent (County)	MO Percent	US Percent
Under Age 18	23.45%	22.7%	22.5%
Age 18-64	60.12%	60.5%	61.5%
Age 65 and Older	16.44%	16.8%	16.0%

### Population by Race & Ethnicity

Race	Percent (County)	MO Percent	US Percent
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<sup>9</sup> 2023 County Health Rankings

<sup>10</sup> US Department of Labor, [Bureau of Labor Statistics](#). 2023 - March. Source geography: County

White	94.5%	80.3%	68.2%
Black	2.0%	11.3%	12.6%
Asian	0.2%	2.0%	5.7%
Native American/Alaska Native	0.1%	0.3%	0.8%
Native Hawaiian/P.I.	0.1%	0.1%	0.2%
Some Other Race	0.1%	1.4%	5.6%
Two or More Races	3.0%	4.6%	7.0%
Hispanic	1.51%	4.4%	18.4%

**Vulnerable Populations**

	Percent (County)	MO Percent	US Percent
Population Below 200% FPL	45.65%	30.5%	29.2%
Population without a high school diploma	19.51%	9.0%	11.1%
Population with a disability	24.44%	14.4%	12.6%
Veterans	9.32%	8.0%	6.9%
Estimated LGBTQ+ Population	N/A	3.8%	4.5%

Washington County covers approximately 759.87 square miles and has a population density of 31 persons per square mile, compared to 89 for Missouri and 93 for the United States.<sup>11</sup>

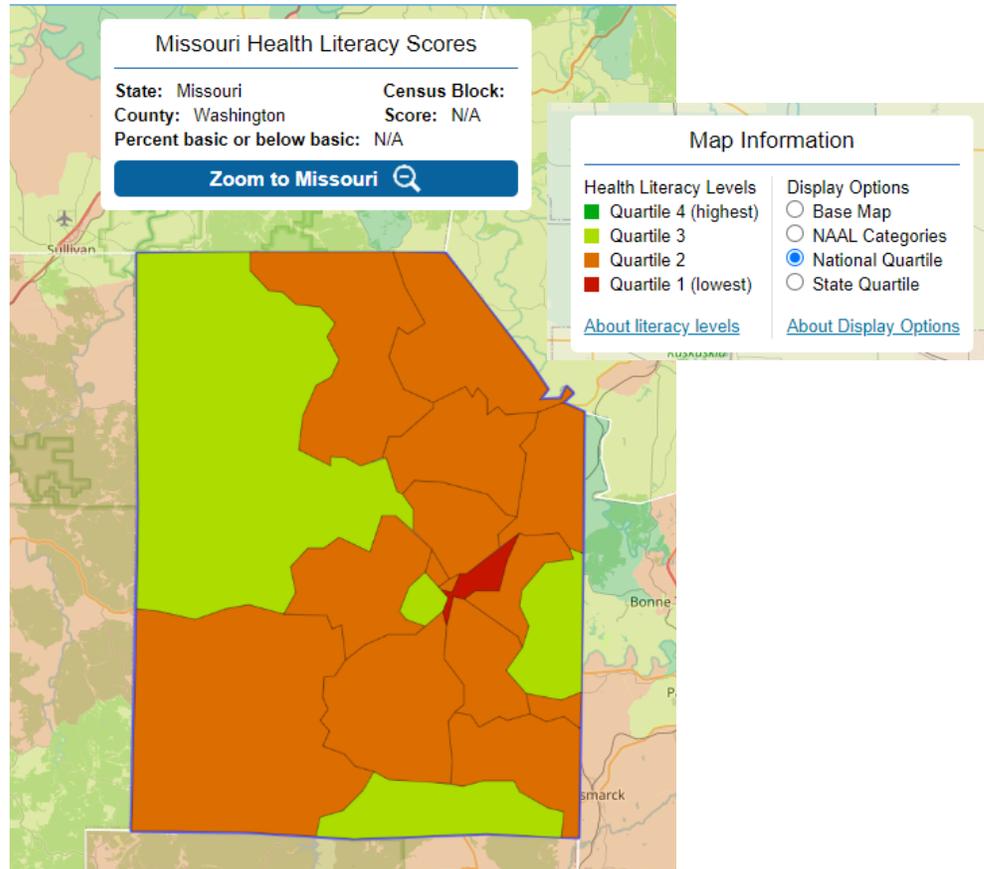
Of the 15,881 people aged 25 and older in the Network’s zip-code area, 20.0% do not have a high school diploma, compared to Missouri at 9.0% and the United States at 11.1%.<sup>12</sup> Area residents are also less likely to have completed higher education, with only 12.3% having a Bachelor’s degree or higher as compared to state (30.7%) and national (33.7%) rates. Lower education levels are linked to lower health literacy, impacting the patient’s ability to communicate needs to healthcare workers and the ability to understand treatment and medication instructions.

Individuals who are socio-economically disadvantaged are more likely to have limited health literacy skills (Health Literacy Missouri, 2009 Annual Report). As a result, poor health literacy has been viewed as a key indicator of health disparities by the Department of Health and Human Services. Studies link limited health literacy to problems with the use of preventive services, delayed diagnosis, understanding one’s medical condition, adherence to medical instructions, and health outcomes. Not surprisingly, low health literacy has been linked to a higher prevalence of chronic disease, inadequate disease treatment and knowledge, and compliance with self-care activities. Health literacy levels are low in Washington County, with many census tracts estimated to have over a third of residents at basic or below basic literacy levels. The map below, from the University of North Carolina at Chapel Hill, shows health literacy levels in the county.

<sup>11</sup> US Census Bureau, American Community Survey. 2017-21. Source geography: Tract

<sup>12</sup> US Census Bureau, American Community Survey. 2017-21. Source geography: Tract

## Health Literacy Data Map



Low health literacy not only leads to poor health outcomes, but also exacerbates national and state health care costs. According to research led by Jon Vernon, professor in the Department of Health Policy and Management at the University of North Carolina, Chapel Hill, the cost of low health literacy to the United States is between \$106 billion and \$238 billion each year. Missouri bears this cost burden to the tune of approximately \$5.2 billion.

Some experts suggest that a person's ZIP Code is more predictive of their health than their genetic code. Having detailed, local information on health factors and health outcomes in the places where Missourians live can help community health leaders take action to help create and sustain a healthy Missouri.

Spotlight on ZIP Health provides unique information on the top health factors facing counties in Missouri, and the healthiest and least-healthy ZIP Codes within each county. The data are arranged to include which health and social factors should be prioritized in each ZIP Code. The following pages illustrate the top ranked zip codes and the bottom ranked zip codes and the associated health factors and social factors for Washington County.<sup>13</sup> The zip codes are ranked from 1 to 942 with 1 = best.

<sup>13</sup> Source: [www.exploremohealth.org/reports/zip-health-report/](http://www.exploremohealth.org/reports/zip-health-report/)

## Top Ranked ZIP Codes in Washington County

ZIP Code	Name	Rank**	Top Health Factor	Top Social Factor
63030	Fletcher	357	Premature Deaths	One Parent Households
63631	Caledonia	378	Years of Potential Life Lost	Commute more than 30 minutes
63648	Irondale	677	Injury Deaths	One Parent Households
63624	Bismarck	685	Emergency Room Utilization	Percent Unmarried
63664	Potosi	700	Preventable Emergency Visits	Less Than High School Education

## Bottom Ranked ZIP Codes in Washington County

ZIP Code	Name	Rank**	Top Health Factor	Top Social Factor
63660	Mineral Point	841	Years of Potential Life Lost	Health Care Worker Availability
63622	Belgrade	820	Kidney Disease	Percent Unmarried
63630	Cadet	799	Preventable Emergency Visits	Medicaid Hospital Visits
63071	Richwoods	771	Preventable Hospitalizations	Unemployment
63626	Blackwell	709	Teen Pregnancy	Commute more than 30 minutes

## Causes of Death and Chronic Disease Prevalence

Chronic diseases and conditions – such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis – are among the most common, costly, and preventable of all health problems. The Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion report:

- Six in ten adults in the U.S. have a chronic disease and four in ten adults have two or more.
- Heart disease and stroke are the first and fifth leading causes of death in the U.S. Cardiovascular diseases cause one in three deaths, or more than 859,000 people each year. Costs include \$147 billion in lost productivity on the job from premature death as well as \$216 billion in health care system costs.
- Obesity is a serious health concern. About one in three adults and one in five children struggle with obesity. The U.S. spends \$147 billion annually on obesity-related health care.
- Arthritis is the most common cause of disability affecting 58.5 million adults in the U.S, with an estimated 25.7 million adults limiting their usual activities due to their arthritis.
- More than 37 million in the U.S. have diabetes, and 96 million have prediabetes. People with diabetes are at higher risk of heart disease, stroke, and other serious complications like kidney failure, blindness, and amputations.

The Washington County age-adjusted death rate (996.01) exceeds the Missouri rate of 809.76, as shown in the table below. The table provides the leading cause of death rates in Washington County, and provides comparative state rates, as well as showing a statistical significance between rates.<sup>14</sup>

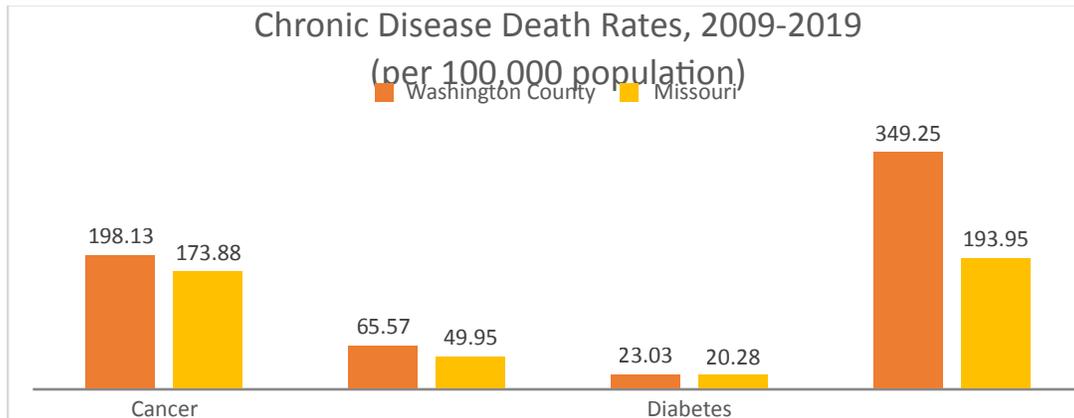
<sup>14</sup> Missouri Department of health and Senior Services, Leading Cause of Death Profile, 2009-2019.

	Data Years	Washington County Rate	Missouri Rate	Significantly Different
<i>Leading Causes of Death</i>				
All Causes	2009 - 2019	996.01	809.76	H
Heart Disease	2009 - 2019	349.25	193.95	H
All Cancers (Malignant Neoplasms)	2009 - 2019	198.13	173.88	H
Lung Cancer	2009 - 2019	74.07	51.08	H
Breast Cancer	2009 - 2019	12.15	11.97	N/S
Colorectal Cancer	2009 - 2019	17.58	15.37	N/S
Chronic Lower Respiratory Disease	2009 - 2019	65.90	51.03	H
Total Unintentional Injuries	2009 - 2019	80.07	52.44	H
Accidental Poisoning	2009 - 2019	27.24	18.12	H
Motor Vehicle Accidents	2009 - 2019	36.17	14.37	H
Stroke/Other Cerebrovascular Disease	2009 - 2019	38.26	41.02	N/S
Alzheimer's Disease	2009 - 2019	23.88	29.21	N/S
Diabetes Mellitus	2009 - 2019	23.03	20.28	N/S
Kidney Disease (Nephritis and Nephrosis)	2009 - 2019	21.68	18.85	N/S
Pneumonia and Influenza	2009 - 2019	17.98	17.17	N/S
Suicide	2009 - 2019	17.99	16.46	N/S
Septicemia	2009 - 2019	9.56	11.19	N/S
Chronic Liver Disease and Cirrhosis	2009 - 2019	9.43	8.75	N/S
<i>Other Causes of Interest</i>				
Smoking-Attributable (estimated)	2009 - 2019	197.51	134.56	H
All Injuries and Poisonings	2009 - 2019	104.38	80.23	H
Homicide	2009 - 2019	3.19*	8.8	L
Alcohol-Induced Deaths	2009 - 2019	4.52*	7.1	N/S
Drug-Induced Deaths	2009 - 2019	28.23	20.51	H
Accidental Drug Poisonings	2009 - 2019	26.58	17.14	H
Injury by Firearms	2009 - 2019	13.78	16.87	N/S

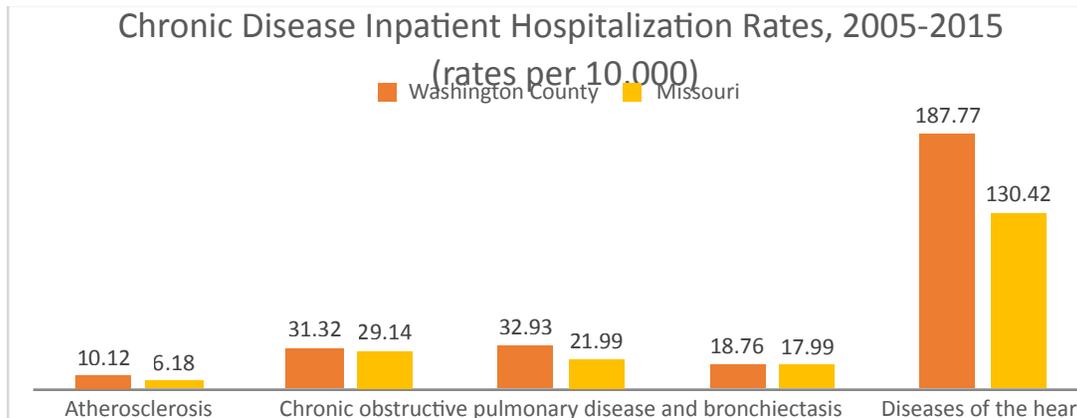
(\* Fewer than 20 events in numerator; rate is unreliable.)

Causes of death at the left margin are listed in order from most to least prevalent statewide, except the seven grouped at the bottom. They are of lower rank or are non-ranked groups which include other causes but are included due to special interest.

The graph on the following page depicts the chronic disease death rates for cancer, Chronic obstructive pulmonary disease (COPD), diabetes, and heart disease for the 10-year period 2009-2019. Washington County has many chronic disease death rates that were statistically significantly higher than the Missouri rates. In reviewing the cancer death rates by type of cancer, Washington County was higher for colon, lung, and breast cancers as well as leukemia when compared to the Missouri rates according to data from the Missouri Department of Health and Senior Services.

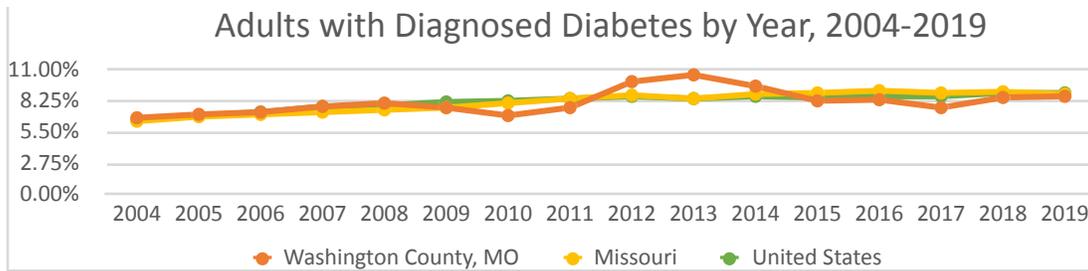


The following graph depicts the chronic disease hospitalization rates for the period 2009-2015. The graph reflects rates that are higher than Missouri rates.



Approximately 8.7% of adults aged 20 and older in Washington County have been told by a doctor they have diabetes. This is lower than state (8.9%) and national (9.0%) rates. The rates of adults with diabetes have fluctuated in Washington County, but has increased since 2004 at local, state, and national levels. The chart below depicts rates for 2004-2019. In Washington County, the 2004 rate was 6.8%, which increased to 8.7% by 2019.<sup>15</sup>

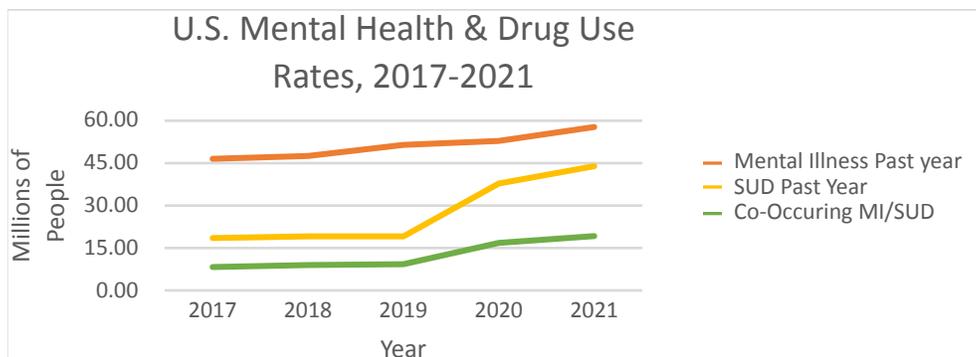
<sup>15</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2019. Source geography: County



Heart disease is a leading cause of death in the United States and is related to high blood pressure, high cholesterol, and heart attacks. In Washington County, an average of 9.40% of adults aged 18 and older have been told by a doctor that they have coronary heart disease or angina. This is significantly higher than state (7.36%) and national (6.4%) rates.<sup>16</sup> In accordance with high rates of heart disease, the averaged county rate for those with high blood pressure is 38.4%, higher than state (32.4%) and national (32.6%) rates.<sup>17</sup>

## Behavioral Health

The National Survey on Drug Use and Health (NSDUH) is the primary source for statistical information on illicit drug use, tobacco use, alcohol use, substance use disorders (SUDs), mental health issues, and co-occurring SUDs and mental health issues for the civilian, noninstitutionalized population of the United States. According to SAMHSA's 2021 National Survey on Drug Use and Health, an estimated 57.8 million (22.8%) people experienced some form of mental illness in the past year (2021). This percentage increased from 19.1%, or 47.6 million people in 2018. In 2021, 46.3 million (16.5%) people aged twelve and older had a substance use disorder in the past year, including 29.5 million with an alcohol use disorder and 24.0 million with a drug use disorder. Among those, 15.8% (7.3 million people) had both an alcohol and a drug use disorder in the past year. Approximately 7.6% (19.4 million people) had both a mental disorder and a substance use disorder, also known as co-occurring mental health and substance use disorder.

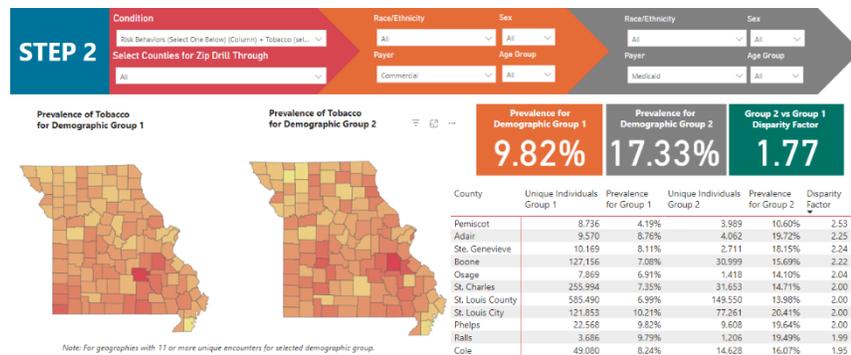


<sup>16</sup> Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the PLACES Data Portal. 2020. Source geography: Tract

<sup>17</sup> Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the PLACES Data Portal. 2019. Source geography: Tract

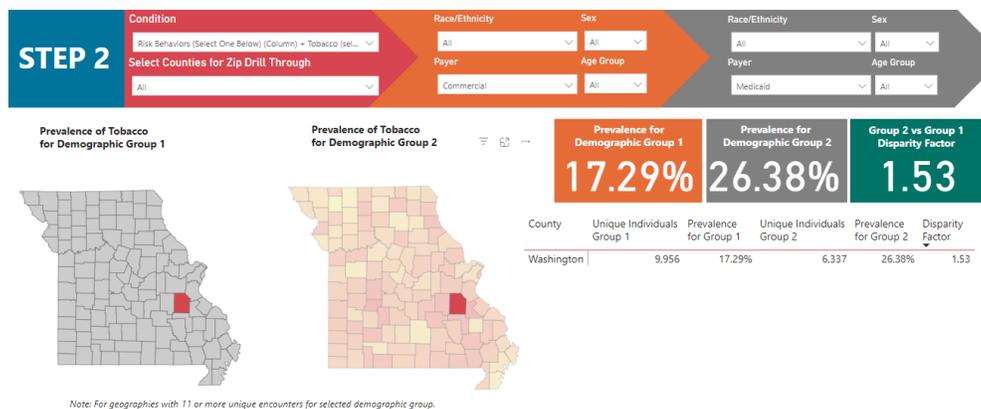
Individuals struggling with serious mental illness are at higher risk for homicide, suicide, and accidents, as well as chronic conditions including cardiovascular and respiratory diseases and substance abuse disorders.

Tobacco use is prevalent in Washington County, again with significant disparities reflected between individuals covered by Medicaid compared to commercial pay patients. When analyzing the Missouri Hospital Association’s Health Equity Dashboard for risk behaviors, specifically tobacco use, Medicaid patients are 1.77



times more likely than commercial pay patients to use tobacco.

When analyzing the data specifically for Washington County, the risk disparity factor lessens from 1.77 to 1.53, but note the prevalence of tobacco uses increases significantly for both commercial pay and Medicaid patients, with a prevalence of 26.38% in the Medicaid covered population.



### Behavioral health disorders

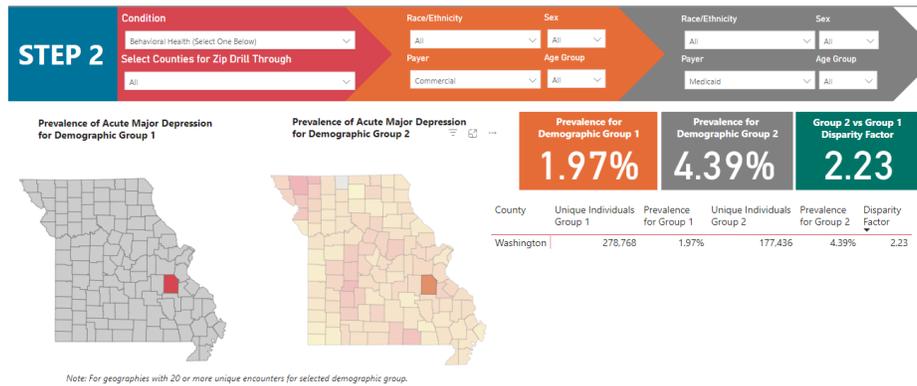
Washington County is a designated Health Professional Shortage Area (HPSA) for mental health care, indicating a low level per capita of mental health professionals. GMHC Health Center has a Federally Qualified Health Center HPSA designation of 22 for mental health. The county also has a low-income population HPSA designation, with a score of 17.

In 2021, approximately 335 individuals in Washington County received clinical services from the Division of Behavioral Health psychiatric program. This is an increase from the 285 individuals served in 2019. The majority of diagnoses were related to depression, anxiety and fear disorders, and trauma and stress related disorders. Washington County is included in the Missouri Department of Mental Health’s Southeast Region where approximately 21.5% of adults aged 18 and older reported a mental illness in the past year and 6.1% had a serious mental illness. Additionally, 8.7% of adults aged 18 and older in the region had at least one major depressive episode.<sup>18</sup> A major depressive episode is characterized by an

<sup>18</sup> Missouri Department of Mental Health, 2021 Community Profiles.

extended period of depressed mood, loss of interest or pleasure, and impaired functioning. Typically, females are more likely to report having had a major depressive episode.

When reviewing the Health Equity Dashboard for Washington County for behavioral health, residents with Medicaid coverage (4.39%) were 2.23 times more likely than commercial pay patients (1.97%) to have a behavioral health condition.



### Suicide

After two consecutive years of declines in suicide nationally (47,511 in 2019 and 45,979 in 2020), 2021 data indicate an increase in suicide to 48,183, nearly returning to the 2018 peak (48,344) with an age-adjusted rate of 14.1 suicides per 100,000 population (versus 14.2 in 2018).<sup>19</sup> Data from 2004 to 2020 shows the age-adjusted suicide rate for all ages in the United States increased (11.0% to 13.5%). In Missouri, the increase has been even more dramatic, with rates increasing from 12.4 to 18.2, well above national rates. There were 32 deaths in Washington County due to intentional self-harm from 2016-2020 for a rate of 26.3 per 100,000. This rate is significantly higher than state (18.6) and national (13.8) rates.<sup>20</sup>

### Deaths of Despair

Deaths of despair measures the rate of death due to intentional self-harm (suicide), alcohol-related disease, and drug overdoses per 100,000 population and is an indicator of poor mental health. There were 85 deaths of despair in Washington County from 2016-2020 for an overall rate of 68.9. This rate is higher than state and national rates, as shown in the table below.

Report Area	Total Population	Age-Adjusted Death Rate per 100,000
Washington County, MO	24,828	68.9
Missouri	6,124,392	54.1
United States	326,747,554	47.0

<sup>19</sup> Stone DM, Mack KA, Qualters J. Notes from the Field: Recent Changes in Suicide Rates, by Race and Ethnicity and Age Group — United States, 2021. MMWR Morb Mortal Wkly Rep 2023; 72:160–162.

<sup>20</sup> Centers for Disease Control and Prevention, [CDC - National Vital Statistics System](#). Accessed via [CDC WONDER](#). 2016-20

Unfortunately, there are only 20 mental health providers in the county, for a rate of 85 providers per 100,000 population, lower than state (231) and national (295.7) rates.<sup>21</sup> GMHC provides Medication Assisted Treatment (MAT) along with counseling services related to substance use disorders. GMHC MAT providers are specially certified to safely provide patients struggling with substance use/addiction including buprenorphine (typically just for pregnant women), buprenorphine with Naloxone (commonly Suboxone), and Naloxone in different forms of administration (oral tablets, strips, or injections). GMHC also has licensed social workers and counselors certified in Medication Assisted Recovery Specialist (MARS) to help patients understand their MAT along with process triggers and traumas related to their substance abuse disorder. In addition, we employ Community Health Workers (CHW) that have knowledge of MAT to provide recourses for patients to prevent any barriers to treatment.

**Substance Abuse**

The following table illustrates indicators of substance abuse, as reported by the Missouri Department of Mental Health in the 2021 Status Report on Missouri’s Substance Use and Mental Health and County Profiles. Hospital data includes emergency department visits, with or without admission, as well as non-emergency department admissions.

**Substance Abuse Indicators**

Washington County			
	2017	2018	2019
Hospital: Alcohol Disorder Principal or Secondary Diagnosis	256	284	207
Hospital: Drug Disorder Principal or Secondary Diagnosis	428	620	630
Arrests for Driving Under the Influence	49	43	32
County	Washington County		
Drug Arrests	44	48	77
Alcohol or Drug Involved Crashes	30	32	22

**Opioid Use Disorder - Mortality**

The following map illustrates the impact of opioid use disorder in Missouri. Most counties with high opioid-involved mortality rates are clustered around the St. Louis metropolitan region moving south and eastward, though some additional counties with high opioid-involved death rates can be found across the state.

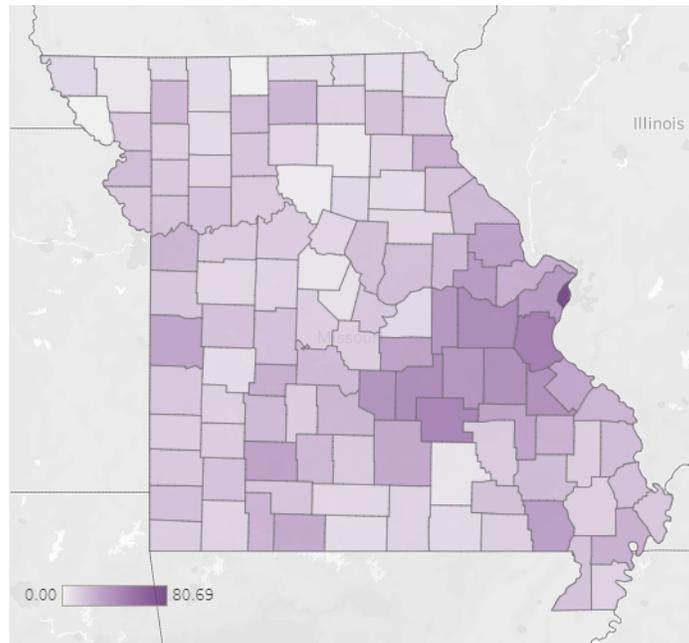
There were 58 drug overdose deaths in Washington County from 2016-2021, for a rate of 39.28 per 100,000 population, accounting for eight deaths. The county ranks as sixth in the state for drug overdose mortality rates. Rates are considered conservative as opioid deaths are often under-reported.

As with opioid overdose deaths, emergency department visits with opioid misuse diagnoses show high rates for many counties surrounding the St Louis area. Washington County had 269 emergency

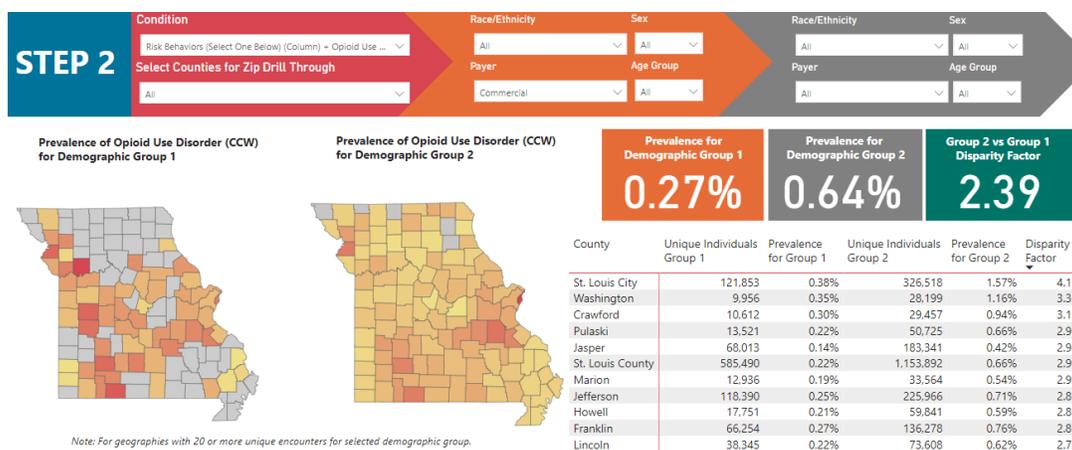
<sup>21</sup> Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES). Accessed via County Health Rankings. 2022. Source geography: County

department visits due to opioid misuse during the period 2016-2020 for a rate of 2.17 per 1,000 population. State rates varied from a low of 1.65 to 1.77 during the five-year period.

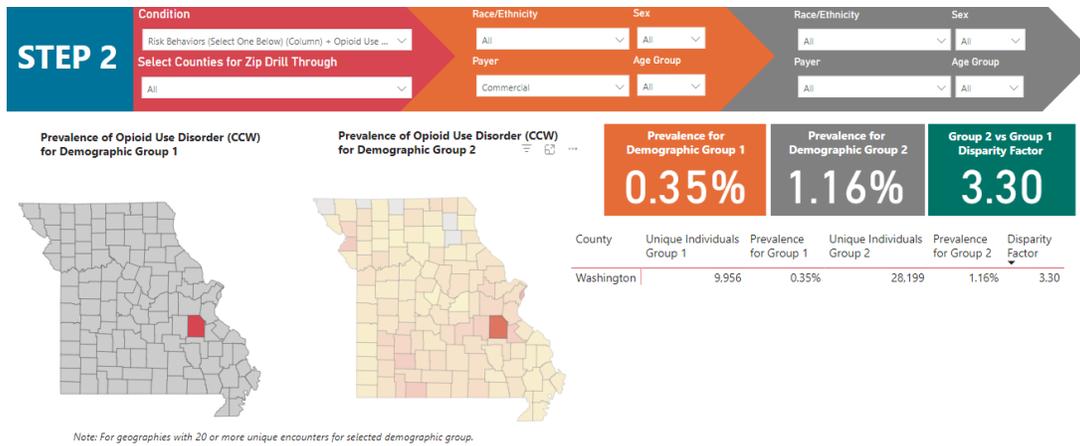
### All Drug Overdose Mortality Rates 2016-2021



When reviewing the Missouri Hospital Association’s Health Equity Dashboard for risk behaviors and disparities between Medicaid and commercial pay patients, individuals with Medicaid coverage fare worse than commercial pay patients. Specifically, when looking at opioid use disorder in Missouri, Medicaid covered individuals are 2.39 times more likely than commercial pay patients to have a risk behavior.



The disparity factor is higher for Washington County at 3.30, as the illustration below reflects.



### Violence Related Incidents

Trauma and violence are widespread, harmful, and costly public health concerns. They have no boundaries regarding age, gender, socioeconomic status, race, ethnicity, or sexual orientation. Trauma is a common experience for adults and children in American communities, and it is especially common in the lives of people with mental and substance use disorders. For this reason, the need to address trauma is increasingly seen as an important part of effective behavioral health care.

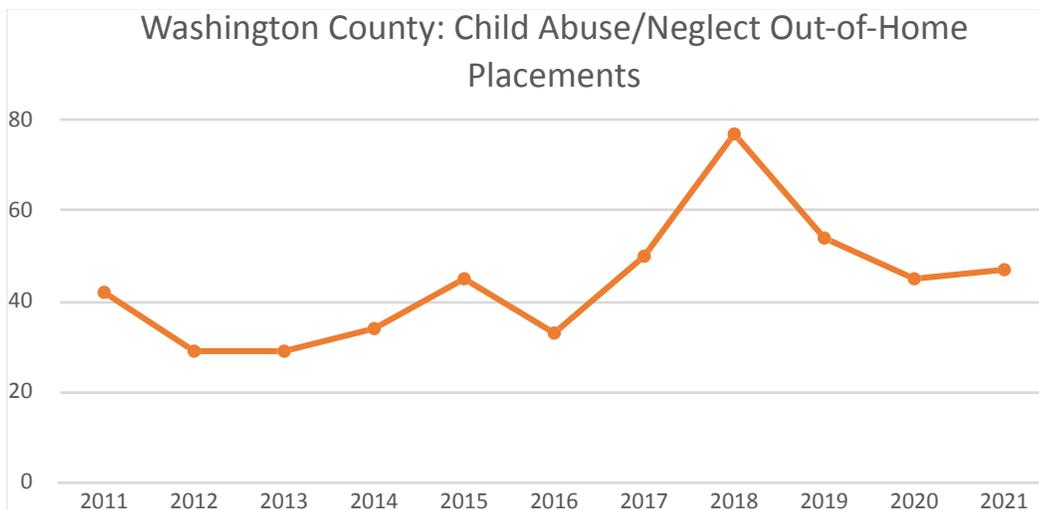
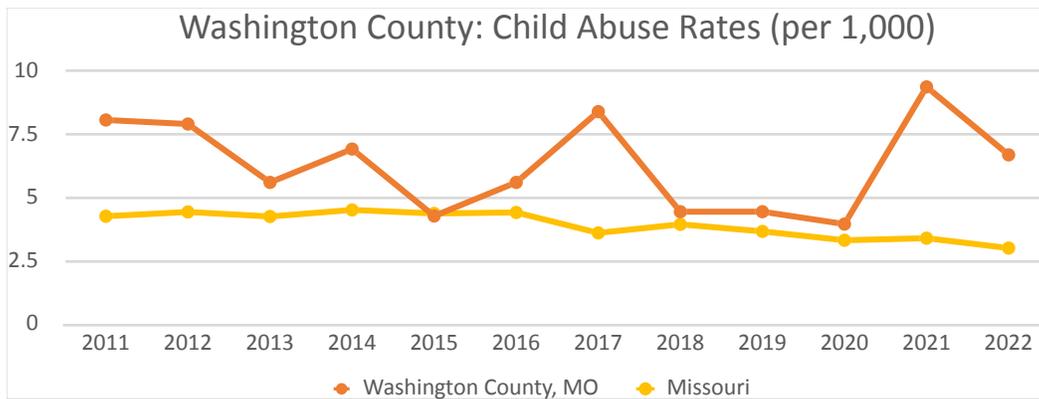
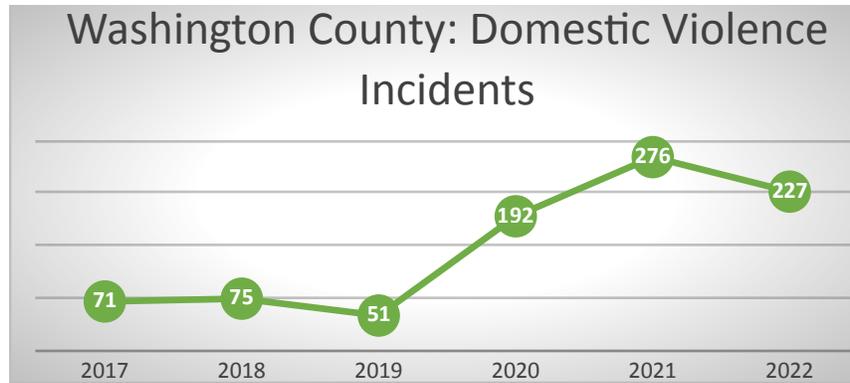
Research has shown that traumatic experiences are associated with both behavioral health and chronic physical health conditions, especially those traumatic events that occur during childhood. Substance use, mental health problems, and other risky behaviors have been linked with traumatic experiences. Because these behavioral health concerns can present challenges in relationships, careers, and other aspects of life, it is important to understand the nature and impact of trauma. Traumatic experiences can also contribute to chronic physical health conditions, such as diabetes and cardiovascular diseases.

Below are violence related statistics for Washington County. High rates of domestic violence, child abuse and neglect, and out-placement of children due to abuse and neglect, that are indicative of underlying behavioral health issues. The following graphs illustrate the number of domestic violence incidents<sup>22</sup>, rates of child abuse and neglect<sup>23</sup>, and the number of children removed from home due to child abuse and neglect<sup>24</sup> for the years specified.

<sup>22</sup> Missouri State Highway Patrol, Domestic Violence Supplemental Reports & Crime in Missouri Dashboard.

<sup>23</sup> Missouri Department of Social Services, Child Abuse and Neglect Annual Reports.

<sup>24</sup> Missouri Office of State Courts Administrator, Juvenile Court Annual Reports.



## Maternal and Infant Health

Maternal and infant health encompass an array of issues, from pregnancy complications, weight gain during pregnancy, tobacco use during pregnancy, pregnancy-related deaths and depression to pre-term birth, sudden infant death syndrome (SIDS), and infant mortality. Pregnancy can often provide an opportunity to identify existing health risks in women and to prevent future health problems for women and their children. These health risks may include:

- Hypertension and heart disease
- Diabetes
- Depression

- Genetic conditions
- Sexually transmitted diseases (STDs)
- Tobacco, alcohol, and other substance use
- Inadequate nutrition
- Unhealthy weight

The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality pre-conception and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. It is noteworthy that:

- Nearly 25% of the people in the United States are younger than 18.
- Most (about 84%) pregnant women enter prenatal care during the first three months of pregnancy, helping to ensure their babies are born healthy.
- Of all countries in 2020, the United States possessed the highest infant mortality rate at 5.4 deaths per 1000 live births, which is markedly higher than the 1.6 deaths per 1000 live births in Norway, which has the lowest mortality rate.<sup>25</sup>

Maternal mortality (death due to maternal causes) includes deaths related to or aggravated by pregnancy or pregnancy management but excludes deaths occurring more than 42 days after the end of the pregnancy and deaths of pregnant women due to external causes such as injury. The rate of maternal mortality in the United States declined dramatically over the last century; however, this trend has reversed somewhat in the last several decades. The 2022 March of Dimes Report Card scored Missouri with a “D-” in pre-term births, as rates in the state have increased from 9.6% in 2011 to 11.3% in 2021. Racial and ethnic disparities persist, with the preterm birth rate among Black women in Missouri being 51% higher than the rate among all other women.<sup>26</sup>

The U.S. Maternal Vulnerability Index identifies where and why mothers in the U.S. are vulnerable to poor health outcomes and assigns scores from 0 - 100, with 100 being the most vulnerable. Six themes are examined to determine scores including reproductive healthcare, physical health, mental health and substance abuse, general healthcare, socioeconomic determinants, and physical environment. Washington County scores 84 on the index, indicating an exceedingly high rate of vulnerability. The areas of most concern include mental health and substance abuse, general health care, and socioeconomic determinants.<sup>27</sup>

### Teen Birth Rate

Per the Centers for Disease Control and Prevention (CDC), in 2021 a total of 146,973 babies were born to women aged 15-19 years in the United States, for a birth rate of 13.9 per 1,000 women in this age group. This is a record low for U.S. teens. Still, the U.S. teen pregnancy rate is substantially higher than in other western industrialized nations, and racial/ethnic and geographic disparities in teen birth rates persist.

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<sup>25</sup> Petruccio, J. (2023, January 31). US has highest infant, maternal mortality rates despite the most health care spending. AJMC. <https://www.ajmc.com/view/us-has-highest-infant-maternal-mortality-rates-despite-the-most-health-care-spending>

<sup>26</sup> 2022 March Of Dimes Report Card For Missouri. (n.d.). March of Dimes | PeriStats. <https://www.marchofdimes.org/peristats/reports/missouri/report-card>

<sup>27</sup> Surgo Ventures - The U.S. Maternal Vulnerability Index (MVI). (n.d.). <https://mvi.surgoventures.org/>

Missouri's teen birth rate is 17.1, higher than the national rate. According to America's Health Rankings, this rate puts Missouri at 39 out of 50 states, with 50 being the state with the highest teen birth rate.<sup>28</sup> In Washington County, the teen birth rate for 2017-2021 was 36.8, significantly higher than state and national rates.

### Infant Mortality

The infant mortality rate is the rate of deaths to infants less than one year of age per 1,000 births. High rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health. According to the CDC, a total of 19,920 deaths occurred in infants under one year of age in 2021, for an infant mortality rate of 543.6 infant deaths per 100,000 live births. Most of these babies die because of –

- Birth defects
- Preterm birth (birth before 37 weeks gestation) and low birth weight
- Maternal complications of pregnancy
- Sudden Infant Death Syndromes (SIDS)
- Injuries (e.g., suffocation)

In addition to providing key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society.

Missouri's infant mortality rate for 2006-2010 was 7.2 per 1,000 births, slightly higher than the national rate of 6.5.<sup>29</sup> The Washington County rate was lower than both state and national rates at 4.8.

### Smoking During Pregnancy

The 2019 rate for smoking during pregnancy as a percentage of all pregnancies is very high for Washington County at 27.04% as compared to the state rate of 12.77%.<sup>30</sup> The most recent data from 2021, according to Healthy People 2030 shows that 95.4% of pregnant women abstain from cigarette smoking, which is an increase from the 2018 rate of 93.5%.

Most people are aware that smoking causes cancer, heart disease, and other major health problems. The Centers for Disease Control and Prevention (CDC) reports that smoking during pregnancy causes additional health problems including premature birth, certain birth defects, and infant death.

- Smoking makes it harder for a woman to get pregnant.
- Women who smoke during pregnancy are more likely than other women to have a miscarriage
- Smoking can cause problems with the placenta – the source of the baby's food and oxygen during pregnancy. For example, the placenta can separate from the womb too early, causing bleeding, which is dangerous to the mother and baby.
- Smoking during pregnancy can cause a baby to be born too early or to have low birth weight – making it more likely the baby will be sick and must stay in the hospital longer.
- Smoking during and after pregnancy is a risk factor of sudden infant death syndrome (SIDS). SIDS is an infant death for which a cause of death cannot be found.
- Babies born to women who smoke are more likely to have certain birth defects, like a cleft lip or cleft palate.

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<sup>28</sup> America's Health Rankings analysis of CDC WONDER, Natality Public Use Files, United Health Foundation, AmericasHealthRankings.org, accessed 2023.

<sup>29</sup> Centers for Disease Control and Prevention, Reproductive Health, Infant Mortality.

<sup>30</sup> Missouri Department of Health and Senior Services, Prenatal Profiles.

### Low Birthweight Infants

Low birthweight is a term used to describe babies who are born weighing less than 2,500 grams (5 pounds, 8 ounces). In contrast, the average newborn weighs about 8 pounds. Over 8% of all newborn babies in 2021 in the United States have low birthweight.<sup>31</sup> Low birth weight infants are at considerable risk for health problems, and high rates can highlight the existence of health disparities. Washington County has a high rate (10.0%) of low birthweight births during the 2014-2020 time period, higher than state (8.6%) and national (8.2%) rates.<sup>32</sup>

### Other Maternal Health Indicators

In 2019, a higher percentage of pregnant women in Washington County received Medicaid, WIC and food stamps compared to Missouri overall. The county also has a high rate (35.07) of women receiving care later in pregnancy, at the second or third trimester, when compared to the state rate (26.39).

Indicator	Washington County	Missouri
Inadequate Prenatal Care (Kotelchuck Index)	18.49	17.89
Late Care (2 <sup>nd</sup> /3 <sup>rd</sup> Trimester)	35.07	26.39
Prenatal WIC	69.55	33.89
Prenatal Medicaid	62.78	38.60
Prenatal Food Stamps	41.31	24.62
Mother Smoked During Pregnancy	27.04	12.77

## Dental Care/Oral Health

According to a report from the Kaiser Family Foundation: “Oral health is an integral part of overall health, but its importance to overall health and well-being often goes unrecognized. Untreated oral health problems can lead to serious health complications. Having no natural teeth can cause nutritional deficiencies and related health problems. Untreated caries (cavities) and periodontal (gum) disease can exacerbate certain diseases, such as diabetes and cardiovascular disease, and lead to chronic pain, infections, and loss of teeth. Lack of routine dental care can also delay diagnosis of conditions, which can lead to potentially preventable complications, high-cost emergency department visits, and adverse outcomes.”

As of 2019, nearly half of Medicare beneficiaries (47%), or nearly 24 million people, do not have dental coverage and many go without needed care, according to a Kaiser Family Foundation brief on dental coverage and costs for Medicare beneficiaries.<sup>33</sup> Rates are even higher among black (68%) and Hispanic (61%) beneficiaries, and those with low incomes (63%).<sup>34</sup> Medicare does not generally cover routine preventive dental care or more expensive dental services that are often needed by older adults. Lack of

<sup>31</sup> <https://www.cdc.gov/nchs/fastats/birthweight.htm>

<sup>32</sup> University of Wisconsin Population Health Institute, [County Health Rankings](#). 2014-2020. Source geography: County

<sup>33</sup> <https://www.kff.org/medicare/issue-brief/medicare-and-dental-coverage-a-closer-look/>

<sup>34</sup> <https://www.kff.org/medicare/issue-brief/drilling-down-on-dental-coverage-and-costs-for-medicare-beneficiaries/>

dental care can lead to delayed diagnosis of serious health conditions, preventable infections and complications, chronic pain, and costly emergency room visits.

County-level data for child oral health utilization indicators are unavailable. Since the county area has Dental Health Professional Service Area (HPSA) designations, it likely fares worse than Missouri for oral health indicators. The dentist rate is one dentist for every 2,140 people, as compared to Missouri at 1,620:1 and the national rate of 1,380:1.<sup>35</sup>

Fluoridated water supplies are beneficial to oral health. According to the CDC, fluoride helps strengthen permanent teeth for children under 8 years old while it leads to strong and healthy teeth among adults.<sup>36</sup> Fluoridated water can help prevent at least 25% of tooth decay in children. Fluoridated water also saves money over time. The American Dental Association estimates that every \$1 spent in water fluoridation saves about \$38 in dental costs in most cities. Despite numerous claims suggesting fluoridated water supplies are toxic, erode lead pipes, and can cause health problems, scientists have shown through evidence-based studies that there is no scientific basis to these claims.<sup>37</sup> There are no fluoridated water supplies in Washington County.<sup>38</sup>

### Children

Dental caries and other oral health problems continue to plague vulnerable populations, particularly low-income children, and those with special health care needs. Despite tremendous advances in basic science and technology, as well as substantial progress in better understanding the pathogenesis and prevention of dental caries, evidence-based interventions are sparsely implemented. Barriers to better oral health care for children are multifaceted and include difficulties with access to the oral health system, insufficient collaboration across fields, insufficient training of both dental and pediatric professionals, and public policies that hinder access to oral health care.

The CDC reports that untreated tooth decay in children can cause pain and infections that may lead to problems with eating, speaking, playing, and learning. Children who have poor oral health often miss more school and receive lower grades than children who do not. Further,

- More than half of children aged 6 to 8 have had a cavity in at least one of their baby (primary) teeth.<sup>2</sup>
- More than half of adolescents aged 12 to 19 have had a cavity in at least one of their permanent teeth.<sup>2</sup>
- Children aged 5 to 19 years from low-income families are twice as likely (25%) to have cavities, compared with children from higher-income households (11%).<sup>3</sup>

The Missouri Preventive Services Program provides screening, education, prevention, and referrals for students in participating schools. There was a total of 42,402 participants statewide in the program in the 2021-2022 school year with the majority (58.8%) being in elementary school. Studies have shown that children with dental pain and poor oral health often miss school and have difficulties with speaking,

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<sup>35</sup> County Health Rankings

<sup>36</sup> Centers for Disease Control and Prevention. (2019). Community Water Fluoridation. Water Fluoridation Basics. Retrieved from <https://www.cdc.gov/fluoridation/basics/index.htm>

<sup>37</sup> American Dental Association. (2019). 5 Reasons Why Fluoride in Water is Good for Communities. Retrieved from <https://www.ada.org/en/publicprograms/advocating-for-the-public/%20fluoride-and-fluoridation/5-reasons-whyfluoride-in-water-is-good-for-communities>

<sup>38</sup> [https://nccd.cdc.gov/DOH\\_MWF/Default/WaterSystemList.aspx](https://nccd.cdc.gov/DOH_MWF/Default/WaterSystemList.aspx)

eating, and learning. More than 51 million school hours are lost each year due to children having a dental related illness.<sup>39</sup>

During the 2005-2015 time period, there were 326 emergency room visits for disorders of the teeth and jaw for those under the age of 15 in Washington County. The majority (48.2%) of those visits were covered by Medicaid, with an additional 17.5% covered by commercial insurance. In reviewing emergency room visits for 2005-2015, rates for disorders of the teeth and jaw overall were higher in Washington County at 27.03 compared to 9.45 for Missouri. Rates are per 1,000 population and are age-adjusted to the U.S. 2000 standard population. There were 6,776 dental related emergency room visits across all age groups in the county for the stated period (2005-2015).

### Elderly

Many Medicare beneficiaries go without dental care due to costs. Overall, 10 percent of all beneficiaries did not get needed dental care in the past year because they could not afford it. The rate was higher among those with low incomes (18%), those in relatively poor health (24%), and beneficiaries under 65 with long-term disabilities (26%). While cost is often cited as top reason for not going to the dentist among those who said they needed care but did not go, fear of the dentist, inconvenient location or time for an appointment are also important contributing factors.<sup>40</sup>

## Infection Control/Vaccinations

**Influenza** - Flu is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and sometimes the lungs. It can cause mild to severe illness, and at times can lead to death. A 2018 CDC study published in *Clinical Infectious Diseases* suggested that, on average, about 8% of the U.S. population gets sick from flu each season, with a range between 3% and 11%, depending on the season. The same study found that children are most likely to get sick from flu and people 65 and older are least likely to get sick. The first and most crucial step in preventing flu is to get a flu vaccine each year. Flu vaccine has been shown to reduce flu related illnesses and the risk of serious flu complications that can result in hospitalization or even death. The CDC also recommends everyday preventive actions (like staying away from people who are sick, covering coughs and sneezes and frequent handwashing) to help slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu.

**COVID-19** – As of March 2023, there have been 7,097 total cases of COVID-19 in Washington County for a rate of 28,698 per 100,000 population, which is less than the state rate of 29,234 per 100,000 population. There have been 155 total COVID-related deaths in Washington County for a rate of 627 per 100,000 population. This is significantly higher than the state rate of 391 deaths per 100,000 population. Washington County has a total of 33% of residents that have been fully vaccinated. Age breakdowns are as follows: Age 5+ - 35%, Age 18+ - 40%, Age 65+ - 54%. This is lower than the state rate of 58% of the total population being fully vaccinated. Currently, Washington County is averaging 0.7 new cases per day, or 2.9 per 100,000 population with a decreasing 14-day trend of -62%. This is less than the state rate of 6 per 100,000 with a decreasing 14-day trend of -30%.<sup>41</sup> As of June 6, 2023, Washington County has had a

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<sup>39</sup> U.S. Department of Health and Human Services, Oral Health in America: A Report of the Surgeon General, 2000. Retrieved from <https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf>

<sup>40</sup> Vujicic M, Buchmueller T, Klein R. Dental Care Presents the Highest Level of Financial Barriers, Compared to Other Types of Health Care Services. *Health Affairs* 2016; 35(12): 2176–2182. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.0800>

<sup>41</sup> Tracking Coronavirus in Missouri: Latest Map and Case Count. (23 March 2023). <https://www.nytimes.com/interactive/2021/us/missouri-covid-cases.html>

total of 41 new hospital admissions due to confirmed COVID-19 in the past week for a rate of 2.4 per 100,000 population. This is higher than the state rate of new COVID-19 hospital admissions of 1.81 in the past week.<sup>42</sup>

**Influenza and COVID-19** - Influenza (Flu) and COVID-19 are both contagious respiratory illnesses, but they are caused by different viruses. COVID-19 is caused by infection with a new coronavirus (SARS-CoV-2) and flu is caused by infection with influenza viruses. Because some of the symptoms of flu and COVID-19 are similar, it may be hard to tell the difference between them based on symptoms alone, and testing may be needed to help confirm a diagnosis. Flu and COVID-19 share many characteristics, but there are some key differences between the two. COVID-19 seems to spread more easily than flu and causes more serious illnesses in some people. It can also take longer before people show symptoms and people can be contagious for longer.

CDC analyzed data from two telephone surveys, the National Immunization Survey-Flu (NIS-Flu) and the Behavioral Risk Factor Surveillance System (BRFSS), to estimate flu vaccination coverage for the U.S. population during the 2021–22 flu season. Half of all individuals over the age of 6 months (51.4%) received the flu vaccine during the 2021–2022 season, a slight decrease of 0.7 percentage points compared to the previous season. Flu vaccination coverage has decreased for both children and adults by 0.8 percentage points compared to the previous season. Missouri had a state vaccination rate for children ages 6 months to 17 years of 58.1%, slightly higher than the national rate of 57.8%. Flu vaccination was 3.0 percentage points lower for White children compared with the 2020–21 season but was 2.5 percentage points higher for Black children. However, Black, non-Hispanic children continue to have the lowest vaccination rates. White adults continue to have the highest rates of flu vaccination while Hispanic adults and non-Hispanic Black adults have the lowest flu vaccination rates. Flu vaccination could help prevent or reduce the severity of flu illness, and reduction of outpatient illnesses, hospitalizations, and intensive care unit admissions could alleviate stress on the U.S. health care system. September and October are good times to get vaccinated; however, as long as flu viruses are circulating, vaccination should continue.<sup>43</sup>

**Immunizations** - Vaccine-preventable diseases are at an all-time low, but this does not mean they have disappeared. Many viruses and bacteria are still circulating. This is why it is important for everyone to receive all the recommended immunizations on time. Vaccines help your body recognize and fight these germs and protect you each time you come in contact with someone who is sick with any of these diseases:

Chickenpox	Influenza	Polio
Diphtheria	Measles	Rotavirus
Haemophilus Influenzae type b	Meningococcal	Rubella
Hepatitis A	Mumps	Tetanus
Hepatitis B	Pertussis	Yellow Fever
Human Papillomavirus	Pneumococcal	

<sup>42</sup> CDC. (8 June 2023). United States COVID-19 Hospitalizations, Deaths, Emergency Visits, and Test Positivity by Geographic Area. [https://covid.cdc.gov/covid-data-tracker/#cases\\_new-admissions-rate-state](https://covid.cdc.gov/covid-data-tracker/#cases_new-admissions-rate-state)

<sup>43</sup> CDC. (18 October 2022). Flu vaccination coverage, United States, 2021-22 influenza season. <https://www.cdc.gov/flu/fluview/coverage-2022estimates.htm>

Data regarding childhood and adult immunizations is not readily accessible.

## **Telehealth**

According to a report from the Missouri Foundation for Health<sup>44</sup>, telehealth has long been available as an alternative to in-person care, particularly for some populations. For older and low-income communities, there may be multiple barriers to going to a doctor's office, including lack of mobility or transportation. Telehealth is a viable alternative to in-person care for non-urgent care, routine management of medical conditions, and evaluations.

To support the growth and use of telehealth, access to broadband and high-speed internet must be prioritized, especially in rural communities. In Missouri, it is estimated that 20% of the state's population does not have access to high-speed internet. In rural Missouri, 61% of residents lack access to high-speed internet services.<sup>45</sup> Only 39.23% of Washington County residents had access to download speeds of 25 MBPS or more and upload speeds of 3 MBPS or more in 2022, which is significantly below the state average of 86.46% and below the national average of 92.73%.<sup>46</sup> An additional 27.04% of households in Washington County have no or slow internet access, higher than state (14.9%) and national (13.0%) rates. These households may have dial-up internet access, have access but do not pay for the service, or have no access at all. To access broadband, households must also have access to computers, including desktops, laptops, smartphones, tablets, or other types of computers. In Washington County, approximately 14.91% of households do not have computers, higher than state (7.94%) and national (6.95%) rates.<sup>47</sup>

## **Medicaid Expansion**

The Affordable Care Act (ACA) of 2010 directed all states and the District of Columbia to expand their Medicaid programs to cover all adults with incomes up to 138% of the Federal Poverty Level (FPL), however, a 2012 Supreme Court ruling made this expansion optional. Initially, in 2014, 25 states expanded their programs. Subsequently, eight additional states expanded their programs through legislative action, and in 2017-18, four states passed ballot initiatives to expand, yet Missouri lagged behind. Early evidence indicated that expansion had a positive impact and research published by in the Journal of the American College of Surgeons revealed that the ACA Medicaid expansion did improve

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<sup>44</sup> <https://mffh.org/wp-content/uploads/2020/08/Telehealth.pdf>

<sup>45</sup> Federal Communications Commission. 2016 Broadband Progress Report.; 2016. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report>

<sup>46</sup> FCC FABRIC Data. Additional data analysis by CARES. December 2022. Source geography: Tract

<sup>47</sup> US Census Bureau, American Community Survey. 2017-21. Source geography: Tract

“quality of care, increased access to care, and, ultimately, reduced health care costs in states that chose to broaden eligibility.”<sup>48</sup>

In 2020, Missouri citizens voted to pass Amendment 2 for Medicaid Expansion. This has brought about new opportunities for many Missourians to gain health care access for the first time. The processing of applications began on October 1, 2021, with coverage being retroactive to July 1, 2021. As a result of expansion, it was estimated that an additional 275,000 Missourians qualified for coverage. Enrollment in Medicaid has also expanded since the onset of the COVID-19 pandemic, with approximately 900,000 Missourians enrolled in March 2020 to over 1.4 million enrolled currently. When the federal public health emergency was declared, states were barred from disenrolling Medicaid participants. However, eligibility redeterminations resumed as of April 1, 2023, and now states, including Missouri, are allowed to conduct eligibility checks and remove any participants deemed ineligible. This could result in upwards of 200,000 Missouri Medicaid enrollees losing coverage.<sup>49</sup> According to the U.S. Census Bureau, 18.0% of the population in Washington County has Medicaid/means test coverage alone, and 25.0% of the population have Medicaid/means test coverage alone or in combination.<sup>50</sup>

Medicaid expansion presents a multitude of benefits for consumers, health care institutions, and providers, and is fiscally prudent for the state. In fact, a review by the Kaiser Family Foundation found that the reduction in mortality rates alone as a result of having insurance coverage led to annual welfare gains between \$20.97 and \$101.8 billion.<sup>51</sup> While studies also highlight complications with Medicaid expansion relating to enrollment gaps, network adequacy, health equity, and potential costs, Missouri can use lessons from its own experience, as well as from other states to overcome these hurdles.

## **Major and/or Unique Healthcare Needs**

**Lack of rural providers.** Recruitment and retention of providers (primary care, specialty, dental, and behavioral health) is a chronic problem for Washington County because of its rural nature and its general proximity to the greater St. Louis Region. Lack of access to providers is one of the greatest barriers that universally impacts all aspects of community health, inclusive of availability and access to primary care providers, mental health professionals and dental professionals, particularly for low-income residents. Oral health is a major issue. Although there are dentists enrolled in the Medicaid program, the dentists

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<sup>48</sup> Metzger, G. A., Asti, L., Quinn, J. P., Chisolm, D. J., Xiang, H., Deans, K. J., & Cooper, J. N. (2021). Association of the Affordable Care Act Medicaid Expansion with Trauma Outcomes and Access to Rehabilitation among Young Adults: Findings Overall, by Race and Ethnicity, and Community Income Level. *Journal of the American College of Surgeons*, 233(6), 776–793. e16. <https://doi.org/10.1016/j.jamcollsurg.2021.08.694>. <https://www.nimhd.nih.gov/news-events/research-spotlights/medicaid-expansion-benefits-young-adults.html#:~:text=The%20researchers%20concluded%20that%20the,that%20chose%20to%20broaden%20eligibility>

<sup>49</sup> Bates, C. (2 Feb. 2023). 200,000 Missourians estimated to lose Medicaid as eligibility renewals resume. *Missouri Independent*. <https://missouriindependent.com/2023/02/02/200000-missourians-estimated-to-lose-medicaid-as-eligibility-renewals-resume/>  
#:~:text=When%20the%20public%20health%20emergency,income%20adults%20in%20late%202021.

<sup>50</sup> U.S. Census Bureau. 2021: ACS 5-Year Estimates Subject Table. S2704 Public health insurance coverage by type and selected characteristics. Washington County, Missouri.

<sup>51</sup> Kaiser Family Foundation. (6 May 2021). Building on the evidence base: studies on the effects of Medicaid expansion, February 2020 to March 2021. <https://www.kff.org/report-section/building-on-the-evidence-base-studies-on-the-effects-of-medicaid-expansion-february-2020-to-march-2021-report/#EconomicImpacts>

limit the number of Medicaid patients served and do not provide services on a sliding fee scale. This is important to note, particularly as patients with emergency room visits for disorders of the teeth and jaw from the service area rely on Medicaid as their payor source. GMHC Health Center is a primary oral health provider for residents in the service area. Behavioral health and substance misuse are another area of concern for Washington County residents, with limited providers available to meet the need and demand for care.

**Distance to care.** Individuals sometimes must travel significant distances to access specialty care or emergency services. There is limited public transportation available and for services that are available, the cost is not affordable. Other non-emergency medical transportation assistance is dependent upon Medicaid coverage and is only available through MTM. These services are extremely limited, difficult to obtain, and often are non-responsive when time-critical services are needed.

**Affordable access to medications.** Because many patients have chronic conditions that require ongoing medication regimens, it is essential they be able to access their prescriptions. GMHC Health Center provides medication assistance through its medication assistance program and the 340 B program.

**Other barriers.** Additional barriers to care in the service area include low incomes that preclude the ability to pay high co-pays and deductibles for those residents that have insurance; lack of health and dental insurance to pay for services and prescriptions; lack of awareness about healthy lifestyles and preventive health; and the lack of knowledge/education to navigate complex health care and social service systems, especially applying for Medicaid and other services.

## Health Provider Shortages

Washington County is a healthcare provider shortage area, with GMHC Health Center, a Network member, holding Federally Qualified Health Center (HPSA) designations of 22 for primary care, 25 for dental health and 22 for mental health.

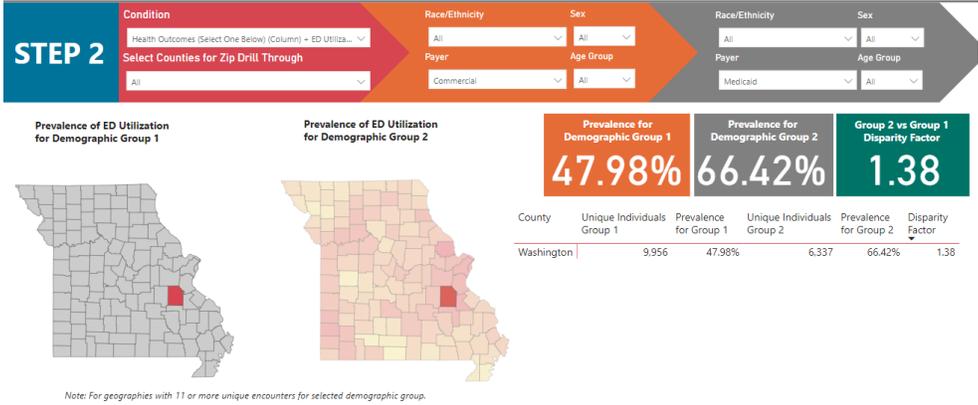
## County Health Rankings

In summary, the Washington County Rural Health Network partners continue to monitor and work to improve many health indicators, particularly mental health, and chronic disease indicators. While progress is being made, Washington County is a very socio-economically challenged region that will require intense effort and resources moving forward. The 2023 County Health Rankings list Washington County at 107 out of 115 counties in Missouri, meaning it is one of the least healthy counties in Missouri. Selected factors are included in the table below.

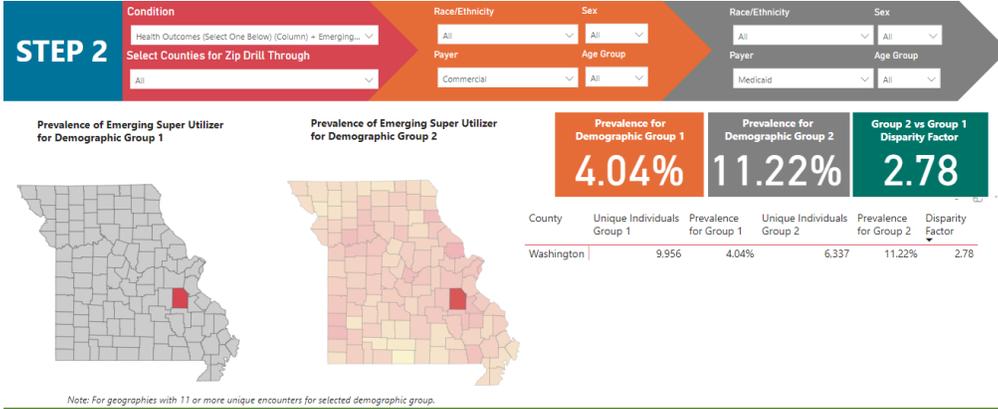
Ranking	Washington County	Missouri	U.S.
<b>Overall Rankings in Health Outcomes</b>			
Life Expectancy	73.1	76.6	78.5
Percentage of adults reporting fair or poor health (age adjusted)	20%	15%	12%
<b>Overall Rankings in Health Factors</b>			
Adult Smoking	27%	19%	16%

Injury Deaths	114	96	76
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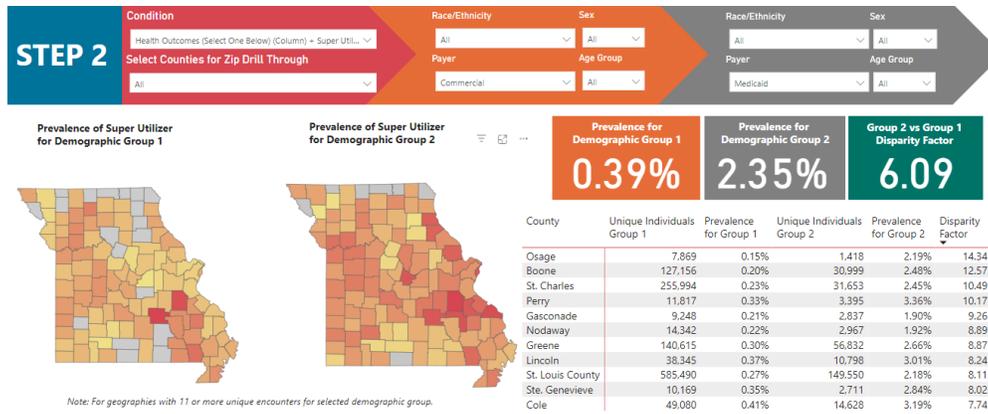
Additionally, when reviewing the Health Equity Dashboards for Health Outcomes data, particularly for emergency department utilization for Medicaid covered individuals compared to individuals with a commercial payer source, individuals with Medicaid coverage (66.42%) were 1.38 times more likely than commercial pay patients (47.98%) to utilize the hospital emergency department.



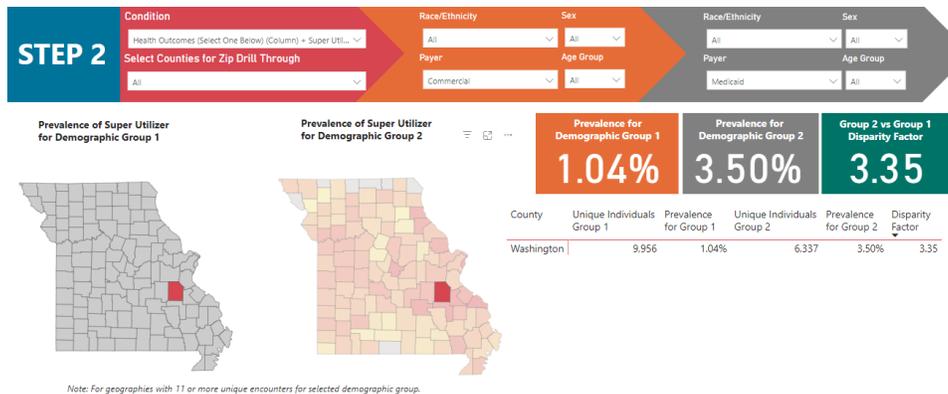
As greater emphasis is placed on reducing Medicaid and Medicare costs, health inequities are of great concern. In Washington County, Medicaid covered individuals are 2.78 times more likely to be an emergency super utilizer of healthcare services with a prevalence of 11.22% compared to commercial pay patients, with a prevalence of 4.04%.



Likewise, when analyzing the Health Equity Dashboard for super utilizers of healthcare services, Medicaid covered individuals in Missouri are 6.09 times more likely to be a super utilizer, with a prevalence of 2.35%, compared to commercial pay patients, with a prevalence of 0.39%.



When looking at Washington County, specifically, Medicaid covered individuals are 3.35 times more likely than commercial pay patients to be super utilizers.



## Community Input

The Washington County Rural Health Network surveyed community members for input on regional health, inviting residents to share thoughts and concerns about success stories and areas for improvement. Approximately 130 residents responded, with 75% of respondents indicating that overall community health quality was staying the same or getting better. Survey result highlights include:

- Most residents (88%) have seen their primary care doctor at least once in the previous twelve months. Those who have not seen a provider indicated that cost and availability were barriers.
- Nearly half (47%) travel less than ten miles for emergency care.
- For those seeking care outside the county, 37% think quality of care is better elsewhere and 57% travel to see a specialist.
- 37% of respondents indicated they needed a service that was unavailable. Of those, most responses centered around behavioral/mental health care and specialist care.
- Respondents selected substance use (89%) and poor diet (31%) as the top two unhealthy behaviors in the region. Additional behaviors that ranked high include inactivity, tobacco use, and unprotected sex.
- Nearly 75% of respondents have seen a dentist within the past two years. For those that have not received care, cost (including lack of insurance) and fear of pain or painful treatment are leading reasons.
- Most residents are aware of services available through the various Network partners, except for the supervised, substance-free housing for women in Potosi.

In addition to the community's input, the Missouri Rural Health Association conducted listening sessions throughout rural Missouri. Washington County fell into Region C of their regional breakout for sessions. Many of the issues surfacing at the listening sessions mirrored the input from Washington County. Below is a brief summary of the key points.

*Barriers:*

- adequate levels of care in each community
- extremely limited options for specialty care
- homelessness
- lack of in-house mental health services in jails and prisons
- staff recruitment
- uninsured / lack of client payer sources or under insured
- limited transportation options / distance to care
- shortage of workforce / hard to attract providers / loan reimbursement or forgiveness is not enough
- low reimbursement and incentives
- lack of technology use by elderly

*Potential Solutions:*

- virtual appointments and more virtual connectivity by clients
- continuity of care
- stability for care models
- competitive market salaries
- capital building funds
- more transportation vehicles and more options
- integrated medical records
- improved models for transitional aging
- chronic care maintenance
- transition care models

*What is working now:*

- Compass Health emergency room diversion, crisis stabilization centers
- open access models
- health navigator
- home visits
- drug courts
- virtual connections to providers
- current HRSA grants

In summary, community members recognize many of the same concerns that are reflected throughout this document. Behavioral health, along with substance use disorders, are a primary concern, as well as chronic disease treatment and prevention, and a need for additional providers and care coordination. Improving access to telehealth options, as well as opportunities to address social determinants of health such as education and incomes, are areas in which Washington County Rural Health Network partners can collaborate to find solutions.

## **Local Programs**

The Washington County Rural Health Network partner organizations offer a variety of local programs addressing chronic disease and wellness. Some programs to highlight include the following, please see organization websites for a full list of programs:

**Washington County Memorial Hospital (<https://wcmhosp.org/>)**

- Primary Care: acute/chronic disease management, annual wellness exams, work/school physicals, health screenings, etc.
- Pediatric Care: immunizations, well child exams, sports physicals, school and daycare, acute/chronic care, etc.
- Behavioral health services: individual counseling, and pediatric/adolescent counseling
- Psychiatry: Pediatric and Adult
- Substance Use Disorder Support: Medicated Assisted Treatment (MAT), Counseling, and support at each primary care clinic from Medicated Assisted Recovery Specialists (MARS) certified Community Health Workers (CHW)
- Specialists: Cardiology, Gastroenterology, Nephrology, Pain Management, Orthopedics, Pulmonology, Neurology, Rheumatology, and Wound Care
- Therapy: Physical, Occupational, and Speech
- Swing Bed Program
- Inpatient Care
- 24/7 Emergency Medicine
- 24/7 Radiology: MRI, CT, X-Ray, and Ultrasound
- 24/7 Laboratory Services
- Respiratory Therapy
- Cardiac Rehabilitation
- Chiropractic Care
- Social Services

**GMHC Health Center (<https://gmhcenter.org/>)**

- Primary care: acute/chronic disease management, annual wellness exams, work/school physicals, health screenings, etc.
- Pediatric care: immunizations, well child exams, sports physicals, school and daycare, acute/chronic care, etc. (Potosi and Farmington clinics)
- Behavioral health services: individual counseling, family counseling, pediatric/adolescent counseling (Potosi and Farmington clinics)
- Women's health: annual well woman exams, cervical cancer screening, breast cancer screening, family planning, hormone replacement, prenatal care, polycystic ovarian syndrome (PCOS) treatment, etc.
- Prenatal care: routine ultrasounds, non-stress testing, biophysical profiles, post-partum follow-up, etc.

**Washington County Health Department (<http://www.wcmohealth.org/>)**

- Show Me Healthy Women: offers free breast and cervical cancer screenings for those that are eligible.[1]
- Lead testing for Children 6 and under – Lead Health Education and Free soil and well water sampling provided by the EPA
- Teen Outreach Program: assist at-risk teens in avoiding risky behaviors and empower them to reach their fullest potential.
- Safe Crib Program: offers portable cribs and safe sleep education to low-income families.
- WIC (Women, infants, and children): supplemental nutrition program for women that are pregnant, breastfeeding, or postpartum as well as children up to the age of five.
- Medicaid for Pregnant Women
- Environmental Services including food establishment inspections and food recalls, boil orders, daycare inspections wastewater compliance, permits and wastewater system compliance and drop off point for state laboratory water samples.
- Finger poke cholesterol testing
- Free blood pressure screening
- Discounted labs with doctor's order
- STD testing
- Free Hepatitis C testing
- TB testing
- Pregnancy testing
- Breastfeeding support
- Emergency Preparedness
- Child Care Health Education Consultation Program
- Immunizations
- TB and STD Testing
- Animal Bite Investigations
- Case Follow-up for Reportable Diseases. (Epidemiology)
- Blood Sugar and Testing
- Maternal Child Health Program
- Opioid Data to Action Program
- Vital Records – Birth and Death Certificates

**Washington County Ambulance District (<http://www.wcadems.org/>)**

- Mobile Integrated Health (MIH): Utilizes the skills of EMS clinicians to provide physical and medical assessments, take vital signs, provide preventive and post-discharge care, in-home lab draws, point of care lab testing, among others. MIH paramedics collaborate with partnering physicians to serve as liaisons for managing care. With MIH, patients receive more frequent medical attention, can remain in their home, and often avoid expensive trips to the emergency department.

**Washington County Community Partnership (Facebook: Washington County Community Partnership)**

- Acts as an umbrella organization referring individuals to community resources such as parenting classes, breast and cervical cancer screenings, housing, drug treatment, Cars to Career Program, and

application assistance with HUD and SNAP. Emergency assistance for unsheltered individuals with hygiene products, food, clothing, birth certificates, and State issued ID. Involved in Community Development projects such as the All-Inclusive City Park.

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