

MISSION: TO IMPROVE THE HEALTH OF THE PEOPLE AND COMMUNITIES WE SERVE.



# Community Health Needs Assessment and Implementation Plan **2022**



**BARNES-JEWISH**  
*St. Peters Hospital*

**BJC** HealthCare

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## Executive Summary

Barnes-Jewish St. Peters Hospital (BJSPH) is a 127-bed facility located in St. Charles County in the city of St. Peters, Missouri. BJSPH opened its doors in 1980. Since then, the hospital has delivered high quality health care services to patients in the St. Charles County region. The hospital has also established effective partnerships toward the goal of improving the health of the community.

Like all nonprofit hospitals, BJSPH is required by the Patient Protection and Affordable Care Act (PPACA) to conduct a community health needs assessment (CHNA) and create an implementation plan every three years. BJSPH completed its first CHNA and implementation plan Dec. 31, 2013 and again in 2016 and 2019. The report was posted to the hospital's website to ensure easy access to the public.

As part of this assessment, each hospital is required to define its community. Once the community is defined, input must be solicited from those who represent the broad interests of the community served by the hospital, as well as those who have special knowledge and expertise in the area of public health. This process occurred in two phases.

In the past, community stakeholder health needs assessments were conducted in person via a moderated discussion. Due to COVID-19, BJC HealthCare, along with collaborative health system and hospital partners, conducted an online survey for the safety of community stakeholders. The survey provided stakeholders an opportunity to rank community health needs compiled by these partners.

During phase two, findings from the stakeholder survey were reviewed and analyzed by an internal hospital work group of clinical and non-clinical staff. Using multiple sources, including Conduent Healthy Communities Institute, a secondary data analysis was conducted to further assess the identified needs. This analysis identified unique health disparities and trends evident in St. Charles County when compared to the state.

At the conclusion of the comprehensive assessment process, BJSPH will focus its efforts on two health needs to improve the health of the community it serves: Mental Health and Heart Health.

The analysis and conclusions will be presented and reviewed for approval by the BJSPH Board of Directors. The report will be posted to the hospital's website to ensure easy access to the public.

# Community Description

## GEOGRAPHY

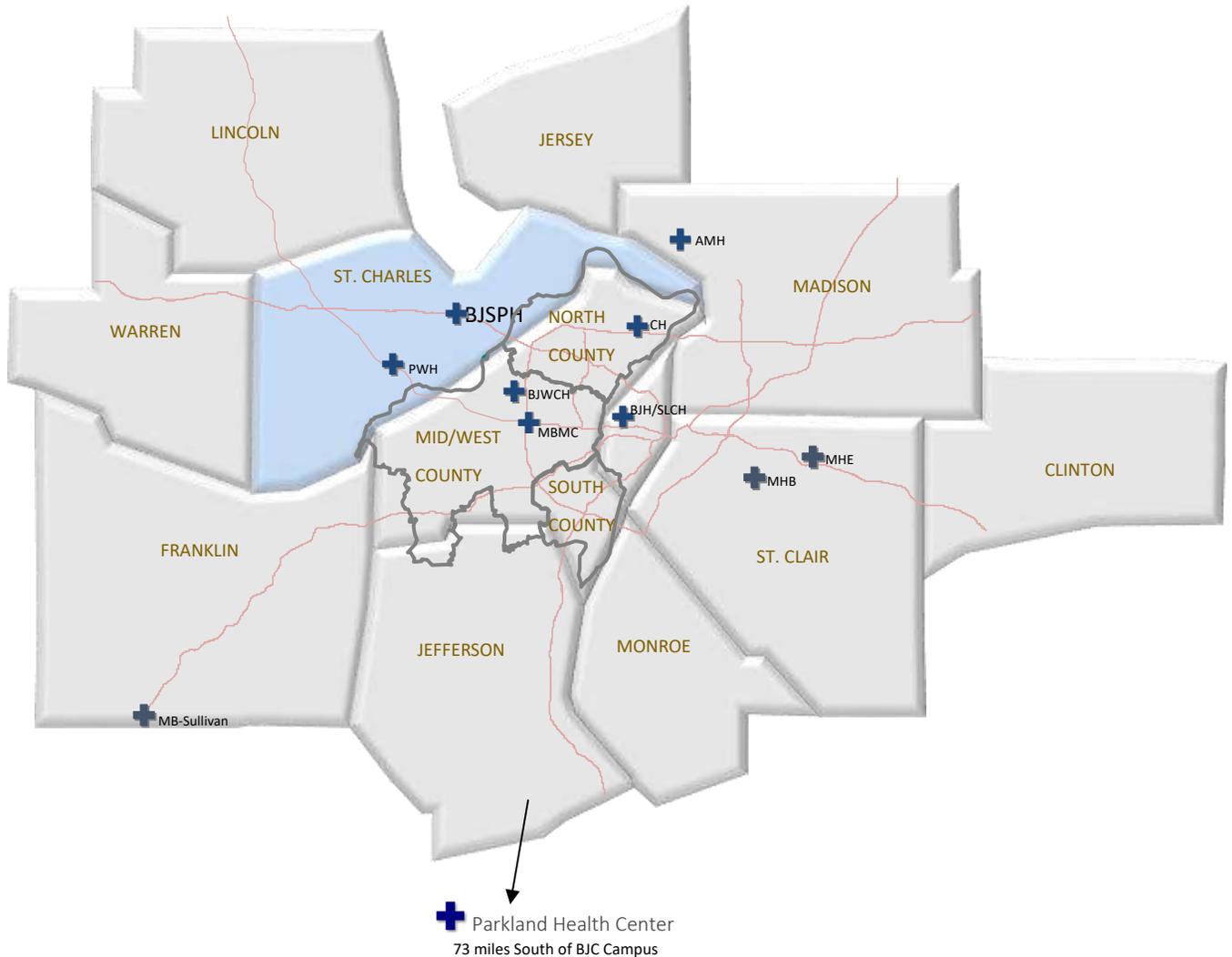
BJSPH is located in St. Charles County in the city of St. Peters, Missouri, and for the purpose of the CHNA, the hospital defined its community as St. Charles County.

BJSPH is a member of BJC HealthCare, one of the largest, nonprofit health care organizations in the country. BJC HealthCare hospitals serve urban, suburban and rural communities through 15 hospitals and multiple community health locations primarily in the greater St. Louis, southern Illinois and mid-Missouri regions. BJSPH and Progress West Hospital (PWH) are the two BJC HealthCare hospitals located in St. Charles County.

BJSPH is located along the Interstate 70 corridor in Eastern/Central St. Charles County.



**BJSPH's Primary Service Area:**  
**St. Charles County MO (shaded in blue below)**



**POPULATION**

Population and demographic data are necessary to understand the health of the community and plan for future needs. In 2021, St. Charles County reported a total population estimate of 409,981 compared to the state population of 6,168,187. St. Charles County comprised 6.6 percent of the state of Missouri's total population. From April 2020 to July 2021, the county population increased 1.2 percent and the state experienced a 0.2 percent increase in population.

**RACE AND ETHNICITY**

In St. Charles County in 2020, 86.6 percent of the population identified as White alone, not Hispanic or Latino compared to 79.1. percent in the state; 5.3 percent of the population identified as African American compared to 11.8 percent in the state; and 3.4 percent of the population identified as Hispanic or Latino compared to 4.4 percent in the state.

**TABLE 1: ST. CHARLES COUNTY VS. MISSOURI POPULATION BY GENDER AND RACE/ETHNICITY**

	ST. CHARLES COUNTY	MISSOURI
TOTAL POPULATION, July 1 2021, estimate	409,981	6,168,187
<b>PERCENT POPULATION BY GENDER (2021)</b>		
GENDER	ST. CHARLES COUNTY	MISSOURI
Female	50.9	<b>50.9</b>
Male	49.1	49.1
<b>PERCENT POPULATION BY RACE/ETHNICITY (2020)</b>		
RACE/ETHNICITY	ST. CHARLES COUNTY	MISSOURI
White, Alone, Percent	89.6	82.9
White alone, not Hispanic or Latino, Percent	86.6	79.1
Black/African American, percent	5.3	11.8
Hispanic or Latino, percent	3.4	4.4
Two or More Races, percent	2.1	2.4
Asian, alone, percent	2.8	2.2
American Indian & Alaska Native, percent	0.2	0.6
Native Hawaiian & other Pacific Islander, percent	0.1	0.2

## **INCOME**

St. Charles County’s median household income totaled \$87,644 (2016-2020) while the state median household income was \$57,290. Persons living below the poverty level in St. Charles County was 5.0 percent compared to 13.7 percent in the state.

## **EDUCATION**

Individuals who do not finish high school are more likely than those who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance or involved in crime. The Healthy People 2030 national health target is to increase the proportion

of students who graduate high school within four years of their first enrollment in ninth grade to 90.7 percent. In St. Charles County, 95.0 percent of the population ages 25 and over had a high school diploma or higher education attainment compared to 90.6 in the state.

For many, having a bachelor's degree is the key to a better life. The college experience develops cognitive skills, and allows learning about a wide range of subjects, people, cultures and communities. Having a college degree also opens career opportunities in a variety of fields and is often the prerequisite to a higher-paying job. It is estimated that college graduates have about \$1 million more in lifetime earnings than their peers without college degrees. In St. Charles County, 40.8 percent of the population ages 25 and older held a bachelor's degree or higher compared to 29.9 percent in the state.

## **AGE**

The age structure of a community is an important determinant of its health and the health services it will need. The distribution of the population across age groups was similar in St. Charles County and the state.

Additional demographic data on St. Charles County is available in Appendix C.

## Previous (2019) CHNA Measurement and Outcomes Results

At the completion of the 2019 CHNA, BJSPH identified diabetes and obesity as areas where focus was most needed to improve the health of the community served by the hospital. The following table details goals, objectives, action plans and current status of these community health needs.

TABLE 2: BARNES JEWISH ST. PETERS HOSPITAL 2019 MEASURE OF SUCCESS BY PRIORITY

DIABETES		OBESITY	
PROGRAM GOAL		PROGRAM GOAL	
To increase the survival skill knowledge of adults with type 2 diabetes.		To improve knowledge and skill in leading a healthy lifestyle among children and their families by offering a multi-disciplinary approach to weight management	
PROGRAM OBJECTIVES		PROGRAM OBJECTIVES	
<ol style="list-style-type: none"> <li>1) Continue annual 10 percent increase of 2019 number of Diabetes Self-Management Education and Support (DSME) participants</li> <li>2) Improve overall knowledge of 80 percent of the participants' survival skills assessment by an average of 10 percent from pre- to post testing</li> <li>3) Improve the participants' Hemoglobin A1C by an average of 5 percent from initial Hemoglobin A1C test provided by physician prior to program enrollment to the six month Hemoglobin A1C test post enrollment</li> </ol>		<ol style="list-style-type: none"> <li>1) Provide intensive group educational sessions that focus on nutrition, physical activity and emotional health to 30 children per year</li> <li>2) Increase knowledge of nutrition, physical activity and emotional health among participants by a 5 percent increase in average knowledge score among participants at post-test compared to pre-test at the end of 12 intensive group sessions</li> </ol>	
PROGRAM CURRENT STATUS		PROGRAM CURRENT STATUS	
Due to the reduction of in-person meetings during 2020, only 45 individuals participated. The number of participants improved to 184 in 2021. Patients demonstrated increased knowledge of severe hyperglycemia and hyperglycemic events furthering the individuals' survival skills. Data collection of the improved Hemoglobin A1C proved difficult, with less than 10 percent of participants reporting after six months post enrollment. Educators report this was due to the difficulty of acquiring in-person physician appointments where labs could be drawn in the office. In-hospital focus was on decreasing severe hyperglycemic events resulting in 36.18 events based on target of 37.23 events for the year.		Due to the reduction of in-person meetings during 2020, only 15 individuals participated in the education for weight management. The numbers of participants improved to 211 in 2021. Participants demonstrated a minimum of a 10% increase in knowledge of nutrition, physical activity and emotional health. The success of this program grew through increased participation from patients with other diagnoses, including cardiovascular disease, general health follow up, hypothyroidism PCOS and other conditions, resulting in an additional 253 participants.	

## Conducting the 2019 CHNA

### Primary Data Collection: Survey of Community Stakeholders

Due to COVID-19, BJC HealthCare, along with collaborative partners SSM Health; Mercy Hospital St. Louis and Mercy Hospital South; and the St. Luke's network of care, which includes St. Luke's Hospital and St. Luke's Des Peres Hospital, conducted online surveys for the safety of our employees and of our community stakeholders who represent the broad interests of the community served by each hospital and those with special knowledge or expertise in public health. In the past, community stakeholder health needs assessments were conducted in person via a moderated discussion. (See Appendix D for the Stakeholder Assessment Report and Appendix E for the list of Participating Community Stakeholders)

#### Summary: Stakeholder Key Findings

Mental health, immunizations/infectious diseases and drug abuse were the needs of greatest concern as well as greatest opportunity for collaboration in St. Charles County. Stakeholders felt that financial barriers related to health insurance were having the greatest impact on limiting access to health services in St. Charles County.

Most stakeholders identified low-income populations and the homeless as being at greatest risk for poor health outcomes in St. Charles County. Those suffering from substance abuse and the unemployed ranked next.

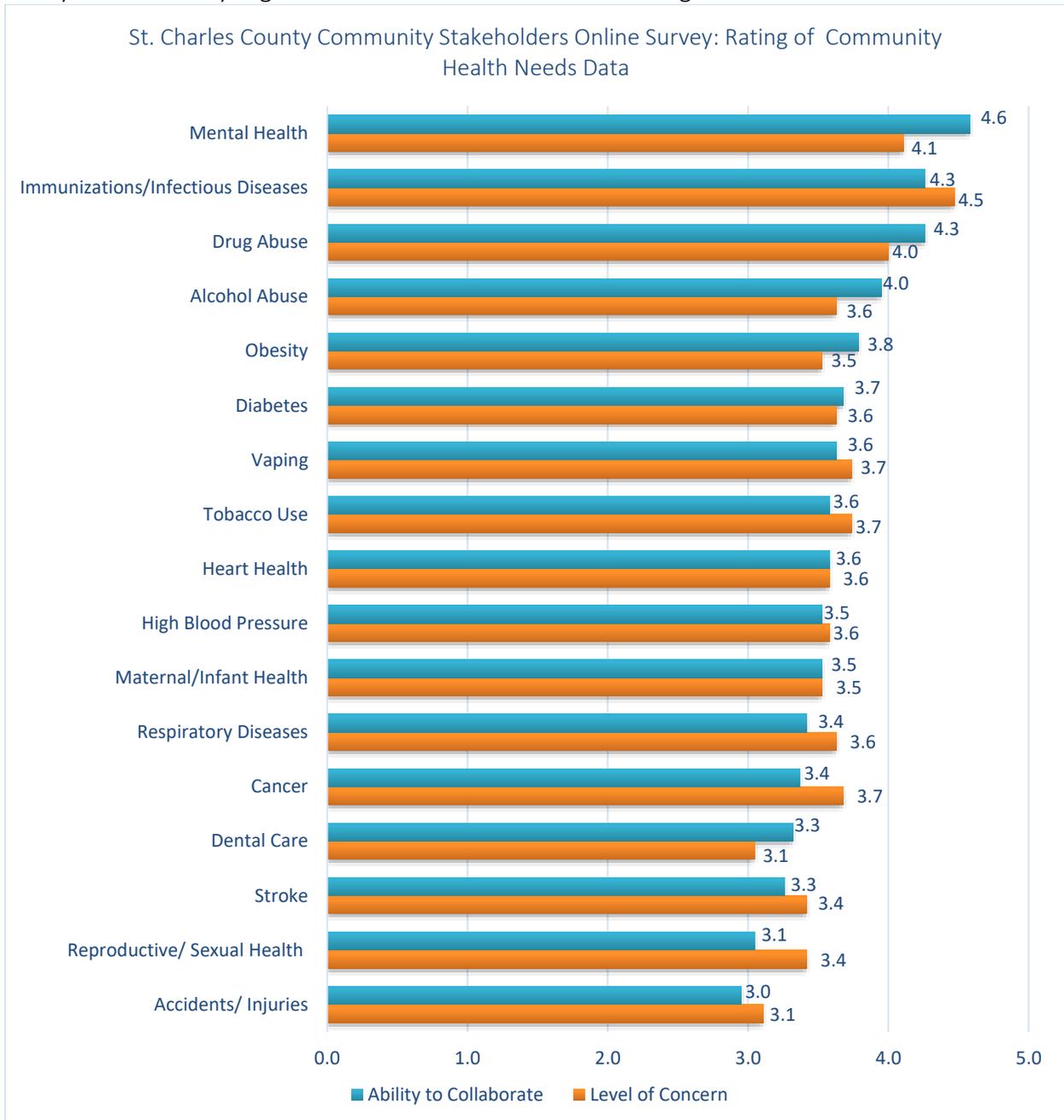
Stakeholders overwhelmingly agreed that access to transportation was the social factor that had the greatest impact on the health of those living in St. Charles County. Stakeholders strongly agreed that the greatest impact of COVID-19 has been on the mental health of St. Charles County residents.

Stakeholders identified the largest gaps in St. Charles County around access to transportation, followed by mental health. Stakeholders identified new issues of concern around vaccine misinformation and mental health as well as homelessness, post-secondary school transitions, vaping and Medicaid expansion.

Many stakeholders identified the city of St. Charles (63301) as being the most at-risk community in St. Charles County; Wentzville (63385) was mentioned by a few.

## RATING OF NEEDS

Community stakeholders were given the list of community health needs compiled by survey partners using results from the previous CHNA. Stakeholders were directed to rank these needs on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate in addressing.



Mental Health ranked highest in terms of ability to collaborate. Immunizations/infectious diseases ranked the highest need for level of concern.

## Secondary Data Summary

Based on the needs reviewed by community stakeholders (see graph on previous page), key areas were identified for a secondary data analysis. These represent the areas of greatest concern identified by the stakeholders.

The majority of the analysis was completed comparing St. Charles County and Missouri. In order to provide a comprehensive overview (analysis of disparity and trend) the most up-to-date secondary data from Conduent Healthy Communities Institute (HCI) was included for the needs listed below.

Conduent Healthy Communities Institute (HCI), an online dashboard of health indicators for St. Charles County, offers the ability to evaluate and track the information against state and national data and Healthy People 2020 and 2030 goals. Sources of data include the National Cancer Institute, Environmental Protection Agency, U.S. Census Bureau, U.S. Department of Education, and other national, state, and regional sources.

Other data sources included:

Missouri Department of Mental Health provides numerous comprehensive reports and statistics on mental health diseases, alcohol and drug abuse.

Missouri Information for Community Assessment (MICA) is an online system that helps to prioritize diseases using publicly available data. The system also provides for the subjective input of experts to rank their perceived seriousness of each issue.

### Community Health Needs

- Cancer
- Diabetes
- Heart and Vascular Disease
- Respiratory Diseases
- Mental/Behavioral Health: Mental Health
- Mental/Behavioral Health: Substance Use and Abuse

A summary of the secondary data follows below. Additional secondary data is available in Appendix G. All mortality and incidence rates are per 100,000 population.

### Cancer

Cancer is a leading cause of death in the U.S., with more than 100 different types of the disease. According to the National Cancer Institute, lung, colon and rectal, breast, pancreatic and prostate cancer lead in the greatest number of annual deaths.

In St. Charles County for the five-year period ending 2018, the age-adjusted incident rate due to all cancers remained relatively flat compared to the five-year period ending 2017. However, for the same time periods the age-adjusted death rate due to cancer decreased 5.7 percent.

In St. Charles County for the five-year period ending 2018, when comparing the age-adjusted incident rate due to all cancers by race/ethnicity, the Asian Pacific Islander, African American and Hispanic populations all had lower rates compared to the same populations in the state. The White population had a 2.5 percent higher rate than the state (467.2 vs. 455.6).

### **Diabetes**

Diabetes is a leading cause of death in the U.S. This disease can have harmful effects on most of the organ systems in the human body. It is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working-age adults. Persons with diabetes are also at increased risk for coronary heart disease, neuropathy and stroke. Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older.

In St. Charles County for the five-year period ending 2019, the age-adjusted death rate due to diabetes was 32.2 percent lower compared to the rate in the state (13.9 vs. 20.5). While Whites in St. Charles County had a 30.2 percent lower rate compared to Whites in the state, African Americans in St. Charles County had a 6.9 percent lower rate when compared to African Americans in the state.

### **Heart and Vascular Disease**

Heart disease and stroke are among the most preventable diseases in the U.S., yet they are the most widespread and costly health conditions facing the nation today. Heart disease and stroke are the first and third leading causes of death for both women and men.

Cerebrovascular disease is a leading cause of death in the United States, and although it is more common in older adults, it can occur at any age. The most important modifiable risk factor for cerebrovascular disease and stroke is high blood pressure. Other risk factors include high cholesterol, heart disease, diabetes mellitus, physical inactivity, obesity, excessive alcohol use and tobacco use.

In St. Charles County for the 10-year period ending 2019, the heart disease death rate was 20.7 percent lower compared to the state rate. For the 10-year period ending 2017, the ischemic heart disease death rate was 18.6 percent lower and the stroke/other cerebrovascular disease death rate was 25.2 percent lower when compared to the state rate.

### **Respiratory Diseases**

Asthma is a chronic lung disease characterized by periods of wheezing, chest tightness, shortness of breath and coughing. Symptoms often occur or worsen at night or in the early morning. These occurrences, often referred to as “asthma attacks,” are the result of inflammation and narrowing of the airways due to a variety of factors or “triggers.”

In St. Charles County for the 10-year period ending in 2019, the asthma death rate was 55.6 percent lower when compared to the rate in the state (0.48 vs. 1.08).

For the three-year period ending 2019 vs. the three-year period ending in 2017, both St. Charles County (5.9 percent lower) and the state (5.4 percent lower) saw a steady decline in the three-year moving average Chronic Obstructive Pulmonary Disease (COPD) death rate.

### **Mental Health**

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 use disorders. In state fiscal year 2020, 2,265 St. Charles County residents received treatment for serious mental illness at publicly-funded facilities. Additionally, 12.5 percent of adults ages 18 years and older did not have good mental health for 14 days or more. While there are data on those who receive treatment, data on mental health in the general population is very limited. This is especially true at the local level.

For the five-year period ending 2019, St. Charles County had a 13.2 percent increase in the age-adjusted death rate due to suicide compared to a 16.6 percent increase in the suicide rate in the state.

### **Substance Use and Abuse**

The availability of county-level data on substance use is limited. The National Survey on Drug Use and Health (NSDUH) and Centers for Disease Control and Prevention (CDC) PLACES are two data sources used to report data for adults at regional and county-level. In St. Charles County in 2021, the prevalence of binge drinking among adults 18 years and older was 20.8 percent. The prevalence of current smoking among the same age group was 16.7 percent.

While the number of individuals receiving drug treatment services for heroin declined by 161 (256 to 95) from 2019 to 2021 in St. Charles County, the number of individuals receiving treatment for other analgesics increased by 111 (107 to 218).

## Internal Work Group Prioritization Meetings

BJSPPH selected 17 employees to participate on an internal CHNA work group from various hospital departments. (See Appendix F)

The work group gathered Feb. 23, 2022, to review the purpose for the CHNA, role of the work group and goals for the project. The team reviewed the key findings from the 2019 CHNA report and from the 2021 community stakeholder report.

The 17 health needs identified by the stakeholders were reviewed and discussed. (Table 3)

TABLE 3: ST. CHARLES COUNTY STAKEHOLDERS PRIMARY HEALTH NEEDS RANKED BY STAKEHOLDERS

Accidents/Injuries	Heart Health	Reproductive/Sexual Health
Alcohol Abuse	High Blood Pressure	Respiratory Diseases
Cancer	Immunization/Infectious Diseases	Stroke
Dental Care	Maternal/Infant Health	Tobacco Use
Diabetes	Mental Health	Vaping
Drug Abuse	Obesity	

Of the needs identified by the stakeholders, the work group eliminated 10 needs that were either too broad or narrow in scope, not in the St. Charles County hospitals' area of expertise, or for which there was inadequate bandwidth for the hospital to address. (Table 4)

TABLE 4: TOP SEVEN HEALTH NEEDS SELECTED BY THE HOSPITAL INTERNAL WORK GROUP

Alcohol Abuse
Cancer
Diabetes
Drug Abuse
Heart Health
Mental Health
Stroke

During this meeting, the work group also reviewed the criteria to rank the top health needs. The criteria for prioritizing the needs identified by the stakeholders was agreed upon by the work group.

The work group used a ranking process to assign weight to criteria by using the established criteria for priority setting above. Criteria of overriding importance were weighted as "3,"

important criteria were weighted as “2,” and criteria worthy of consideration, but not a major factor, were weighted as “1.” Health needs were then assigned a rating ranging from one (low need) to five (high need) for each criteria. The total score for each need was calculated by multiplying weights by rating.” This process was done individually. (Table 5)

	RATING	WEIGHT	SCORE
How many people are affected by the problem?			
What are the consequences of not addressing this problem?			
Are existing programs addressing this issue?			
How important is this problem to community members?			
How does this problem affect vulnerable populations?			
TOTAL SCORE			

*Source: Catholic Health Association*

Following the ranking, drug abuse and mental health received a 75-point value for each. Diabetes scored 68; heart health and stroke received a 65-point value for each. Cancer scored 64 while alcohol abuse scored 40. (Table 6)

RANK	COMMUNITY HEALTH NEEDS	TOTAL RANKING SCORE
1	Drug Abuse	75
1	Mental Health	75
3	Diabetes	68
4	Heart Health	65
4	Stroke	65
6	Cancer	64
7	Alcohol Abuse	40

Table 7 shows the secondary data ranking from the Conduent Healthy Communities Institute Data Scoring Tool that compares data from similar communities in the nation. The tool provides a systematic ranking of indicators for St. Charles County and helps prioritize the needs. The scoring is based on how a county compares to other similar counties within the state and U.S., the average state value, the average U.S. value, historical indicator values, Healthy People 2020 and 2030 targets, and locally set targets, depending on data availability. The team reviewed the scores by indicators.

Table 7 also highlights the needs ranked by the stakeholders. Similarities observed in the top tier of needs include mental health and alcohol/drug abuse.

TABLE 7: CONDUENT HEALTHY COMMUNITIES INSTITUTE VS. ST. CHARLES COUNTY STAKEHOLDERS RANKING OF THE HEALTH NEEDS DATA

RANK	CONDUENT HEALTHY COMMUNITIES INSTITUTE SECONDARY DATA RANKING	RANK	ST. CHARLES COUNTY STAKEHOLDERS RANKING OF THE COMMUNITY HEALTH NEEDS: HIGHEST TO THE LOWEST
1	Alcohol and Drug Use	1	Mental Health
2	Mental Health & Mental Disorders	2	Immunization/Infectious Diseases
3	Physical Activity	3	Drug Abuse
4	Environmental Health	4	Alcohol Abuse
5	Prevention & Safety	5	Obesity
6	Heart Disease & Stroke	6	Diabetes
7	Women's Health	7	Vaping
8	Children's Health	8	Tobacco Use
9	Health Care Access & Quality	9	Heart Health
10	Cancer	10	High Blood Pressure
11	Immunizations & Infectious Diseases	11	Maternal /Infant Health
12	Diabetes	12	Respiratory Diseases
13	Maternal, Fetal & Infant Health	13	Cancer
14	Respiratory Diseases	14	Dental Care
15	Wellness & Lifestyle	15	Stroke
16	Oral Health	16	Reproductive/Sexual Health
17	Economy	17	Accidents/Injuries

Table 8 shows:

- Results of the secondary data using Healthy Communities Institute scoring tools that compared data from similar communities in the nation
- Primary data from the stakeholder ranking
- Needs identified by the internal work group ranking

TABLE 8: CONDUENT HEALTHY COMMUNITIES INSTITUTE VS. ST. CHARLES COUNTY STAKEHOLDERS VS. BARNES-JEWISH ST. PETERS AND PROGRESS WEST HOSPITAL INTERNAL TEAM RANKINGS: HIGHEST TO LOWEST

RANK	CONDUENT HEALTHY COMMUNITIES INSTITUTE	ST. CHARLES COUNTY STAKEHOLDERS	BARNES-JEWISH ST. PETERS & PROGRESS WEST HOSPITALS
1	Alcohol and Drug Use	Mental Health	Drug Abuse
2	Mental Health & Mental Disorders	Immunization/Infectious Diseases	Mental Health
3	Physical Activity	Drug Abuse	Diabetes
4	Environmental Health	Alcohol Abuse	Heart Health
5	Prevention & Safety	Obesity	Stroke
6	Heart Disease & Stroke	Diabetes	Cancer
7	Women's Health	Vaping	Alcohol Abuse

- Mental Health was ranked first by the stakeholders and second by both Conduent and the work group.
- Alcohol and drug abuse was ranked first by Conduent; drug abuse was ranked third by the stakeholders and first by the work group. Alcohol abuse was ranked fourth by the stakeholders and seventh by the work group.
- While heart health was ranked fourth by the work group, this need was ranked sixth by Conduent and was not in the top ranking of the stakeholders.
- Diabetes was ranked sixth by the stakeholders and third by the work group.

## SUMMARY

At the conclusion of the comprehensive assessment process to determine the most critical needs in St. Charles County, the work group concluded BJSPH will address 1) Mental Health; 2) Heart Health. The group agreed that BJSPH has the resources and staff to effectively make improvements by focusing on policies, education and programming over the next three years.

## Appendix A: About Progress West Hospital

Since 1980, BJSPH has served the acute health care needs of St. Charles County. The hospital specializes in a broad range of services, which include emergency care, surgery, cardiology, pulmonology, women's health, endoscopy and much more. Access to the award-winning Siteman Cancer Center is also on its campus, just steps away from the hospital. The staff of almost 900 employees and more than 400 physicians consider themselves part of the community.

At BJSPH, our vision is to be the premier health care organization serving St. Charles, Lincoln and Warren counties. To realize that vision, our physicians and employees are constantly focusing on ways to improve the health of the people and communities we serve.

As our community has changed and grown, so have we. Our patients continue to enjoy the intimacy, friendliness and respect of their community hospital, while benefiting from our affiliation with BJC HealthCare and its expansive connection to a world-class network of physicians, technology and resources.

Our employees and medical staff understand that caring for our community doesn't stop at our hospital campus. Each year we reach out to the people in the communities we serve through ongoing programs, screenings, support groups and educational opportunities. Each year, our employees touch the lives of more than 20,000 individuals -- adults and children -- through their community-focused efforts.

In 2020, BJSPH provided a total of \$5,504,542.00 in community benefits serving 9,940 persons. This total includes:

- \$4,959,381.00 in financial assistance and means-tested programs serving 6,508 individuals
- 4,017 individuals on Medicaid at a total net benefit of \$1,352,354.00

BJSPH also provided a total of \$545,161.00 to 3,432 persons in other community benefits including, community health improvement services, subsidized health services and in-kind donations. (See Appendix B for Community Benefit Expenses)

## Appendix B: 2020 Net Community Benefit Expenses

### BARNES-JEWISH ST. PETERS HOSPITAL: 2020 TOTAL NET COMMUNITY BENEFIT EXPENSES

CATEGORY	PERSONS SERVED	TOTAL NET BENEFIT
FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS		
Financial Assistance at Cost	2,491	\$3,607,027
Medicaid	4,017	\$1,352,354
TOTAL FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS	6,508	\$4,959,381
OTHER COMMUNITY BENEFITS		
Community Health Improvement Services	2,564	\$112,918
Health Professional	1	-\$66,591
Subsidized Health Services	867	\$443,445
In-Kind Donation		\$55,389
TOTAL OTHER COMMUNITY BENEFITS	3,432	\$545,161
GRAND TOTAL	9,940	\$5,504,542

## Appendix C: St. Charles County Demographic

DEMOGRAPHIC OF ST. CHARLES COUNTY VS. MISSOURI		
	ST. CHARLES COUNTY	MISSOURI
<b>GEOGRAPHY</b>		
Land area in square miles, 2010	560.44	68,741.52
Population per square mile, 2010	643.20	87.1
<b>POPULATION</b>		
Population, April 1, 2010	360,485	5,988,923
Population, April 1, 2020	405,262	6,154,913
Population, July 1, 2021, estimate	409,981	6,168,187
Population, Percent change - April 1, 2020 (estimate base) to July 1, 2021	1.2	0.2
<b>AGE</b>		
Persons Under 5 Years, Percent, 2020	5.7	6.0
Persons Under 18 Years, Percent, 2020	23.0	22.3
Persons 65 Years and over, Percent, 2020	15.8	17.3
<b>GENDER</b>		
Female Persons, Percent, 2021	50.9	50.9
Male Person, Percent, 2021	49.1	49.1
<b>RACE / ETHNICITY</b>		
White alone, Percent, 2020	89.6	82.9
White alone, not Hispanic or Latino, Percent, 2020	86.6	79.1
Black/African American alone, Percent, 2020	5.3	11.8
Hispanic or Latino, Percent, 2020	3.4	4.4
Two or More Races, Percent, 2020	2.1	2.4
American Indian and Alaska Native alone, Percent, 2020	0.2	0.6
Asian alone, Percent, 2020	2.8	2.2
Native Hawaiian and Other Pacific Islander alone, Percent, 2020	0.1	0.2
<b>LANGUAGE</b>		
Foreign Born Persons, Percent, 2016-2020	3.9	4.2

Source: Conduent Healthy Communities Institute

DEMOGRAPHIC OF ST. CHARLES COUNTY INCLUDING EDUCATION / INCOME / HOUSING		
	ST. CHARLES COUNTY	MISSOURI
<b>HOUSING</b>		
Housing Units, July 1, 2021	164,505	2,819,383
Owner-Occupied Housing Unit Rate, Percent, 2016-2020	81.6	67.1
Median Value of Owner-Occupied Housing Units, Dollars, 2016-2020	230,100	157,200
<b>FAMILIES &amp; LIVING ARRANGEMENTS</b>		
Households, 2016-2020	149,472	2,440,212
Persons per Household, 2016-2020	2.62	2.44
Language other than English spoken at home, percent of persons age 5 years +, 2016-2020	5.5	6.3
<b>EDUCATION</b>		
High School Graduate or Higher, Percent of Persons Age 25+, 2016-2020	95.0	90.6
Bachelor's Degree or Higher, Percent of Persons Age 25+, 2016-2020	40.8	29.9
<b>INCOME</b>		
Median Household Income, Dollars, 2016-2020	87,644	57,290
Per Capita Income in past 12 months (in dollars), 2016-2020	40,738	31,839
Persons in Poverty, Percent, 2016-2020	5.0	13.7

Source: Conduent Healthy Communities Institute

## Appendix D: St. Charles County Stakeholders Focus Group Report

### STAKEHOLDER ASSESSMENT OF THE HEALTH NEEDS OF ST. CHARLES COUNTY

Prepared by: BJC Market Research  
August 25, 2021

## BACKGROUND

The Patient Protection and Affordable Care Act (PPACA) was passed in March 2010. It required that

Each 501(c)3 hospital must conduct a Community Health Need Assessment (CHNA) every three years.

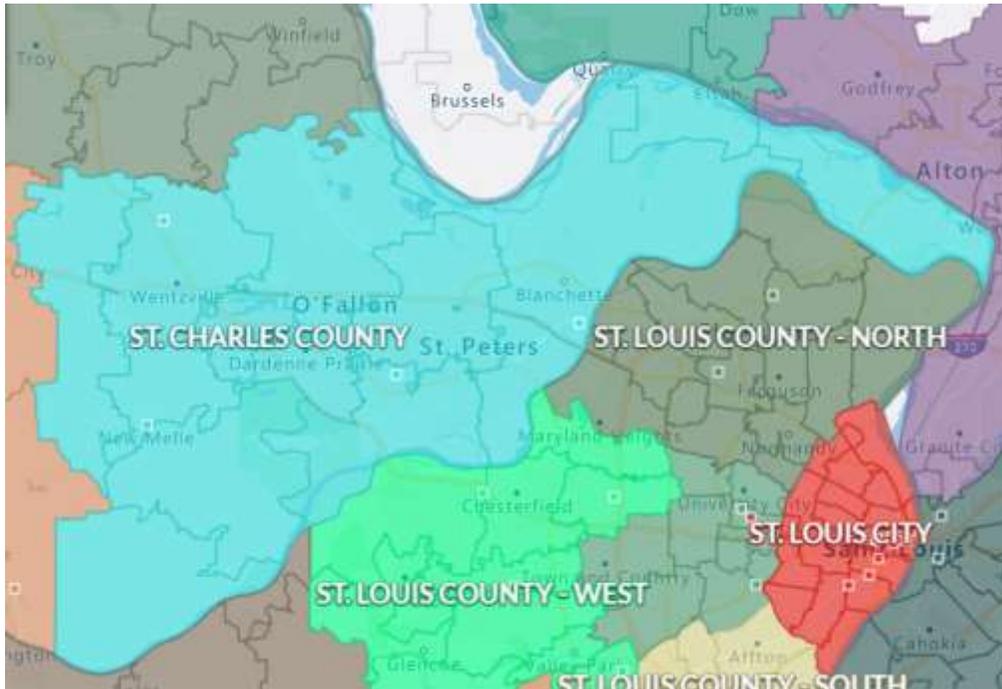
- Each hospital must adopt an implementation strategy to meet the community health needs identified in the CHNA
- The CHNA and Implementation Plan must be widely available to the public.

The assessment is required to consider **input from those who represent the broad interests of the community served by the hospital**, including those with special knowledge or expertise in public health.

## METHODOLOGY

- In the past, community stakeholder health needs assessments were conducted in person via a moderated discussion.
- Due to COVID-19, BJC HealthCare, along with its collaborative partners, decided to conduct an online survey for the safety of our community stakeholders.
- On June 7th, an email invitation was sent by Gina Calder, president of Barnes-Jewish St. Peters Hospital and Progress West Hospital, to 24 St. Charles County community stakeholders, inviting them to participate in the survey. Several reminders were sent out before it was closed for analysis on June 30th.
- 19 community stakeholders completed the survey for a 79% response rate.

## MARKET DEFINITION: ST. CHARLES COUNTY



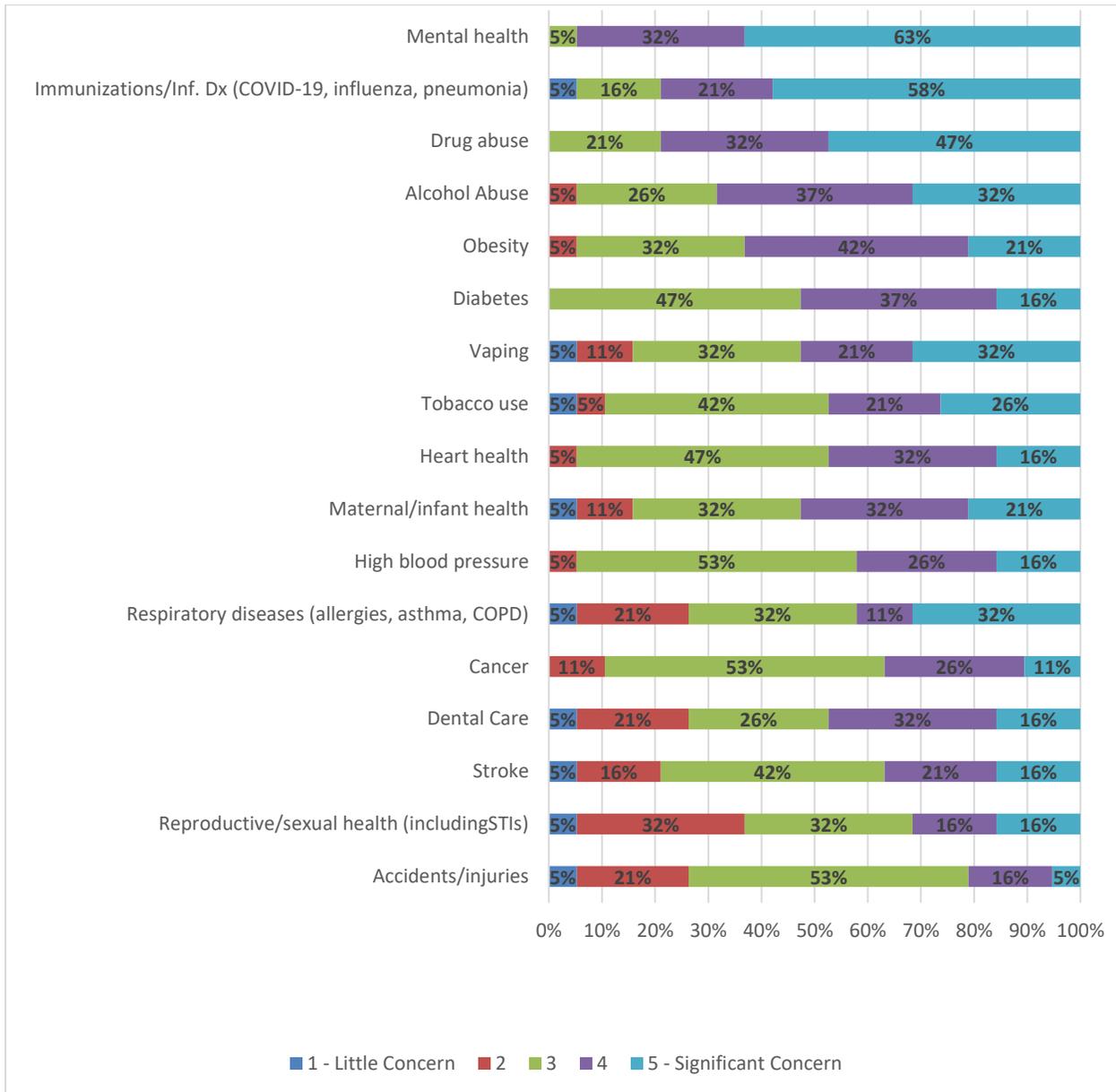
### KEY FINDINGS

- There are three needs that are of greatest concern in St. Charles County: **mental health, immunizations/infectious diseases** and **drug abuse**. These are the same needs around which stakeholders feel there is the greatest opportunity for collaboration.
- Stakeholders feel that **financial barriers related to health insurance** are having the greatest impact on limiting access to health services in St. Charles County. Concerns related to **transportation** and **lack of mental health services** are ranked next in importance.
- Most stakeholders identify **low-income populations** and the **homeless** as being at greatest risk for poor health outcomes in St. Charles County. Those **suffering from substance abuse** and the **unemployed** are ranked next.
- Stakeholders overwhelmingly agree that **access to transportation** is the social factor that has the greatest impact on the health of those living in St. Charles County.
- Stakeholders strongly agree that the greatest impact of COVID-19 has been on the **mental health** of St. Charles County residents. The pandemic has also created **financial hardship** for area residents, resulting in loss of regular income. They also identify the challenges of **managing remote learning** but to a lesser degree.
- Stakeholders identified the largest gaps in St. Charles County around **access to transportation**, followed by **mental health**. **Affordable housing, substance abuse** and **employment** ranked third (see next slide).
- Stakeholders identified new issues of concern around **vaccine misinformation** and **mental health**, as well as **homelessness, post-secondary school transitions, vaping** and **Medicaid expansion**.

- When asked about local resources about which community members may be unaware, stakeholders most frequently mentioned specific **community agencies**. The state parks and walking trails provide **recreational opportunities** for promoting health. There was also mention of other **local health services** that are considered community assets.
- Stakeholders had several suggestions for improving the health of the community. Many stakeholders suggested **forming a task force** (or working through the Community Council) to create a plan to address current health needs. Others suggested **addressing COVID-19 misinformation, mental health issues, better communication** in general, and **elimination of service duplication**.
- Many stakeholders identified the **city of St. Charles (63301)** as being the most at-risk community in St. Charles County. **Wentzville (63385)** was mentioned by a few.

## PRIORITY HEALTH NEEDS FOR ST. CHARLES COUNTY

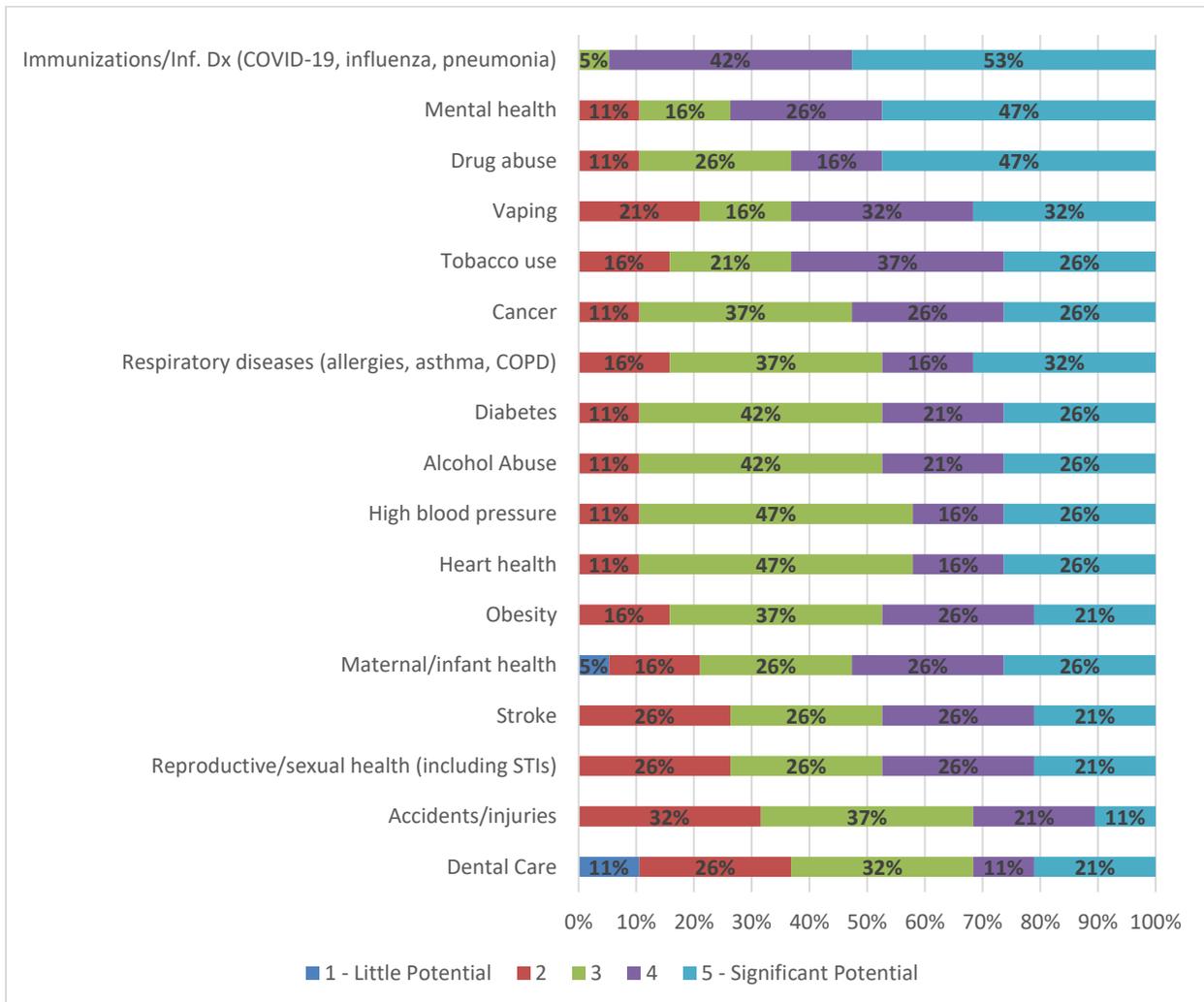
There are three needs that are of greatest concern in St. Charles County: **mental health**, **immunizations/infectious diseases** and **drug abuse**. They had an average rating greater than 4 on a 1 to 5 scale.



**Q3 & Q4:** Thinking about St. Charles County, please rate your level of concern about each of these health needs on a scale 1 (little concern) to 5 (significant concern).

## NEEDS WITH GREATEST POTENTIAL FOR COLLABORATION IN ST. CHARLES COUNTY

Stakeholders feel that there is the greatest potential to work together around the issues of immunizations/infectious diseases, mental health and drug abuse.

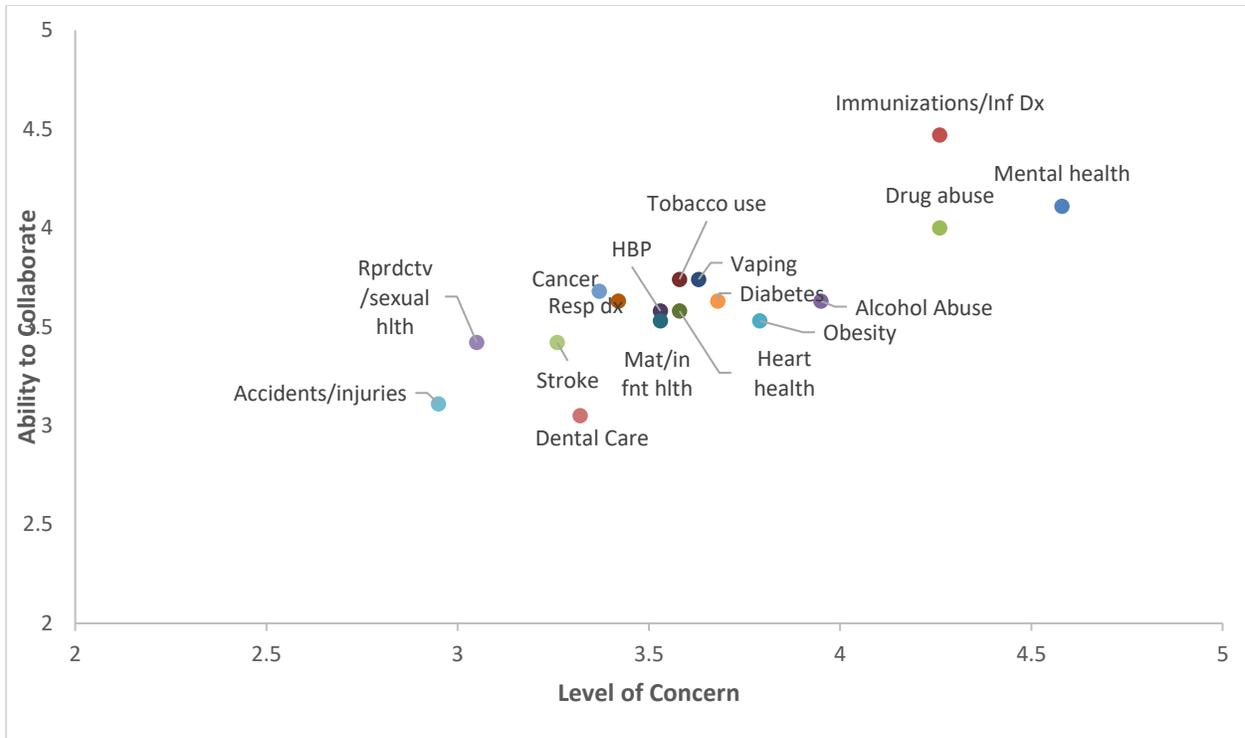


*Q5 & Q6: How would you rate the potential of community partners in St. Charles County to work together to address each of these health needs? Please rate each on a scale 1 (little potential) – 5 (significant potential).*

## LEVEL OF CONCERN BY ABILITY TO COLLABORATE

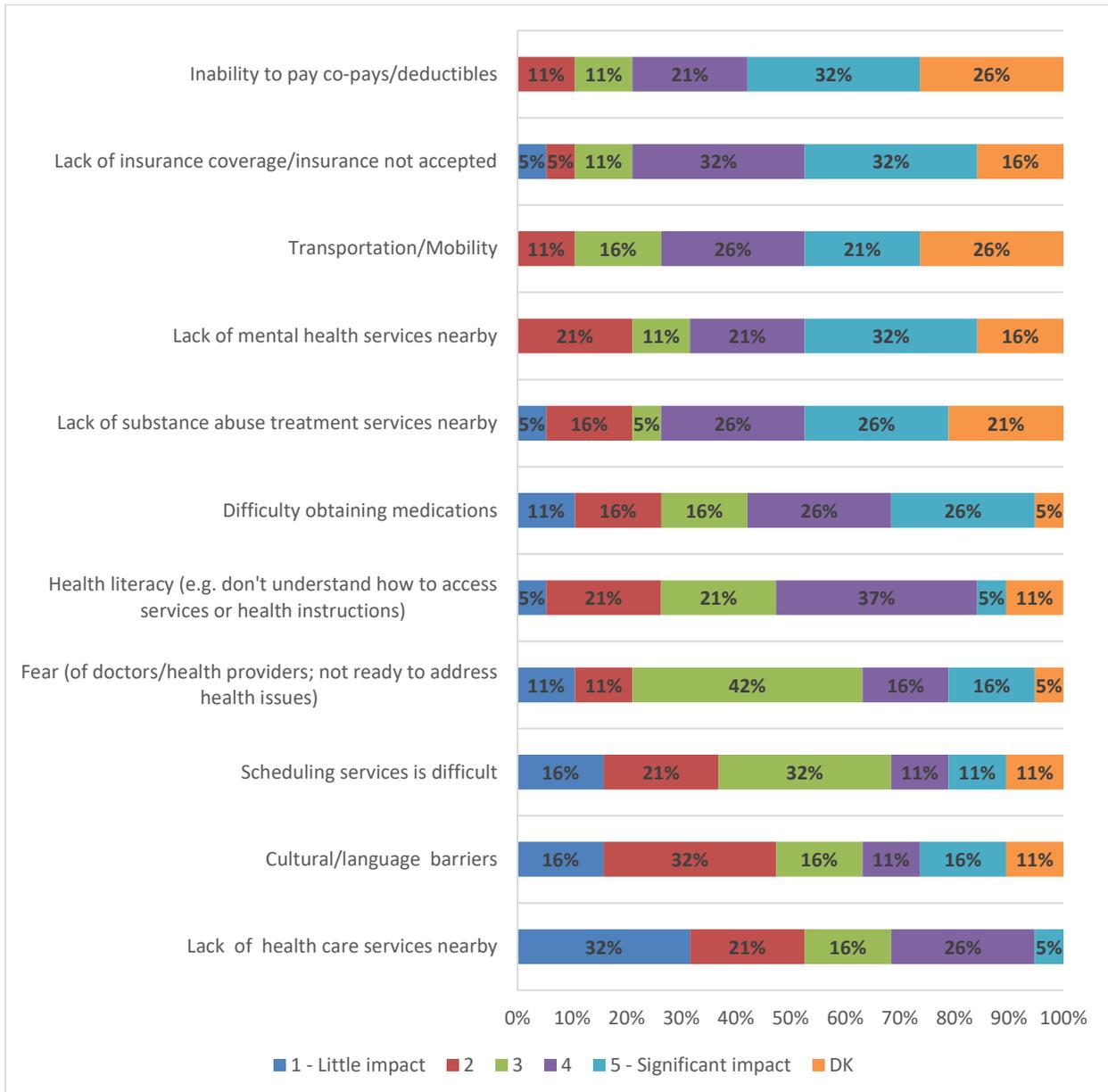
Stakeholders rate **mental health** at the highest level of concern and ability to collaborate. **Immunizations and infectious disease** and **drug abuse** rank slightly lower in concern, but higher in potential for collaboration.

Health Need	Level of Concern	Ability to Collaborate
Mental health	4.1	4.6
Immunizations/Inf Dx	4.5	4.3
Drug abuse	4.0	4.3
Alcohol Abuse	3.6	4.0
Obesity	3.5	3.8
Diabetes	3.6	3.7
Vaping	3.7	3.6
Tobacco use	3.7	3.6
Heart health	3.6	3.6
HBP	3.6	3.5
Mat/ infant health	3.5	3.5
Resp dx	3.6	3.4
Cancer	3.7	3.4
Dental Care	3.1	3.3
Stroke	3.4	3.3
Reproductive/ sexual health	3.4	3.1
Accidents/ injuries	3.1	3.0



## GREATEST BARRIERS TO ACCESS IN ST. CHARLES COUNTY

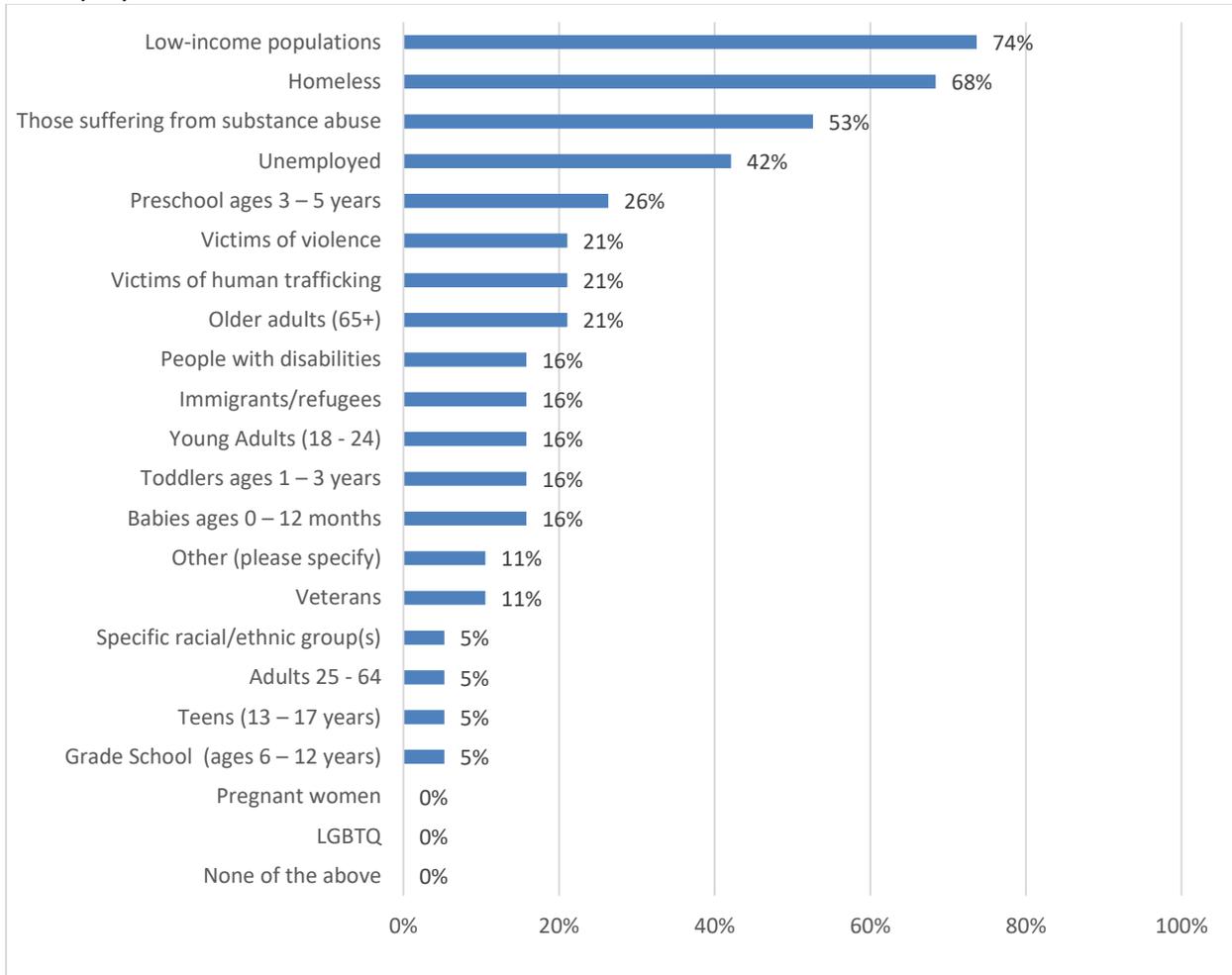
Stakeholders identify **financial barriers related to health insurance** as having the greatest impact on access to health services in St. Charles County. Concerns related to **transportation** and **lack of mental health services** are ranked 3<sup>rd</sup> and 4<sup>th</sup>.



**Q7:** How impactful are each of the following barriers in St. Charles County to accessing health care? Rate each on a scale of 1 (little impact) – 5 (significant impact).

## POPULATIONS AT GREATEST RISK IN ST. CHARLES COUNTY

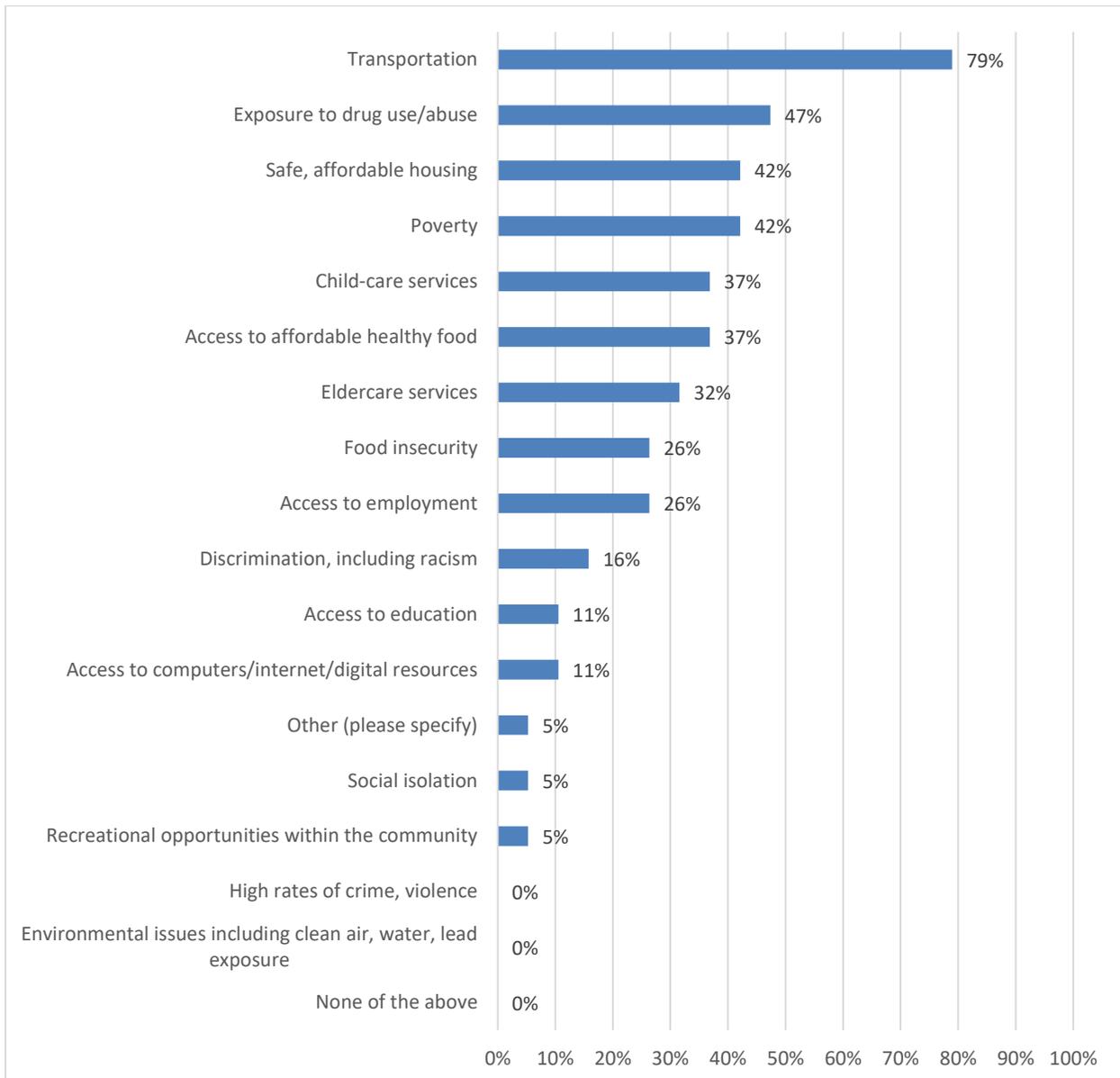
Most stakeholders identify **low-income populations** and the **homeless** as being at greatest risk for poor health outcomes in St. Charles County. Those **suffering from substance abuse** and the **unemployed** are ranked 3<sup>rd</sup> and 4th.



*Q8: Among those you serve in St. Charles County, which of the following populations are most at risk for poor health outcomes? Pick no more than five.*

## SOCIAL FACTORS IMPACTING ST. CHARLES COUNTY

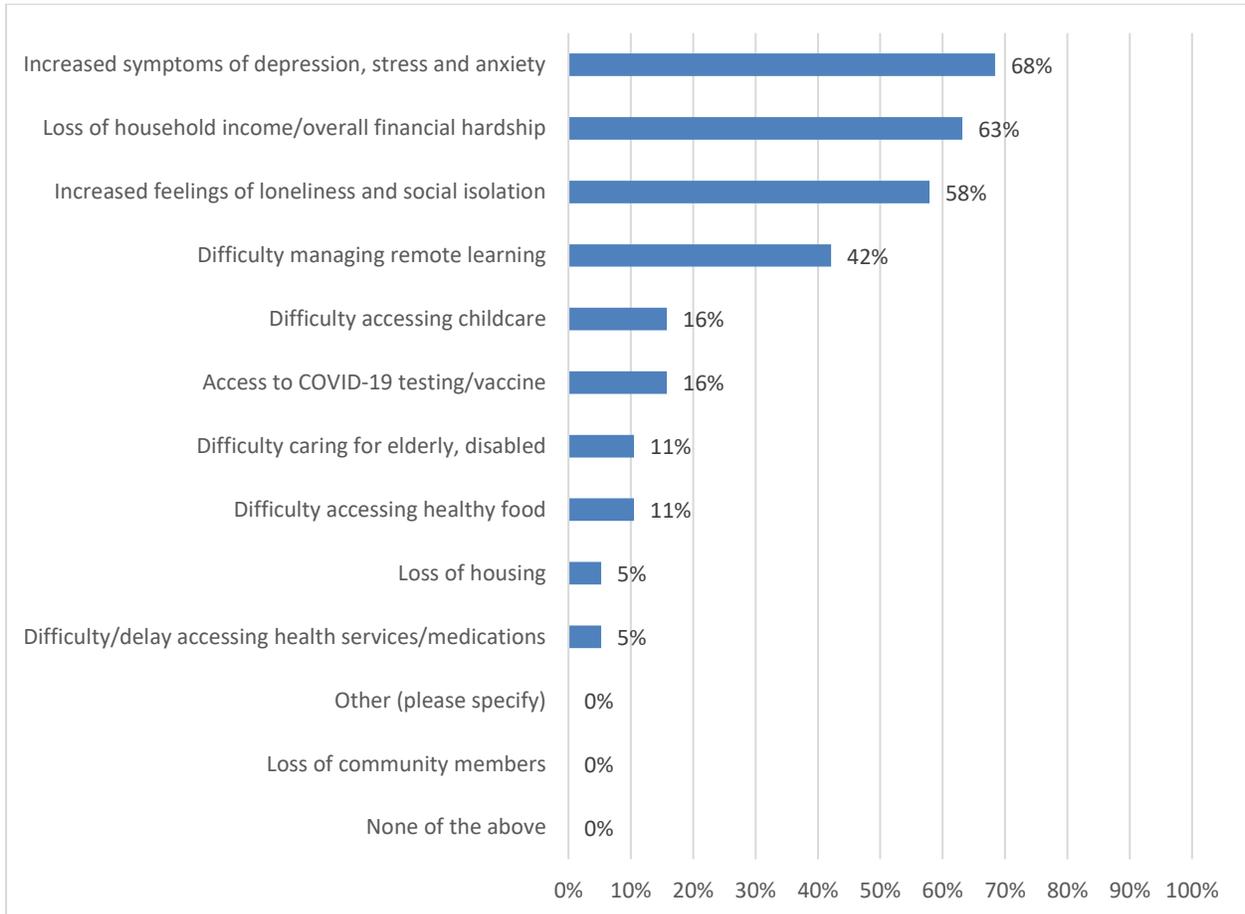
Stakeholders overwhelmingly agree that **access to transportation** is the social factor that has the greatest impact on the health of those living in St. Charles County.



*Q9: Which of the following social factors have historically had the greatest impact on the health of the communities you serve in St. Charles County. Pick no more than five.*

## COVID-19'S IMPACT ON ST. CHARLES COUNTY

Stakeholders strongly agree that the greatest impact of COVID-19 has been on the **mental health** of St. Charles County residents. The pandemic has also created **financial hardship** for area residents, resulting in **loss of regular income**. They also identify the challenges of **managing remote learning** but to a lesser degree.



*Q10: Thinking about the COVID-19 pandemic and its impact on St. Charles County, which of the following have had the greatest impact on the health of the community? Pick no more than three.*

## BIGGEST GAPS IN RESOURCES

Stakeholders identified the largest gaps in St. Charles County around **access to transportation**, followed by **mental health**. **Affordable housing, substance abuse** and **employment** ranked third (see next slide).

NEED	GAP
Transportation (4 comments)	One of the biggest gaps in St. Charles County is Transportation. There are no public transportation options for all ages, and what is available for older adults and those with disabilities is limited due to available funding.
	Lack of public transportation for individuals lacking personal vehicles.
	Transportation to obtain medical care and resources. Ride share and public transportation.
	Transportation
Mental Health (3 comments)	Fear of the unknown resulting in social isolation
	Pediatric psychiatry
	Reducing the stigma behind getting help/medication, information about how to get access to help
Affordable Housing (2 comments)	Affordable housing continues to be the biggest gap that we see and the unhomed are at risk for many illnesses and diseases that could be prevented if they were in a home. The emergency care they need and hospital services they receive cost in the millions but it would not cost us that much to house them
	A wealth gap exists and we have to be sure not to let people who object to affordable housing being built in our community have the loudest voice. There is a need for temporary and short-term housing assistance along with affordable, safe options for longer term housing.
	SMTS does not cover all needs
Substance Abuse (2 comments)	Drug rehab, We need more free treatment centers
	There is a shortage of substance use treatment services in St. Charles County, along with issues regarding stigma of people with substance use disorders. Other mental health issues are related to substance use, and there is a lack of services for those folks (all ages).
Employment (2 comments)	Gap assistance as people transition from government assistance back to employment.
	Forced COVID closures impacting employment
Internet Access (1 comment)	Internet accessibility

**Q11:** *What are the biggest gaps in resources within this community to address the needs that you have identified? Please mention the need along with the missing resources.*

## NEW/ADDITIONAL HEALTH/SOCIAL ISSUES

Stakeholders identified new issues of concern around **vaccine misinformation** and **mental health**, as well as **homelessness**, **post-secondary school transitions**, **vaping** and **Medicaid expansion**.

NEED	DESCRIPTION
Vaccine misinformation (2 comments)	Spread of misinformation and impact on vaccination rates and overall trust of scientific information. The disinformation that our community has absorbed about Covid-19 and the vaccines is astonishing. While that is a bigger cultural problem we can't solve by ourselves, we need to be ready to find ways for trusted community members to fight this disinformation.
Mental Health (2 comments)	Mental health is often overlooked in St. Charles County; the co-morbidity of obesity is downplayed Mental wellness
Homelessness (1)	The large homeless population in St. Charles County is something that I don't believe many residents of St. Charles County are aware of. Residents of St. Charles County tend to think of that as a City of St. Louis problem.
Post-Secondary School Transition (1)	Youth transition after High School
Vaping (1)	The growing use of vaping by young people and proliferation of vape shops. Seems recreational marijuana is the next goal in Missouri.
Medicaid Expansion (1)	Medicaid Expansion is set for late July 2021, which will help folks with unemployment and lack of health insurance access health insurance.

**Q12:** *What new/additional health or social issues are you aware of in this community that may not be widely known, yet are a concern for the future?*

## COMMUNITY ASSETS THAT PROMOTE COMMUNITY HEALTH

Stakeholders most frequently mentioned **specific community agencies** as resources which community members may be unaware. The state parks and walking trails provide **recreational opportunities** for promoting health. There was also mention of other **local health services** that are considered community assets.

RESOURCE TYPE	RESOURCE
Community Agencies (4 comments)	We do offer pediatric therapy at United Services for Children. Unfortunately, behavioral health services for very young children don't exist.
	Crisis Nursery offers FREE physicals to children in care
	St. Charles County CRUSH, substance use prevention coalition.
Recreational Opportunities (2 comments)	The libraries as a safe, neutral place for customers to access recreational materials (ie disc golf sets, fishing poles) or relaxing activities (reading, being social, learning a new hobby or skill) and for accessing information or the health system (online hospital charts/accounts, etc.)
	Walking trails throughout the City of St. Peters & naturally occurring paths built into the City of O'Fallon are great resources to promote a healthy and safe walkable community.
Health Services (2 comments)	Quality park system,
	SCCAD is a progressive, innovative EMS organization
	Mental health services in the community are not as well known as they should be, such as CenterPointe Hospital, Harris House, and others.

**Q13:** *Think about health assets or resources as people, institutions, services, supports built resources (i.e. parks) or natural resources that promote a culture or health. What are the health assets or resources in St. Charles County that we may not be aware of?*

## IDEAS FOR IMPROVING THE HEALTH OF THE COMMUNITY

Many stakeholders suggested forming a **task force** (or working through Community Council) to create a plan for the community, establish goals and tactics to address current needs. Others suggested **addressing COVID-19 misinformation, mental health issues, better communication** in general, and **elimination of service duplication**.

NEED	DESCRIPTION
Create a Community Work Group	Identifying where there are gaps, such as affordable dental resources, and gathering folks who are willing to identify funding opportunities to allow low-income folks access to dental care and other gaps in services.
	Collaborate in a more meaningful way to meet the needs of the community
	Jointly identify an issue supported by real numbers (i.e. number of emergency ambulance calls, hospitalizations, deaths due to the issue) and coordinate a group campaign focused on that issue for a specific period of time
	Meet on a monthly basis through Community Council
Address COVID Misinformation	Right now the urgent need is to fight the Covid misinformation. Elected leaders and other trusted community members should be more vocal about the value of vaccines (and should have been more vocal about masking as well).
Address Mental Health	Mental health issues including substance use disorders are on the rise, correlated with COVID-19 (economic issues, grief, loss of income, social isolation, stress).
Better Communication	Communications on the needs of the community.
Eliminate Duplication of Services	Do not duplicate services- either get together and do it together but not everyone can be an expert at everything so let the experts in the field do it and you do what you do best.

**Q14:** *How can community stakeholders in St. Charles County work together to use their collective strengths to improve the health of the community?*

## COMMUNITIES AT GREATEST RISK

Many stakeholders identified the **city of St. Charles (63301,63303)** as being the most at-risk community in St. Charles County. **Wentzville (63385)** was mentioned by three stakeholders. Other communities were mentioned once each.

NEED	DESCRIPTION
	63301
City of St. Charles (7 mentions)	Those in the older sections of the community, especially parts of 63301 and where older mobile home parks are located, as identified by Census tracts for poverty.
	63385
Wentzville (3 mentions)	63385 (especially old town area)
O'Fallon (1 mention)	63366 (especially old town area)
Dardenne Prairie/O'Fallon (1 mention)	63368
St. Peters (1 mention)	63376 (especially old town area)
Other populations (1 mention)	LGBTQ populations, low income populations, elderly, and people with diabetes/obesity, along with a growing Bosnian population in St. Charles County are particularly at risk for health issues, including mental health which includes substance use disorders.

**Q15:** *Within St. Charles County, which communities, neighborhoods or ZIP codes are especially vulnerable or at risk?*

### NEXT STEPS

Using the input received from community stakeholders, Barnes-Jewish St. Peters Hospital and Progress West Hospital will consult with their internal workgroup to evaluate this feedback. They will also consider other secondary data and determine whether/how their priorities should change. The final needs assessment and implementation plan is due by December 31, 2022.

## Appendix E: Online Survey Participants

ST. CHARLES COUNTY ONLINE SURVEY PARTICIPATING COMMUNITY STAKEHOLDERS				
LAST NAME	FIRST NAME	ORGANIZATION	TITLE	CITY/TOWN
Barnes	Todd	Community Council	Executive Director	St. Peters
Drachnik	Scott J.	EDC of St. Charles	President & CEO	St. Peters
DuBray	Bernard	Fort Zumwalt School District	Superintendent	St. Peters
Kohlberg	Nick	St. Charles County Department of Public Health	Public Health Emergency Planner	St. Charles
Liebel	Denise	United Services for Children	Chief Executive Officer	St. Peters
Macauley	Mike	United Way of Greater St. Louis	Director, West Region	St. Charles
Mahnken	Glenn	Lutheran High School-St. Charles	Director of Community Relations	St. Peters
McDonnell	Brittany	St. Louis Crisis Nursery	Sr. Regional Program Manager	St. Charles
Miller	Matthew	Calvary Church	Community Ministry Pastor	St. Peters
Moellenhoff	Cheryl, MA, BA, RN	Crossroads Clinic Volunteers in Medicine	Clinical Director	Lake St. Louis
Montgomery	Christa	US House of Representatives	District Director	Wentzville
Nielsen	Sara	St. Charles City-County Public Library	Director of Adult Services	St. Peters
Steinhoff	Wade	Orchard Farm School District	Superintendent	St. Charles
Stout	Sarah B	Aging Ahead	Community Option Specialist	O'Fallon
Struckhoff	Pam	St. Joachim and Ann Care Services	Executive Director	St. Charles
Trotter	Kristin	Lindenwood Athletics	Assistant Athletic Director-Sports Medicine	St. Charles
Vineyard	Thomas	O'Fallon Fire Protection District	Fire Chief	O'Fallon
Wiley	Erica	PreventEd	Community Strategist	St. Louis
Williams	Carrie	Youth in Need	Health Manager	St. Louis

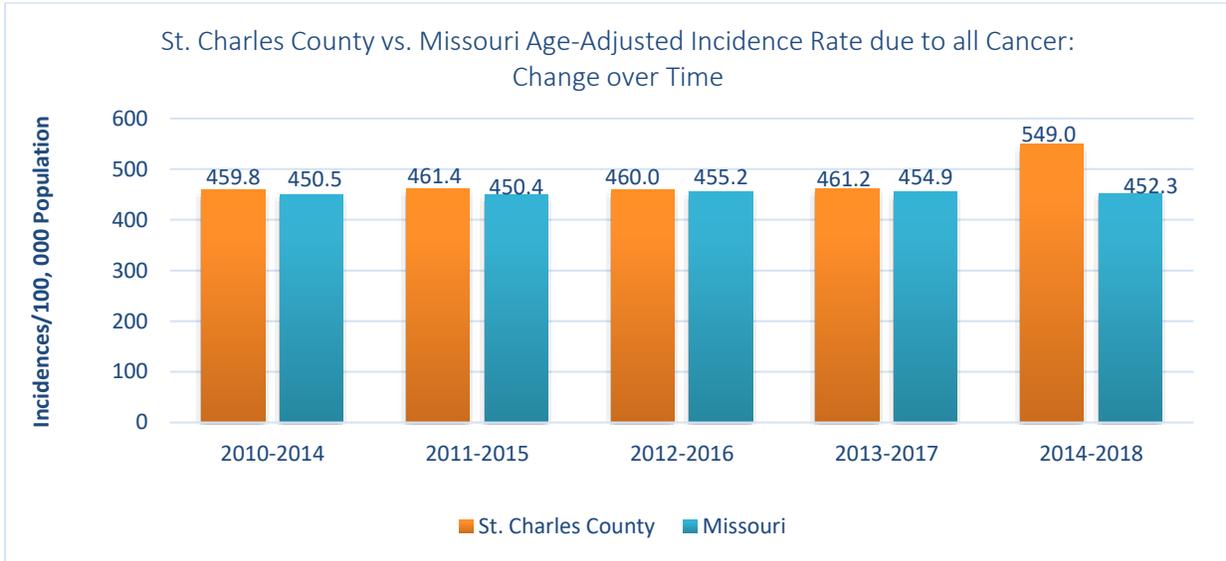
## Appendix F: Barnes-Jewish St. Peters Hospital and Progress West Hospital Internal Work Group

### BARNES- JEWISH SAINT PETERS & PROGRESS WEST HOSPITAL COMMUNITY HEALTH NEEDS ASSESSMENT INTERNAL WORK GROUP

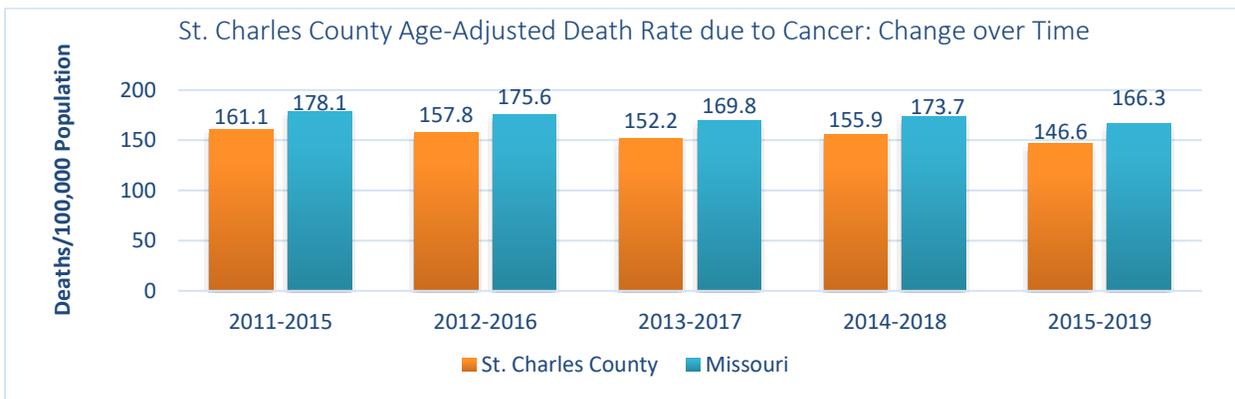
LAST NAME	FIRST NAME	TITLE	DEPARTMENT
Berdick	Mary	Analyst, Quality	Family Health Resource Center
Brandriff	Jeff	Manager IV, Patient care	Medical/Surgical Units
Daly	Theresa	Manager, Community Health	Family Health Resource Center
Decker	Heather	Manager IV, Patient Care	Women's Health
Emery	Sharla	Director, Patient Care Services	Nursing Resources
Franklin	Dale	Manager, Radiology	Radiology
Gase	Kathleen	Director, Clinical Excellence	Total Quality Management / Continuous Quality Improvement
Kettle-Singleton	Heather	Team-Lead / Charge Nurse	R & B Surgical
King	Karley	Program Manager, Community Benefit	Corporate Communication & Marketing
Kretzler-Hoff	Michelle	Director, Surgical Services	Surgery
Labeau	Dareld	Manager, Radiology	Radiology
Lynch	Sandra	Supervisor, Patient Access	RCM-PT Access Community
McCracken	Adriana	Supervisor, Case Management	Patient Care Evaluation
Mohan	Karen	Supervisor, Physician Services	Physician Services
Schob	Christina	Manager IV, Patient care	Cardiac Catheter Lab
Seifried	Carrie	Manager, Assistant Nurse	Telemetry
Smith	Tramaine	Manager, Patient experience	Total Quality Management / Continuous Quality Improvement

# Appendix G: St. Charles County Secondary Data

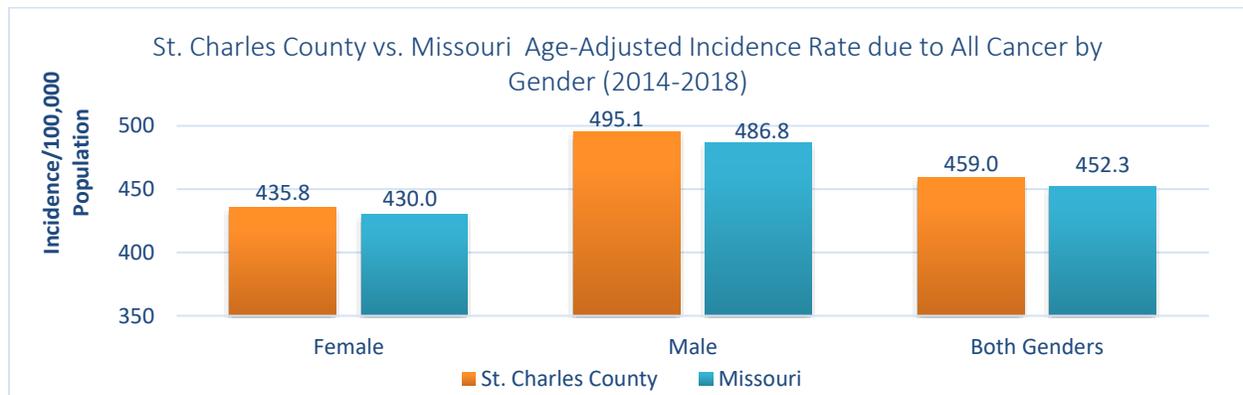
## CANCER



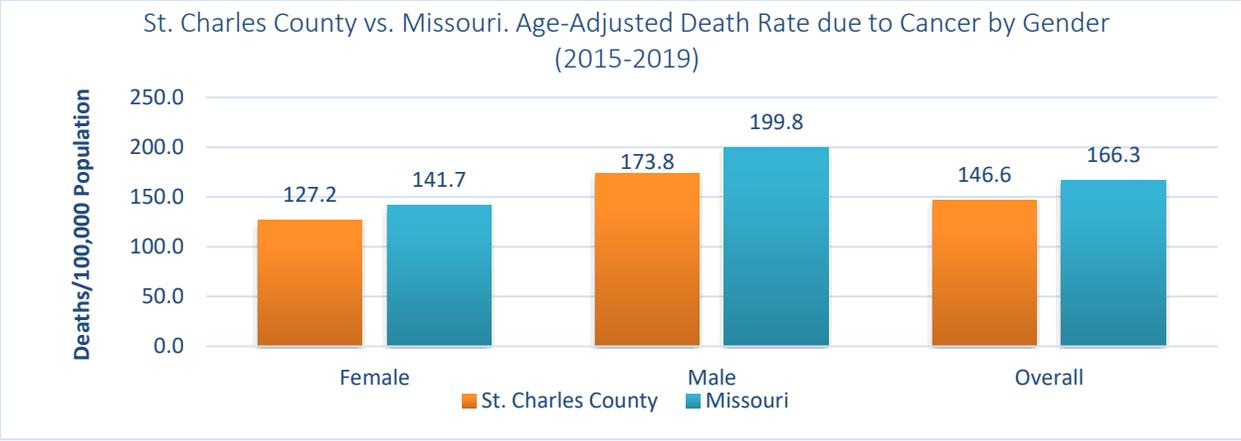
Source: Conduent Healthy Communities Institute



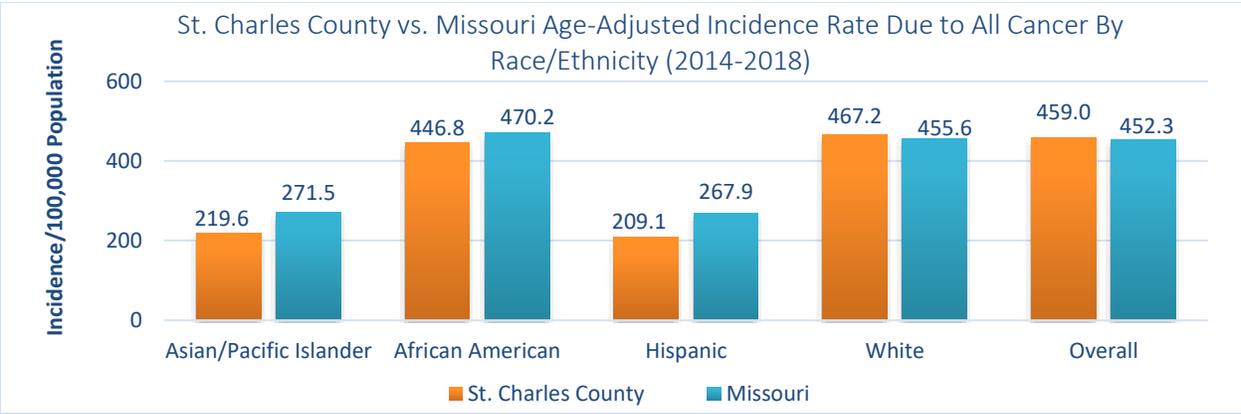
Source: Conduent Healthy Communities Institute



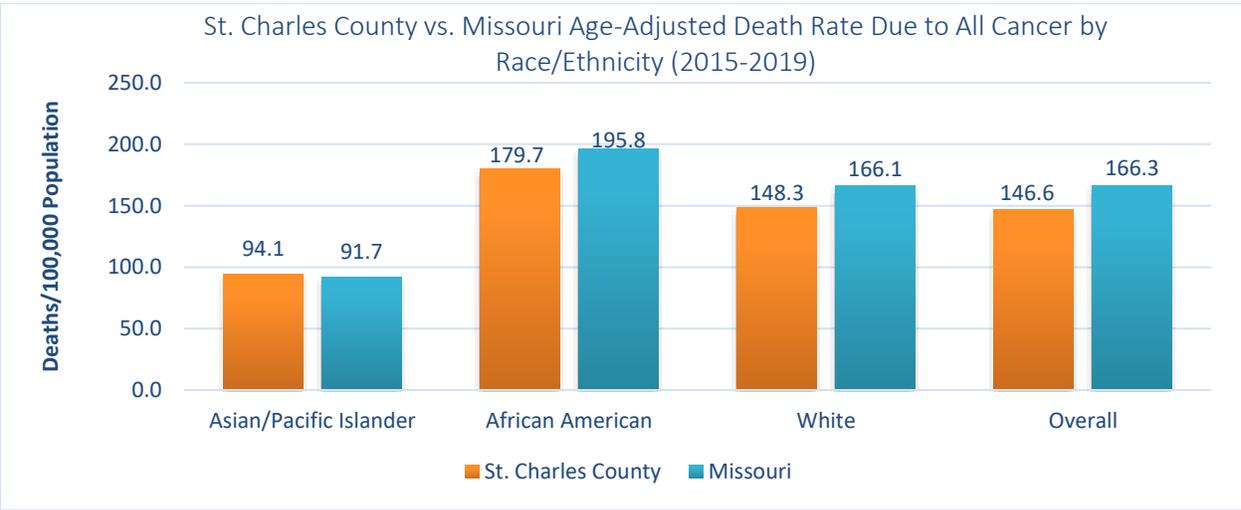
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

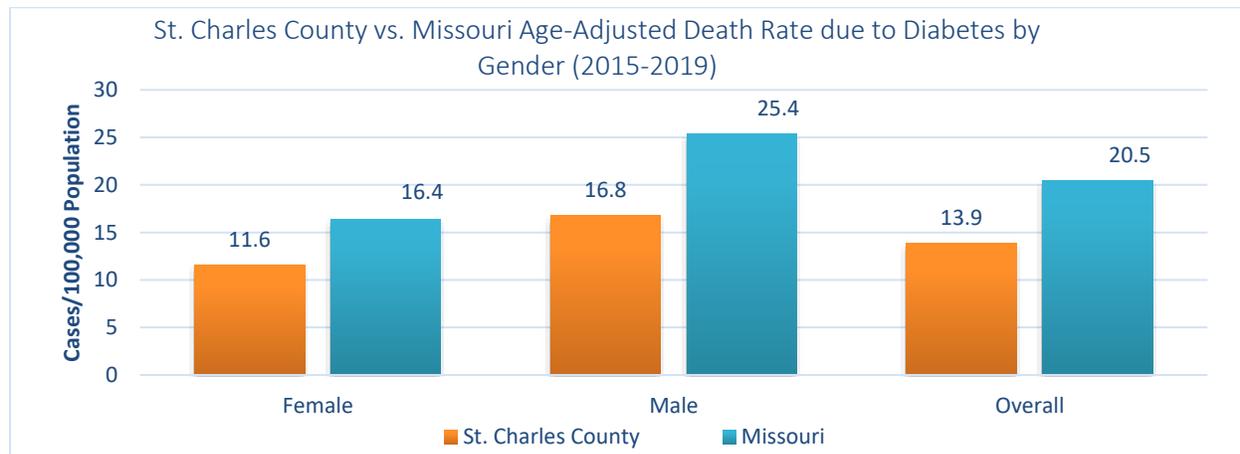


Source: Conduent Healthy Community Institute

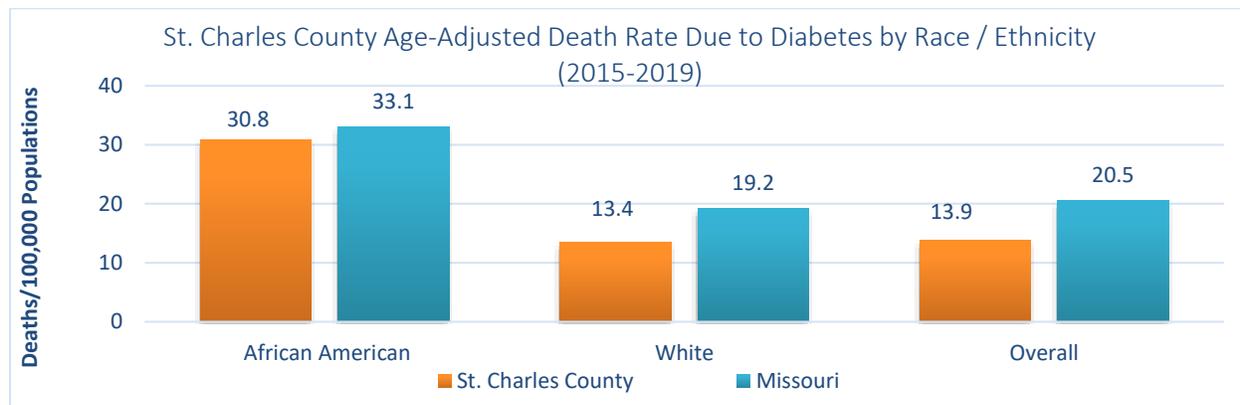
## DIABETES

ST. CHARLES COUNTY VS. MISSOURI THREE-YEARS MOVING DIABETES MELLITUS AVERAGE RATE						
HEALTH INDICATORS						
DIABETES MELLITUS	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
THREE YEARS MOVING AVERAGE RATE	2015-2017		2016-2018		2017-2019	
Death /100,000 Population	13.89	20.24	13.07	20.61	13.59	20.86
THREE YEARS MOVING AVERAGE RATE	2011-2013		2012-2015		2013-2015	
Hospitalizations /10,000 Population	12.33	18.5	13.08	18.63	13.53	18.97
ER Visits / 1,000 Population	0.96	1.92	1.02	1.96	1.08	1.99

Source: Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute

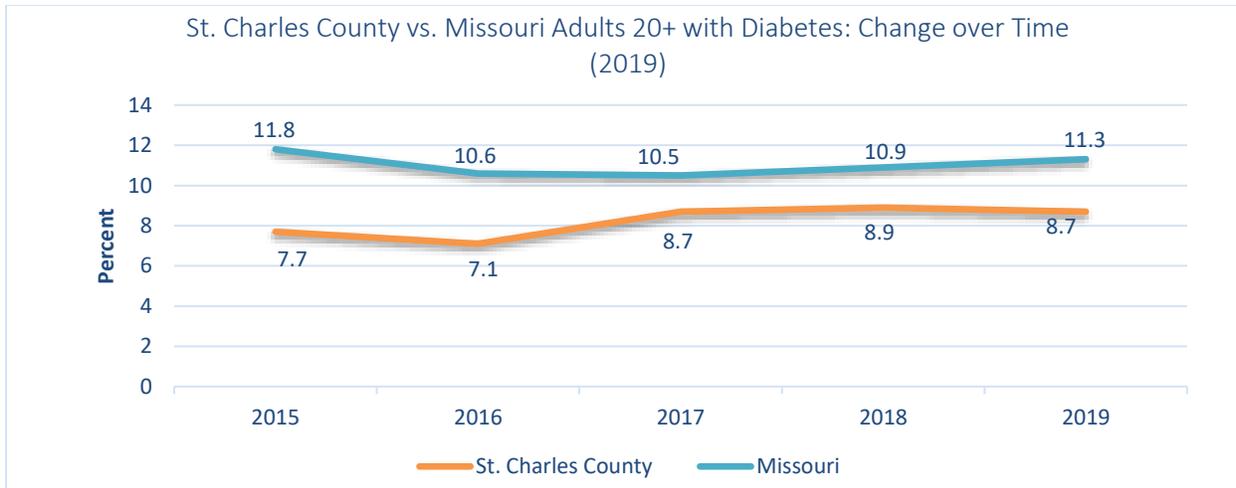


Source: Conduent Healthy Communities Institute

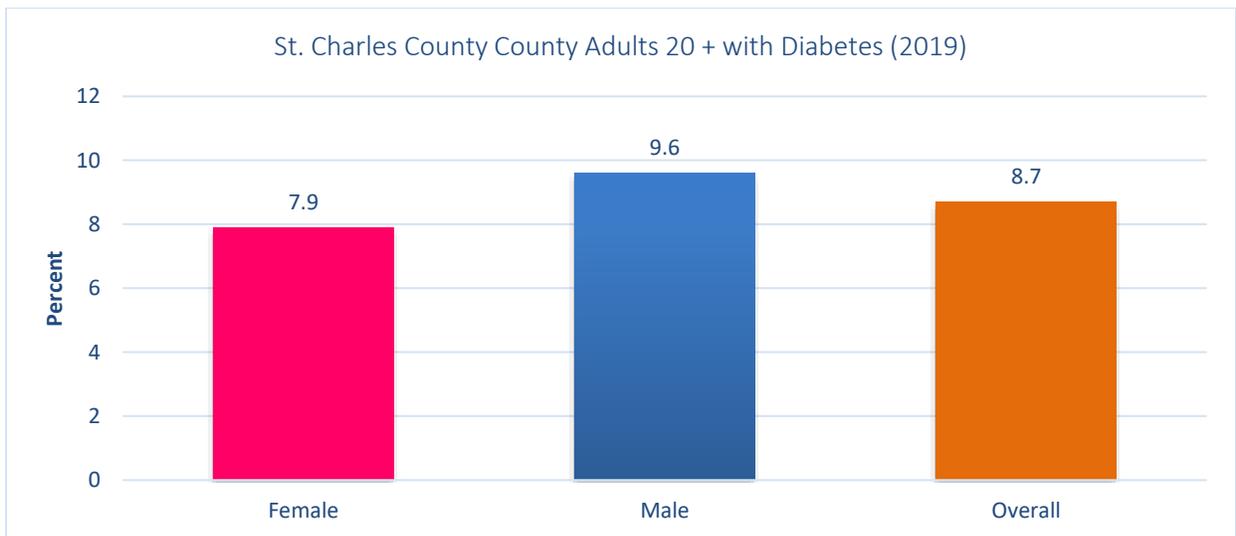
ST. CHARLES COUNTY VS. MISSOURI DIABETES MELLITUS BY ETHNICITY / RACE

ETHNICITY / RACE	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Deaths / 100,000 Population (2009-2019)	13.73	18.85	27.65	35.59
Hospitalizations / 10,000 Population (2011-2015)	12.64	15.31	21.7	45.83
ER Visits / 1,000 Population (2011-2015)	0.94	1.56	2.35	4.86

Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute

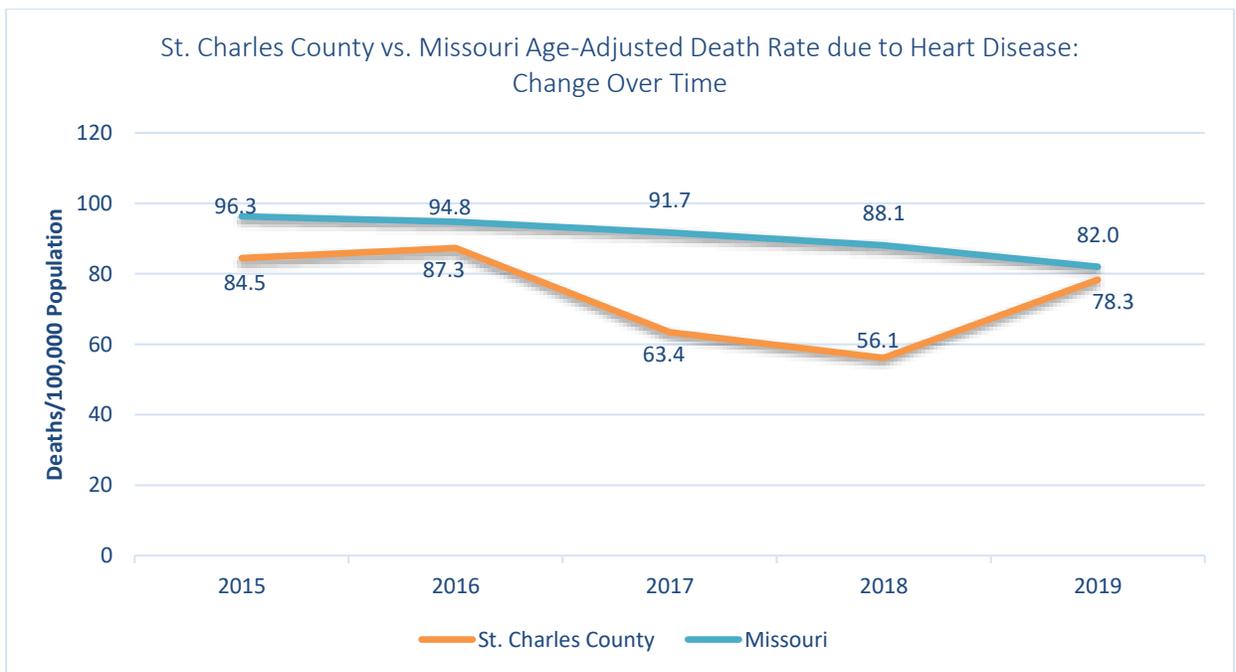


Source: Conduent Healthy Communities Institute

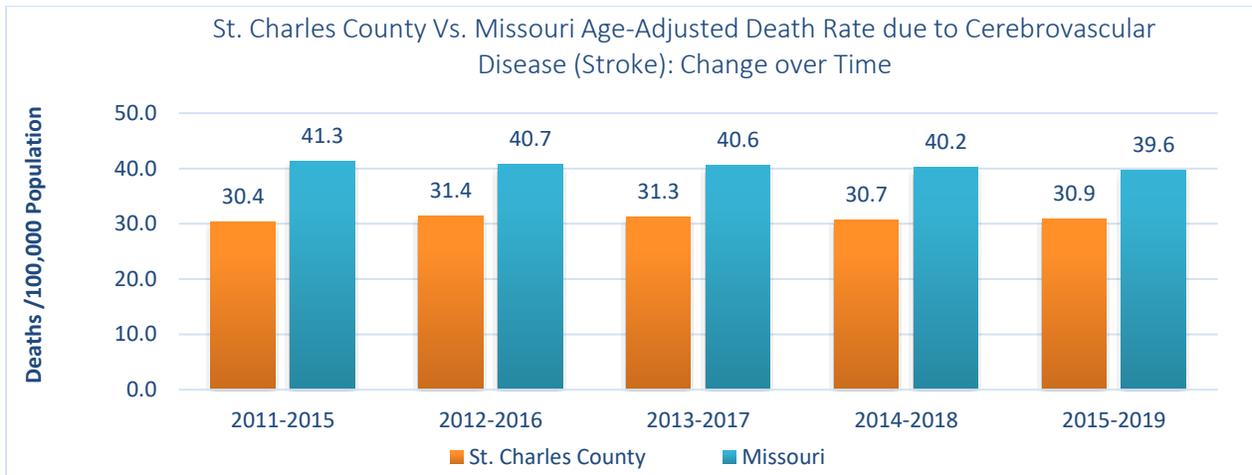
## HEART & VASCULAR DISEASE

ST. CHARLES COUNTY VS. MISSOURI AGE-ADJUSTED RATE: HEART DISEASE & STROKE		
	ST. CHARLES COUNTY	MISSOURI
<b>HEART DISEASE</b>		
Deaths / 100,000 Population (2009-2019)	157.98	199.32
Hospitalizations / 10,000 Population (2011-2015)	96.69	109.46
ER Visits / 1,000 Population (2011-2015)	11.62	15.12
<b>ISCHEMIC HEART DISEASE</b>		
Deaths / 100,000 Population (2007-2017)	101.12	124.16
Hospitalizations / 10,000 Population (2011-2015)	28.68	32.53
ER Visits / 1,000 Population (2011-2015)	0.13	0.57
<b>STROKE / OTHER CEREBROVASCULAR DISEASE</b>		
Deaths / 100,000 Population (2007-2017)	32.2	43.02
Hospitalizations / 10,000 Population (2011-2015)	27.9	27.85
ER Visits / 1,000 Population (2011-2015)	0.51	0.77

Source: Missouri Department of Health & Senior Services



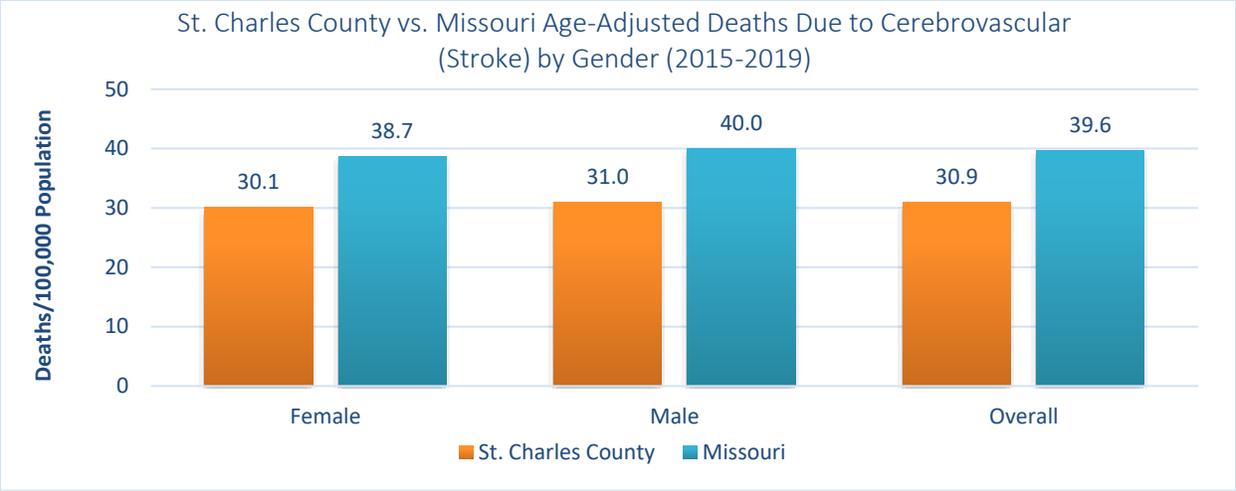
Source: Conduent Healthy Communities Institute



*Source: Conduent Healthy Communities Institute*

ST. CHARLES COUNTY VS. MISSOURI HEART DISEASE & STROKE RATE BY ETHNICITY / RACE				
ETHNICITY / RACE	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
<b>HEART DISEASE</b>				
Deaths / 100,000 Population (2009-2019)	154.08	190.86	157.55	228.99
Hospitalizations / 10,000 Population (2011-2015)	95.39	102.13	115.39	164.99
ER Visits / 1,000 Population (2011-2015)	11.08	13.48	21.38	25.70
<b>ISCHEMIC HEART DISEASE</b>				
Deaths / 100,000 Population (2009-2019)	94.43	114.56	108.51	131.74
Hospitalizations / 10,000 Population (2011-2015)	28.53	32.06	25.55	33.04
ER Visits / 1,000 Population (2011-2015)	0.13	0.59	0.13*	0.35
<b>STROKE / OTHER CEREBROVASCULAR DISEASE</b>				
Deaths / 100,000 Population (2009-2019)	31.22	39.53	46.39	55.53
Hospitalizations / 10,000 Population (2011-2015)	27.28	25.66	40.51	44.57
ER Visits / 1,000 Population (2011-2015)	0.5	0.77	0.69	0.69

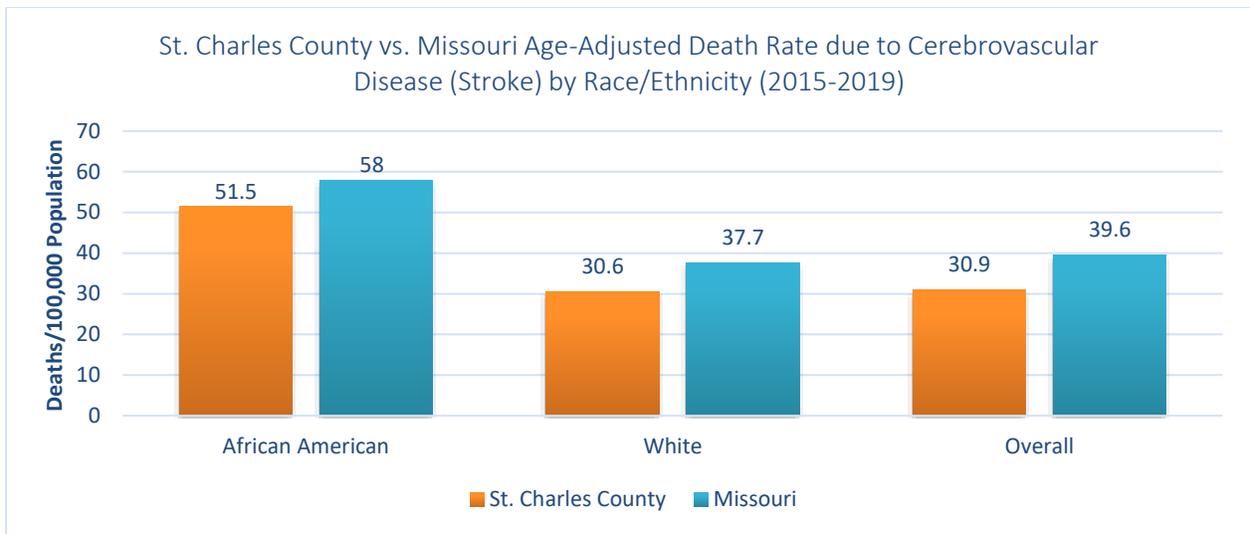
*Source: Missouri Department of Health & Senior Services*



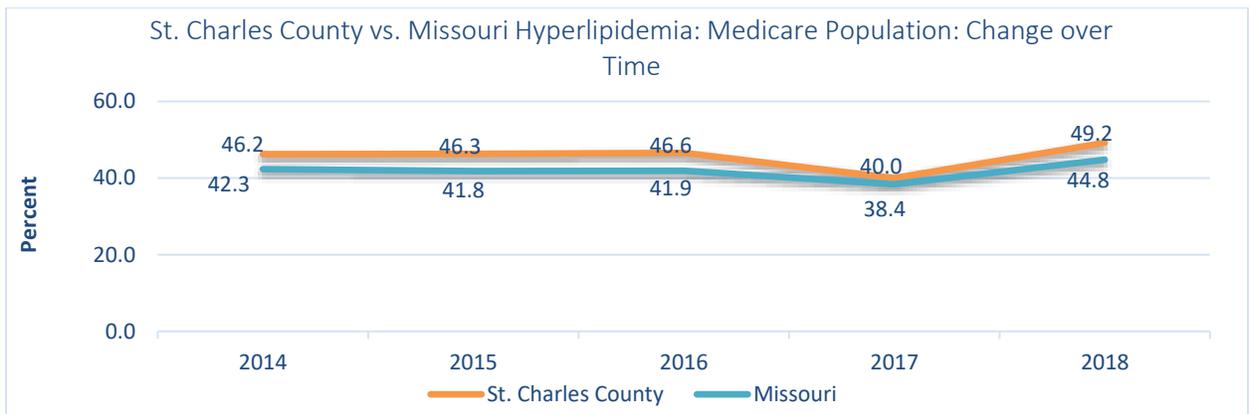
Source: Conduent Healthy Communities Institute

ST. CHARLES COUNTY VS. MISSOURI THREE-YEAR MOVING HEART DISEASE AVERAGE RATES						
HEART DISEASE	ST. CHARLES COUNTY		MISSOURI		ST. CHARLES COUNTY	
THREE-YEAR MOVING RATE	2015-2017		2016-2018		2017-2019	
Deaths / 100,000 Population	155.5	193.5	150.83	190.44	149.78	188.49
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	102.94	115.58	94.72	108.12	90.75	102.68
ER Visits / 1,000 Population	11.99	15.25	11.64	15.1	11.46	14.97
ISCHEMIC HEART DISEASE						
THREE-YEAR MOVING RATE	2015-2017		2016-2018		2017-2019	
Deaths / 100,000 Population	91.1	108.36	87.2	105.2	88.31	102.31
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	30.52	34.89	27.81	31.91	26.89	30.04
ER Visits / 1,000 Population	0.13	0.6	0.11	0.57	0.11	0.54
STROKE / OTHER CEREBROVASCULAR DISEASE						
THREE-YEAR MOVING RATE	2015-2017		2016-2018		2017-2019	
Deaths / 100,000 Population	32.15	40.65	31.55	39.94	29.53	39
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	28.27	28.44	27.24	27.47	27.37	27.16
ER Visits / 1,000 Population	0.54	0.78	0.5	0.76	0.48	0.75

Source: Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

## RESPIRATORY DISEASES

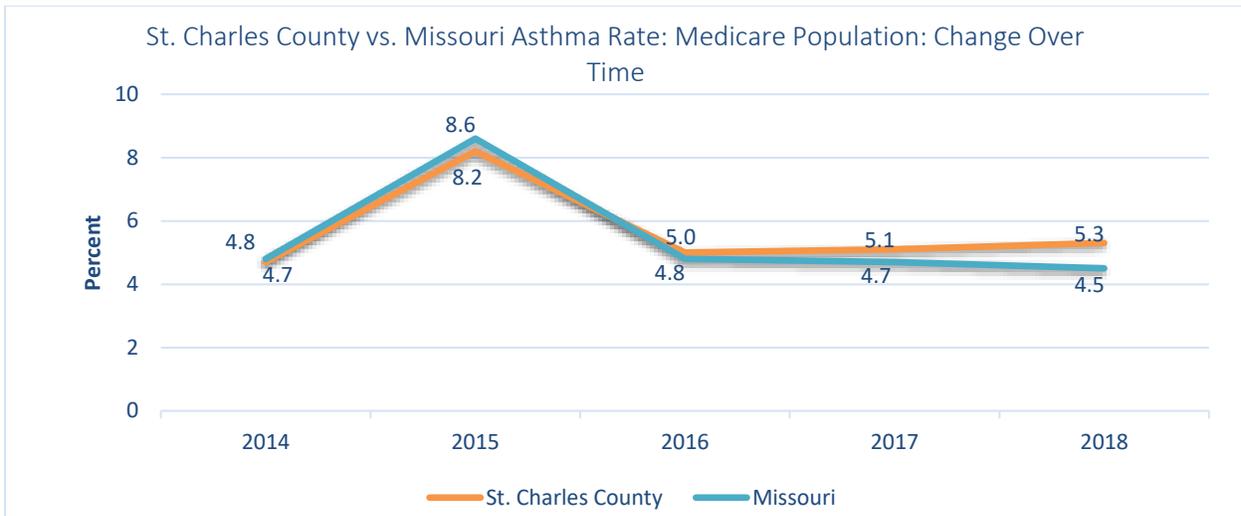
ST. CHARLES COUNTY VS. MISSOURI ASTHMA RATE BY ETHNICITY / RACE				
	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Asthma Death / 100,000 Population (2009-2019)	0.51	0.79	0	3.2
Asthma Hospitalizations / 10,000 Population (2011-2015)	6.06	7.13	13.83	35.59
Asthma ER Visits / 1,000 Population (2011-2015)	2.37	3.02	10.28	18.16

Source: Missouri Department of Health & Senior Services

### ST. CHARLES COUNTY VS. MISSOURI ASTHMA RATE

	ST. CHARLES COUNTY	MISSOURI
Asthma Death / 100,000 Population (2009-2019)	0.48	1.08
Asthma Hospitalizations / 10,000 Population (2011-2015)	6.68	11.27
Asthma ER Visits / 1,000 Population (2011-2015)	2.95	5.39

Source: Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute

### ST. CHARLES COUNTY VS. MISSOURI RESPIRATORY DISEASES RATES

	ST. CHARLES COUNTY	MISSOURI
Adults with Current Asthma in Percent (2016)	8.7	9.7
Age-Adjusted Death Rate due to Chronic Lower Respiratory Disease /100,000 Population (2015-2019)	33.3	50.4
Asthma: Medicare Population/Percent (2017)	5.3	4.5
COPD: Medicare Population in Percent (2017)	11.8	13.7

Source: Missouri Department of Health & Senior Services

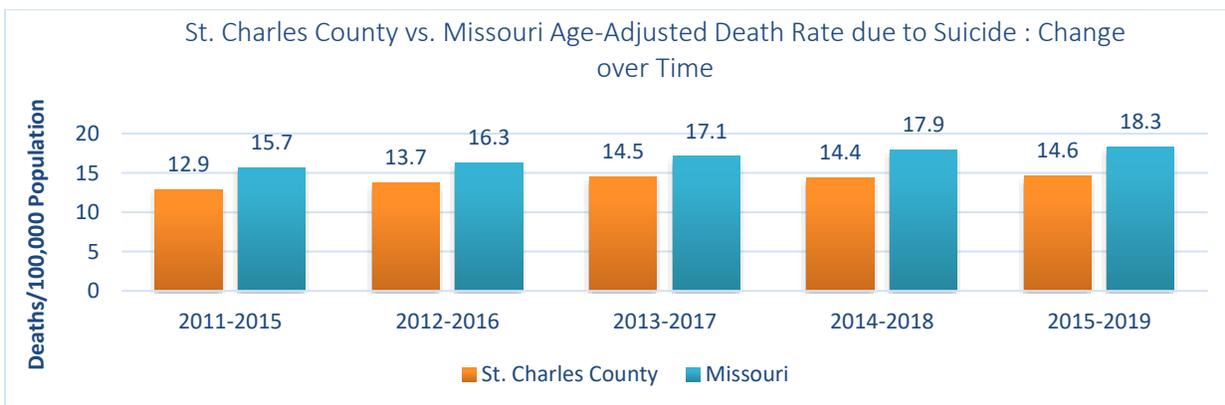
ST. CHARLES COUNTY VS. MISSOURI THREE-YEAR MOVING CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) EXCLUDING ASTHMA						
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
THREE-YEAR MOVING AVERAGE RATE	2015-2017		2016-2018		2017-2019	
COPD Death Rate/100,000 Population	34.14	50.72	33.53	49.79	32.13	47.99
THREE-YEAR MOVING AVERAGE RATE	2011-2013		2012-2014		2013-2015	
COPD Hospitalizations/10,000 Population	12.74	21.86	11.63	20.27	11.29	19.3
COPD ER Visits / 1,000 Population	2.24	5.57	2.33	5.62	2.38	5.45

Source: Missouri Department of Health & Senior Services

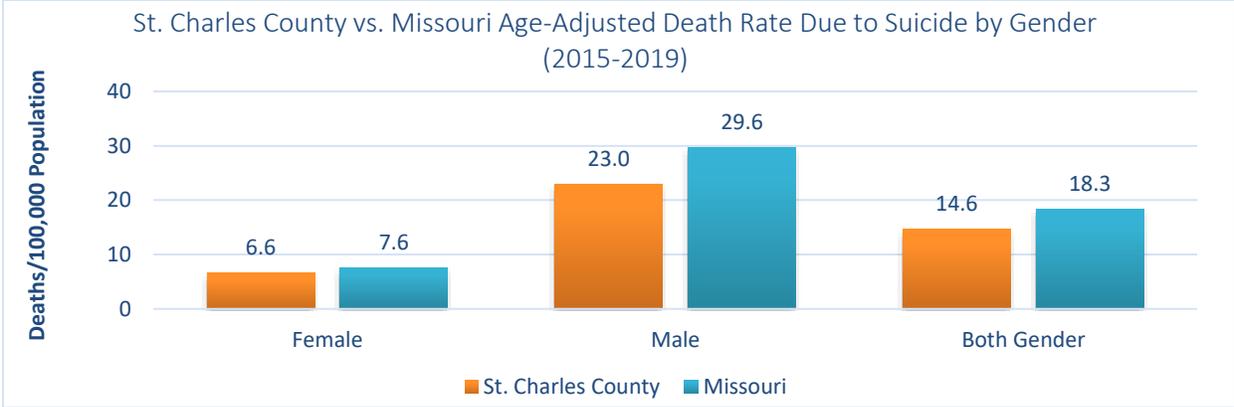
ST. CHARLES COUNTY VS. MISSOURI CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) RATE BY ETHNICITY / RACE				
	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Death / 100,000 Population (2009-2019)	35.09	52.10	10.88*	30.34
Hospitalizations / 10,000 Population (2011-2015)	12.20	20.45	7.74	23.23
ER Visits / 1,000 Population (2011-2015)	2.20	5.27	4.50	7.23

Source: Missouri Department of Health & Senior Services

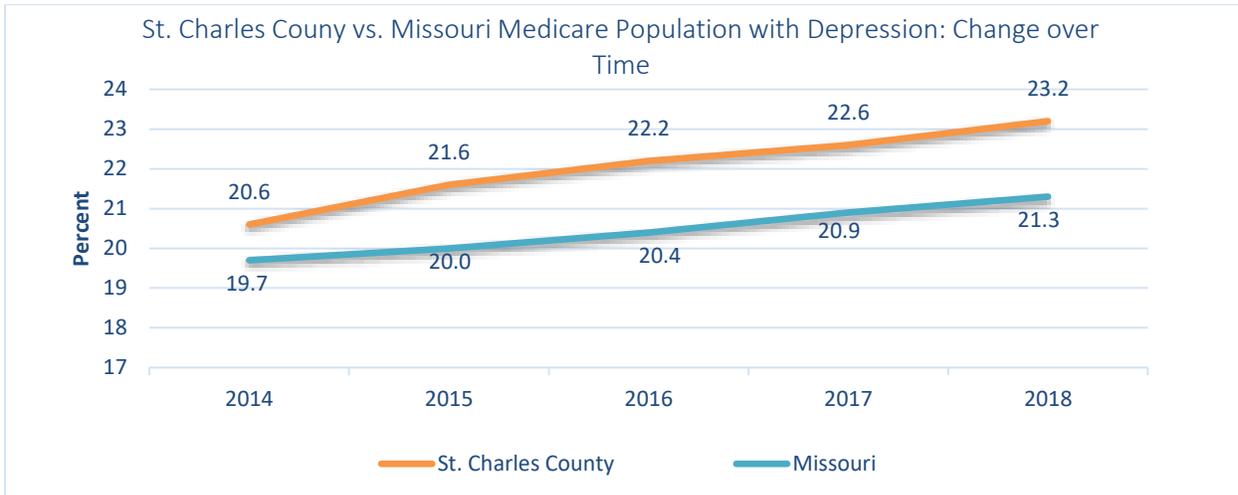
### MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Community Institute

St. Charles County Percent Comprehensive Psychiatric Services By Disorder Types:  
Change Over Time

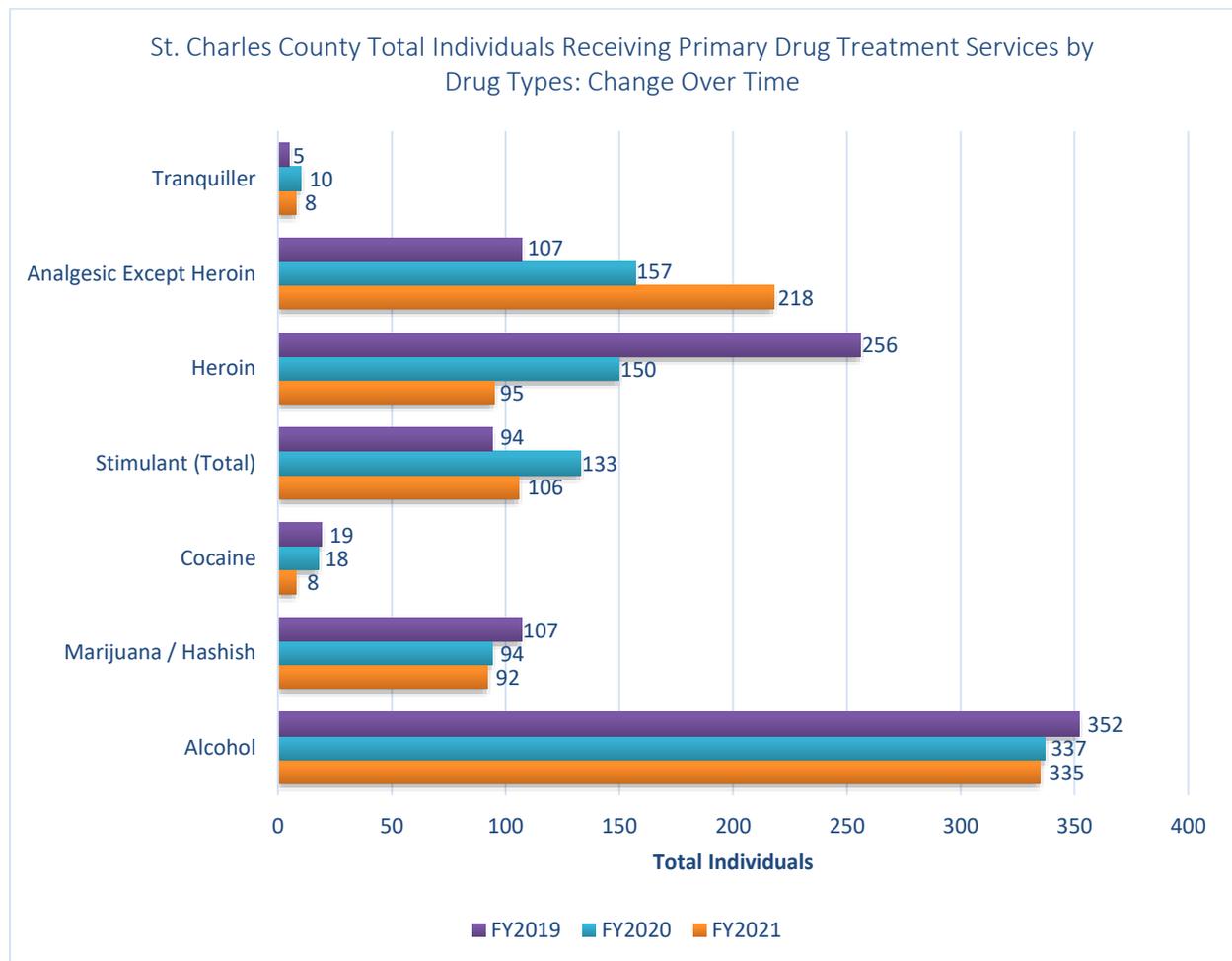


Source: Missouri Department of Mental Health

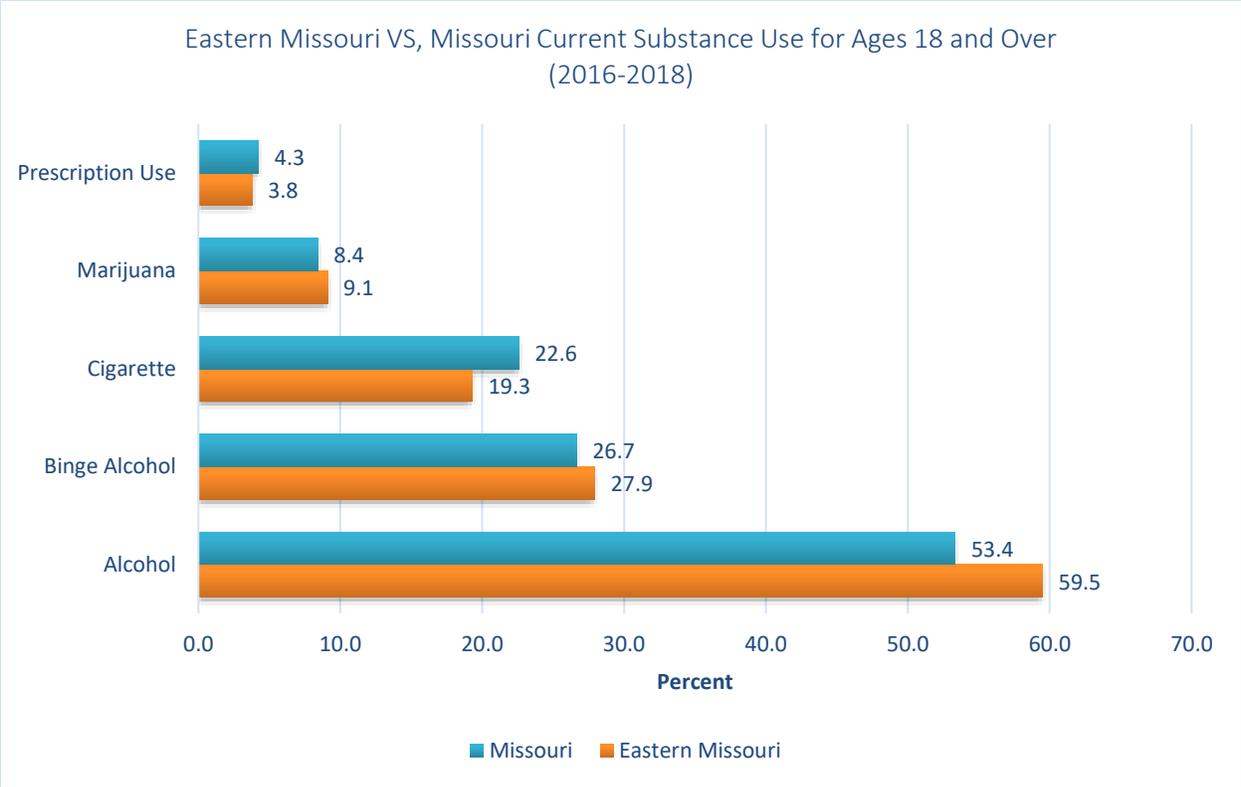
## MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE

ST. CHARLES COUNTY VS. MISSOURI & U.S. SUBSTANCE ABUSE RATE		
	ST. CHARLES COUNTY	MISSOURI
Percent Adults who Binge Drink (2018)	18.6	
Percent Adults who Smoke (2018)	17.1	20.1
Percent Adults who Drink Excessive (2018)	24.0	20.5
Percent Alcohol-Impaired Driving Deaths (2015-2019)	32.3	27.1
Death Rate due Drug-Poisoning / 100,000 Population (2017-2019)	26.0	24.8

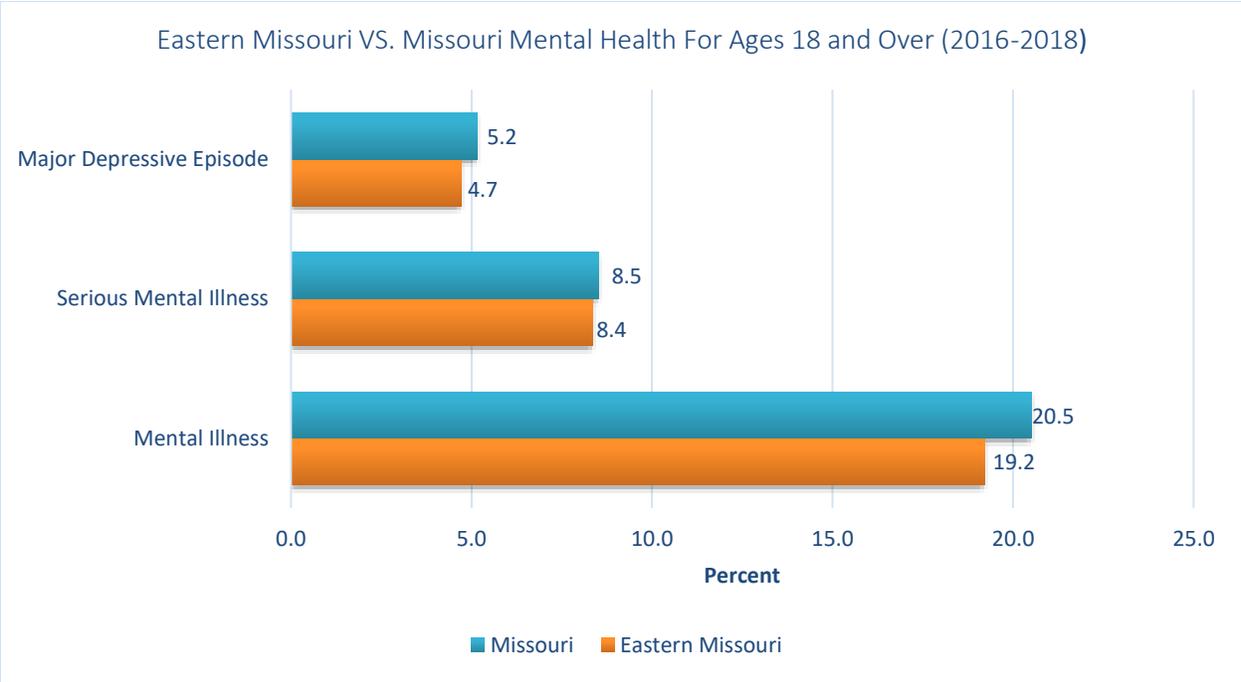
Source: Conduent Healthy Communities Institute



Source: Missouri Department of Mental Health



Source: Missouri Department of Mental Health



Source: Missouri Department of Mental Health

# Implementation Strategy



## Community Health Needs to be Addressed

- A. COMMUNITY HEALTH NEEDS TO BE ADDRESSED
  - I. MENTAL HEALTH

### STRATEGY RATIONALE:

About half of all people in the United States will be diagnosed with a mental disorder at some point in their lifetime. Mental disorders affect people of all age and racial/ethnic groups, but some populations are disproportionately affected. And estimates suggest that only half of all people with mental disorders get the treatment they need.

In addition, mental health and physical health are closely connected. Mental disorders like depression and anxiety can affect people's ability to take part in healthy behaviors. Similarly, physical health problems can make it harder for people to get treatment for mental disorders. Increasing screening for mental disorders can help people get the treatment they need.

**PROGRAM GOAL:** To improve health and quality of life for St. Charles County residents affected by mental health.

### PROGRAM OBJECTIVES:

- I. Improve overall knowledge of healthy behavior of St. Charles County residents living with mental health disease by 10 percent from pre- to post-test assessment yearly starting from 2024.

### ACTION PLAN:

- Barnes Jewish St. Peters Hospital (BJSPH) and Progress West Hospital (PWH) currently work with St. Louis Oasis to provide virtual or in-person educational opportunities from January-April, May – August and September-December.
- BJSPH and PWH will continue working with wider area resources including PreventEd, Center Point, the Missouri Prevention Resource Center Network and Compass Health to expand programming to St. Charles County which will allow families to have access to the program closer to home.
- A BJSPH and PWH staff RN will work as a liaison with area resources and agencies, will support the St. Charles County CRUSH Coalition, and support BJSPH and PWH staff. Areas of opportunity include the Parent and Teen Drug Summits with the local area public.

**EXPECTED OUTCOMES:** Change in hearty healthy behavior.

**OUTCOME MEASUREMENTS:** Pre-post assessment tools results will be recorded and analyze to determine improvement in behavior change.

## II. HEART HEALTH

### HEALTH NEED RATIONALE: (Healthy People 2030)

Heart disease is the leading cause of death in the United States, and stroke is the fifth leading cause. Heart disease and stroke can result in poor quality of life, disability and death. Though both diseases are common, they can often be prevented by controlling risk factors like high blood pressure and high cholesterol through treatment.

In addition, making sure people who experience a cardiovascular emergency — like stroke, heart attack, or cardiac arrest — get timely recommended treatment can reduce their risk for long-term disability and death. Teaching people to recognize symptoms is key to helping more people get the treatment they need.

### STRATEGY GOALS:

- I. Improve cardiovascular health and quality of life through prevention, detection and access to treatment of risk factors for heart attack.
- II. Increase early identification and treatment of heart attacks and strokes and prevention of repeat cardiovascular events.

### STRATEGY OBJECTIVES:

- a) Screen 200 adults from St. Charles County starting from 2023 with 10 percent increase in year 2024, 2025 for modifiable risk factors, including blood pressure and cholesterol.
- b) Provide 12 months of additional follow-up with 40 percent of adults in St. Charles County, who were screened and who opt-in and are identified as in the high-risk range for heart disease.
- c) St. Charles County adults, who are screened, and opt-in and are identified as high risk for heart disease will improve their knowledge level of healthy behavior by 10 percent from pre-post assessment at the end of their educational session.

### STRATEGY ACTION PLAN:

- Community Education nurses, dietitians and other health professionals will provide cardiovascular screenings in the St. Charles County area that includes blood pressure, cholesterol (total and high-density lipoprotein, HDL) and blood glucose.
- Screenings will include:
  - Individualized counseling regarding presence or absence of personal risk factors, including interpretation of results, educational materials regarding healthy lifestyle changes, including diet that may reduce risk factors as well as the importance of calling 911 and the signs and symptoms of stroke.
  - A stroke risk assessment developed in collaboration with the hospital's Stroke educator and the American Stroke Association and performed by registered nurses, dietitians and other health professionals.
  - Referrals to smoking cessation programs and blood pressure self-management

- programs.
  - Staff will educate individuals on the long-term risk associated with uncontrolled high blood pressure and provide education around how to properly measure blood pressure and best practices for ongoing tracking.
- Based on their results, participants who opt-in to follow-up will also receive a combination of the following:
  - Provide these clients with ongoing education. Document an increase in knowledge of healthy lifestyle changes with each follow-up encounter.
  - Additional relevant health coaching via email throughout the year, including nutrition advice, exercise suggestions, and information around prevention such as smoking cessation programs and early warning signs.
  - Follow-up with individuals at 6 weeks, 4 months, 8 months, and one year with an objective to contact.
- Staff will:
  - Offer re-screening between 6 months and one year to determine any changes in risk factors behaviors.
  - Partner with OASIS to promote and provide space for their Stanford's Chronic Disease self-management program. Ensure goal alignment and receive follow-up information from OASIS team.
  - Work with the hospital's EMS Outreach Team to disseminate education materials on prevention and risk-factor reduction.

**EXPECTED OUTCOMES:**

- Healthy lifestyle changes among those at risk for heart disease and stroke.
- Early detection and prevention of heart diseases and stroke.

**OUTCOMES MEASUREMENT:**

- Document if knowledge level has improved ability to maintain lifestyle changes, and any further support/education given.

## Community Health Needs That Will not be Specifically Addressed

### **ACCIDENTS/INJURIES**

### **ALCOHOL ABUSE AND DRUG ABUSE**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Mental Health Implementation plan.

### **CANCER**

BJSPH will continue to partner with Siteman Cancer Center.

### **DENTAL HEALTH**

BJSPH does not provide preventive dental services. We do recognize that this is a serious health concern for those lacking dental care. Patients that are seen in the emergency department are referred to a dentist, but this is often a difficult process as the county lacks providers willing to care for the underinsured or uninsured. Through updated collaborations with Compass Health, we are striving to improve this referral process.

### **DIABETES**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

### **HIGH BLOOD PRESSURE**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

### **IMMUNIZATIONS/ INFECTIOUS DISEASES**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

### **MATERNAL/INFANT HEALTH**

BJSPH's partner hospital, PWH, will address pediatric services and programs.

### **OBESITY**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

### **REPRODUCTIVE/ SEXUAL HEALTH**

BJSPH's partner hospital, PWH, will address reproductive and sexual health services and programs.

### **RESPIRATORY DISEASES**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

**STROKE**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health Implementation plan.

**TOBACCO USE**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health and Mental Implementation plan.

**VAPING**

Although not a single priority, BJSPH continues to address through education initiatives already in place with our Heart Health and Mental Health Implementation plan.