

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



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### Executive Summary

Christian Hospital (CH) is licensed as a 220-bed; acute-care medical center located on 28 acres in north St. Louis County. Located 6 miles west of Christian Hospital's main campus is an extension, Northwest Healthcare, which offers the community 24-hour emergency care and a variety of outpatient services in a convenient setting to complement the hospital services. Both facilities have established effective partnerships toward the goal of improving the health of the community. (See Appendix A for additional information)

Like all nonprofit hospitals, CH 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. CH completed its first CHNA and implementation plan in 2013 and again in 2016 and 2019. Reports were 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. Louis County when compared to the state.

At the conclusion of the comprehensive assessment process, CH identified two health needs where focus is most needed to improve the future health of the community it serves and will designate a point person for each need: 1) Heart Health and 2) Diabetes.

The analysis and conclusions will be presented and reviewed for approval by the CH Board of Directors.

# Community Description

#### **GEOGRAPHY**

Christian Hospital (CH) 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.

CH is one of three BJC HealthCare hospitals located in St. Louis County, along with Missouri Baptist Medical Center and Barnes-Jewish West County Hospital.

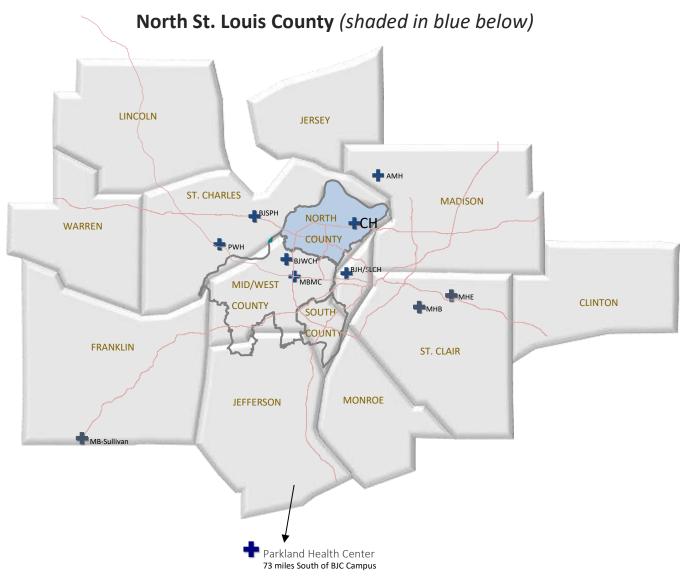
#### ST. LOUIS COUNTY SUB-COUNTY: NORTH COUNTY

For the purpose of this report, CH's focus area is North County. Most of the available data to complete the CHNA compared St. Louis County and Missouri. Whenever possible, data analysis was included on the sub-counties of St. Louis County: North County, West County and South County. Some available data is combined for Mid and West St. Louis County.



CH's community is defined by its Primary Service Area in north St. Louis County in the map below.

### **CH's Primary Service Area:**



#### **POPULATION**

Population data are necessary to understand the health of the community and plan for future needs. In 2022 in St. Louis County, 35 percent of the population resided in North County; 18 percent in South County; 29 percent in West County; and 18 percent in Mid County. Mid County is made up of the central and eastern portion of St. Louis County.

North County is estimated to have a 1 percent decline in its population from 2022 to 2027. West County is expected to have a 1 percent increase and Mid County and South County are forecasted to remain flat.

#### **INCOME**

In North County, the median household income in 2022 was \$56,732 and estimated to increase to \$62,116 in 2027. In South County, the median household income in 2022 was \$79,630 and projected to increase to \$88,612 in 2027. In West County, the median household income in 2022 was \$110,275 and projected to increase to \$121,947 in 2027.

In North County, 29 percent of families with children were from single-parent households compared to 12 percent in South County; 13 percent in West County; and 10 percent in Mid County. Adults and children in single-parent households are at a higher risk for adverse health effects, such as emotional and behavioral problems, compared to their peers. Children in such households are more likely to develop depression, smoke and abuse alcohol and other substances. Consequently, these children experience increased risk of morbidity and mortality of all causes. Similarly, single parents suffer from lower perceived health and higher risk of mortality.

#### **EDUCATION**

Individuals who do not finish high school are more likely than people 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 West County, 98 percent of the population age 25 and over had a high school diploma or higher education attainment compared to 96 percent South County; 97 percent in Mid County; and 92 percent in North County.

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 earn about \$1 million more per lifetime than their non-graduate peers. In West County, 59 percent of the population age 25 and older had a bachelor's degree or higher compared to 39 percent in South County; 67 percent in Mid County; and 24 percent in North County.

TABLE 1: DEMOGRAPHIC OF MID, NORTH, SC	OUTH AND WEST ST. LOUIS COUNTY	1							
		MID C	MID COUNTY		COUNTY	SOUTH COUNTY		WEST COUNTY	
		2022	2027	2022	2027	2022	2027	2022	2027
PERCENT POPULATION BY RACE /ETHNICITY									
	White	76.2	75.3	35.1	32.3	91.1	90.0	83.3	81.3
	African American	13.9	13.7	58.1	60.2	2.8	3.2	4.7	5.2
	Asian	6.0	6.7	20	22	3.3	3.7	8.5	9.5
	Two or More Races	2.8	3.1	29	13	2.0	2.2	2.5	2.8
	Other	0.9	0.9	16	18	0.6	0.7	0.9	0.9
	American Indian/AL Native	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
	Native Hawaiian/Pacific Islander	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.11	<0.1
	TOTAL POPULATION	187,398	186,834	360,730	358,125	182,757	182,859	292,050	295,284
PERCENT MALE POPULATION BY AGE									
	<18	22.3	21.8	25.9	25.3	20.9	20.6	22	21.3
	18-44	35.9	35.6	36.1	35.7	33.1	32.3	32.4	33.1
	45-64	24.1	23.0	23.2	22.2	25.7	24.2	26.7	24.2
	65-Up	17.8	19.6	14.8	16.9	20.4	22.9	18.8	21.5
	MALE TOTAL	89,179	89,049	168,579	167,944	87,796	87954	140,631	142,142
PERCENT FEMALE POPULATION BY AGE									
	<18	19.3	19.1	21.9	21.4	18.2	18.2	19.7	19.0
	18-44	33.4	32.6	344	33.1	31.2	31.3	30.7	30.9
	45-64	24.8	23.9	25.1	24.7	25.4	24.1	27.4	25.3
	65-Up	22.5	24.4	18.6	20.8	25.2	27.4	22.2	24.9
	FEMALE TOTAL	98,219	97,785	192,151	190,181	94,961	94,905	151,419	153,142

Source: Explore Mo Health

#### 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 North County, South County, West County and Mid County.

From 2022 to 2027, the 65 and up age group (male and female) is projected to increase by 14.4 percent in West County; 10.3 percent in South County; 11.8 percent in North County; and 8.8 percent in Mid County.

From 2022 to 2027, the <18 age group is expected to decrease by 2.3 percent in West County; 0.7 percent in South County; 3.1 percent in North County; and 1.9 percent in Mid County.

#### **RACE AND ETHNICITY**

In North County, 58 percent identified as African American compared to 2.8 percent of residents in South County; 4.7 percent in West County; and 13.9 percent in Mid County.

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

### Previous CHNA Measurement and Outcomes Results

At the completion of the 2019 CHNA, CH identified Diabetes and Obesity as the top priority heath needs where focus was most needed to improve the health of the community served by the hospital. The following table details goals and objectives to address these community health needs. Due to COVID-19, CH decided to place the diabetes program on hold.

TABLE 2: CHRISTIAN HOSPITAL'S 2019 CHNA OUTCO	MES	
ACCESS TO AFFORDABLE HEALTHCARE	DIABETES	OPIOID USE DISORDER
GOAL	GOAL	GOAL
Increase access to care and provide care coordination for the community in North County	Reduce disease and economic burden of diabetes mellitus (DM) and improve the quality of life for all persons who have or are at risk to have diabetes	Increase the number of patients referred from Christian Hospital to the EPICC Project
OBJECTIVES	OBJECTIVE	OBJECTIVE
a) Increase enrollment in CHAP, Transition to Wellness and Pathway to Health by 10 percent b) Increase collaboration and connection to medical homes and health insurance by 5 percent from 2019 baseline of the target population c) Reduce hospital re-visits in the target populations with chronic health conditions by 10 percent	a) Increase the proportion of persons with diabetes who receive formal diabetes education     b) Increase the proportion of persons with diabetes whose conditions have been screened	Increase the number of patients referred from Christian Hospital to the EPICC Project by 10 percent every year starting from 2020 using 2018 as a baseline
CURRENT STATUS	CURRENT STATUS	CURRENT STATUS
January-December 2020 Total of 380 individuals were referred to the Wellness and Pathway to Health, an increase of 245 percent January-December 2021 A total of 545 individuals were referred to the Wellness and Pathway to Health, an increase of 43 percent. Out of the total refrred in 2021, 136 individuals obtained health insurances and 207 were connected to primary care physicians	Due to COVID-19, the diabetes program was put on hold. Therefore, there is no data related to the program.	January-December 2020 Total of 326 individuals were referred by Christian Hospital to the EPICC project, a 24 percent increase from the baseline of total 263 referrals made in 2019 January-December 2021 Total of 434 individuals were referred by Christian Hospital to the EPICC project, a 31 percent increased from December of 2020 and a 65 percent increase since December of 2019

### 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

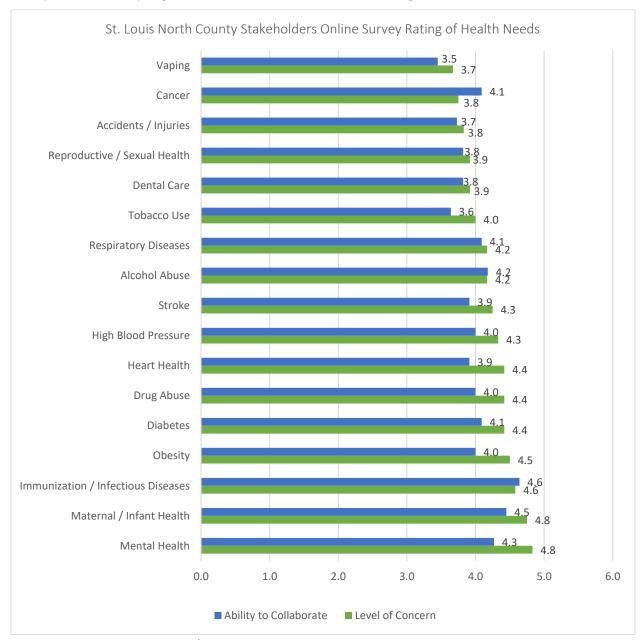
Stakeholders rated immunizations and infectious disease, maternal/infant health and mental health highest in both level of concern and potential for collaboration. Stakeholders highly ranked many barriers to access in North St. Louis County, with the financial barriers related to health insurance and transportation having the greatest impact on access. Concerns related to lack of mental health services rank next.

Stakeholders highly ranked many barriers to access in North St. Louis County, with the financial barriers related to health insurance and transportation having the greatest impact on access. Concerns related to lack of mental health services rank next. Stakeholders strongly agree that the greatest impact of COVID-19 has been on the mental health of North St. Louis County residents. The pandemic has also created financial hardship for area residents, resulting in loss of regular income. They also identified the challenges of managing remote learning as an impact of the pandemic.

A few stakeholders identified Ferguson and Jennings as being communities at greatest risk. Pine Lawn and Normandy were mentioned by one stakeholder each along with the Promise Zone communities. (See Appendix D for complete Stakeholder Assessment Report)

#### **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 and Maternal/Infant Health were rated the highest in terms of level of concern and Immunization/Infectious Diseases was rated the highest for ability to collaborate.

### 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. Louis County and its sub-counties 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. Louis 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.

Explore MO Health is a tool that allows users to explore hyperlocal health data to better understand the factors that can influence health outcomes. Data from this source combined data from Mid and West St. Louis County.

#### Community Health Needs

- Asthma
- Cancer
- Diabetes
- Heart Health/Stroke
- Maternal/Infant Health
- Mental Health
- Obesity
- Sexually Transmitted Infections
- Substance Abuse

While CH identified two needs as its primary focus, the following needs will continue to be appropriately addressed by the hospital and other organizations in St. Louis County.

#### **ASTHMA**

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."

For the three-year period ending 2019, the North County region of St. Louis County had the highest number of asthma cases per 1,000 population at 107.94, which was nearly triple the rate in Mid/West County (36.57) and South County (35.35).

For the three-year period ending in 2019, the North County region of St. Louis County had the highest number of respiratory disease cases per 1,000 population at 174.14, which was approximately 2.5 times the rate in Mid/West County (70.53) and double the rate in South County (86.9).

Asthma rates for deaths (2009-2019), hospitalization (2011-2015) and emergency room visits (2011-2015) were significantly higher among African Americans when compared to Whites in St. Louis County. While this rate difference by race was consistent with state levels, hospitalization (4.4 percent) and emergency room visit rate (10.4 percent) for the African American population in St. Louis County were slightly higher compared to the state.

For the three-year period ending in 2019, the North County region of St. Louis County had the highest number of chronic obstructive pulmonary disease cases per 1,000 population at 66.2 which was 95 percent higher than the rate in Mid/West County (33.96) and 28 percent higher than the rate in South County (51.55).

#### **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.

For the three-year period ending 2019, the North County region of St. Louis County had the lowest rate of cancer cases per 1,000 population at 157.5, which was nearly 14 percent lower than the rate in Mid/West County (181.3) and South County (183.8).

When comparing the all-cancer incidence rate per 100,000 population by race in St. Louis County, African Americans had the highest rate of 481 followed by Whites at 476. These rates are above the rates by race for Missouri; African Americans (2.4 percent) and Whites (4.7 percent). Both Asian/Pacific Islander and Hispanics in St. Louis County had lower rates than the state for their race.

St. Louis County had a higher age-adjusted all-cancer incidence rate (incidents per 100,000 population) when compared to Missouri. For the five-year period ending 2019, St. Louis County's rate of 471.2 was 4.2 percent higher than the states rate of 452.3.

St. Louis County had a lower age-adjusted all-cancer death rate (deaths per 100,000 population) when compared to the state rate. For the five-year period ending 2019, St. Louis County's rate of 154.7 was 7 percent lower than the state rate of 166.3.

When comparing the all-cancer death rate per 100,000 population by race in St. Louis County, African Americans had the highest rate of 201 followed by Whites at 146.3. Hispanics had the lowest rate of 73.6. African Americans and Asian/Pacific Islander race groups both had a higher rate in St. Louis County compared to the rate in the state.

#### **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.

For the three-year period ending 2019, the North County region of St. Louis County had the highest rate of diagnosed diabetes cases at 201.25 per 1,000 population which was 93 percent higher than the rate in Mid/West County and 55 percent higher than the rate in South County.

St. Louis County continued to have a lower age-adjusted death rate due to diabetes (deaths per 100,000 population) when compared to the state rate.

For the five-year period ending 2019, St. Louis County's rate of 16.1 was 21.4 percent lower than the state rate of 20.5.

For the five-year period ending 2019; Whites in St. Louis County had a 35.9 percent lower ageadjusted death rate due to diabetes when compared to Whites in the state. The African American rate was the about the same in St. Louis County compared to the state (33.1 v 33.2).

The rate of adults 20+ in St. Louis County has remained relatively flat at 8.9 percent from 2017 to 2019.

#### **HEART HEALTH & STROKE**

Heart disease and stroke are among the most preventable diseases in the U.S. yet 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.

For the three-year period ending 2019, the South County region of St. Louis County had the highest number of diagnosed heart diseases cases per 1,000 population at 201.2, which was 29 percent higher than the rate in Mid/West County (155.5) and 3.5 percent higher than the rate in North County (194.3).

For the three-year period ending 2019, the North County region of St. Louis County had the highest number of diagnosed ischemic stroke cases per 1,000 population at 8.8, which was 27 percent higher than the rate in Mid/West County (6.9) and 33 percent higher than the rate in South County (6.6).

For the four-year period ending in 2019, St. Louis County's age-adjusted death rate (per 100,000 population) due to cerebrovascular disease (stroke) was 6 percent higher when compared to the state rate. The higher rate was driven by a higher rate of African Americans who had a 10.2 percent higher rate than among African Americans in the state. Whites had a 2.9 percent lower rate in the county compared to the state. Another factor contributing to St. Louis County's higher rate was among males who had a rate 13 percent higher than males in the state.

For the four-year period ending in 2019, St. Louis County's age-adjusted death rate (per 100,000 population) due to heart disease was 7.9 percent lower when compared to the state rate. However, when comparing by race, African Americans in St. Louis County had a 4.6 percent higher rate compared to African Americans in the state.

For the five-year period ending 2019 compared to the period ending in 2015, the age-adjusted death rate due to heart disease for St Louis County remained flat at about 175.9 deaths per 100,000 population while the state rate declined approximately 2 percent to 190.9 for the same time period.

For the three-year period ending 2019, the North County region of St. Louis County had the highest number of hypertension cases per 1,000 population at 351.54, which was 52.4 percent higher than the rate in Mid/West County (230.69) and 28 percent higher than the rate in South County (274.31).

#### MATERNAL AND INFANT HEALTH

Infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. The leading causes of death among infants are birth defects, preterm delivery, low birth weight, Sudden Infant Death Syndrome (SIDS), and maternal complications during pregnancy. This is a Healthy People 2030 Leading Health Indicator. The Healthy People 2030 national health target is to reduce the rate of infant deaths to 5.0 deaths per 1,000 live births.

Babies born premature are likely to require specialized medical care, and oftentimes must stay in intensive care nurseries. While there have been many medical advances enabling premature infants to survive, there is still risk of infant death or long-term disability. The most important things an expectant mother can do to prevent prematurity and low birth weight are to take prenatal vitamins, stop smoking, stop drinking alcohol and using drugs, and get prenatal care. The Healthy People 2030 national health target is to reduce the proportion of infants who are born preterm to 9.4 percent.

While the infant mortality rate in St. Louis County has steadily declined from 2015-2019, it's rate was slightly higher than the rate in Missouri (6.6 percent vs. 6.4 percent).

For the three-year period ending 2019 in St. Louis County, the rate of mothers who received early prenatal care was slightly higher than the rate in the state (74.7 percent vs. 72.5 percent). When comparing the rates by race, every race had a higher rate except for American Indian/Alaska Native. In St. Louis County, White mothers had the highest rate at 82.3 percent, while American Indian/Alaska Natives had the lowest at 58.3 percent.

For 2019, African American mothers had the highest preterm birth rate at 16.3 percent compared to White and Hispanic mothers at 10 percent.

#### MENTAL/BEHAVIORAL HEALTH: 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, 6,965 St. Louis County residents received treatment for serious mental illness at publicly-funded facilities. In St. Louis County, 12.7 percent of adults aged 18 years and older did not have a 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 three-year period ending 2019, the North County region of St. Louis County had the highest rate of diagnosed mental health disorder cases per 1,000 population at 45.45 which was 62.1 percent higher than the rate in Mid/West County (28.03) and 52.9 percent higher than the rate in South County (29.73).

#### MENTAL / BEHAVIORAL HEALTH: SUBSTANCE USE

The availability of county-level data on substance use is limited. 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. Louis County, the prevalence of binge drinking among adults 18 years and older is 17.8 percent. The

prevalence of current smoking among the same age group is 15.4 percent. Alcohol is the most commonly used substance in Missouri adults. In the Eastern region, approximately 59.5 percent of adults currently drink alcohol, and 27.9 percent have had 5 or more drinks of alcohol on a single occasion in the past 30 days. Cigarette use is of concern across the state. In the Eastern region, 19.3 percent of adults currently use cigarettes compared to 22.6 percent statewide.

Marijuana use in Missouri continues to be of interest, particularly with recent shifts in legality of adult use across the nation and medical marijuana sales in the state since October 2020. In the Eastern region, approximately 9.1 percent of adults currently used marijuana in the past 30 days.

Prescription drug misuse is of growing concern both across the nation and in Missouri, where 3.8 percent of adults in the Eastern region reported misuse of prescription pain medication over the past year. (Behavioral Health Profile of St. Louis County 2016-2018)

For the three-year period ending 2019 Mid/West County had the lowest rate (number of cases per 1,000 population) of opioid use at 15.56 compared to South County at 19.84 and North County at 37.17.

For the three-year period ending 2019 Mid/West County had the lowest rate (number of cases per 1,000 population) of tobacco use at 145.62 compared to South County at 191.25 and North County at 319.09.

For the three-year period ending 2019 Mid/West County had the lowest rate (number of cases per 1,000 population) of alcohol use at 3.83 compared to South County at 4.49 and North County at 6.79.

#### **OBESITY**

The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions including heart disease, type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis.

For the three-year period ending 2019, the number of Obesity cases per 1,000 population were: Mid/West County (46.2); South County (60.6); and North County (105.94).

#### SEXUALLY TRANSMITTED INFECTIONS

Chlamydia, one of the most frequently reported bacterial sexually transmitted infections (STIs) in the United States, is caused by the bacterium, Chlamydia trachomatis. Although symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman ever recognizes a problem. Chlamydia can also be transmitted via discharge from the penis of an infected man. Under-reporting of chlamydia is substantial because most people with chlamydia are not aware of their infections and do not seek testing. The Centers for Disease Control and Prevention recommends that all sexually active women age 25 or younger be tested annually for chlamydia. Females aged 15 to 19 consistently have the highest rate of chlamydia compared with any other age or sex group according to the Centers for Disease Control and Prevention. This group may be particularly susceptible because the cervix is not yet fully developed. Increased screening in this group, however, may partially contribute to increased rates of reported chlamydia.

For the three-year period ending 2019, the North County region of St. Louis County had the highest number of sexually transmitted infectious cases per 1,000 population at 26.51 which was 142.7 percent higher than the rate in Mid/West County (10.92) and 94.9 percent higher than the rate in South County (13.6).

For the five-year period ending 2014 in St. Louis County, African Americans had the highest chlamydia rate among females ages 15-19 at 10,205 cases per 100,000 population. This was over six times higher than the rate among Whites at 1,648.

#### WORK GROUP PRIORITIZATION MEETINGS

CH selected 14 employees to participate on an internal CHNA work group from various hospital departments. (See Appendix F)

The work group met twice to analyze the primary and secondary data and to complete the priority ranking for the hospital's CHNA.

#### MEETING 1

The work group met March 1, 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.

The ranking of needs by the stakeholders were then reviewed and discussed. (See list of needs on Table 3)

TABLE 3: ST. LOUIS COUNTY COMMUNITY 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								

The following summarizes work group discussions at the meeting:

#### Area of Greatest Needs

- Mental Health
- ➤ Maternal/Infant Health
- Cancer
- ➤ Heart Health

#### Greatest Area for Collaboration

- > Immunization/Infection Diseases
- ➤ Maternal/Infant Health
- Mental Health

#### Greatest Impact on Access

- Financial barriers related to health insurance and transportation
- ➤ Lack of mental health services
- > Social factor with greatest health impact
- Discrimination

#### COVID-19 Greatest Impact

- Mental Health
- > Financial hardship

Managing remote learning

#### Largest Resource Gap

- > Access to healthy food
- > Affordable housing

#### New Issues for Concern

- Housing
- > Mental Health for children
- Reduced support from religious institutions
- Childcare and health issues
- Asthma

#### Community resources members not aware of

- Community agencies
- County parks and municipalities for recreational opportunities

#### Most at Risk

- Ferguson and Jennings
- Pine Lawn, Normandy along with Promise Zone communities

Through the discussion and consensus, the team narrowed the list of health needs from 17 to 6 health needs. The team made its decision by reviewing resources available, including staffing, program availability and clinical specialty. (Table 4)

TABLE 4: THE TOP SIX COMMUNITY HEALTH NEEDS SELECTED BY CHRISTIAN HOSPITAL INTERNAL TEAM
Cancer
Diabetes
Drug Abuse
Heart Health
Mental Health
Respiratory Diseases

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)

TABLE 5: CRITERIA FOR PRIORITY SETTING  How many people are affected by the problem?	RATING	WEIGHT	SCORE
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			

The group decided to consider six top areas of interest based on resources and capacities to support these initiatives:

- > Cancer
- ➤ Heart Health for readmission and those living in zip code with high renal failures
  - o Implemented initiatives to reduce readmission for heart patients
- > Respiratory Disease
- Diabetes
- Drug Abuse
- Mental Health

#### **MEETING 2**

The work group met again March 7, 2022. During this meeting, the group discussed results of the ranking exercise of the top six needs of the community. (Table 6)

TABLE 6: CHRISTIAN HOSPITAL INTERNAL WORK GROUP COMMUNITY HEALTH NEEDS RANKING							
RANK	HIGHEST-LOWEST	TOTAL SCORE					
1	Heart Health	440					
2	Diabetes	406					
3	Mental Health	394					
4	Cancer	355					
5	Drug Abuse	338					
6	Respiratory Diseases	331					

The group then compared the secondary data to the ranking by community stakeholders. 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. Louis 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 highlights the needs ranked by the St. Louis County stakeholders and the CH work group. Similarities observed in the top needs include Maternal/Infant Health, Immunization/Infectious Diseases and Mental Health.

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

#### Table 8 shows:

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

	:: CONDUENT HEALTHY COMMUNITIES INST G VS. CHRISTIAN HOSPITAL INTERNAL TEAM			COUNTY	COMMUNITY STAKEHOLDERS
RANK	CONDUENT HEALTHY COMMUNITIES INSTITUTE SECONDARY DATA HIGHEST TO LOWEST RATING	RANK	STAKEHOLDERS RANKING OF HEALTH NEEDS HIGHEST TO LOWEST	RANK	CHRISTIAN INTERNAL WORK GROUP RANKING OF COMMUNITY HEALTH NEEDS
1	Alcohol & Drug Use	1	Mental Health	1	Heart Health
2	Maternal, Fetal & Infant Health	2	Maternal/Infant Health	2	Diabetes
3	Prevention & Safety	3	Immunization/Infectious Diseases	3	Mental Health
4	Mental Health & Mental Disorders	4	Obesity	4	Cancer
5	Immunizations & Infectious Diseases	5	Diabetes	5	Drug Abuse
6	Heart Disease & Stroke	5	Drug Abuse	6	Respiratory Diseases

- Mental Health was ranked in the top tier of needs by all three groups.
- ➤ While Alcohol & Drug Abuse was ranked first by Conduent, this need was ranked sixth by the stakeholders and fifth by the work group.
- ➤ While Heart Health was ranked first by the work group, this need was ranked sixth by Conduent and not in the top ranking of the stakeholders.
- Diabetes was ranked second by the work group, fifth by stakeholders and not in the top ranking of the stakeholders.

#### **SUMMARY**

At the conclusion of the comprehensive assessment process to determine the most critical needs in north St. Louis County, the group concluded that considering resources available, including staffing, program availability and clinical specialty, CH will address two focus areas for its implementation program and designate a point person for each need: 1) Heart Health; 2) Diabetes.

# Appendices

### Appendix A: About Christian Hospital

Christian Hospital is licensed as a 220-bed; acute-care medical center located on 28 acres in unincorporated north St. Louis County. Located 6 miles west of Christian Hospital's main campus is an extension, Northwest Healthcare, which offers the community 24-hour emergency care and a variety of outpatient services in a convenient setting to complement the hospital services. Christian Hospital is a leader among hospitals in the St. Louis region and has experienced tremendous growth in the last few years.

Specifically, Christian Hospital is highly regarded for its excellence in heart services and lifesaving cardiothoracic surgery, emergency medicine, neurosurgery, spine surgery, cancer treatment, radiation oncology, substance abuse programs, radiology, urology, and pulmonary care.

Christian Hospital, a nonprofit organization and founding member of BJC HealthCare, has nearly 500 physicians on staff and a diverse workforce of more than 2,200 healthcare professionals who are dedicated to providing the highest quality care with the latest technology and medical advances.

Our community counts on Christian Hospital. It is one of the largest employers and is a pillar in the community. Due to the complex nature of the health needs in our community, we provide lectures, screenings, education, and wellness programs to nearly 10,000 community residents and provide thousands of meals to the North County Meals on Wheels program.

In 2020, Christian Hospital provided \$23,681,355.00 in community benefits and serving 132,214 persons. This total includes:

- \$9,097,310.00 in financial assistance and means-tested programs serving 36,730 individuals
- 43,612 individuals on Medicaid at a total net benefit of \$11,348,071.00

Christian Hospital also provided a total of \$3,235,974.00 to 51,872 persons in other community benefits including, community health improvement services, subsidized health services and inkind donations. (See Appendix B for Community Benefit Expenses)

### Appendix B: 2020 Community Benefit Expenses

CHRISTIAN HOSPITAL: 2020 TOTAL NET COMMUNITY BENEFIT EXPENSES								
CATEGORY	PERSONS SERVED	TOTAL NET BENEFIT						
FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS								
Financial Assistance at Cost	36,730	\$9,097,310.00						
Medicaid	43,612	\$11,348,071.00						
TOTAL FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS	80,342	\$20,445,381.00						
OTHER COMMUNITY BENEFITS								
Community Health Improvement Services	44,387	\$465,253.00						
Health Professional	4	\$446,156.00						
Subsidized Health Services	7,481	\$2,147,327.00						
In-Kind Donation		\$177,238.00						
TOTAL OTHER COMMUNITY BENEFITS	51,872	\$3,235,974.00						
GRAND TOTAL	132,214	\$23,681,355.00						

# Appendix C: St. Louis County Demographic

DEMOGRAPHIC OF ST. LOUIS COUNTY VS. MISSOURI		
	ST. LOUIS COUNTY	MISSOURI
GEOGRAPHY		
Land area in square miles, 2010	507. 80	68,741.52
Persons per square mile, 2010	1967.2	87.1
POPULATION		
Population, 2010	998,954	5,988,923
Population, 2020	1,004,125	6,154,913
Population Estimates, July 1, 2021	997,187	6,168,187
Population, Percent Change - April, 2020 (estimate base) to July 1, 2021	-0.7	0.2
AGE		
Persons Under 5 Years, Percent, 2020	5.8	6.0
Persons Under 18 Years, Percent, 2020	21.9	22.3
Persons 65 Years and over, Percent, 2020	18.5	17.3
GENDER		
Female Person, Person, 2020	52.5	50.9
Male Persons, Percent, 2020	47.5	49.1
RACE / ETHNICITY		
White, Percent, 2020	67.9	82.9
White Alone, not Hispanic or Latino, Percent, 2020	65.3	79.1
Black / African American Alone, Percent, 2020	25.0	11.8
Asian Alone, Percent, 2020	4.7	2.2
Hispanic or Latino, Percent, 2020	3.0	4.4
Two or More Races, Percent, 2020	2.2	2.4
American Indian and Alaska Native alone, Percent, 2020	0.2	0.6
Native Hawaiian and Other Pacific Islander Alone, Percent, 2020	<0.1	0.2
LANGUAGE		
Foreign Born Persons, Percent, 2016-2020	7.4	4.2

Source: Conduent Healthy Communities Institute

ST. LOUIS COUNTY DEMOGRAPHIC INCLUDING EDUCATION / INCOME / HOUSING VS. MISSO	URI ST. LOUIS COUNTY	MISSOURI
Housing Units, July 1, 2021	445,419	2,807,604
Homeownership, Percent, 2016-2020	68.3	67.1
Median Housing Units Value, in Dollars, 2016-2020	206,700	163,600
FAMILY & LIVING ARRANGEMENTS		
Households, 2016-2020	409,658	2,440,212
Household Size, Average, 2016-2020)	2.4	2.4
Population Age 5+ with Language other than English Spoken at Home, Percent, 2016-2020	9.5	6.3
EDUCATION		
High School Graduate or Higher, Percent of Persons Age 25+, 2016-2020	94.0	90.6
Bachelor's Degree or Higher, Percent of Persons Age 25+, 2016-2020	44.4	29.9
INCOME & POVERTY		
Median Household Income, ( in 2020 dollars), 2016-2020	67,420	55,461
Per Capita Income, in past 12 months (in 2020 dollars), 2016-2020	42,682	31,839
Persons in Poverty, Percent	9.1	12.1

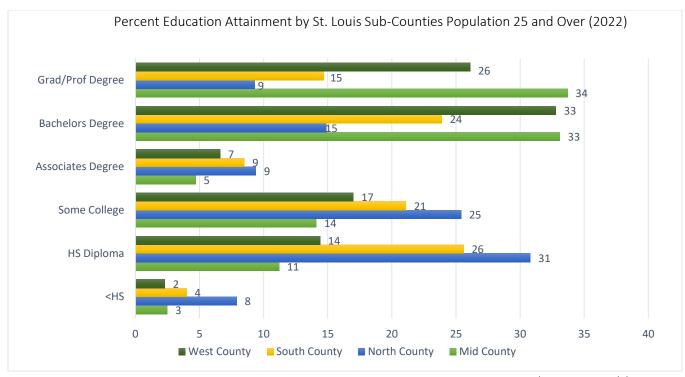
Source: Conduent Healthy Communities Institute

DEMOGRAPHIC OF SUB-COUNTIES	OF ST. LOUIS COUNTY								
		NORTH	COUNTY	MID	MID COUNTY		SOUTH COUNTY		COUNTY
		2022	2027	2022	2027	2022	2027	2022	2027
POPULATION BY RACE /ETHNICITY									
	White	126,726	115,635	142,867	140,709	166,518	164,499	243,194	240,213
	African American	209,412	215,541	26,039	25,574	5,112	5,854	13,675	15,255
	Asian	7,287	7,958	11,250	12,611	6,021	6,849	24,778	28,097
	Two or More Races	10,614	11,758	5,163	5,735	3,622	4,084	7,190	8,237
	Other	5,742	6,271	1,643	1,764	1,119	1,210	2,543	2,803
	American Indian/AL Native	865	898	392	399	327	330	592	608
	Native Hawaiian/Pacific Islander	84	64	44	42	38	33	78	71
	TOTAL POPULATION	360,730	358,125	187,398	186,834	182,757	182,859	292,050	295,284
MALE POPULATION BY AGE									
	<18	43,630	42,484	19,843	19,421	18,317	18,147	30,941	30,222
	18-44	60,890	59,878	32,040	31,704	29,022	28,391	45,632	47,037
	45-64	39,080	37,212	21,462	20,441	22,588	21,281	37,586	34,359
	65-Up	24,979	28,370	15,834	17,483	17,869	20,135	26,472	30,524
	MALE TOTAL	168,579	167,944	89,179	89,049	87,796	87,954	140,631	142,142
FEMALE POPULATION BY AGE									
	<18	42,159	40,748	18,982	18,637	17,323	17,260	29,846	29,121
	18-44	66,044	62,874	32,851	31,921	29,641	28,796	46,469	47,265
	45-64	48,288	47,015	24,332	23,389	24,104	22,890	41,421	38,677
	65-Up	35,660	39,544	22,054	23,838	23,893	25,959	33,683	38,079
	FEMALE TOTAL	192,151	190,181	98,219	97,785	94,961	94,905	151,419	153,142

Source: Explore Mo Health

TOTAL HOUSEHOLDS & FAMILY STRUCTURE OF SUB-COUNTIES OF ST. LOUIS COUNTY									
		NORTH	COUNTY	MID CC	DUNTY	SOUTH	COUNTY	WEST (	COUNTY
YEAR		2022	2027	2022	2027	2022	2027	2022	2027
TOTAL HOUSEHOLDS		145,932	145,557	80,911	81,088	78,843	79,171	115,673	117,180
MEDIAN HOUSEHOLD INCOME		\$ 56,732	\$ 62,116	\$ 103,153	\$115,199	\$79,630	\$ 88,612	\$ 110,275	\$ 121,947
FAMILY STRUCTURE									
	Total Families	94,491	94,238	47,686	47,803	50,618	50,827	80,950	81,946
	Married Couple W/ Children	19,269	19,176	16,758	16,710	13,931	13,972	28,647	28,935
	Married Couple W/o Children	31,434	31,387	22,307	22,302	25,723	25,787	39,598	39,999
	Female Householder W/ Children	22,464	22,442	3,775	3,855	4,148	4,208	5,258	5,408
	Female Householder W/o Children	12,591	12,620	2,801	2,834	3,500	3,524	3,796	3,885
	Male Householder W/ Children	4,735	4,651	1,101	1,137	2,016	2,029	2,006	2,046
	Male Householder W/o Children	3,998	3,962	944	965	1,300	1,307	1,645	1,673

Source: Explore Mo Health



Source: Explore Mo Health

# Appendix D: North St. Louis County Community Stakeholders Community Survey Report

Stakeholder Assessment of the Health Needs of North St. Louis County

Prepared by: BJC Market Research November 23, 2021

BACKGROUND

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

- o 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
- o 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.
- > Around June 7, an email invitation was sent out from representatives of BJC HealthCare
  - o and SSM Health to 22 North St. Louis County community stakeholders, inviting them to participate in the survey. A reminder sent out on June 30 before the survey closed for analysis.
- ➤ 12 community stakeholders completed the survey for a 55% response rate.

MARKET DEFINITION: NORTH ST. LOUIS COUNTY

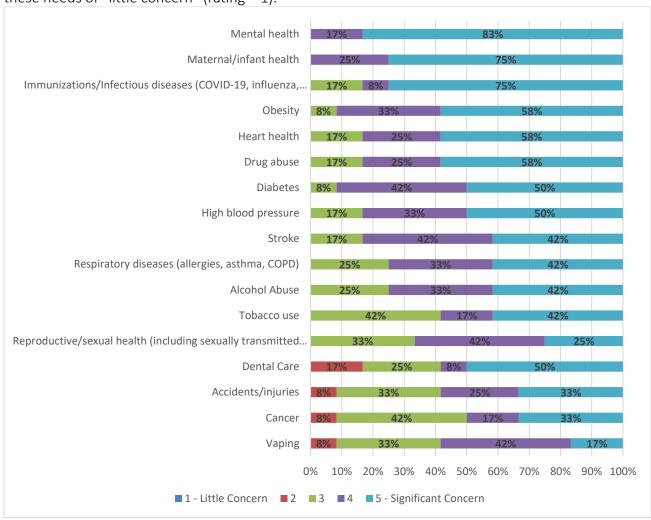


#### **KEY FINDINGS**

- Two needs ranked of greatest concern in North St. Louis County: mental health and maternal/infant health. They were rated either a 4 or a 5 on a 1 to 5 scale. No one rated any of the identified needs of "little concern" (rating = 1).
- > Stakeholders feel that there is the greatest potential to work together around the issues of immunizations/ infectious diseases, maternal/infant health, and mental health.
- > Stakeholders rate immunizations and infectious disease, maternal/infant health, and mental health highest in both level of concern and potential for collaboration.
- > Stakeholders highly ranked many barriers to access in North St. Louis County with the financial barriers related to health insurance and transportation having the greatest impact on access. Concerns related to lack of mental health services rank next
- Over half of the stakeholders identified discrimination as the social factor having the greatest impact on the health of those living in North St. Louis County. Half identified poverty, food insecurity, environmental issues, and access to healthy food as social factors of major concern.
- ➤ Stakeholders strongly agree that the greatest impact of COVID-19 has been on the mental health of North St. Louis 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 as an impact of the pandemic.

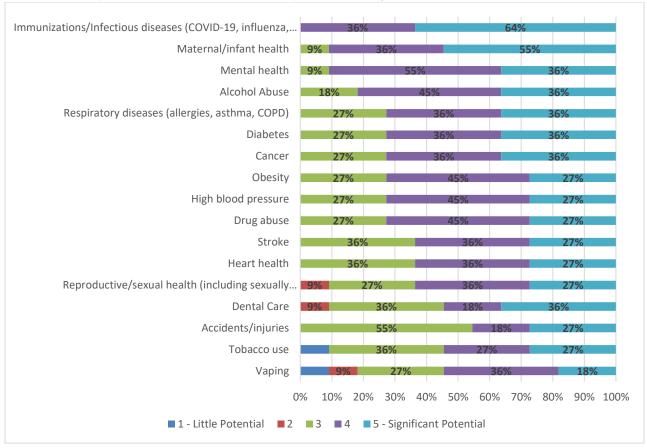
- > Stakeholders identified gaps in North St. Louis County around access to healthy food and affordable housing. They also identified gaps related to health services, community partnerships, mental health, resources for adolescents and asthma.
- > Stakeholders identified new issues of concern around housing and the mental health of children, as well as reduced support from religious institutions, childcare and health issues, and asthma.
- > Stakeholders most frequently mentioned **community agencies** as resources of which community members may be unaware. The county parks provide **recreational opportunities** for promoting health.
- > Several stakeholders suggested creating opportunities for more collaboration among community partners. Others suggested ways to increase access and provide related information.
- A few stakeholders identified **Ferguson** and **Jennings** as being a community at greatest risk. **Pine Lawn** and **Normandy** were mentioned by 1 stakeholder each along with the **Promise Zone** communities.

Two needs ranked of greatest concern in North St. Louis County: **mental health** and **maternal/infant health**. They were rated either a 4 or a 5 on a 1 to 5 scale. No one rated any of these needs of "little concern" (rating = 1).



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

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

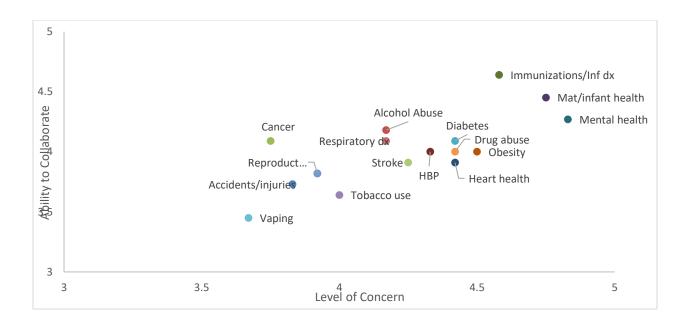


**Q5 & Q6:** How would you rate the potential of community partners in North St. Louis County to work together to address each of these health needs? Please rate each on a scale 1 (little potential) -5 (significant potential).

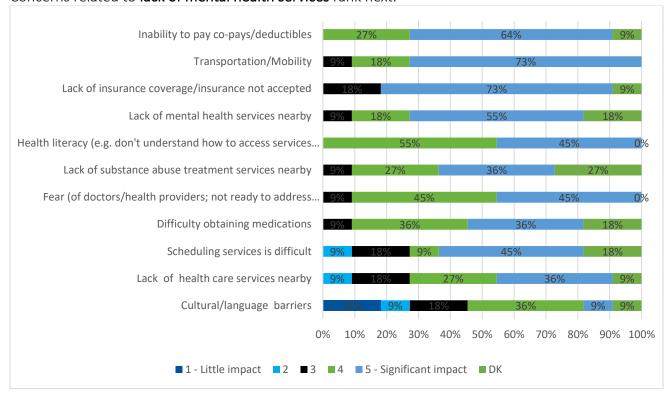
#### LEVEL OF CONCERN BY ABILITY TO COLLABORATE

Stakeholders rate immunizations and infectious disease, maternal/infant health, and mental health highest in level of concern and potential for collaboration.

Health Need	Level of Concern	Ability to		
пеанн меец	Level of Concern	Collaborate		
Mental Health	4.83	4.27		
Maternal/Infants Health	4.75	4.45		
Immunizations/Infectious	4.58	4.64		
Disease	4.36	4.04		
Obesity	4.50	4.00		
Diabetes	4.42	4.09		
Drug Abuse	4.42	4.00		
Heart Health	4.42	3.91		
High Blood Pressure	4.33	4.00		
Stroke	4.25	3.91		
Alcohol Abuse	4.17	4.18		
Respiratory Diseases	4.17	4.09		
Tobacco Use	4.00	3.64		
Dental Care	3.92	3.82		
Reproductive/Sexual Health	3.92	3.82		
Accidents/Injuries	3.83	3.73		
Cancer	3.75	4.09		
Vaping	3.67	3.45		



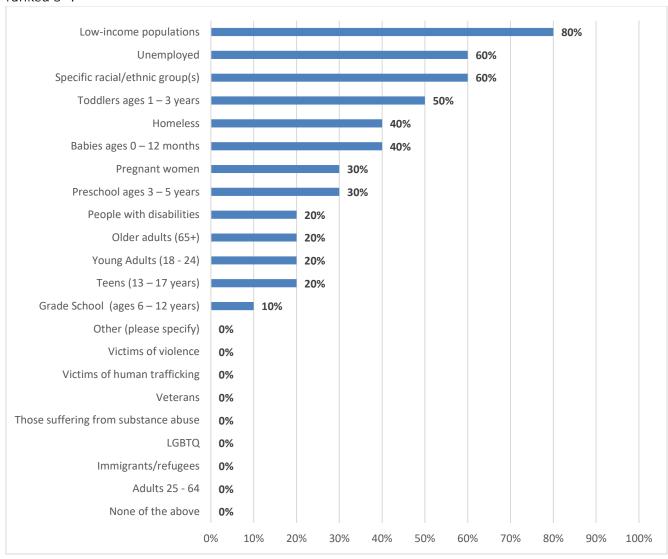
Stakeholders highly ranked many barriers to access in North St. Louis County with the **financial barriers related to health insurance** and **transportation** having the greatest impact on access. Concerns related to **lack of mental health services** rank next.



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

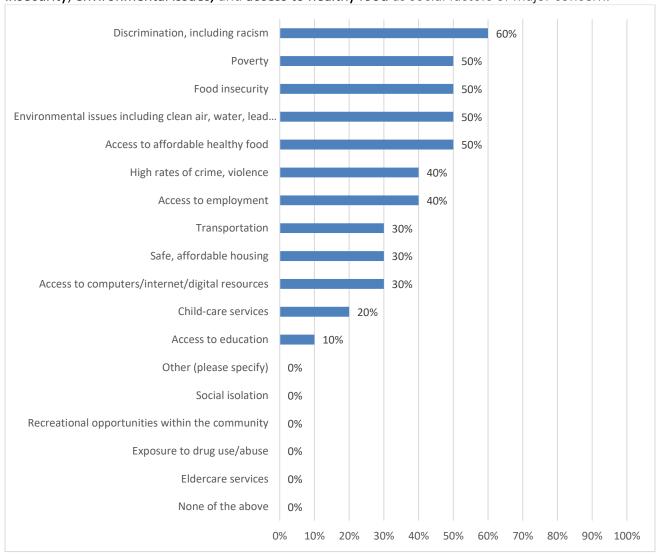
### POPULATIONS AT GREATEST RISK IN NORTH ST. LOUIS COUNTY

Most stakeholders identify **low-income populations**, the **unemployed and specific racial/ethnic groups** as being at greatest risk for poor health outcomes in St. Charles County. Toddlers age 1-3 ranked  $3^{rd}$ .



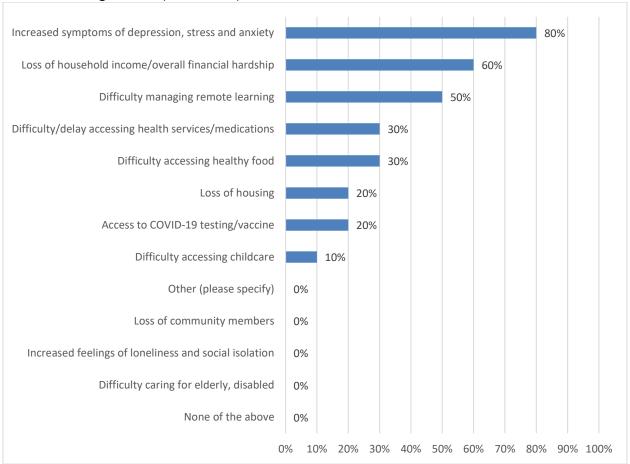
**Q8:** Among those you serve in North St. Louis County, which of the following populations are most at risk for poor health outcomes? Pick no more than five.

Over half of the stakeholders identified **discrimination** as the social factor having the greatest impact on the health of those living in North St. Louis County. Half identified **poverty**, **food insecurity**, **environmental issues**, and **access to healthy food** as social factors of major concern.



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

Stakeholders strongly agree that the greatest impact of COVID-19 has been on the **mental health** of North St. Louis 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** as an impact of the pandemic.



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

Stakeholders identified gaps in North St. Louis County around access to healthy food and affordable housing. They also identified gaps related to health services, community partnerships, mental health, resources for adolescents and asthma.

NEED	GAP
A	Food deserts in some pockets of STL North County
Access to healthy food (2 comments)	Support for those with food allergies that are also food insecure
Affordable Housing (2 comments)	Home repairs and the significant financial resources needs to maintain homes in the community. Older adults no longer have a steady/replenishing or increasing income to handle the eventual mishaps and catastrophes encountered in owning a home.
	Affordable housing- Finding well paying occupations to help with rising rent and mortgages
Access to health services (1 comment)	Trusting healthcare providers to provide information, access to care, and insurance policies to cover their needs.
Community Partnerships (1 comment)	Partnerships and Resources for community organizations already available
Mental Health (1 comment)	Mental health services (especially during pandemic) - Help with dealing with isolation, anxiety, and depression
Resources for adolescents (1 comment)	Things for adolescents to do (especially during the pandemic) - Community Centers or Recreation Centers
Respiratory diseases (1 comment)	In-home services to address asthma education and environmental assessments (IAQ) to identify the asthma triggers in the home

**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 housing and the mental health of children,

as well as reduced support from religious institutions, childcare and health issues, and asthma.

NEED	DESCRIPTION
	The rising cost of renting properties is a concern.
Housing issues (3 comments)	In addition, the need for housing codes to support the health and safety of renters e.g., similar to what has been implemented in the Kansas City.
	Affordable housing
	Mental Health for children and adolescents during the pandemic
Mental health of children ( 2 Comments)	Mental health techniques for managing and navigating social media for teens and adolescents
Reduced support from religious institutions (1)	A reduction in church or religious participation for additional financial assistance outside of social service agencies.
Issues related to child care and health (1)	School closings, childcare facilities not available, and school-based health facilities on site.
Asthma (1)	The high incidence of asthma in African American children and poor housing (substandard).

**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?

Stakeholders most frequently mentioned **community agencies** as resources of which community members may be unaware. The county parks provide **recreational opportunities** for promoting health.

RESOURCE TYPE	RESOURCE
	The library continues to be a major resource to the community for information, supplies and community involvement.
Community Agencies (3 comments)	Churches , school-based health, and community.
	Working in collaboration with community partners to address health issues collectively is greater than working in silos. For example, utilizing the schools with health centers as a resource provides another opportunity to effectively address the school-aged group.
Recreational Opportunities (1 comment)	The St. Louis county parks and municipality recreation centers.

**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 North St. Louis County that we may not be aware of?

### IDEAS FOR IMPROVING THE HEALTH OF THE COMMUNITY

Several stakeholders suggested creating opportunities for more **collaboration among community partners**. Others suggested ways to **increase access** and provide related information.

NEED	DESCRIPTION
	Identify how their work can compliment or act as a resource with others.
More collaboration (3 comments)	Collaboration among organizations for systemic changes
	Community meetings
Resources for health services access (2	Create a free basic care substation.
comments)	Access to care placed in a directory.

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

A few stakeholders identified Ferguson and Jennings as being a greatest risk. Pine Lawn and Normandy

were mentioned by 1 stakeholder each along with the Promise Zone communities.

NEED	DESCRIPTION
Ferguson (2 mentions)	63135
Jennings (2 mentions)	63136
Pine Lawn (1 mentions)	63120
Normandy (1 mention)	63121
Promise Zone communities (1 mention)	Includes parts of north city and county

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

### **NEXT STEPS**

Using the input received from community stakeholders, Christian Hospital will consult with its 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: PARTICIPATING STAKEHOLDERS

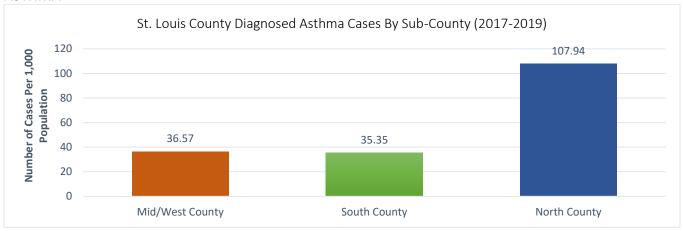
#### ONLINE SURVEY PARTICIPATING NORTH COUNTY STAKEHOLDERS LAST NAME FIRST NAME **ORGANIZATION** TITLE CITY/TOWN Colbert Edith St. Luke's Hospital Medical Doctor St. Louis Community Engagement Hinton Courtney Prevent + Ed St. Louis Manager Asthma & Allergy Foundation-St. Jennings Katie Senior Program Manager St. Louis MacMullan Gigi Refuge & Restoration Director of Development St. Louis Mueller Alan N/A N/A Ferguson Seindenfeld Miriam Jewish Family Services of St. Louis Chief Executive Officer St. Louis Co-Director of Community Simpson IV Theodore Alive & Well Communities Jennings Activation Smith Muriel St. Louis Area Diaper Bank **Executive Director** St. Louis Sydnor SonJoria Our Family's Doing Yoga Founder St. Louis St. Louis County Department of Assistant Environmental Theard Joyce Berkeley Public Health Director Community Engagement Weidner Cornerstone Realty St. Louis Joy Coordinator Williams Petra Aging Ahead Community Options Specialist St. Louis

APPENDIX F: Christian hospital internal work group

CHRISTIAN HOSPITAL INTERNAL WORK GROUP					
LAST NAME	FIRST NAME	TITLE	DEPARTMENT		
Ballenger	Dana	Director	Case Management		
Chung	Necole	Director	Foundation		
Davis	Danyal	Manager	Financial Services		
Douglas	Teconda	Nurse Practitioner	CH Transition to Wellness		
Drake	Paul	Manager	CHAPS		
Hanks	Brianna	Consultant	Safety and Quality		
King	Karley	Program Manager	Communication & Marketing		
МсСоу	Alisha	Manager	Case Management		
Onifade	Moyosore	Medical Doctor	Medical Services		
Rhine	Latisha	Manager	Patient Access		
Session	Lashonda	Director	Business Development		
Thurman	Christina	Director	Marketing & Communication		
Van Hook	Cokeisha	Director	Nursing Administration		
Watson	Shannon	Manager	Emergency Medical Services		

## Appendix G: Secondary Data

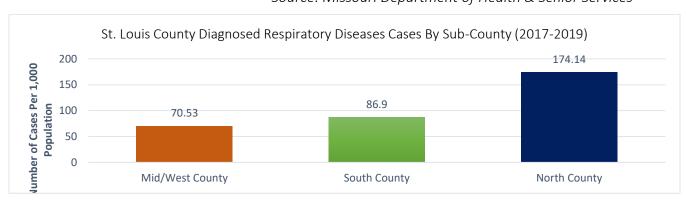
### **ASTHMA**



Source: Explore Mo Health

ST. LOUIS COUNTY VS. MISSOURI THREE-YEAR MOVING ASTHMA AVERAGE RATE						
HEALTH INDICATORS	2015-20	)17	2016-20	18	2017-20	19
	St. Louis County	Missouri	St. Louis County	Missouri	St. Louis County	Missouri
Asthma Death / 100,000 Population	1.17	1.1	1.31	1.15	1.16	1.06
	2011-20	)13	2012-20	14	2013-20	15
Asthma Hospitalizations /10,000 Population	15.51	11.74	15.06	11.44	14.08	10.65
Asthma EMERGENCY ROOM Visits/ 1000 Population	7.6	5.39	7.78	5.47	7.56	5.34

Source: Missouri Department of Health & Senior Services



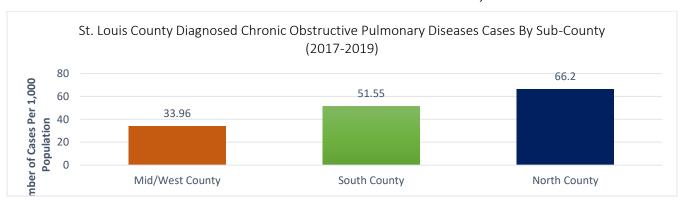
Source: Explore Mo Health

2018 vs. 2019 TOP TEN CITIES IN ST. LOUIS COUNTY WITH CURRENT ASTHMA (PERCENT) **RANK** CITIES YEAR 2018 CITIES YEAR 2019 1 Wellston 14.2 Wellston 14.2 Flordell Hills 13.5 Country Club Hills 13.8 2 Hillsdale 3 Kinloch 13.7 13.3 Bel-Ridge 13.1 Flordell Hills 13.6 4 5 Hanley Hills 13.1 Bel-Ridge 13.4 6 Pagedale 13.1 Hanley Hills 13.4 7 Velda City Hillsdale 13.1 13.3 Country Club Hills 13.0 Glasgow Village 13.2 8 9 Glasgow Village 13.0 Pine Lawn 13.2 10 Kinloch 13.0 Northwoods 13.1

Source: Conduent Healthy Communities Institute

ST. LOUIS COUNTY VS. MISSOURI ASTHMA RATE BY RACE / ETHNICITY						
HEALTH INDICATORS	WHITE		AFRICAN AMERICAN			
	ST. LOUIS COUNTY	MISSOURI	ST. LOUIS COUNTY	MISSOURI		
Death / 100,000 Population (2009-2019)	0.66	0.79	3.16	3.2		
Hospitalizations / 10,000 Population (2011-2015)	6.76	7.13	37.17	35.59		
Emergency Room Visits / 1,000 Population (2011-2015)	2.4	3.02	20.06	18.16		

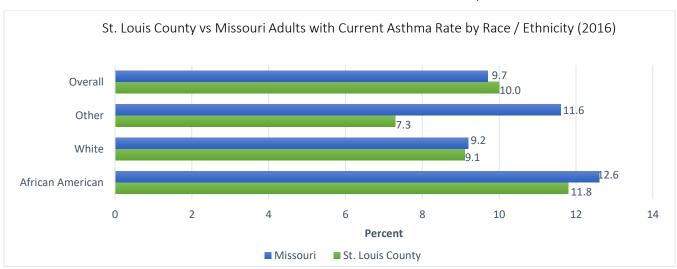
Source: Conduent Healthy Communities Institute



Source: Explore MO Health

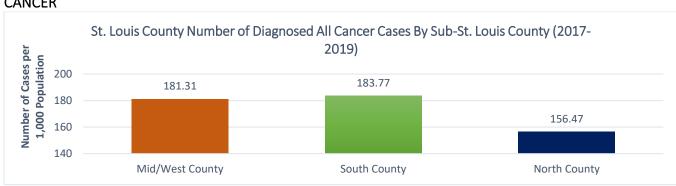
ST. LOUIS COUNTY VS. MISSOURI & U.S. RESPIRATORY DISEASES RATE			
HEALTH INDICATORS	ST. LOUIS COUNTY	MISSOURI	U.S.
Adults with Current Asthma in Percent (2016)	10.0	9.7	9.3
Age-Adjusted Death Rate due to Chronic Lower Respiratory Disease /100,000 Population (2015-2019)	30.1	50.4	40.2
Asthma: Medicare Population in Percent (2018)	5.6	4.5	5.0

Source: Conduent Healthy Communities Institute

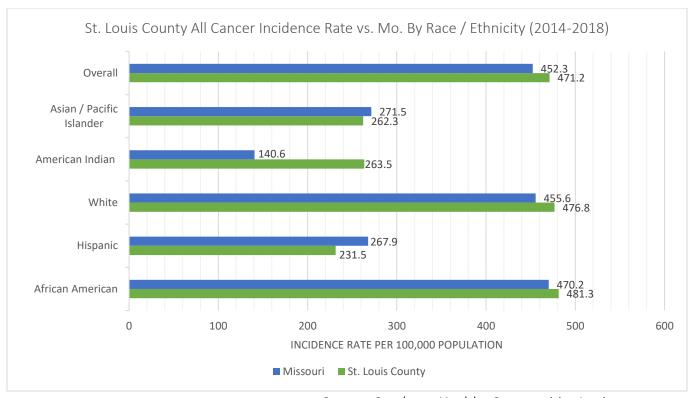


Source: Conduent Healthy Communities Institute

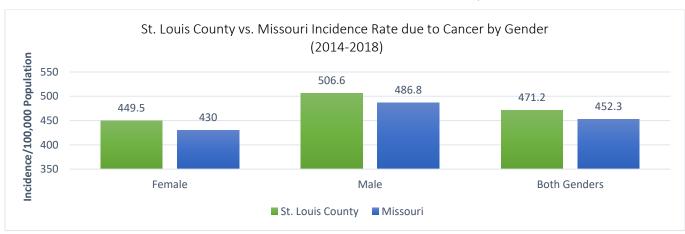
### **CANCER**



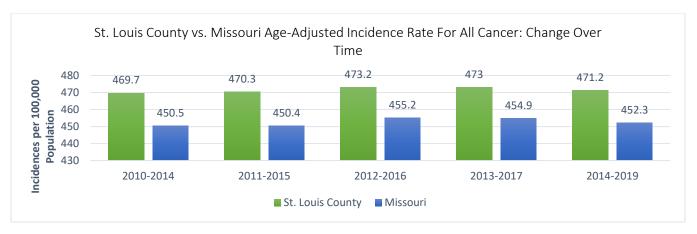
Source: Explore Mo Health



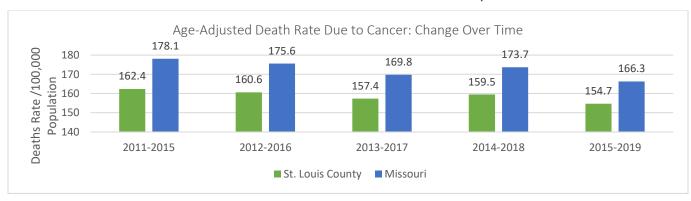
Source: Conduent Healthy Communities Institute



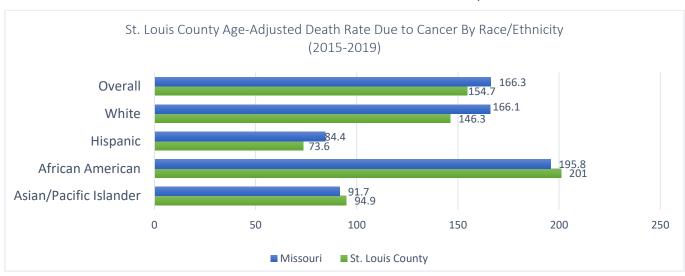
Source: Conduent Healthy Communities Institute



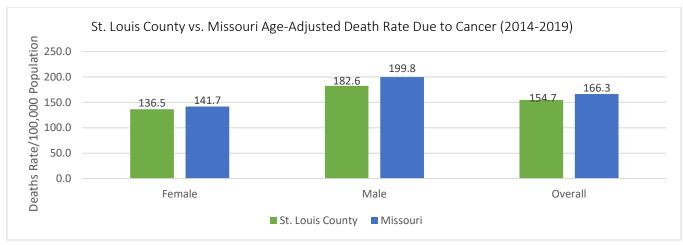
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

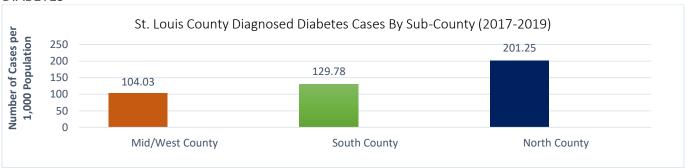


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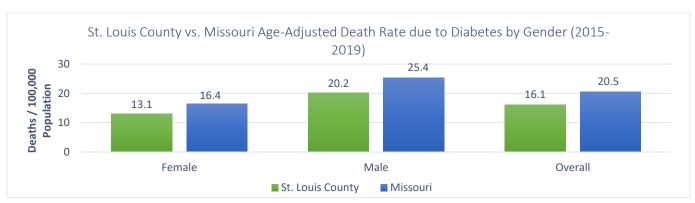


Source: Conduent Healthy Communities Institute

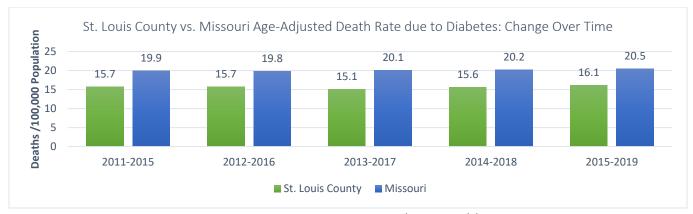
### **DIABETES**



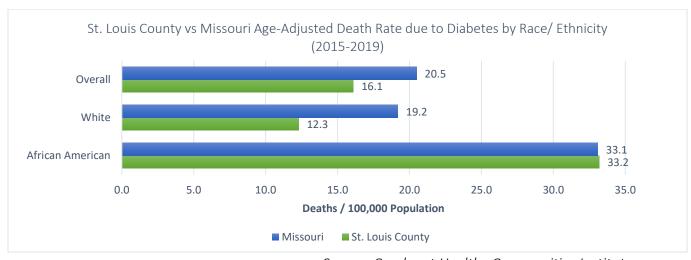
Source: Explore Mo Health



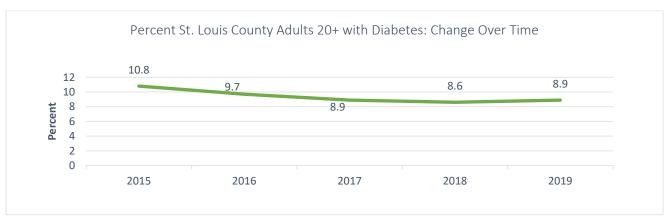
Source: Conduent Healthy Communities Institute



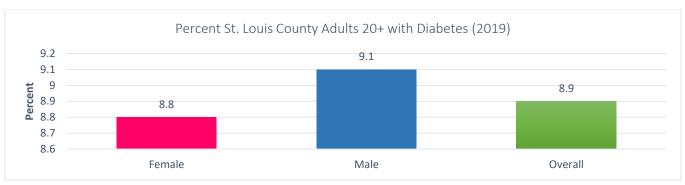
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



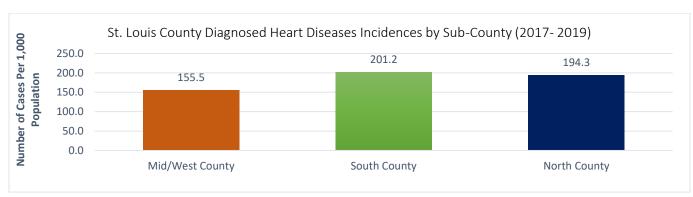
Source: Conduent Healthy Communities Institute

2018 vs	2018 vs. 2019 TOP TEN CITIES IN ST. LOUIS COUNTY WITH ADULTS WITH DIABETES (PERCENT)					
RANK	CITIES	YEAR 2018	CITIES YEAR 2019			
1	Velda Village Hills	22.3	Northwoods 23.7			
2	Uplands Park	22.2	Velda Village Hills 23.1			
3	Northwoods	21.7	Uplands Park 23			
4	Velda City	19.6	Kinloch 21.5			
5	Wellston	19.5	Velda City 20.2			
6	Beverly Hills	19.2	Wellston 20.1			
7	Pagedale	18.7	Beverly Hills 19.9			
8	Kinloch	18.6	Pine Lawn 19.7			
9	Pine Lawn	18.4	Pagedale 19.6			
10	Moline Acres	18.3	Moline Acres 19.5			

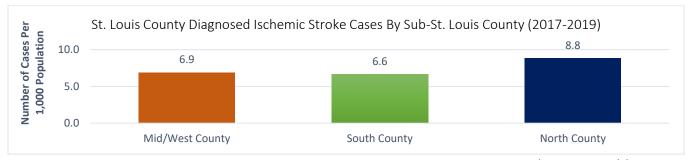
Source: Conduent Healthy Communities Institute

Moline Acres

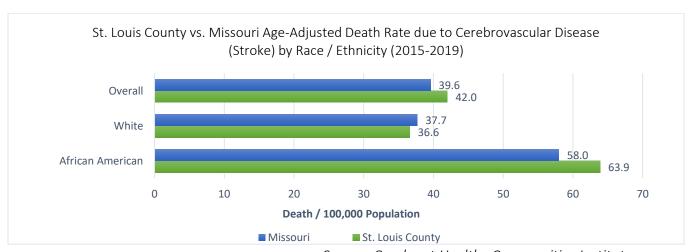
### **HEART HEALTH & STROKE**



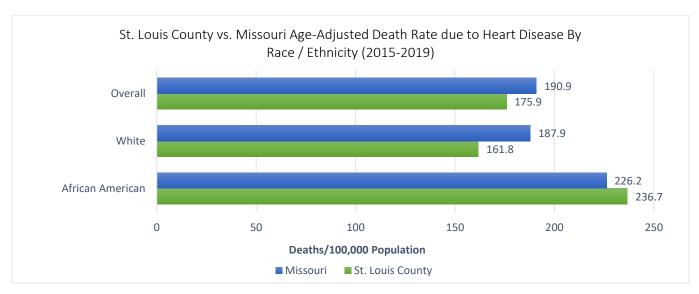
Source: Explore Mo Health



Source: Explore Mo Health



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

ST. LOUIS COUNTY VS. MISSOURI HEART DISEASE & STROKE AGE-ADJUSTED RATE					
HEALTH TOPICS	ST. LOUIS COUNTY	MISSOURI			
HEART DISEASE					
Deaths / 100,000 Population (2009-2019)	178.69	193.95			
Hospitalizations / 10,000 Population (2011-2015)	106.11	109.46			
Emergency Room Visits / 1,000 Population (2011-2015)	12.67	15.12			
ISCHEMIC HEART DISEASE					
Deaths / 100,000 Population (2009-2019)	120.16	115.62			
Hospitalizations / 10,000 Population (2011-2015)	26.54	32.53			
Emergency Room Visits / 1,000 Population (2011-2015)	0.12	0.57			
STROKE / OTHER CEREBROVASCULAR DISEASE					
Deaths / 100,000 Population (2009-2019)	40.25	41.02			
Hospitalizations / 10,000 Population (2011-2015)	30.15	27.85			
Emergency Room Visits / 1,000 Population (2011-2015)	0.33	0.77			

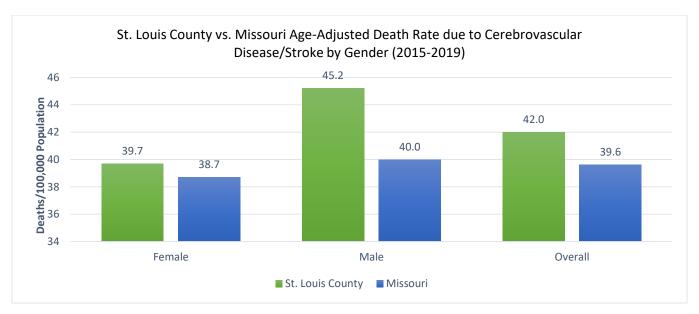
Source: Missouri Department of Health & Senior Services

ST. LOUIS COUNTY VS. MISSOURI HEART DISEASE & STROKE AGE-ADJUSTED RATE BY RACE / ETHNICITY						
	WHITE	WHITE		AFRICAN AMERICAN		
HEALTH INDICATORS	ST. LOUIS COUNTY	MISSOURI	ST. LOUIS COUNTY	MISSOURI		
HEART DISEASE						
Deaths / 100,000 Population(2009-2019)	165.8	190.86	238.48	228.99		
Hospitalizations / 10,000 Population (2011-2015)	88.71	102.13	173.23	164.99		
Emergency Room Visits / 1,000 Population (2011-2015)	8.47	13.48	25.67	25.7		
ISCHEMIC HEART DISEASE						
Deaths / 100,000 Population (2009-2019)	112.5	114.56	160.42	131.74		
Hospitalizations / 10,000 Population (2011-2015)	24.19	32.06	35.42	33.04		
Emergency Room Visits / 1,000 Population (2011-2015)	0.09	0.59	0.21	0.35		
STROKE / OTHER CEREBROVASCULAR DISEASE						
Deaths / 100,000 Population (2009-2019)	36.12	39.53	58.65	55.53		
Hospitalizations / 10,000 Population (2011-2015)	24.75	25.66	51.53	44.57		
Emergency Room Visits / 1,000 Population (2011-2015)	0.24	0.77	0.65	0.69		

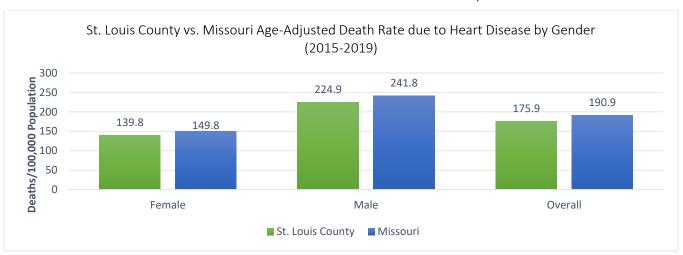
Source: Missouri Department of Health & Senior Services

ST. LOUIS COUNTY VS. MISSOURI HEART DISEASE & STROKE THREE-YEAR MOVING AVERAGE RATES							
	ST. LOUIS COUNTY	MISSOURI	ST. LOUIS COUNTY	MISSOURI	ST. LOUIS COUNTY	MISSOURI	
DEATHS / 100,000 POPULATION	2015-2017		2016-2018		2017-2019		
Heart Disease	176.26	193.5	176.62	190.44	175.93	188.49	
Ischemic Heart Disease	111.46	108.36	111.16	105.2	109.81	102.31	
Stroke / Other Cerebrovascular Disease	41.5	40.65	42.15	39.94	43.1	39	
HOSPITALIZATIONS / 10,000 POPULATION	2011-2	2011-2013 2012-201		1014	2013-2015		
Heart Disease	113.24	115.58	104.86	108.12	98.17	102.68	
Ischemic Heart Disease	28.21	34.89	25.94	31.91	24.53	30.04	
Stroke / Other Cerebrovascular Disease	30.84	28.44	29.9	27.47	29.36	27.16	
EMERGENCY ROOM VISITS / 1,000 POPULATION	2011-2013		2012-2014		2013-2015		
Heart Disease	12.89	15.25	12.75	15.1	12.52	14.97	
Ischemic Heart Disease	0.12	0.6	0.11	0.57	0.11	0.54	
Stroke / Other Cerebrovascular Disease	0.33	0.78	0.33	0.76	0.32	0.75	

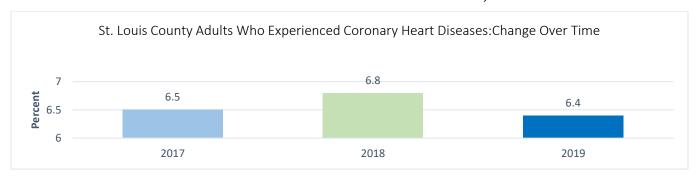
Source: Missouri Department of Health & Senior Services



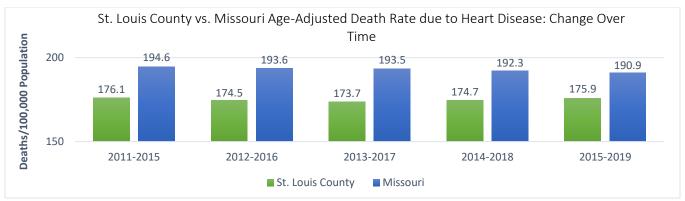
Source: Conduent Healthy Communities Institute



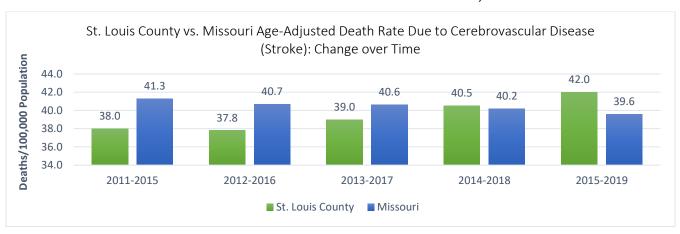
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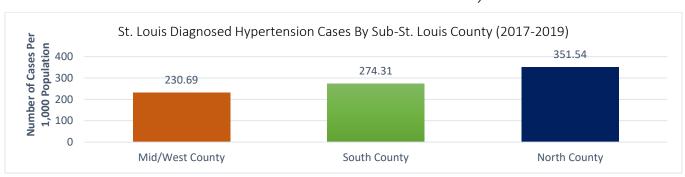
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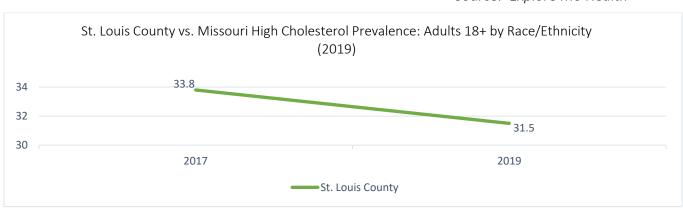
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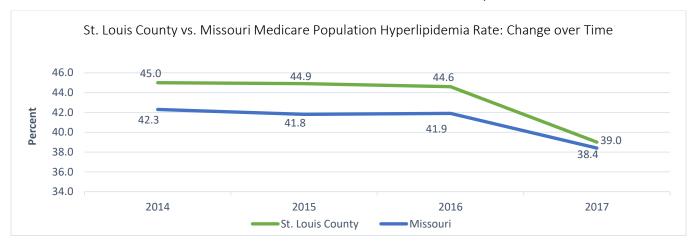
Source: Conduent Healthy Communities Institute



Source: Explore Mo Health



Source: Conduent Healthy Communities Institute

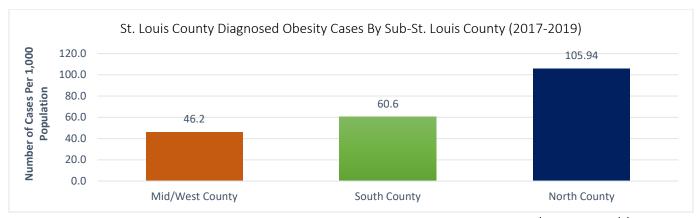


Source: Conduent Healthy Communities Institute

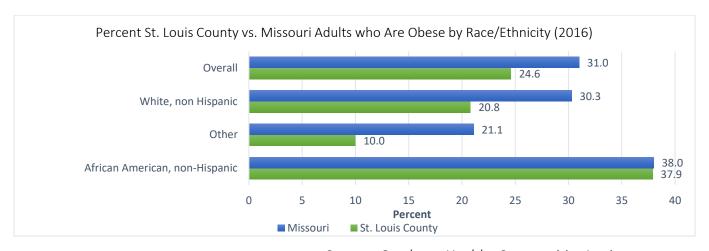
2018 vs. 2019 TOP TEN CITIES IN ST. LOUIS COUNTY WHO EXPERIENCED CORONARY HEART DISEASE (PERCENT)							
RANK	CITIES	YEAR 2018	CITIES YEAR 2019				
1	Wellston	48.9	Wellston 49.6				
2	Kinloch	46.2	Kinloch 49.5				
3	Velda Village Hills	45.9	Country Club Hills 47.3				
4	Pagedale	45.4	Northwoods 47.3				
5	Uplands Park	45.4	Hanley Hills 47.0				
6	Hanley Hills	45.3	Pine Lawn 46.8				
7	Northwoods	45.1	Velda Village Hills 46.8				
8	Beverly Hills	45.0	Pagedale 46.5				
9	Pine Lawn	45.0	Uplands Park 46.4				
10	Velda City	45.0	Moline Acres 46.0				

Source: Conduent Healthy Communities Institute

### **OBESITY**

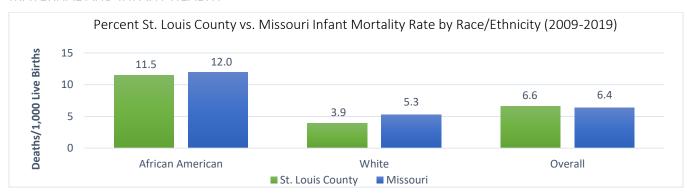


Source: Explore Mo Health

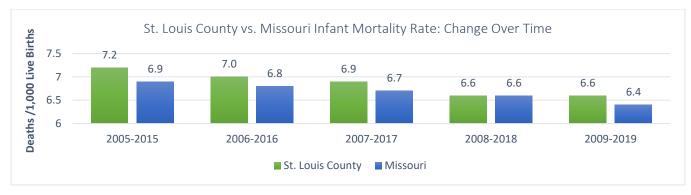


Source: Conduent Healthy Communities Institute

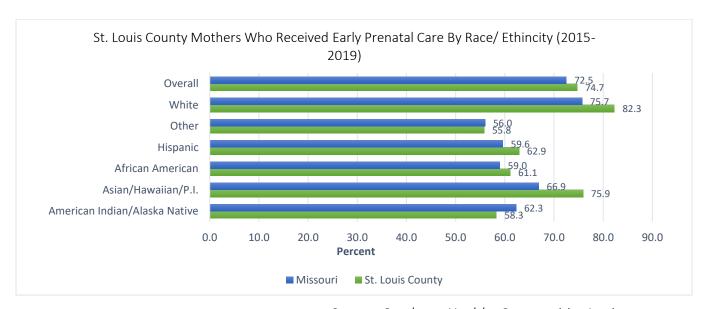
### MATERNAL AND INFANT HEALTH



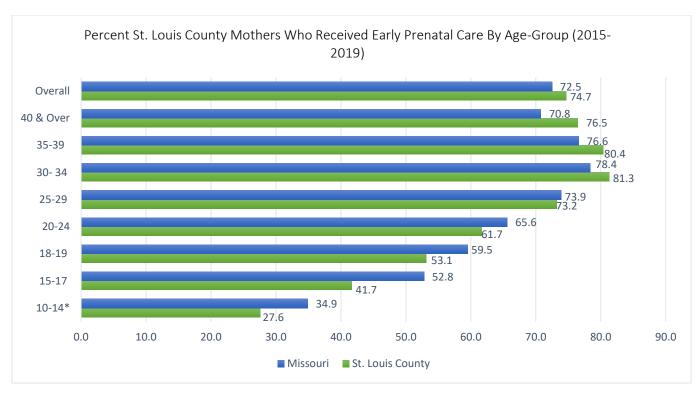
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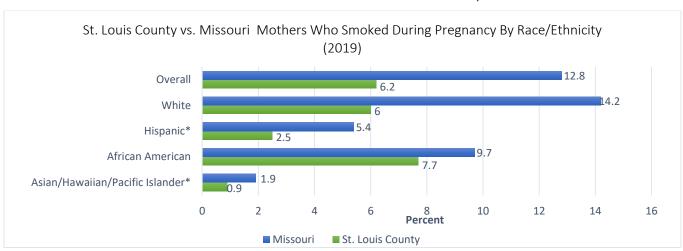
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

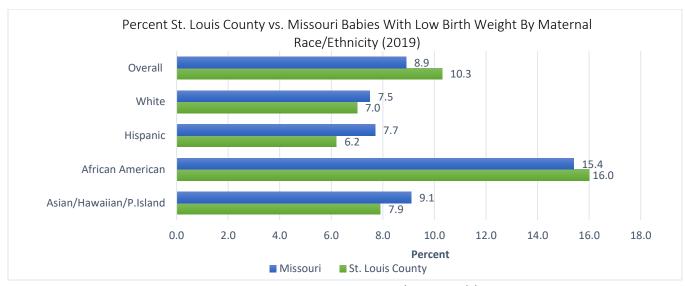


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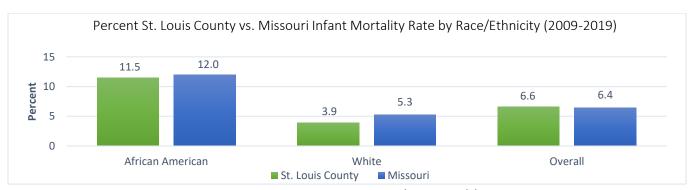


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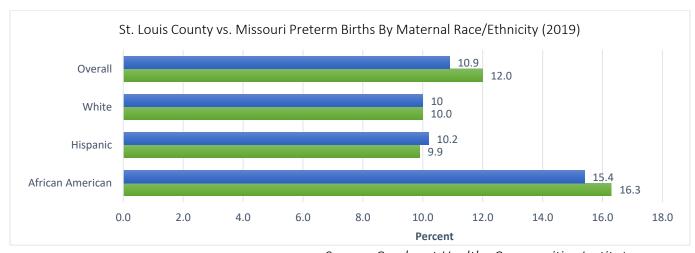
(Value may be statistically unstable and should be interpreted with caution)



Source: Conduent Healthy Communities Institute

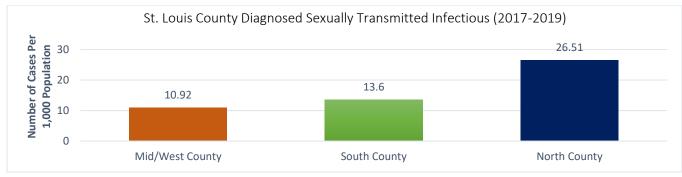


Source: Conduent Healthy Communities Institute

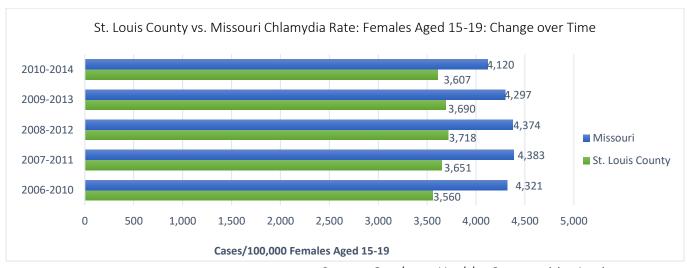


Source: Conduent Healthy Communities Institute

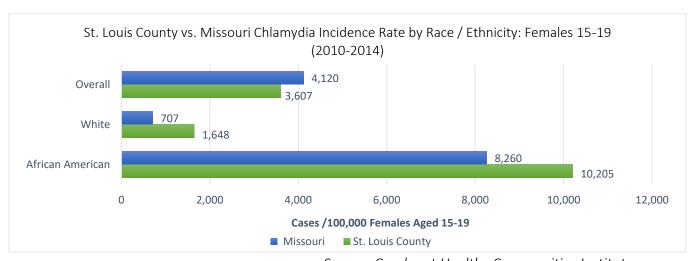
### SEXUALLY TRANSMITTED INFECTIONS



Source: Explore Mo Health

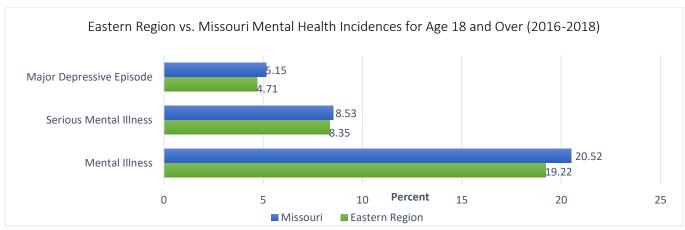


Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

### MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH



Source: Missouri Department of Mental Health

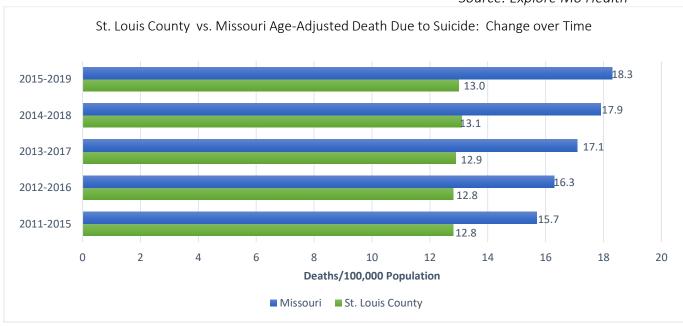
ST. LOUIS COUNTY TOTAL NUMBER OF COMPREHENSIVE PSYCHIATRIC SERVICES BY DIAGN	NOSISES:
CHANGE OVER TIME	

DISORDERS	FY2019	FY2020	FY2021
Anxiety and Fear Disorders	640	1006	1619
Bipolar Mood Disorders	1583	1724	1836
Depression Mood Disorders	2636	3093	3682
Developmental & Age Related Disorders	957	1079	1305
Impulse Control& Conduct Disorders	330	432	481
Personality Disorders	590	665	753
Schizophrenia & Psychotic Disorders	1745	1993	2013
Sexual Disorders	12	11	12
Trauma & Stress Related Disorders	710	986	1380
Other Disorders	51	64	82
Diagnosis Unknown	249	40	34
TOTAL PSYCHIATRIC SERVICE PER YEAR	9503	11093	13197

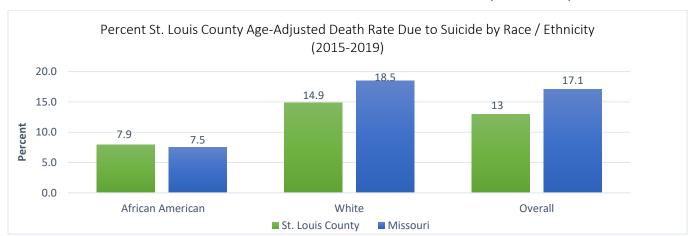
Source: Missouri Department of Mental Health



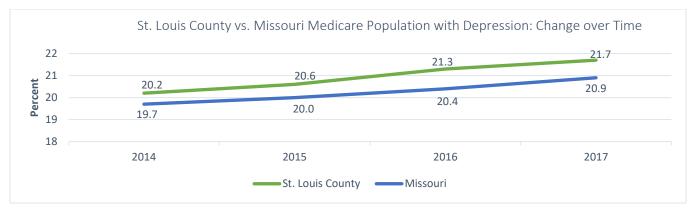
Source: Explore Mo Health



Source: Conduent Healthy Community Institute

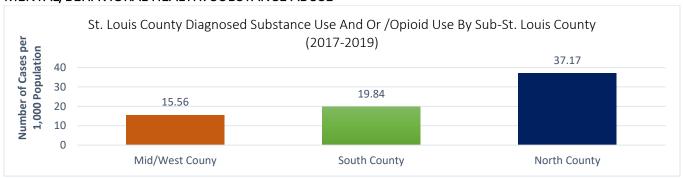


Source: Conduent Healthy Community Institute

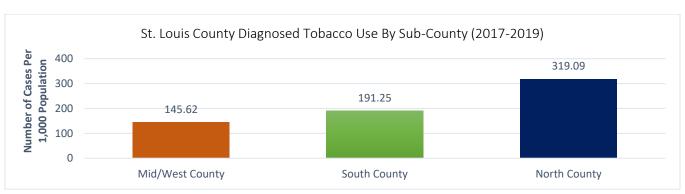


Source: Conduent Healthy Community Institute

### MENTAL/BEHAVIORAL HEALTH: SUBSTANCE ABUSE



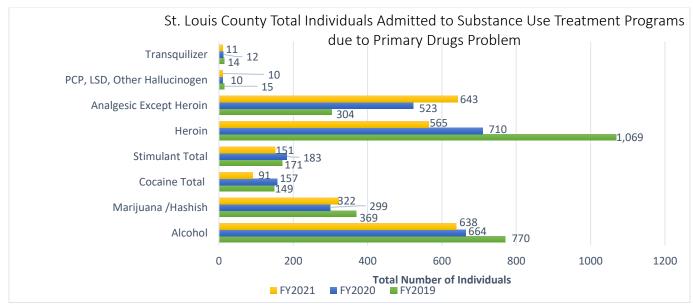
Source: Explore Mo Health



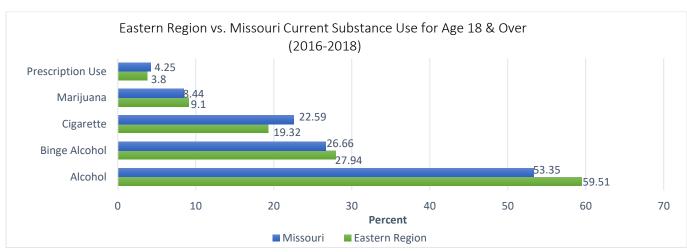
Source: Explore Mo Health



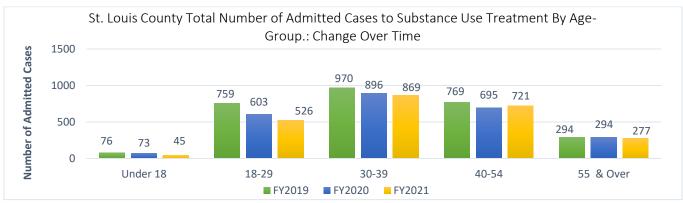
Source: Explore Mo Health



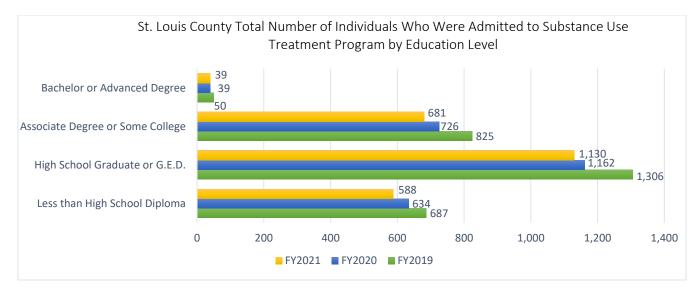
Source: Missouri Department of Mental Health



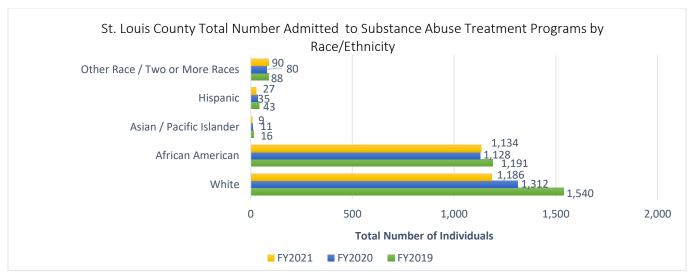
Source: Missouri Department of Mental Health



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

### **Heart Health**

Heart disease is the leading cause of death in the United States. Heart disease can result in poor quality of life, disability, and death. Though, the disease is common, it 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 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 GOAL:

Reduce disease and economic burden of heart failure conditions and improve the quality of life for all persons who have or are at risk to have heart failure.

### Strategy OBJECTIVES:

Increase the proportion of persons living in North St. louis County with heart failure receiving formal nutrition and disease maintenance education by 5% by the end of 2023 and thereafter.

Increase the proportion of persons living at North St. Louis County at risk of heart failure that receive preventative care and education by 5% by the end of 2023 and thereafter.

### Strategy ACTION PLAN:

Engage all stakeholders in a Heart Failure Steering committee.

Christian Hospital outpatient dietitians, as contracted through Morrison Healthcare, will provide physician ordered 1:1 heart health nutrition counseling, nutrition and chronic heart health conditions courses, and educational resources, free of charge.

Educate physicians to send referrals for nutritional counseling education via fax or electronic charting system.

Liaise with the Family Care Pharmacy and Mobile Pharmacy Team to increase the delivery of heart failure specific medications before patients are discharged.

Collaborate with the Marketing and Communications team to increase usage of Christian Hospital social media to promote heart health resources.

### Strategy OUTCOMES:

Establish a Heart Failure Steering Committee to aid in accomplishing program objectives.

Increase awareness of the importance of heart health, preventative measures, and heart health nutrition through Christian Hospital social media by 10%.

Increase the number of patients receiving medications filled by Christian Hospital's mobile pharmacy service specific to the treatment of heart failure by 5%.

### Strategy OUTCOMES MEASUREMENT:

Christian Hospital will obtain monthly data depicting the number of patients receiving heart failure medications filled by the Mobile Pharmacy service.

Christian Hospital will establish a Steering Committee that will monitor readmissions and assess progress on all efforts.

Christian Hospital will monitor the number of posts and views (specific to videos) on our social media platforms regarding heart health and preventative medicine.

### **DIABETES MELLITUS**

### STRATEGY RATIONALE

More than 30 million people in the United States have diabetes, and it's the seventh leading cause of death. Some racial/ethnic minorities are more likely to have diabetes. And many people with diabetes don't know they have it. Poorly controlled or untreated diabetes can lead to leg or foot amputations, vision loss, and kidney damage. But interventions to help people manage diabetes can help reduce the risk of complications. In addition, strategies to help people who don't have diabetes eat healthier, get physical activity, and lose weight can help prevent new cases.

#### STRATEGY GOAL:

Reduce disease and economic burden of diabetes mellitus (DM) and improve the quality of life for all persons who have or are at risk to have diabetes.

### STRATEGY OBJECTIVE:

Increase social determinants of health food insecurity and financial resource strain screenings on diabetic patients enrolled in CHAP by 5% by the end of 2023 and yearly thereafter.

Increase dietitian education for diabetes patients with an A1C greater than 8.0 to reduce hospital readmissions related to diabetes by 2% by the end of 2023 and yearly thereafter.

Increase overall knowledge of participants regarding carbohydrate content post discharge by 5% in the inpatient and/or outpatient setting by the end of 2023 and yearly thereafter.

### STRATEGY ACTION PLAN:

Christian Hospital Diabetic Educators will schedule three education sessions for newly diagnosed diabetic patients

Christian Hospital Diabetic Educators will provide free supplies including meters and continuous glucose monitor samples to patients in need.

Christian Hospital inpatient dieticians will run an Epic report showing patients in hospital with an A1C greater than 8 and add any with an existing consult to their list to see that day.

Educate physicians and nursing to send consults for Diabetic Educator resources early in admission.

CHAP team assess and screen patients enrolled in the program with social determinants of health barriers to include financial resource strain and food insecurities.

### STRATEGY OUTCOMES:

Increase the proportion of persons with diabetes who receive formal diabetes education.

Increase education of newly diagnosed diabetic inpatients to three sessions.

Increase the proportion of persons with diabetes whose conditions have been screened.

### **OUTCOMES MEASUREMENT:**

Christian Hospital will track the patients that receive three education sessions as newly diagnosed diabetics.

Christian Hospital will monitor readmission rates of patients with a primary diagnosis of diabetes to measure success outside of the hospital.

Christian Hospital will track the diabetic patients enrolled in CHAP being screen for food insecurities and financial strain.

Christian Hospital will monitor the number of patients receiving dietitian education with an A1C greater than 8.

### Community Health Needs that Will Not be Addressed

Christian Hospital is positioned to actively impact the top two community health needs as identified through this study. The health needs below are not currently being addressed through this study; however Christian Hospital has programs in place that allow us to influence five of the top 10 community health needs. (Listed in order of priority of needs 3-10)

**ACCIDENTS/INJURIES-** The community works together as a whole to tend to accidents/injuries. Christian Hospital EMS and Christian Hospital work triage patients in any instance to assure patients in these circumstances get the immediate care they need.

**CANCER** – Community benefit programs are currently funded that allow us to address cancer education and prevention such as the Free PSA screenings and the Mammo-thon, providing mammograms for underinsured women in the community. However, we do not actively coordinate a program outside of our Komen grant. The greater community is actively involved with events through the American Cancer Society.

**DENTAL HEALTH** – The hospital does not currently have the clinical opportunities to provide dental care to our community members.

**DRUG /ALCOHOL ABUSE** - There are several Alcoholics Anonymous and Narcotics Anonymous meetings and counselors in the North St. Louis County who address drug and alcohol abuse. CH will be focus on offering the services of EPICC for drug abuse to bridge those in need of treatment and enroll them in rehabilitation programs by licensed counselors.

**HEART & VASCULAR: STROKE** – The hospital does not currently have the financial and staffing ability to actively educate and screen the community for stroke. We do, however, offer education throughout the year at community events and offer a paper risk assessment for people to weigh their risk of stroke.

**HIGH BLOOD PRESSURE-** Christian Hospital and all area providers focus on treatment and cause of high blood pressure when assessing patients. CH participates in local health fairs, where blood pressure is tracked and if it is high, they are called and referred to a primary care provider to address their health issue.

**IMMUNIZATION/ INFECTIOUS DISEASE** – The hospital does not currently have the financial ability to actively educate and screen the community for infectious disease. We do, however, provide funds for free flu shots given in the community.

MATERNAL/INFANT HEALTH- Christian Hospital's Northwest Emergency Department always has pediatrics in house. North St. Louis County community offers several resources through OB Clinics, the health department, and the pregnancy resource center.

**MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH** – The hospital does not currently have the financial ability to actively educate and screen the community. We offer support groups for substance abuse and other mental diagnosis through our outpatient mental health center.

**OBESITY-** The hospital does not currently have the financial ability to actively educate the community for obesity. We do, however, have the weight loss challenge, which helps educate community members who choose to join and pay a small fee, on nutrition, motivation, mental and physical benefits to losing weight.

**REPRODUCTIVE HEALTH** – The hospital does not currently offer clinical support for obstetrics, thus a focus on reproductive health is minimal.

**RESPIRATORY DISEASE**- Although not a single priority, Christian Hospital continues to address through education initiatives already in place with our Pulmonary Rehab program.

**SMOKING/TOBACCO USE** – The hospital does not currently have the financial ability to actively educate the community for Smoking/Tobacco use. We do, however, provide smoking cessation for employees and family members along with promoting smoking cessation with flyers and brochures at community events.

**VAPING-** Vaping is an issue within the community, it is currently being addressed in the local school districts and with parent education. CH will touch on vaping and its correlation with substance use through the CHNA.