

## **Sullivan County Community Health Needs Assessment 2024-25**



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# **PREVENT • PROMOTE • PROTECT**

Sullivan County Health Department is committed to providing public health services and education to promote and protect the quality of life in our county.

## **OUR MISSION**

Sullivan County Health Department promotes a healthy lifestyle and environment through education and public health services for the well-being of our community.

## Executive Summary: Sullivan County Community Health Needs Assessment 2024-25

**SECONDARY DATA SUMMARY:** Rural Sullivan County in North Central MO is known for its outdoor recreation opportunities, clean air and water, and low crime rates. The median age of the population trends higher than the state average with nine percent foreign-born, also higher than the state rate. Child poverty is higher than the state rate, however, educationally, county students graduate high school at rates above the state average and pass their proficiency tests in English and Math at the state level. For youth, substance use is of concern, as reported usage is above state rates. The county is designated as a high area of deprivation and as a HRSA health professional shortage area. For adults and seniors, priority concerns include high diabetes prevalence, heart disease deaths, and falls - all above state rates. Contributing risk factors include obesity, high blood pressure, and physical inactivity.

**PRIMARY DATA SUMMARY:** Survey respondents generally mirrored the county population in education and insurance coverage rates, but they were a little older (although the county does trend older than state average) with a little less income than the general population. A very high percentage reported that they could access medical care, mental health care, and health information from the local hospital, clinics, health department, and other agencies. In addition, most rated their physical and mental health as at least average, substance use was not a major problem, and that they felt safe in their community. The majority reported high trust in SCHD, and 90% indicated that they were pleased with the services provided. Respondents perceived health education needs were in the areas of chronic disease/diabetes, nutrition, and mental health prevention education. Medical services perceived as needed in the community included senior/women's/home health, nutrition/exercise, and mental health services. Many noted financial and job challenges as well as access to exercise (only 28% reported regularly exercising). Additionally, although many were seniors, 25% of respondents reported not obtaining flu shots. Contributors to challenges, especially for seniors in the population, include the following non-medical factors: rural, low-SES, and quality jobs.

**Prioritization of the Top Community Health Needs/Concerns:** Community prioritization process strategies were completed.

Secondary assessment: Vulnerable population: Older citizens/seniors; Health conditions: Diabetes/Heart disease/ Falls; Health risks: Obesity/ HBP/Physical inactivity

Primary assessment: Perceived health needs: Chronic disease/Diabetes/Nutrition/Exercise/Senior health/Mental health

Community assets related to the health conditions: Medical: Hospital/Clinics/Home health/SCHD; General: Food pantry/Senior-Community center/Public transportation/MU Extension office

TOP Priorities identified/overlapping: Seniors as priority population, Chronic diseases, Poor Nutrition, Physical Inactivity/Lack of Exercise; County possesses assets of facilities and low-cost transportation to them, food pantry, and providers for education/interventions.

**TOP HEALTH PRIORITY: Chronic Disease - followed very closely by Physical Inactivity - and then Poor Nutrition.** To view the full report online, go to the webpage/Facebook page: <https://www.facebook.com/profile.php?id=100066695810153> <https://schdmilanmo.com/> or to request a hard copy of the report: call (660) 265-4141.

# Community Health Needs Assessment

This assessment identifies key health needs in Sullivan County, Missouri, with a focus on older adults and chronic diseases.



## Senior Health

Older adults are a vulnerable population in Sullivan County, with concerns about diabetes, heart disease, and falls.

## Chronic Diseases

High prevalence of diabetes and heart disease are major health concerns for the county.



## Nutrition Concerns

Poor nutrition is a contributing factor to health challenges, with community members expressing a need for nutritional education and resources.

## Physical Inactivity

Lack of regular exercise is another significant concern, with only a small percentage of residents reporting regular physical activity.



## Sullivan County

The assessment highlights the need to address chronic diseases, poor nutrition, and physical inactivity in Sullivan County, particularly among older adults.



**Partner Acknowledgement - Sullivan County Community Health Needs Assessment. (2024-25).**

Partner/Organization	Role in CHNA
Administration. Deborah Taylor, RN. Sullivan County Health Department Director, Jacqueline Perez, Staff, Hannah Branch, Intern.	Define community, Identify partners and community representatives, Identify and personally contact to ask representatives from the medically underserved, low-income, and chronically ill populations for their expertise/input in the process, Analyze data/prioritize top 3 health issues, Document/disseminate the CHNA.
Board - Sullivan County Health Department. Betty Stroud/Board Member, Sarah Lewis/Board Member, Angela Huffman/Board President-Dr. Dale Essmyer, DO, Sally Jones Board member.	Establish vision for CHNA, Oversee financial management for CHNA, Maintain legal compliance and integrity of CHNA, Seek community perspectives – primary.
Community Representatives – Schools- Green City RI District, Milan C-2 District, Grundy R-5 Elementary, New-Town Harris High School Hospitals/ Clinics- Sullivan County Memorial Hospital, Milan Family Practice, Northeast family health clinic. Corporations- Stanbury, Smithfield foods, Simmons Animal Nutrition, North Central Missouri Electric Cooperative. Agencies with current data relevant to community health needs, leaders/members of medically underserved, low-income/minority, senior citizens, and those with chronic disease needs.	Community perspectives input– primary, Active in the preliminary stage as survey ‘pre-testers’ to provide feedback on survey drafts, Active participants in survey draft evaluation, oversampled in data collection, and specifically incentivized to participate in the process, Analyze data/prioritize top 3 health issues.
Rolena Stephenson, PhD, Carol Cox, PhD. University Consultants - special knowledge in public health.	Gather data and assessments – secondary, Seek community perspectives – primary, Aggregate secondary and primary data.



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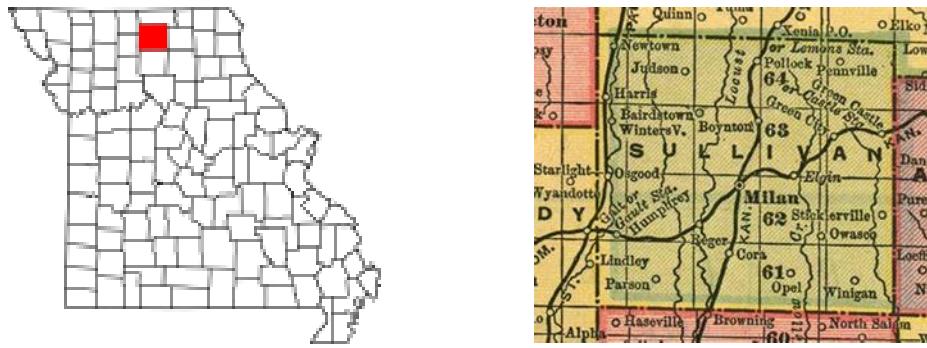
## SECONDARY DATA

## **COMMUNITY DESCRIPTION/UNIQUE COMMUNITY CHARACTERISTICS**

Located in north-central Missouri, 50 miles south of Iowa and 65 miles west of the Mississippi River, Sullivan County was organized February 14, 1845 and named for Major General John Sullivan of the American Revolutionary War. The first settlers were from Kentucky and Tennessee, and the county seat is Milan (MOGenWeb, 2020).

Outdoor recreation and agriculture define the area as there are seven Missouri Conservation Areas, six lakes, and the Thompson River for hiking, fishing, and camping. With thousands of acres of hunting grounds, the area is well-known for turkey, waterfowl, and deer hunting. There are several historical sites and museums, farms and ranches, as well as parks and trails (North Missouri Tourism, 2022).

Specifically, there are six properties and districts in the county on the National Register of Historic Places: Campground Church and Cemetery, Green City Presbyterian Church, Green City Railroad Depot, Henry Cemetery, Milan Railroad Depot, and Quincy, Omaha and Kansas City Railroad Office Building (National Park Service, 2023).



## OVERALL COMMUNITY VITALITY SCORE = 51/100

73.7% Homeownership Rate; National Median: 73.2%

-14.1% Net Migration Rate; National Median: -0.2%

53.7% Voter Participation Rate; National Median: 66.0%

(US News, 2023).

## POPULATION/HOUSING

Sullivan County is classified as a rural area. A total of about ~6000 people reside in the 647.98 square mile county. The county covers eight zip codes (Zipcodes.com, 2023).

<b>ZIP Code</b>	<b>Classification</b>	<b>City</b>	<b>Population</b>	<b>Timezone</b>	<b>Area Code(s)</b>
<a href="#">ZIP Code 63544</a>	General	<a href="#">Green Castle</a>	807	Central	660
<a href="#">ZIP Code 63545</a>	General	<a href="#">Green City</a>	939	Central	660
<a href="#">ZIP Code 63556</a>	General	<a href="#">Milan</a>	3,452	Central	660
<a href="#">ZIP Code 63560</a>	General	<a href="#">Pollock</a>	149	Central	660
<a href="#">ZIP Code 63566</a>	General	<a href="#">Winigan</a>	106	Central	660
<a href="#">ZIP Code 64645</a>	General	<a href="#">Harris</a>	239	Central	660
<a href="#">ZIP Code 64646</a>	General	<a href="#">Humphreys</a>	306	Central	660
<a href="#">ZIP Code 64667</a>	General	<a href="#">Newtown</a>	292	Central	660

Population density is estimated at 9 persons/square mile, less than the national average of 94/square mile. Total population declined 10.65% between 2010-2020. About 18-33.6% of county housing units are vacant; and of those occupied, 18.5-19.1% possess housing costs over 30% of total household income, and about 21% are considered substandard (University of MO, 2023).

Zip codes with the highest housing vacancies include: 64646/Humphreys; 64645/Harris; 64667/Newtown; 63545/Green City; and 63556/Milan (HIDI, 2023).

Median home/property value is about \$75,600.00-\$79,200.00 with an average property tax of \$1,635.00 (DataUSA, 2020). Median rent is about \$667.00 compared to the national average of \$1,163.00 (Niche, 2023). Average commute time to work is 17.8 minutes, shorter than the national average, and most households in the county possess two cars (DataUSA, 2020). Only about 2.0% commute over an hour to work, compared to the national median of about 7% (US News, 2023).

### **OVERALL HOUSING SCORE = 62/100**

19.1% Households Spending at Least 30% of Income on Housing; National Median: 22.8%

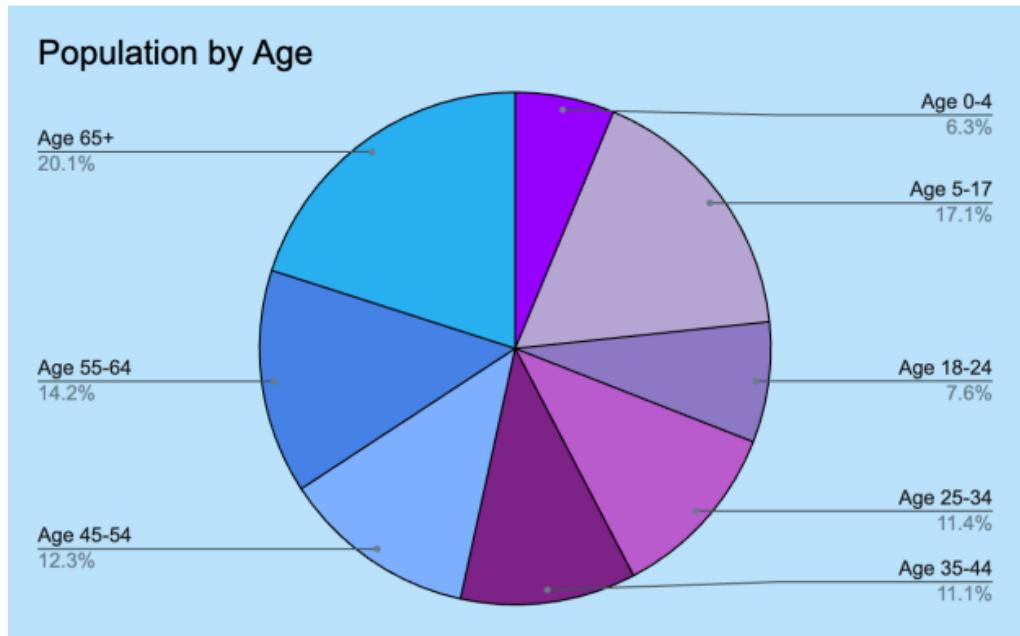
27.2 Work Hours Needed to Pay for Affordable Housing; National Median: 40.6

33.6% Vacant Houses; National Median: 16.3% (US News, 2023)

## **DEMOGRAPHICS**

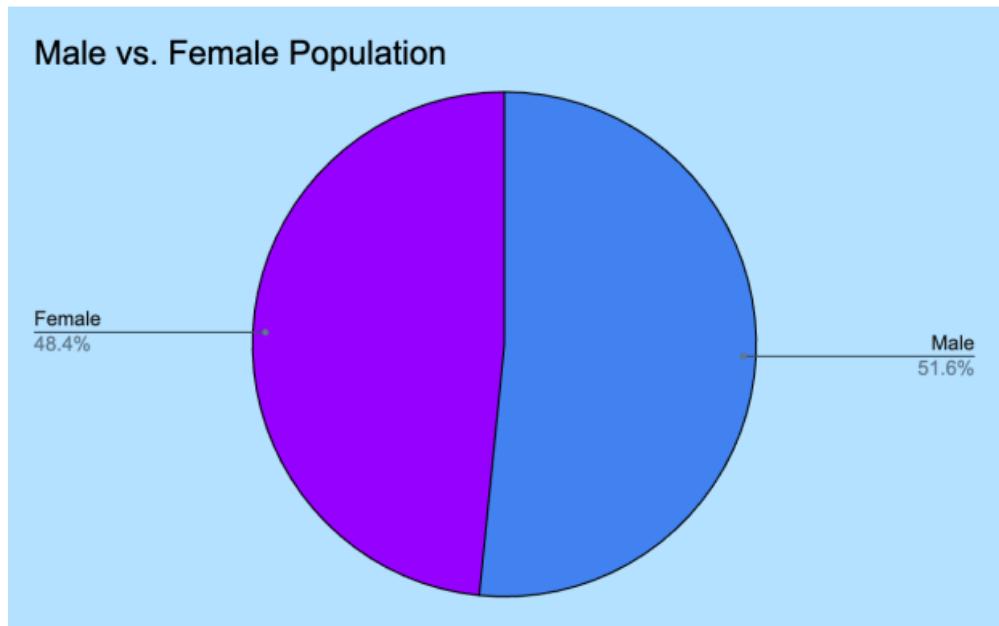
### **AGE**

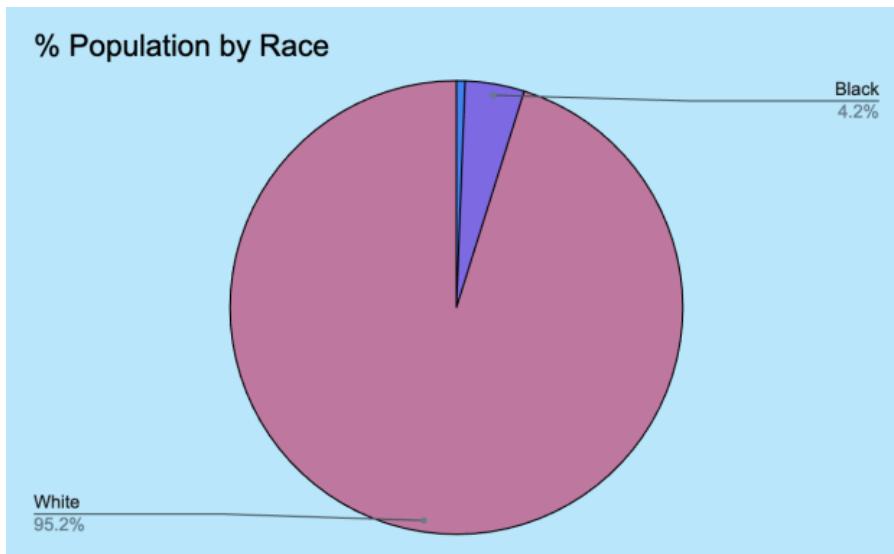
Median age in the county is 41.9 years old and trends older than the state, which has a median age of 38.8 years old. About 24% of the population is under the age of 18. Those over 65 years old and older represent about 20% of the population. Although lower than the state rate, 11.59% of the population possesses a disability, and 8.00% have limited English proficiency, higher than the state rate. About 9% are foreign-born, double the state average; with 3.9% non-citizens (University of MO, 2023).



Population by age %

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Sullivan County, MO	6.28%	17.05%	7.6%	11.4%	11.1%	12.34%	14.15%	20.07%





## RACE/ETHNICITY

The male population is 51.59%, and the female population is 48.41%. Majority of the population is White (78.01%), followed by Black (3.47%), and Asian (0.5%). Hispanic/Latino make up 17.57% of the population. Almost 7% of adults are veterans (University of MO, 2023). About 18% speak a language other than English at home, with 15% of those speaking Spanish, followed by less than 1% speaking Other Asian and Pacific Island languages, French, Haitian, or Cajun, Arabic, Tagalog, German, and Other and unspecified languages (Sparkmap, 2024).

The zip codes with the highest rates of multi-lingual households include: 63556/Milan and 64667/Newtown (HIDI, 2023).

## ECONOMIC/EDUCATION INDICATORS

The labor force participation rate is 54.53%, lower than the state average; as the unemployment rate is 3.3%-4.3%, similar to the state rate. With an average income of \$63,576.00 and a median income of \$46,964.00-\$51,280.00, a little less than 11% of families receive the Supplemental Nutrition Assistance Program. The population of children/youth in poverty is 26.96%, higher than the state average (University of MO, 2023); but trends show improvement (Kids Count, 2023). Youth age 16-19 who are not currently enrolled in school and who are not employed are 19.47%, almost three times the state average (University of MO, 2023).

The zip codes with the highest childhood poverty rates include: 4667/Newtown; 63556/Milan; 64630/Browning; 64646/Humphreys; and 64645/Harris (HIDI, 2023).

The zip codes with the lowest median household income include: 64646/Humphreys; 63544/Green Castle; 63545/Green City; 64645/Harris; and 63556/Milan (HIDI, 2023).

The zip codes with the highest unemployment rates include: 64645/Harris; 63556/Milan; and 63545/Green City (HIDI, 2023).

**OVERALL ECONOMY SCORE = 41/100**

4.3% Unemployment Rate; National Median: 6.5% ; Historical Trend: Improvement  
 \$51,280 Median Household Income; National Median: \$58,759  
 16.7% Poverty Rate; National Median: 13.6%; Child poverty rate: Historical Trend: No significant trend  
 (CHR/R, 2024; US News, 2023).

Although ranked as a high area of deprivation, only about 6% of households lack a vehicle, however 11.18% lack health insurance (higher than the state rate). Social vulnerability, an index of high poverty and crowded housing, was rated 0.45, a little above the state average of 0.44 (University of MO, 2023). In addition, there is adequate broadband access (US News, 2023).

The zip codes with the highest rates of socioeconomic deprivation include: 64667/Newtown; 63545/Green City; and 63556/Milan (HIDI, 2023).

### **OVERALL INFRASTRUCTURE SCORE = 75/100**

94.9% Population With Access to Broadband; National Median: 96.7%  
 5.7 Walkability Index Score; National Median: 6.1  
 (US News, 2023)

Educationally, high school graduation rate is 87.9%-94.4%, similar or a little higher than the state rate of 90%, and almost half of county students are eligible for free-reduced lunch (University of MO, 2023). About half of children aged 3-4 are enrolled in pre-school (Curators University of MO, 2023), and the percentage of accredited childcare facilities has improved to one-third from 2017-2022 (Kids Count, 2023). In addition, middle and high school students, in general in the county, tested at the state level in English proficiency and a little above in Algebra proficiency (Curators University of MO, 2023).

#### Public Schools

County	School Name	School District	Total Students	Lowest Grade Level	Highest Grade Level
Sullivan County	GRUNDY CO. ELEM.	GRUNDY CO. R-V	60	KG	5
Sullivan County	GREEN CITY ELEM.	GREEN CITY R-I	157	PK	6
Sullivan County	MILAN ELEM.	MILAN C-2	350	PK	6
Sullivan County	NEWTOWN-HARRIS ELEM.	NEWTOWN-HARRIS R-III	41	PK	6

(Curators of the University of Missouri, 2023)

## Public Schools - High

County	School Name	School District	Total Students	Lowest Grade Level	Highest Grade Level
Sullivan County	GREEN CITY HIGH	GREEN CITY R-I	122	7	12
Sullivan County	MILAN HIGH	MILAN C-2	298	7	12
Sullivan County	NEWTOWN-HARRIS HIGH	NEWTOWN-HARRIS R-III	33	7	12

(Curators of the University of Missouri, 2023)

- Green City R-1: Students tested slightly above state proficiency rate for English, Math, and Social Studies; were higher than the state rate for graduation and attendance; but slightly higher in free-reduced lunch rates.
- Milan C-2: Students tested lower than state proficiency rate for English, Math, and Social Studies; were slightly higher for graduation, attendance, and free-reduced lunch rates.
- Newtown-Harris R-3: Students tested below state proficiency rate for English and Math, but higher for Social Studies; had higher graduation and attendance rates; but slightly higher free-reduced lunch rates (MODESE, 2023).

The zip codes with the highest rates of less than high school education include: 64646/Humphreys; 63556/Milan; 63545 /Green City; 64630/Browning; and 63544/Green Castle (HIDI, 2023).

Overall, both high school completion rates and obtaining some college are lower than both the state and national rates (County Health Rankings, 2023). About 10% of adults have at least a bachelor's degree, however, 15% have no high school diploma (University of MO, 2023).

Report Area	No High School Diploma	High School Only	Some College	Associate's Degree	Bachelor's Degree	Graduate or Professional Degree
Sullivan County, MO	15.0%	48.1%	15.5%	6.4%	9.8%	5.4%

### OVERALL EDUCATION SCORE = 47/100

87.9% High School Graduation Rate; National Median: 89.4%

21.7% Population with Advanced Degree; National Median: 30.6%

\$13,032 Per-Pupil Expenditures; National Median: \$13,452 (US News, 2023)

## HEALTH STATUS INDICATORS

### Overall Health Status Score = 42/100

43 = MO median; 30= Rural up-and-coming; 47 National median

15.2% Uninsured; National Median: 11.0%; Historical Trend: Uninsured adults/children: Improving (CHR/R, 2024)

23.6% Smoke; National Median: 20.0%

75.6 Years Life Expectancy; National Median: 77.5 years; Historical Trend-Premature death – No significant trend (CHR/R, 2024; US News, 2023)

#### Categories Rank

Population Health 42

Education 47

Economy 41

Housing 62

Food & Nutrition 43

Environment 57

Public Safety 41

Community Vitality 51

Infrastructure 75

(US News Healthiest Communities, 2022)

### FEDERAL DESIGNATIONS/HRSA

Sullivan County is a designated health professional shortage area for primary care, dental health and mental health (U.S. Department of Health & Human Services, 2021). Historical Trend/Primary care: No significant trend; Dentists: Improving (CHR/R, 2024).

There are 6 Health Professional Shortage Areas (HPSAs) in the county:

Report Area	Primary Care Facilities	Mental Health Care Facilities	Dental Health Care Facilities	Total HPSA Facility Designations
Sullivan County, MO	2	2	2	6

(Curators University of MO, 2023).

Almost 50% of county residents live in a Health Professional Shortage Area of primary care, dental, or mental health professionals, higher than the state average (Curators University of MO, 2023).

The zip codes with the lowest healthcare worker availability include: 4667/Newtown; 63544/Green Castle; 63556/Milan; 63545/Green City; and 64645/Harris (HIDI, 2023).

## HEALTH OUTCOMES

About 24% of county residents self-reported their general health status as fair/poor, higher than the state average (University of MO, 2023). Almost 20% of adults also reported poor dental and mental health, higher than the state rates. Average life expectancy at birth for county residents is 76.54 years (Curators University of MO, 2023). The county is ranked one of the Least Healthy [89/115] (Lowest 0%-25%) counties in the state (County Health Rankings, 2023).

Combined health outcomes ranking based on life expectancy and quality of life (HIDI, 2023):

County	Length of Life Rank (of 115)	Quality of Life Rank (of 115)	Health Outcomes Combined Rank (of 115)	Health Outcomes Combined Quintile
Sullivan	90	95	95	5

## MORBIDITY/MORTALITY

Cancer and diabetes incidence rates were lower than the state rate (University of MO, 2023). In the Medicare population, asthma percentage (4%), heart disease percentage (22.6%), and high blood pressure percentage (52.8%) were lower than the state rate, however, diabetes prevalence (27.9%) was higher than the state rate (University of MO, 2023). Diabetes as an underlying cause of mortality was also higher than the state rate (MDHSS, 2019). With 54.10% of the adult population fully vaccinated, spring 2023 rate of confirmed COVID-19 cases was 32,920.75 per 100,000 population, which is greater than the state average (University of MO, 2023). For infectious disease, over the first quarter of 2023, there were seven reported chlamydia cases and two reported tuberculosis cases (MO DHSS, 2023). Historical Trend: STD rates: Getting worse; Flu vaccination rate: Improvement (CHR/R, 2024).

Zip codes with the highest diabetes rates include: 4641/Galt; 64645/Harris; and 64646/Humphreys (HIDI, 2023).

Zip codes with the highest stroke rates include: 64641/Galt; 64667/Newtown; and 64645/Harris (HIDI, 2023).

Cancer death rate (157.5 per every 100,000 total population) and lung disease death rate (46.2 per every 100,000 total population) were lower than the state rate, however, heart disease death rate (159.1 per every 100,000 total population) and specifically acute myocardial infarction (MDHSS, 2019), stroke death rate (43.4 per every 100,000 total population), and unintentional injury death rate (86.4 per every 100,000 total population) - including motor vehicle accidents (MDHSS, 2019) were higher (University of MO, 2023). Spring 2023 mortality rate for COVID-19 was 466.16 per 100,000 population, which is greater than the state average of 351.26 (University of MO, 2023).

Zip codes with the highest injury deaths include: 63556/Milan; 64641/Galt; 64630/Browning; 63545/Green City; and 63544/Green Castle (HIDI, 2023).

Overall premature death rates in Years of Potential Life Lost/Rate per 100,000 Population was 11,099, higher than the state rate of 8,860 (University of MO, 2023).

The zip codes with the highest rates of premature death include: 4630/Browning; 63556/Milan; and 63545/Green City (HIDI, 2023).

The zip codes with the highest rates of years of potential life lost include: 3545/Green City; 64630/Browning; and 63556/Milan (HIDI, 2023).

## HEALTH FACTORS

Sullivan County is ranked in the lower-middle (Lower 25%-50%) range of MO counties in health factors, modifiable factors that can improve quality of life. Adult smoking, adult obesity, adult physical inactivity, and teen birth rates are higher than both state and national rates (2023 County Health Rankings). Specifically, lack of leisure-time physical activity (25.2%), lack of sleep (33.70%), and smoking (21.50%) rates were higher than state rates (University of MO, 2023). The percentage of county residents with the risk factor of obesity (30.7%) is slightly higher than the state rate of about 30% (University of MO, 2023). Additionally, about 40% reported having high blood pressure, higher than the state rate (Curators University of MO, 2023).

Zip codes with the worst rates of obesity include: 64641/Galt; 64645/Harris; 64646/Humphreys; 64667/Newtown; and 63545/Green City (HIDI, 2023).

Zip codes with the worst smoking rates include: 64641/Galt; 64645/Harris; 64646/Humphreys; 64630/Browning; and 63545/Green City (HIDI, 2023).

Rank for combined health factors of behaviors, clinical care, environment, and socio-economic status (HIDI, 2023):

County	Health Behaviors Rank (of 115)	Clinical Care Rank (of 115)	Environmental Rank (of 115)	Social and Economic Rank (of 115)	Health Factors Combined Rank (of 115)	Health Factors Combined Quintile
Sullivan	43	86	13	78	63	3

### Top Ranked ZIP Codes in Sullivan County

ZIP Code	Name	Rank**	Top Health Factor	Top Social Factor
64641	Galt	235	Obesity	Drive Alone to Work
64630	Browning	259	Low Birthweight	High School Education
63544	Green Castle	288	After Hour Emergency Visits	High School Education
64646	Humphreys	356	Liver Disease	Vacant Housing

### Bottom Ranked ZIP Codes in Sullivan County

ZIP Code	Name	Rank**	Top Health Factor	Top Social Factor
64645	Harris	807	Teen Pregnancy	Unemployment
63545	Green City	659	Liver Disease	Socioeconomic Deprivation
63556	Milan	616	After Hour Emergency Visits	Multilingual Households
64667	Newtown	503	Stroke	Median Home Value

(HIDI, 2023)

## BIO-BEHAVIORAL HEALTH

Excessive adult drinking and binge drinking was lower than the state average (University of MO, 2023). Medicare Part D opioid drug claims as a percentage of total claims were 5.4%, higher than the state average; however, misuse hospitalizations were far lower than the state average (Curators University of MO, 2023).

The number of individuals admitted to treatment for substance use and gambling disorders based on their primary drug of concern has increased from 19-28 for alcohol, 9-14 for marijuana, and 8-17 for methamphetamine from 2020-2022. Most were referrals from criminal justice and increased from 26-43 over the same time period (MO Department of Mental Health, 2023).

For adults in the region, particularly with recent shifts in legality of adult use in the state, about 9% have used marijuana in the past 30 days. About 4% in the region, too, have reported misusing prescription pain medications in the past year (MO Dept of Mental Health, 2021).

For youth in the county, past 30-day use of tobacco (9.8%), e-cigarettes (11.8%), and alcohol (16.3%) is higher than the state rate and increased between 2020-2022; even though over 90% perceived parental disapproval of use. County youth have reported riding with someone who was drinking alcohol in the past month (15.8%), posting hurtful texts (22.2%), making fun of others (45.3%), and hitting others (14.2%) over the past 3 months – a little higher than the state rate. Over the past year, about 20% reported being in a fight, and 11% reported seriously considering suicide. County youth reported past month rates of feeling very sad (30%), hopeless for the future (~20%), and difficult to concentrate on school (~40%) higher than the state rate and also increasing the past two years. Their perception of easy availability of tobacco (40.2%), e-cigarettes (37.5%), and alcohol (46.7%) has also increased over the past two years (MO Department of Mental Health, 2022). Mental health hospitalizations for children and youth/10,000 have, though, increased from 70.4 in 2015 to 85.8 in 2020 (Kids Count, 2023).

For adult mental health in the region, 21.4% possessed a mental illness in the past year, 5.2% had a serious mental illness, and about 9% had at least one major depressive episode in the past year (MO Department of Mental Health, 2021).

## CLINICAL CARE/ACCESS/HEATLHCARE SYSTEM

A little over 11% are without health insurance coverage, higher than the state average of 9.53%. In the county, there are only two primary care physicians, no addiction providers, one federally qualified health center in Milan, six active Medicare and Medicaid institutional service providers (Curators University of MO, 2023).

Almost 80% of women had recommended cervical cancer screening, 66.40% of adults received a recommended colorectal cancer screening, 82.24% of Medicare enrollees with diabetes had an annual exam; however, the rates are still lower than the state rates (Curators University of MO, 2023). Over 75% made a doctor's visit for a routine checkup within the past year, but 17.20% of adults reported poor dental health (Curators University of MO, 2023). Clinically, the percentage of uninsured is higher than both the state and national rates; and the percentage obtaining mammography screening is lower than both the state and national rates (County Health Rankings, 2023).

For Medicare beneficiaries, females with a recent mammogram, 29%, was lower than the state rate of 34%, 82.24% had an annual diabetes exam, and preventable hospitalization rates were lower than the state rate (University of MO, 2023). Historical Trends: Preventable hospital stays: Improving; Mammography screenings: Getting worse (CHR/R, 2024).

Zip codes with the highest after-hours ER visit rates include: 63556/Milan; 63545/Green City; 63544/ Green Castle; 64630/Browning; and 64645/Harris (HIDI, 2023).

Zip codes with the lowest high-risk mammogram rates include: 63556/Milan; 63544/ Green Castle; 64630/Browning; 64667/Newtown and 64646/Humphreys (HIDI, 2023).

Zip codes with the highest percentage of hospital utilization include: 64645/Harris and 64641/ Galt (HIDI, 2023).

The county hospital, as of 2017, possessed total assets of \$3,234,873.00, 25 licensed beds, 6500 in-patient days, 273 discharges, with an average length of stay of 23.82 days, and with a 71.27% occupancy rate. In-patient hospitalizations for the most recent reported year of 2015 were higher than the state rates for: urinary tract infections, pregnancy-related, and skin disorders (MDHSS, n.d.).

## ENVIRONMENT

The county enjoys good air and water quality (US News, 2023), with 7 public drinking water systems and 16 private wells (MO EPHT, n.d.). In the rural area, 28.34% of recent weeks were spent in drought including an additional 16.88% of weeks spent in "abnormally dry conditions" (US News, 2023). Historical Trend: Air pollution rate: Getting better (CHR/R, 2024).

Child asthma ER visit rates were higher than the state rate, but trends show improvement (Kids Count, 2023). Of those homes tested for radon in 2018, about one-fourth possessed elevated levels. Lead exposure as elevated childhood blood lead rates and proportion of older/pre-1980 houses were both above state averages (MO EPHT, n.d.).

## OVERALL ENVIRONMENT SCORE = 57/100

0.01/1k Drinking Water Violation Rate; National Median: 0.03/1k

1.0% Population Within 0.5 Mile of a Park; National Median: 18.0%

7.7 days Extreme Heat Days per Year; National Median: 10.3 days

(US News, 2023).

Two census tracts were classified as USDA food deserts although there were three grocery stores in the area and a higher than the state rate of SNAP-Authorized Retailers (University of MO, 2023). The food insecurity rate for the county is 11.9% and cost/meal is \$3.47, similar to the state rates (Feeding America, 2021). Only about 5% of county residents have access to a grocery store without a car, and for low-income households, it is 30.08% (Citydata.com, 2023).

#### **OVERALL FOOD & NUTRITION SCORE = 43/100**

11.5% Diabetes Prevalence; National Median: 10.4%

40.7% Obesity Prevalence; National Median: 36.2%

(US News, 2023).

#### **PUBLIC SAFETY/COMMUNITY SAFETY**

County property crime has decreased about 50% from 2021-2022, with only 1 current burglary reported in 2023. There have been no violent crimes reported in the past two years 2022-2023. However, current domestic violence crimes (4 with 5 victims) are up one-third since 2022 (MO State Highway Patrol, 2023). The property crime rate of 1,129.3 per 100,000 residents is lower than the statewide rate of 2,854.2 per 100,000. For violent crime, the annual rate of 196.70 crimes per 100,000 people is lower than the statewide rate of 524.30. (University of MO, 2023). Referrals for juvenile law violations/1000 have decreased from 12.3 to 5.1 between 2017 and 2022 (Kids Count, 2023).

ER visits for total assault injuries (180), adult abuse (6), and other assaults (29) 2005-2015 were significantly lower than the state rate (MDHSS, 2019).

ER visits for total self-inflicted injuries (70) and specifically for ages 20-24 (38) 2005-2015 were significantly higher than the state rate (MDHSS, 2019).

#### **OVERALL PUBLIC SAFETY SCORE = 41/100**

205.3/100k Violent Crime Rate; National Median: 204.5/100k

\$192 Per Capita Spending on Health and Emergency Services; National Median: \$358

0.13% Public Safety Professionals in Population; National Median: 0.73%

(US News, 2023)

#### **UNINTENDED INJURY**

Falls were reported as 5,990 per 100,000 population, which is higher than the state rate of 5,316 (Curators University of MO, 2023). ER visits (6264) and hospitalizations (521) for total unintended injuries 2005-2015 were significantly higher than the state rate (MDHSS, 2019). Motor vehicle deaths (20) 2009-2019, ER visits for falls (1992) and burns (133) 2005-2015 were significantly higher than the state rate (MDHSS, 2019).

#### **MATERNAL INFANT CHILD**

The teen birth rate is 49.3 per 1,000, which is greater than the state's teen birth rate of 22.7. (University of MO, 2023), but trends show improvement (Kids Count, 2023).

Zip codes with the highest teen birth rates include: 4645/Harris; 63556/Milan; 64630/Browning; 63545/Green City; and 63544/Green Castle (HIDI, 2023).

The percentage of low birthweight babies (9%) was higher than the state percentage (Curators of the University of Missouri, 2023), with trends worsening (Kids Count, 2023). Births to women with non-Type-1 diabetes was higher than the state rate (MDHSS, 2019). Although C-sections were significantly higher than the state rate, non-hospital live births and abortions were lower than the state rate (MDHSS, 2019). For the most recent data, pre-term births, mothers with less than a high school education, and births to women ages 18-24 were significantly higher than the state rate (MDHSS, 2019). WIC participation ages 12-59 months, lead testing under age 6, injury ER visits ages 1-14 were all significantly higher than the state rate (MDHSS, 2019).

Substantiated child abuse/neglect investigation rates for children were 5.8, higher than the state rate of 3 (Curators of the University of Missouri, 2023), but trends show improvement (Kids Count, 2023). The percentage of homeless children/youth was 2%, a little more than the statewide 1.9% (Curators of the University of Missouri, 2023). Referrals to juvenile courts, youth hospitalization rate for mental or behavioral health conditions, were lower than the statewide rate, however, youth hospitalization rate for substance abuse is 3.50 per 100,000 population; higher than the state rate (Curators of the University of Missouri, 2023).

Childcare spaces were reported at a rate of 43.4 per 1,000 children, lower than the state rate of 91.7. (Curators of the University of Missouri, 2023). The Head Start program rate was 23.75 per 10,000 children under 5 years old, higher than the state rate. (Curators of the University of Missouri, 2023).

## SECONDARY DATA SUMMARY

Rural Sullivan County in North Central MO is known for its outdoor recreation opportunities, clean air and water, and low crime rates. The median age of the population trends higher than the state average with nine percent foreign-born, also higher than the state rate. Child poverty is higher than the state rate, however, educationally, county students graduate high school at rates above the state average and pass their proficiency tests in English and Math at the state level. For youth, substance use is of concern, as reported usage is above state rates. The county is designated as a high area of deprivation and as a HRSA health professional shortage area. For adults and seniors, priority concerns include high diabetes prevalence, heart disease deaths, and falls - all above state rates. Contributing risk factors include obesity, high blood pressure, and physical inactivity.



## PRIMARY DATA

Project consultants included: Dr. Rolena Stephenson, PhD, MCHES® Associate Professor Health Science, Truman State University; Dr. Carol Cox, PhD, MCHES® FAWHP FASHA FESG Professor Health Science, Truman State University; and H. Branch, B. Wagner, K. Schilly, S. Frerker, H. Jones, L. Washburn Students, Truman State University. SCHD and community collaborators included: Deborah Taylor, Administrator, Jacquelyn Perez, Staff, and Hannah Branch, Public Health Intern; along with community members from the SCHD Board, Sullivan Count Memorial Hospital, the school district, and the Senior Center. Representing underserved groups is Raelene Bailey, Community Health Worker as well as an interested senior citizen. All members came together as a Survey Team or Community Members Survey Consultants to help create the instrument topics/ideas for question items, and format. Health Department staff led the survey distribution process for both online (with QR code added for this year) and hard copy disbursal. The survey team defined the priority population and stakeholders, assessed resources needed for the process, defined success metrics, and considered assessment methodology.

The survey approach combined quantitative and qualitative data collection and analysis to enhance breadth and depth of health issue understanding and help strengthen validity of the process. Results from the secondary data analysis were used to inform the community survey process and develop and widely disseminate the instrument (hard and e-copy with added QR code). Data specific to the underserved, high-risk populations was researched in the secondary assessment. In the primary assessment, those populations were in the forefront of the Survey Team's thoughts during drafting and attempts at oversampling those populations in data collection were conducted. Collecting community perspective data from a variety of individual stakeholders in the process helped explain initial results and answer project-specific questions. Primary and secondary data were analyzed, displayed, compared, and aggregated. With input from community members and public health leaders, patterns were identified to note assets, disparities, and trends.

*Survey methodology –*

Survey use, a successful collection method in the past as compared to our town halls previously conducted, was identified as an appropriate method for soliciting community data again this cycle. Surveys – e and hard copies - allow for many diverse community members to provide direct feedback and are a cost-effective means to collect data from many people.

A plan for community-wide distribution (hard and e-copy formats) was determined by the Survey Team. A special plan on survey distribution to low-income/uninsured and those with chronic diseases by means of targeted survey placement, attempted oversampling, and adding the following distribution centers was implemented: hospital, farmers market, outreach clinics, annual safety and wellness event, open house event, back to school bashes, on tables at local outreach clinics, homecoming booths, flu clinics, hospital health fair, North Central Rural Electric Company Annual Meeting, four schools before start of school, provider offices in underserved areas, local Senior Center targeting elders, City Hall, and local business and storefronts. In addition, a data analysis plan was created.

In the survey distribution and collection phases, surveys were delivered in both print and electronic version (with QR code) and in Spanish. For specific examples, paper surveys were delivered to visitors and patients of SCHD in the waiting room and front desk, copies were also given to SCHD Board members and community partners to distribute to their networks. Paper surveys were also delivered to the following sites: churches, businesses, nursing homes, and clinics/provider offices. Participation from the underserved populations was encouraged through targeted hard copy survey placement at the hospital and

outreach clinics, flu clinics, hospital health fair, provider offices in underserved areas, local Senior Center targeting elders, and City Hall.

Links and QR code to the e-version were sent to the community calendar, the SCDH social media outlets, email listservs, and shared on multiple government, medical, social service, and other community-based social media sites and their supporting networks.

Although the surveys garnered a low response rate, respondents generally mirrored the county population in education and insurance coverage rates, but they were a little older with a little less income than the general population.

Data was analyzed using SPSS28. Descriptive statistics were computed on all quantitative items as appropriate. Qualitative data was compiled into one document, and themes that emerged in the data were identified accordingly.

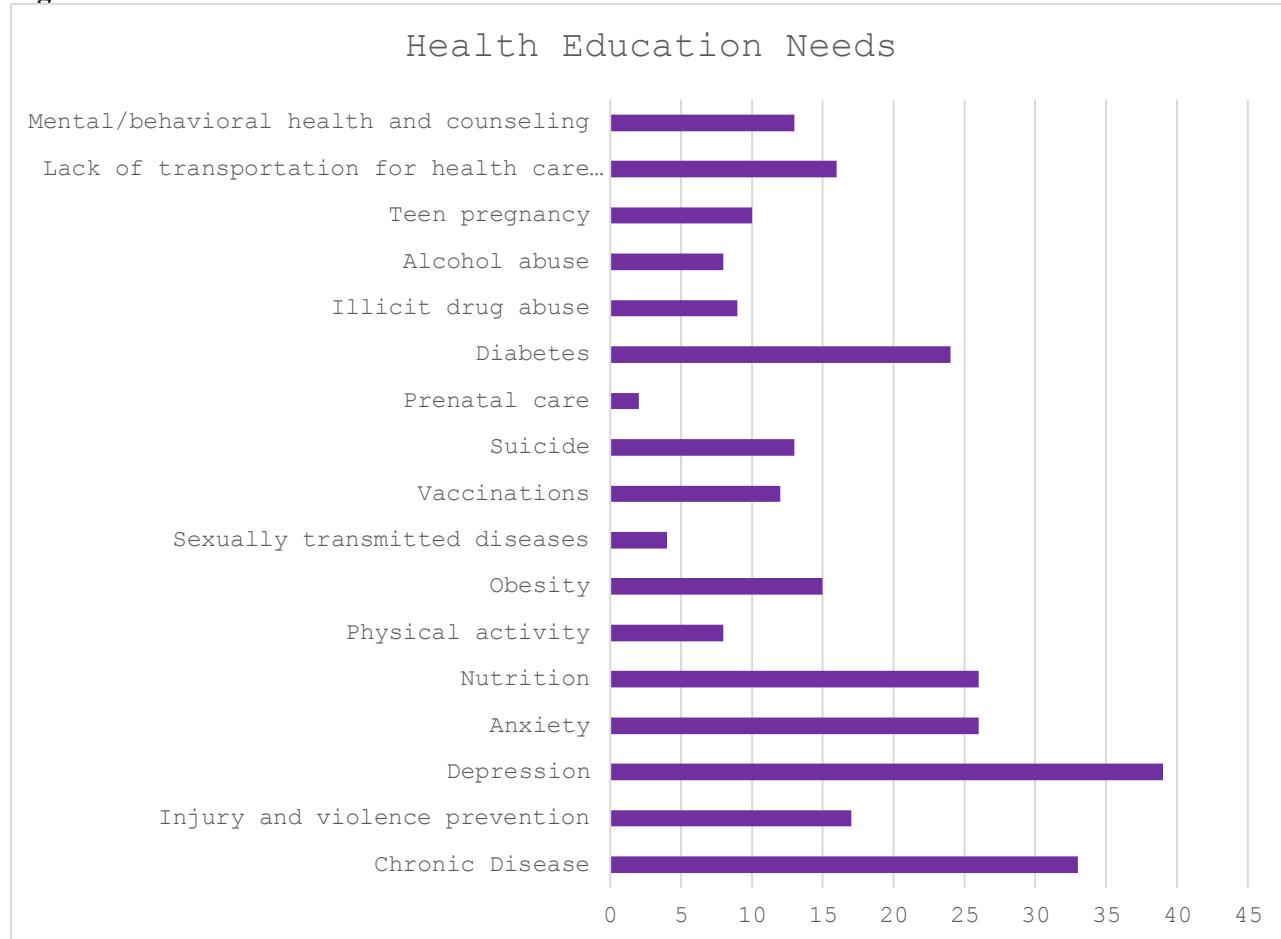


## Community Health Needs Assessment Survey Results

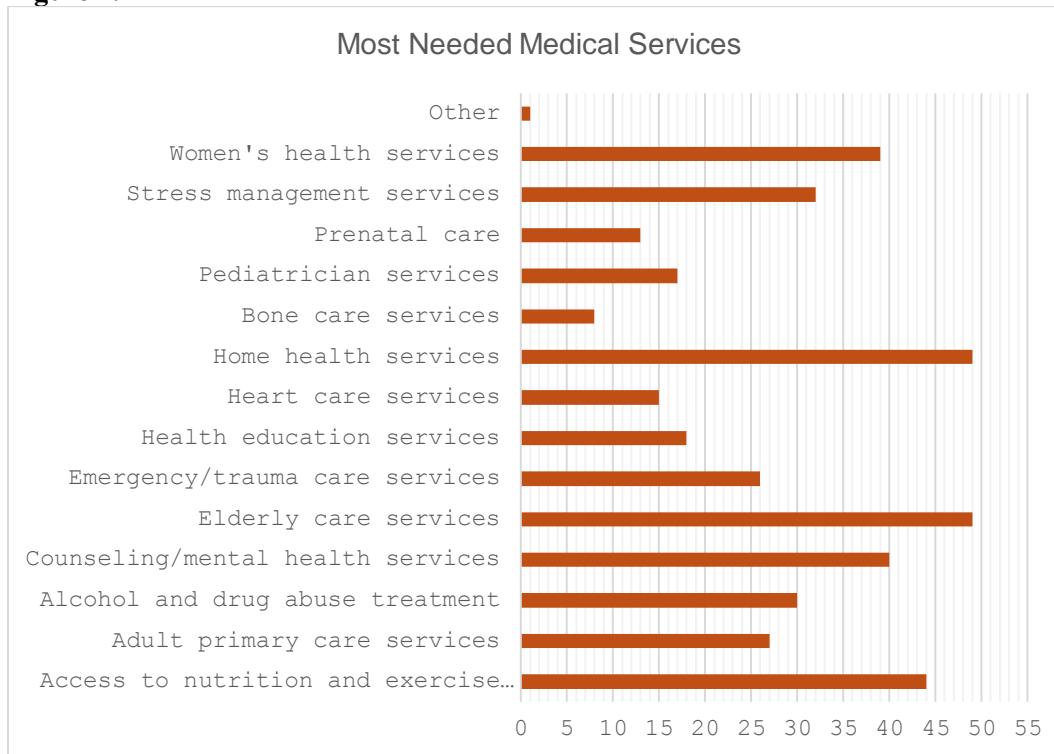
One hundred and eight (N = 108) individuals responded to the community needs assessment survey, 81% identified as female and 16% as male. All respondents reported living in Sullivan County. Individuals under 18 years to 70+ participated in the survey, and approximately 50% of respondents were 65+ of age. Nine percent (9%) reported not finishing high school, 34% possessed a high school diploma or GED, 23% took college classes, 9% possessed an associate's degree, and 32% hold a bachelor's degree or higher. Of those who reported their income, 44% possessed an annual household income of less than \$40,000. About 8 percent of respondents indicated that they do not have health insurance.

The top five health education needs are in the areas of depression, chronic disease, anxiety, nutrition, and diabetes. See Figure 1.

**Figure 1.**



Elder care, home health, access to nutrition and exercise, counseling/mental health, and women's health were the top five medical services that were identified as most needed in the community. See Figure 2.

**Figure 2.**

Survey results indicated that 88% of respondents go to a clinic or doctor's office, followed by hospital/emergency room (14%), urgent care facility (7%), and the health department (4%) for medical care. About 7% indicated that they "don't seek medical care" or chose "Other." About 88% indicated that they were able to get needed healthcare in the past year.

#### *Physical Health*

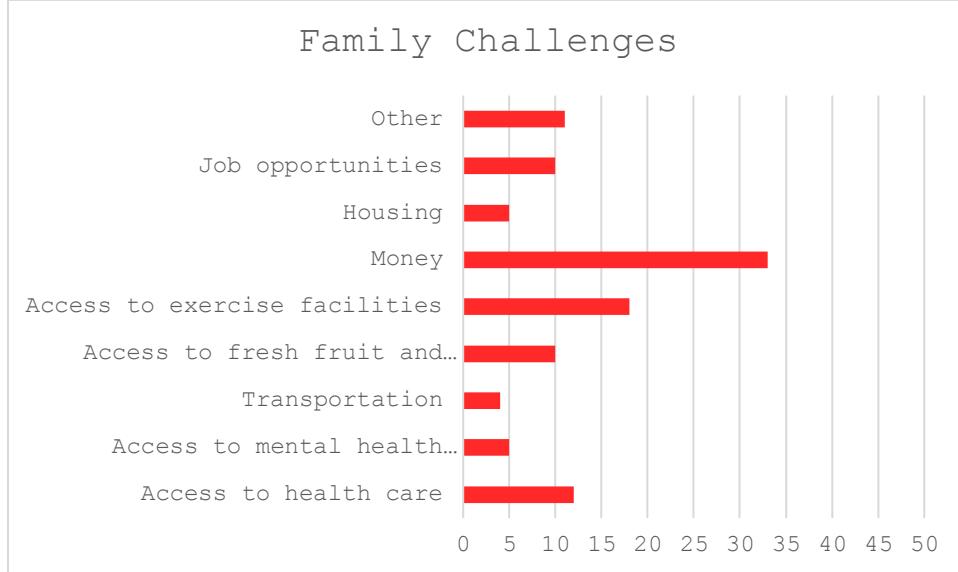
Eighty-two percent (82%) of respondents indicated that their physical health is average, somewhat good, or excellent, and about 52% indicated that they can easily access space to exercise. Approximately 54% of respondents indicated that they must travel 6 miles or more to parks and recreational areas from their home. Twenty-eight percent (28%) reported doing moderate to vigorous exercise for at least 30 minutes for 3 or more times per week.

#### *Nutrition*

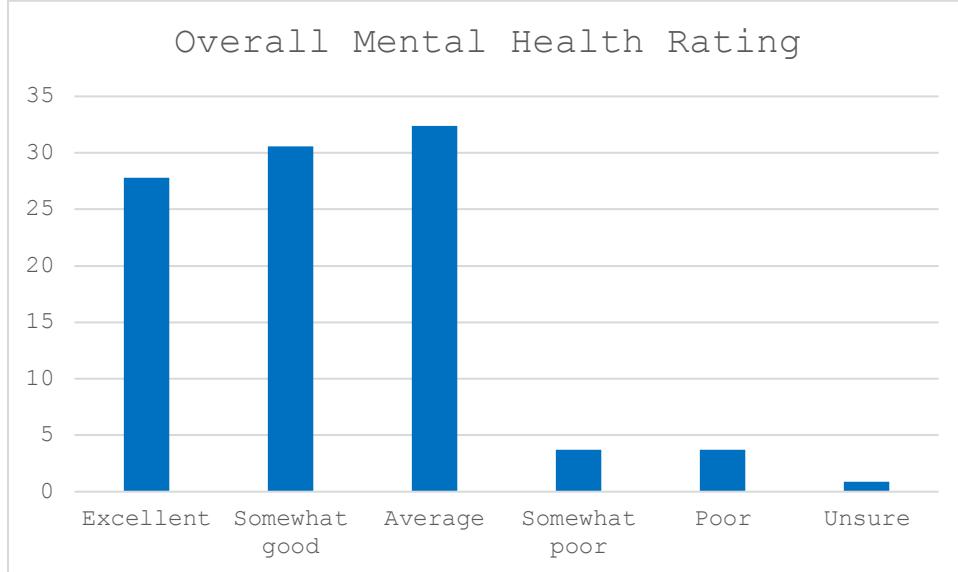
Thirty percent (30%) of respondents reported eating 3 or more servings of fruits and/or vegetables on a typical day, and 68% reported that they have access to fresh fruits and vegetables.

#### *Family Challenges*

Individuals reported that the most pressing challenges their family faces were money to pay for needs, access to exercise facilities, access to health care, lack of job opportunities, access to fresh fruit and vegetables, access to mental health services, housing, and transportation. See Figure 3.

**Figure 3.*****Mental Health***

The majority of the respondents (91%) reported an average to excellent rating on their mental health (See Figure 4). About 48% indicated that they have access to mental/behavioral health services if needed.

**Figure 4.*****Substance Use***

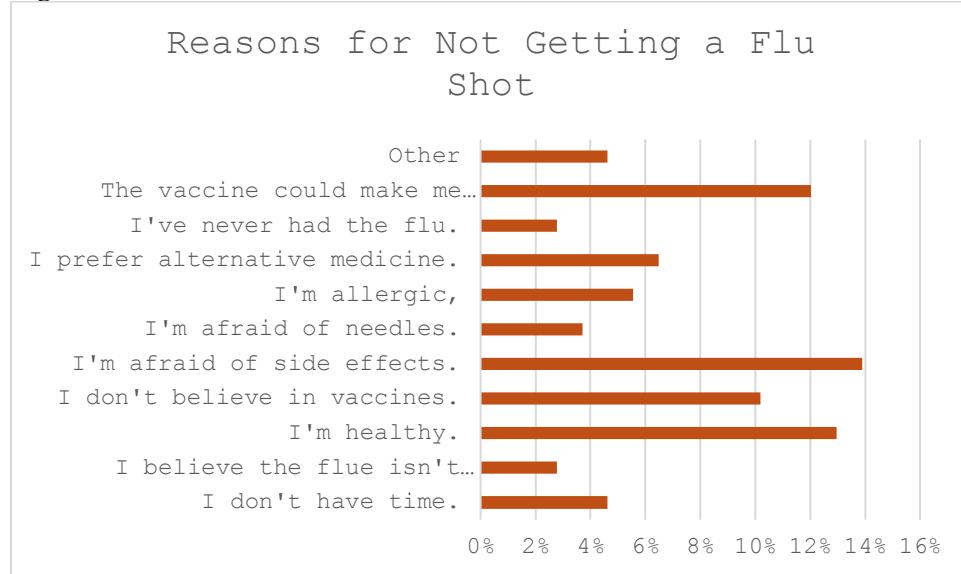
Seventy-seven percent (77%) reported that they “never” purchased tobacco products, and 92% “strongly agreed or agreed” to the statement, “Using tobacco products can harm individuals and others.” About 6% were “undecided, disagreed, or strongly disagreed” with that statement. For alcohol use, 81%

reported consuming alcohol 0-1 time a week, 6% consumed 2-3 times, and 6% consumed 4 or more times a week.

#### *Flu Shots*

Only 28% of respondents reported getting their flu shots this year. The top three reasons were being “afraid of side effects,” deemed themselves “healthy,” and the “vaccine could make me sick.” See Figure 5.

**Figure 5.**



#### *Health Literacy and Sources of Health Information*

Respondents reported that their doctors/physicians (74%) were their source of health information, followed by the internet/social media (21%), family and friends (17%), and the health department (12%). Approximately 59% of respondents indicated that they have “high or very high” trust in receiving information from the Health Department over the past 12 months, and 10% indicated “low or very low” trust. When asked about their understanding of basic information and medical information that was given to them, the majority of the respondents “agreed” or “strongly agreed” to statements. See Table 1.

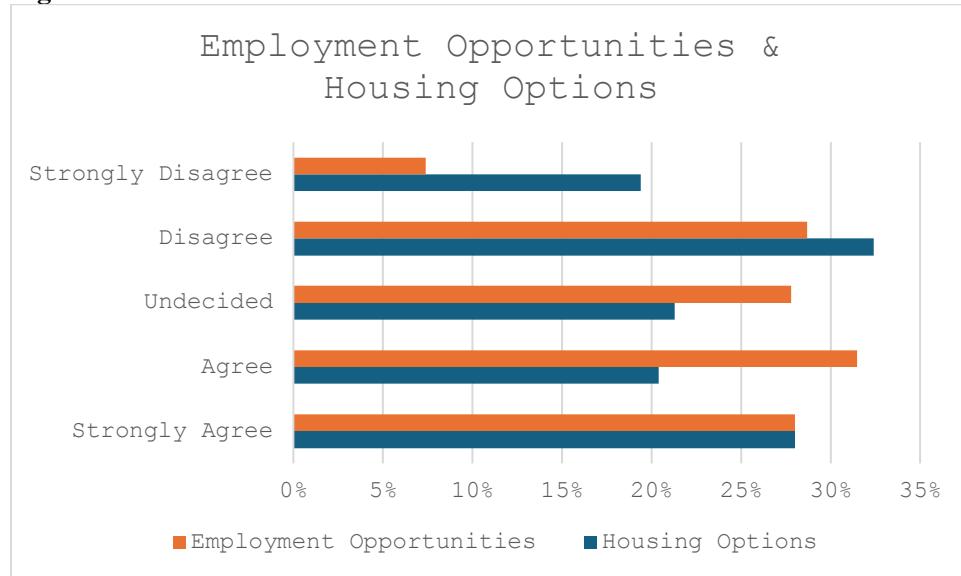
**Table 1.**

Statements	Strongly Agree % (n)	Agree % (n)	Undecided % (n)	Disagree % (n)	Strongly Disagree % (n)
I understand the basic information given to me. *	32% (35)	61% (66)	4% (4)	-	1% (1)
I understand the basic medical information given to me. *	26% (28)	65% (70)	6% (7)	-	1% (1)

\*Does not total to 100% due to missing data.

#### *Community*

About 80% of respondents indicated that they feel “safe” or “extremely safe” living and/or raising children in their community. When asked about their agreement with the statements related to good employment opportunities in the community, 36% “disagreed or strongly disagreed,” and 51% “disagreed or strongly disagreed” with the statement related to good housing options. See Figure 6.

**Figure 6.**

### *Health Department*

Ninety percent (90%) of respondents indicated that they are pleased with the services that Sullivan County Health Department provides. When participants were asked what the Sullivan County Health Department can improve on, developing new programs and outreach were the top two recommendations (cited 13 times) followed by providing more education (cited 9 times). Along with health department staff, respondents identified the clinic, its services, and its accessibility as strengths of the Sullivan County Health Department.

### **PRIMARY DATA SUMMARY**

Survey respondents generally mirrored the county population in education and insurance coverage rates, but they were a little older (although the county does trend older than state average) with a little less income than the general population. A very high percentage reported that they could access medical care, mental health care, and health information from the local hospital, clinics, health department, and other agencies. In addition, most rated their physical and mental health as at least average, substance use was not a major problem, and that they felt safe in their community. The majority reported high trust in SCHD, and 90% indicated that they were pleased with the services provided.

Respondents perceived health education needs were in the areas of chronic disease/diabetes, nutrition, and mental health prevention education. Medical services perceived as needed in the community included senior/women's/home health, nutrition/exercise, and mental health services. Many noted financial and job challenges as well as access to exercise (only 28% reported regularly exercising). Additionally, although many were seniors, 25% of respondents reported not obtaining flu shots.

Contributors to challenges, especially for seniors in the population, include the following non-medical factors: rural, low-SES, and quality jobs.

### **ASSET ASSESSMENT**

## Community Assets:

General listing:

<https://www.chamberofcommerce.com/business-directory/missouri/milan/family-community/>

Name of Asset	Category	Description	Link to asset
Milan Christian Food Pantry; Sullivan County Farmer's Market	Food	Provides food; Produce/crafts - seasonal	<a href="#">Milan Christian Food Pantry   Milan IL   Facebook</a>  <a href="https://www.facebook.com/SullivanCountyFarmersMarket/">https://www.facebook.com/SullivanCountyFarmersMarket/</a>
Sullivan County Public Library	Education	Free educational materials, courses, and children's programs	<a href="#">Public Library for Sullivan County Missouri (mogenweb.org)</a>
Sullivan County Multi-Purpose Senior Center	Service/Food	Home delivered meals, congregate meals and space during extreme weather emergencies.	<a href="#">United Way 2-1-1 (myresourcedirectory.com)</a>
OATS transit/Transit Department	Transport organization; Transportation Departments	Affordable transportation to nearby towns; Government Offices	<a href="#">Sullivan   OATS Transit</a>  <a href="https://www.countyoffice.org/mo-sullivan-county-department-of-transportation/">https://www.countyoffice.org/mo-sullivan-county-department-of-transportation/</a>
Sullivan County School Districts	Education	Provides free education to local K-12 students	<a href="https://www.milan.k12.mo.us/">https://www.milan.k12.mo.us/</a>  <a href="https://www.greencity.k12.mo.us/">https://www.greencity.k12.mo.us/</a>  <a href="https://www.nhtigers.k12.mo.us/">https://www.nhtigers.k12.mo.us/</a>

Sullivan County Community Center	Community	Events	<a href="https://www.facebook.com/p/Sullivan-County-Community-Center-100083489212144/">https://www.facebook.com/p/Sullivan-County-Community-Center-100083489212144/</a>
Recreation/Milan Pool; SCCC	Recreation, golf	Outdoor pool- open in summers	<a href="https://www.facebook.com/sullivancountycountryclub/">Fun and Recreation - City of Milan (milanmo.gov)</a>  <a href="https://www.facebook.com/sullivancountycountryclub/">https://www.facebook.com/sullivancountycountryclub/</a>
Lake View RV Park & Campground	Recreation	RV hookups, lake for swimming, fishing, and boating.	<a href="https://www.bing.com/search?q=Lake+View+RV+Park+&amp;+Campground">Lake View RV Park &amp; Campground (bing.com)</a>
Milan MO Chamber of Commerce	Small Businesses	Retail, banking, ag, insurance, automotive...	<a href="https://www.chamberofcommerce.com/business-directory/missouri/milan/">https://www.chamberofcommerce.com/business-directory/missouri/milan/</a>
MU Extension	Service	MU partnership for ag/health	<a href="https://extension.missouri.edu/counties/sullivan/">https://extension.missouri.edu/counties/sullivan/</a>
Churches	Service	Churches in/near Milan	<a href="https://www.churchfinder.com/churches/mo/milan">https://www.churchfinder.com/churches/mo/milan</a>  <a href="https://www.bing.com/search?q=Milan+Christian+Church+-+Milan+Missouri+(bing.com);+Saint+Mary+Catholic+Parish+-+Milan+and+Unionville,+MO+(stmary.church)">Milan Christian Church - Milan Missouri (bing.com); Saint Mary Catholic Parish - Milan and Unionville, MO (stmary.church)</a>
Sullivan County Government and Social Services	Government/Services/Action Network	Directory of officials and offices; Missouri Community Action Network	<a href="https://www.legalconsumer.com/democracy/elected-officials.php?FIPS=29211">https://www.legalconsumer.com/democracy/elected-officials.php?FIPS=29211</a>

			<a href="https://www.thecountyoffice.com/sullivan-county-mo-social-service/">https://www.thecountyoffice.com/sullivan-county-mo-social-service/</a>
			<a href="https://www.communityaction.org/">https://www.communityaction.org/</a>

- Nearby/Regional Resources: <http://NEMORESOURCES.ORG>

#### Healthcare Assets:

General listings:

<https://scmhospital.org/community-resources/> - Region

<https://www.chamberofcommerce.com/business-directory/missouri/milan/health-medicine/>

Name of Asset	Category	Description	Link
Sullivan County Health Department	Public Health	Public health, environmental health, and home health. Provides resources for CPR, immunizations, and overall health education.	<a href="https://schdmilanmo.com/public-health/health-education/">https://schdmilanmo.com/public-health/health-education/</a>
Sullivan County Memorial Hospital	Hospital	ER, Cardiac Therapy, infusions care, urology, radiology, rheumatology, pain management; Area clinics	<a href="https://scmhospital.org/infusion/">https://scmhospital.org/infusion/</a>
Primary Care Clinics			<a href="https://scmhospital.org/scmh-clinics/">https://scmhospital.org/scmh-clinics/</a>
Serve Link	Home health	Skilled nursing, OT, PT, Speech therapy, home health aide, chore care, personal care	<a href="https://www.servelinkhomedecare.com/services">https://www.servelinkhomedecare.com/services</a>
Sullivan County	Primary care	Primary care providers,	<a href="https://scmhospital.org/">https://scmhospital.org/</a>

Memorial Physicians Clinic		connected to hospital. Locations in Milan, Green City, and the hospital.	<a href="http://scmh-clinics/">scmh-clinics/</a>
NC MO Mental Health Center; Preferred Family Health	Mental health	Outpatient mental health services	<a href="https://mo211.myresourcedirectory.com/index.php/component/cpx/?task=resource.view&amp;id=4382742">https://mo211.myresourcedirectory.com/index.php/component/cpx/?task=resource.view&amp;id=4382742</a>  <a href="https://pfh.org/locations/">https://pfh.org/locations/</a>
Northeast MO Family Health Clinic/FQHC	Primary care	Connected to Northeast Health Council with a location in Milan	<a href="https://www.nemohealthcouncil.com/clinics">https://www.nemohealthcouncil.com/clinics</a>  <a href="https://npino.com/primary-clinic/1144366154-northeast-missouri-family-health-clinic/">https://npino.com/primary-clinic/1144366154-northeast-missouri-family-health-clinic/</a>
Milan Family Practice Clinic	Primary Care	Primary care services	<a href="https://www.chamberofcommerce.com/united-states/missouri/milan/medical-clinic/2007900052-milan-family-practice-clinic">https://www.chamberofcommerce.com/united-states/missouri/milan/medical-clinic/2007900052-milan-family-practice-clinic</a>
Assisted Living/Nursing homes: Stover's residential clinic, Tessland residential care, Milan healthcare center	Senior Living	Nursing home services, medication and behavior management, housekeeping, laundry, meal services, has an independent living program.	<a href="https://www.countyoffice.org/milan-mo-assisted-living-nursing-home/">https://www.countyoffice.org/milan-mo-assisted-living-nursing-home/</a>  <a href="https://www.stoversrcf.com/">https://www.stoversrcf.com/</a>  <a href="https://npiprofile.com/pi/1376117465">https://npiprofile.com/pi/1376117465</a>  <a href="https://www.senioradvice.com/providers/view/">https://www.senioradvice.com/providers/view/</a>

			<a href="#">rolling-hill-milan-mo</a>
Sullivan County WIC office	Women, Infant, and Children	Provides supplemental food packages, nutrition and health education, breastfeeding support, resources for pregnant and postpartum women, infants, and children up to 5 years old	<a href="https://schdmilanmo.com/public-health/wic/">https://schdmilanmo.com/public-health/wic/</a>  <a href="https://www.wicprograms.org/co/mo-sullivan">https://www.wicprograms.org/co/mo-sullivan</a>
PEAK Sport and Spine	Rehabilitation	Physical Therapy and PTA care	<a href="https://peaksportspine.com/locations/milan/">https://peaksportspine.com/locations/milan/</a>
Pharmacies	Pharmacy – Sullivan County Pharmacy	Prescriptions	<a href="https://npino.com/pharmacy/1407678857-sullivan-county-memorial-hospital/">https://npino.com/pharmacy/1407678857-sullivan-county-memorial-hospital/</a>
Complete Family Chiropractic & Wellness, LLC	Chiropractic	Family care	<a href="https://www.facebook.com/people/Complete-Family-Chiropractic-Wellness-LLC/100057256517837/">https://www.facebook.com/people/Complete-Family-Chiropractic-Wellness-LLC/100057256517837/</a>
Sullivan Co Ambulance District	Services	First response	<a href="https://www.countyoffice.org/sullivan-county-ambulance-district-milan-mo-fa6/">https://www.countyoffice.org/sullivan-county-ambulance-district-milan-mo-fa6/</a>  <a href="https://www.facebook.com/people/Sullivan-County-Ambulance-District/100083561163354/">https://www.facebook.com/people/Sullivan-County-Ambulance-District/100083561163354/</a>
Hospice	Service - Regional	End-of-life care	<a href="https://everloved.com/hospices/MO/milan/">https://everloved.com/hospices/MO/milan/</a>

## CURRENT LPHA PROGRAMMING/SERVICES

**Public Health Services:** The Sullivan County Health Department offers public health services to county residents, including those in Milan, Green City, Green Castle, Winigan, Reger, Humphreys, Osgood, Harris and Newtown, Missouri. Health Education; Animal Bites; Flu Clinic; Immunizations; Laboratory Services; Blood Pressure & Blood Sugar; Emergency Preparedness; Pregnancy testing ; STD AND HIV Testing; Lead and hemoglobin testing; DNA testing; CPR training; TB testing.

**WIC Services:** The WIC program offers a variety of benefits, including: Nutritional education for families; Breastfeeding education and support; Referrals to resources throughout the community; Health assessments; Supplemental foods such as milk, cheese, eggs, fruits and vegetables, beans, peanut butter, juice, cereal, and infant formula and foods.

**Environmental Health Services:** On-site sewage; Cafeteria inspections; Childcare inspections; Lodging inspections; Water testing; Food establishment inspections/County food ordinance.

**COVID-19:** Resources.

**Vital Records:** Birth and death certificates.

## COMMUNITY HEALTH NEEDS PRIORITIZATION

Health department leadership team, project consultant team, and community representatives from the hospital, social work, and social services sectors were involved in the needs prioritization process.

Before the start of the process, those most affected by the issue were asked to participate to make sure those most affected by the issues were represented because their voices are the ones most often ignored. We made sure they all were comfortable speaking up in the meetings and told them that they bring a valuable perspective. All were briefed that through discussion, brainstorming, and other methods of generating ideas, the group should be able to agree on issue prioritization criteria. All were told that health topics deemed important through group input but lack data will still be included in the prioritization of health issues if they deemed it important.

The group identified interests in relation to the process of setting priorities and established clear criteria for setting priorities for community issues to be addressed. Data was then discussed. Qualitative and quantitative data was analyzed by the committee. An open dialogue was fostered to identify health needs thoroughly. Community assets were reviewed to identify what resources exist to address the need. Also identified were resources (staffing, in-kind, financial, etc.) of the health department that could potentially be leveraged to address that need. Priorities were then selected. Consensus was built around priority needs as well as consequences of not addressing an issue. The selected priority aligned with SCHD and community sentiment. Needs that were not prioritized were also presented with a rationale as to why. Establishing criteria and processes for deciding on what are the most important issues makes decisions much easier. It also allowed for a participatory planning process from the very beginning to obtain community support and ownership of the plan.

- Over discussion and analysis, the following issues were identified by the group:

Secondary assessment:

Vulnerable population: Older citizens/seniors

Health conditions: Diabetes/Heart disease/ Falls

Health risks: Obesity/ HBP/Physical inactivity

Primary assessment:

Perceived health needs: Chronic disease/Diabetes/Nutrition/Exercise/Senior health/Mental health

Community assets related to the health conditions:

Medical: Hospital/Clinics/Home health/SCHD

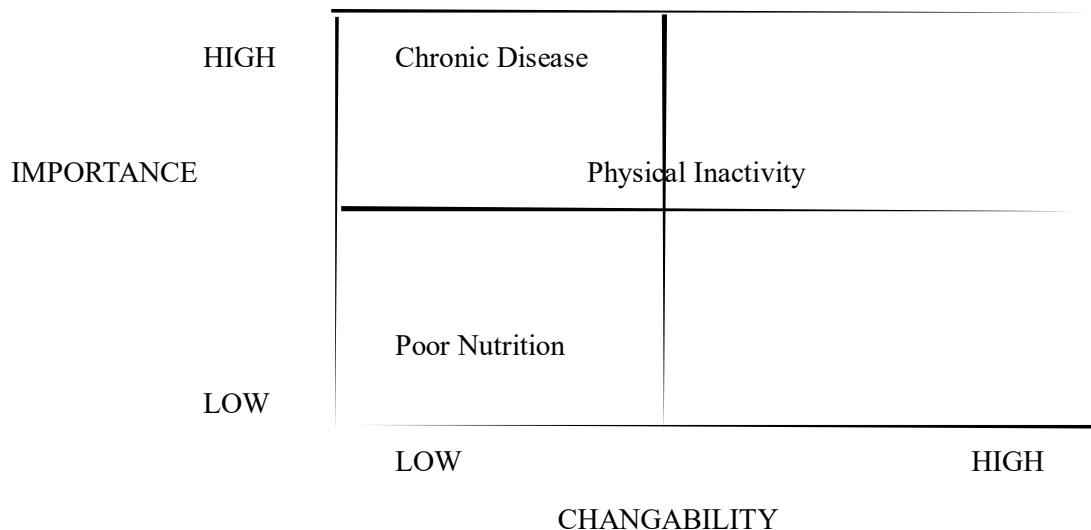
General: Food pantry/Senior-Community center/Public transportation/MU Extension office

- TOP Priorities identified/overlapping: Seniors as priority population, Chronic diseases, Poor Nutrition, Physical Inactivity/Lack of Exercise; County possesses assets of facilities and low-cost transportation to them, food pantry, and providers for education/interventions.

Rationale for those not prioritized: Falls can be prevented if physical fitness and nutrition are improved and chronic diseases managed. Improved nutrition and fitness can also lead to improved mood and mental health status.

Community prioritization process strategies (Strategy grid, Prioritization matrix, Hanlon) were then completed and results displayed.

By using formalized techniques, groups have a structured mechanism that can facilitate an orderly process. A strategy grid listed health needs as priorities based on baseline data, numeric values, and feasibility factors. The community prioritization process included use of a strategy grid to facilitate focusing efforts by shifting emphasis towards addressing problems that will yield the greatest results. This tool is particularly useful for agencies that are limited in capacity and want to focus on areas that provide 'the biggest bang for the buck.' The methodology takes a thoughtful approach to achieving maximum results with limited resources.



A prioritization matrix provided a structured approach to analyze health problems and solutions, relative to all criteria and considerations, and focused on those that will prove to have the greatest impact on the

overall health of a community. A prioritization matrix was used to consider health problems against a large number of criteria or when an agency is restricted to focusing on only one priority health issue. It was used to provide a visual method for prioritizing and account for criteria with varying degrees of importance.

<u>ISSUE</u>	<u>Size/Trend/Comparisons/Severity/Econ&amp;Soc/Capacity/Chageability/Readiness</u>
CHRONIC DISEASE	M/M/M/H/H/L/M/L
POOR NUTRITION	H/H/L/H/H/L/L/M-L
PHYSICAL INACTIVITY	H/M/M/H/H/L/M/M

*Size/magnitude* – How big the problem is in terms of occurrence, absolute numbers/cases, frequency/%, rates, incidence/prevalence rates adjusted for population.

*Time trends* – How problems are changing over time, identify emerging or growing problems.

*Other relative comparisons* – Comparisons to other geographic areas/reference populations/state.

*Seriousness/severity* – Potential impact/level of outcomes on individuals or community associated with different problems. How serious compared to other problems and includes YPLL, QALY, DALY.

*Economic costs/social impact* – Quantify the dollar amount associated with the issue and related consequences.

*Capacity/resources* – Availability of human, institutional, financial resources and commitment level.

*Preventability/changeability* – Feasibility to prevent/control the problem or its consequences, evidence about effectiveness of interventions to change the problem.

*Readiness/political will* – Level of awareness/concern/interest of the public to support addressing the issue, public/political level of acceptability and support as associated with addressing the issue.

The Hanlon method was used to rates item based on: A. Size of problem, (0-10), B. Seriousness (0-20), C. Effectiveness of available interventions (0-10), and D. “PEARL” (Propriety, Economics, Acceptability, Resources, and Legality: 0 or 1). Calculate Scores. Rank based on Scores. Priority rating = (A+B)C divided by 3xD.

Issue	Score
CHRONIC DISEASE	8,10,7,1 = 126
POOR NUTRITION	9, 15, 5, 1 = 120
PHYSICAL INACTIVITY/LACK OF EXERCISE	9,15, 5, 1 = 120

In addition, the answers to the following questions also were considered:

SCHD Focus

- What is important to the health department as defined by its mission and vision?
- What are the health department’s current strategic priorities related to population-based health initiatives?
- What are the health department’s current community health programs?
- What are the health department’s core lines of service and patient populations?
- What does the health department do well?
- What does the health department have the ability to influence and thus create positive change?

### The Community's Focus

- What is important to the community as conveyed in the primary research?
- Has anything significant occurred within the community that may not be captured in any of the data?
- Is there a community health issue that is especially relevant right now regardless of data?
- Are there other current community health programs?
- Have there been recent failed attempts to address community health issues?

The group achieved consensus on the top community health issues by using a standard nominal group technique. After community prioritization process strategies (strategy grid, prioritization matrix, Hanlon) were completed and results displayed, the project consultant team took the role as Leader to explain the technique and the importance of everyone's contributions. Leader posed the ranking of the top 3/top 1 health issue question, and participants wrote their answers on index cards, working silently and independently. Each participant gave the Leader one card with their top 3/top 1 ideas, with no discussion. The Leader numbered each idea and wrote it on a flipchart until all items were written down, and there were no new ideas. Leader named the first idea out loud and asked the group if there are any questions. The object was to clarify, not persuade. Duplicates were eliminated. Leader distributed index cards to each participant who selected from the master list on the flipchart the top 3/top 1 they thought were most important. The items were put on a card with the number given it in the master list. Then the participants ranked these items in order of their importance and put that number in the bottom right-hand corner of the card. Leader collected all the cards, tabulated results, and shared results with group. Group discussed to clarify any questions or changed votes. Final vote was reported to the group.

- **TOP HEALTH PRIORITY: Consensus on Chronic Disease, Physical Inactivity, Poor Nutrition**

### CHNA DISSEMINATION PLAN

- The report will be widely disseminated to the public, including those with limited internet access.
  - o Specifically for those medically underserved, chronically ill and lower socioeconomic populations, the report will be faxed/or hand delivered to local social service agencies and our health department partners so it can be distributed by them to their client population. Sites include, but are not limited to: Senior Services/Social Services Offices, Children's Division, Senior Center, Juvenile Office, Health Department, the hospital, outreach clinics, school district, Smithfield/Simmons/Stansbury workplace bulletin boards, and provider offices in underserved areas.
- The report will be released to the public by June 1, 2025 through mass media/press release, print, and social media (with a QR Code) at the following locations/sites: Senior Services, Children's Division, Senior Center, Juvenile Office, City Hall, Chamber of Commerce, Health Department, local churches, the hospital, outreach clinics/pharmacy, school district, and provider offices, Smithfield/Simmons/Stansbury workplaces, and provider offices in underserved areas.
  - o Copies will be available in our health department lobby and clinic, as well as posted on our Facebook and on our webpage: <https://www.facebook.com/profile.php?id=100066695810153>; <https://schdmilanmo.com/>
  - o We will also announce the release on the Sullivan County Information webpage on Facebook and post a link/QR Code to the full report.

- o We will also run a Community Calendar ad on KTTN and local paper announcing the completion and results of the CHNA.
- o A notice will be given to our local businesses/Chamber of Commerce telling them that the CHNA is available for review on our webpage/QR Code, and a hard copy will be provided upon request.
- o We will also send an announcement to local church groups to place in their church bulletins with the webpage <https://schdmilanmo.com/> and number to the health department (660) 265-4141 for church members to request a hard copy.
- o Hard copies will be mailed free to all those who request a hard copy.

## APPENDIX

### Sullivan County Needs Assessment

#### 2024 Survey For Sullivan County, Missouri

This survey is only for people who live in Sullivan County. **It will take about 10 minutes.** Your answers will help the health department understand community needs and improve our services. **Completing this survey will help our Health Department become accredited so that we can receive more funding to help improve our community!**

#### **Do you live in Sullivan County?**

- ( ) Yes
- ( ) No (If you do not live here, please do not take this survey.)
- ( ) Unsure

#### **What is your Sullivan County zip code?**

#### **Are you pleased with the services that the Health Department provides?**

- ( ) Yes
- ( ) No
- ( ) Unsure

#### **What language do you speak at home?**

#### **How safe do you feel living in your community or raising children there? (Rate from 1 to 5)**

1 2 3 4 5

Not safe at all	( )	( )	( )	( )	( )	Extremely safe
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#### **How would you rate the healthcare you receive?**

1 2 3 4 5

Extremely bad	( )	( )	( )	( )	( )	Excellent
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#### **Choose three topics you would like health education on in Sullivan County.**

- ( ) Chronic diseases
- ( ) Injury and violence prevention
- ( ) Mental/behavioral health and counseling
- ( ) Nutrition
- ( ) Physical Activity
- ( ) Obesity
- ( ) Sexually Transmitted Diseases
- ( ) Vaccinations
- ( ) Suicide
- ( ) Prenatal Care

- ( ) Diabetes
- ( ) Illicit Drug Use
- ( ) Alcohol Abuse
- ( ) Teen Pregnancy
- ( ) Lack of transportation for health care services

**What Medical services are most needed in your community? Select your top 5**

- [ ] Acess to nutrntion and exercise services
- [ ] Adult primary care services
- [ ] Alcohol and drug abuse treatment
- [ ] Counseling/ mental health services
- [ ] Elderly Services
- [ ] Emergency/ trauma care services
- [ ] Health education services
- [ ] Heart care services
- [ ] Home health services
- [ ] Bone care services
- [ ] Pediatrician services
- [ ] Prenatal care
- [ ] Stress management
- [ ] Women's health services
- [ ] Other:

**What is one challenge you face as an individual ?**

- ( ) Access to health care
- ( ) Access to mental health services
- ( ) Transportation
- ( ) Access to fresh fruit and vegetables
- ( ) Money
- ( ) Housing
- ( ) Job opportunities
- ( ) Other:

**What is one challenge you face as a family?**

- ( ) Access to health care
- ( ) Access to mental health services
- ( ) Transportation
- ( ) Access to fresh fruit and vegetables
- ( ) Access to exercise faculties
- ( ) Money
- ( ) Housing
- ( ) Job opportunities
- ( ) Other:

**Overall, how would you rate your physical health?**

- ( ) Excellent
- ( ) Somewhat good
- ( ) Average
- ( ) Somewhat poor
- ( ) Poor
- ( ) Unsure

**Is exercise easily accessible to you?**

- ( ) Yes
- ( ) No
- ( ) Unsure

**How often do you do moderate to vigorous exercise for at least 30 minutes? (Examples: brisk walking, sports, etc.)**

- ( ) 0-1 days per week
- ( ) 3-4 days per week
- ( ) 5-7 days per week

**How many servings of fruit/ vegetables do you eat on a typical day?**

- ( ) 0
- ( ) 1-2
- ( ) 3-5
- ( ) 6 or more

**Do you have access to fresh fruits/ vegetables within 10 miles of your home?**

- ( ) Yes
- ( ) No
- ( ) Unsure

**Overall, how would you rate your mental health?**

- ( ) Excellent
- ( ) Somewhat good
- ( ) Average
- ( ) Somewhat poor
- ( ) Poor
- ( ) Unsure

**Do you know how to access mental health/ behavioral services if needed?**

- ( ) Yes
- ( ) No
- ( ) Unsure

**How often do you buy tobacco/smoking products for yourself?**

- ( ) Very Frequently
- ( ) Frequently
- ( ) Occasionally
- ( ) Rarely
- ( ) Very rarely
- ( ) Never

**Do you agree or disagree with this statement? "Using tobacco/smoking products can harm individuals and others."**

- ( ) Strongly Agree
- ( ) Agree
- ( ) Disagree
- ( ) Strongly Disagree

**How often do you consume alcohol?**

- ( ) 0-1 times a week
- ( ) 2-3 times a week
- ( ) 4-5 times a week
- ( ) 6+ times a week

**If you didn't get a flu vaccine shot this year, why not? (choose all that apply)**

- ( ) I got my flu shot this year.
- ( ) I don't have time.
- ( ) I believe the flu isn't serious.
- ( ) I'm healthy.
- ( ) I don't believe in vaccines.
- ( ) I'm afraid of side effects.
- ( ) I'm afraid of needles.
- ( ) I'm allergic.
- ( ) I prefer alternative medicine.
- ( ) I've never had the flu.
- ( ) The vaccine could make me sick.
- ( ) Other

**Where do you go for medical care? (Select all that apply)**

- ( ) Clinic or doctor's office
- ( ) Urgent care facility
- ( ) Hospital or emergency department
- ( ) I don't seek medical care.
- ( ) Other

**How far do you travel for your primary care provider?**

- ( ) 0- 5 miles
- ( ) 6-10 miles

- ( ) 11-20 miles
- ( ) 21-30 miles
- ( ) 30+ miles

**How far are parks and recreation from your home?**

- ( ) 0- 5 miles
- ( ) 6-10 miles
- ( ) 11-20 miles
- ( ) 21-30 miles
- ( ) 31+ miles

**Where do you get most of your health information from?**

- ( ) Doctor/ Physician
- ( ) Family/Friends
- ( ) News/ TV
- ( ) Newspaper
- ( ) Radio
- ( ) Pharmacy
- ( ) Health Department
- ( ) Other

**Over the past 12 months, what is your level of trust in receiving information from the Health Department?**

- ( ) Very High
- ( ) High
- ( ) Neutral
- ( ) Low
- ( ) Very Low

**What type of health insurance do you have?**

- ( ) I don't have health insurance.
- ( ) Private/Commercial
- ( ) Medicare
- ( ) Medicaid

**In the past year, were you able to get needed healthcare?**

- ( ) Yes
- ( ) No
- ( ) I don't need healthcare.

**Do you agree or disagree with this statement? "There are good housing options in Sullivan County."**

- ( ) Strongly Agree
- ( ) Agree
- ( ) Undecided
- ( ) Disagree

- ( ) Strongly Disagree

**Do you agree or disagree with this statement? "I understand the basic information given to me."**

- ( ) Strongly Agree

- ( ) Agree

- ( ) Undecided

- ( ) Disagree

- ( ) Strongly Disagree

**Do you agree or disagree with this statement? "I understand the basic medical information given to me."**

- ( ) Strongly Agree

- ( ) Agree

- ( ) Undecided

- ( ) Disagree

- ( ) Strongly Disagree

**Do you agree or disagree with this statement? "There are good employment opportunities in my area."**

- ( ) Strongly Agree

- ( ) Agree

- ( ) Undecided

- ( ) Disagree

- ( ) Strongly Disagree

**What is your sex?**

- ( ) Male

- ( ) Female

- ( ) Prefer not to say

**What age range are you in?**

- ( ) Under 18

- ( ) 18-25

- ( ) 26-35

- ( ) 36-45

- ( ) 46-55

- ( ) 56-65

- ( ) 66-75

- ( ) 76+

**What is your race?**

- ( ) White

- ( ) Hispanic/ Latino

- ( ) Black or African American

- ( ) American Indian or Alaska Native

- ( ) Asian
- ( ) Native Hawaiian or Other Pacific Islander

**What is your highest level of education?**

- ( ) Did not finish high school/ GED
- ( ) High school diploma/ GED or equivalent
- ( ) Some college (no degree)
- ( ) Associates degree
- ( ) Bachelor's degree
- ( ) Master's degree
- ( ) Doctoral degree

**What is your annual household income?**

- ( ) \$0- \$19,999
- ( ) \$20,000- \$39,000
- ( ) \$40,000-\$59,000
- ( ) \$60,000-\$79,000
- ( ) \$80,000-\$99,000
- ( ) \$100,000-\$119,000
- ( ) \$120,000+

**What is something that the Sullivan County Health Department can improve on? (Examples: Providing education, outreach, utilization of technology, etc.)**

What is one strength of the Sullivan County Health Department? (Examples: services, clinics, education, etc.)

