

BOLIVAR COMMUNITY SUMMARY

Regional Health Assessment



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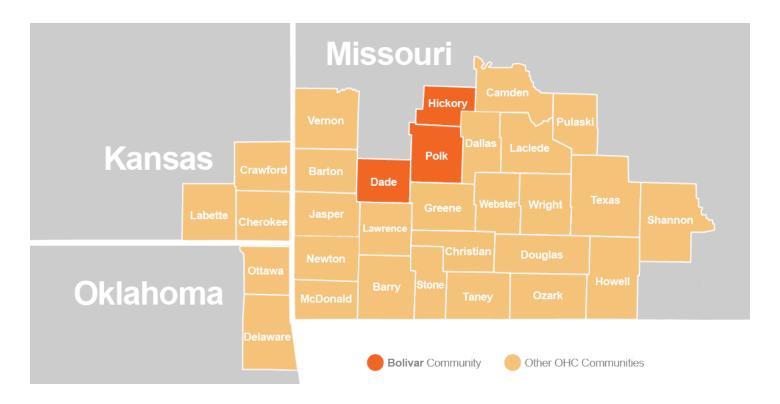


INTRODUCTION





Every three years since 2016, organizations under the umbrella of Ozarks Health Commission (the Commission) come together to publish a Regional Health Assessment (RHA). The Commission's work has been recognized at the annual meeting of the American Public Health Association, honored as a Promising Practice by the National Association of County and City Health Officials and awarded the Group Merit Award from the Missouri Public Health Association. Building upon the success of the 2016 and 2019 regional health assessments, in 2021 partners again sought to better understand the health status, behaviors and needs of the populations served. The resulting 2022 Regional Health Assessment combines more than 200 hospital and community indicators with feedback from stakeholders and citizens. The region includes counties spanning southwest Missouri, southeast Kansas and northeast Oklahoma. The full Ozarks Health Commission RHA can be found at ozarkshealthcommission. org. Within the Commission Region, seven multi-county communities were defined based on hospital service areas. The Bolivar Community is a three-county area that is serviced by Citizens Memorial Healthcare. The Bolivar Summary presents key findings for the area and describes the process used to prioritize the top assessed health issues of concern. The document provides local stakeholders and organizations with information necessary to better understand the health needs of the community.



SERVICE AREA

The Bolivar Community is made up of three Missouri counties: Polk, Hickory and Dade. The data collected for the Bolivar Community service area was based on the only participating hospital serving this area, Citizens Memorial Hospital and the only health center, Ozark Community Health Center.

Citizens Memorial Healthcare system (CMH) serves thousands of patients each year between their Hospital and federally certified rural health clinics; CMH is committed to providing high quality care to their patients and residents living in their seven county service region.

Ozark Community Health Center (OCHC) serves many patients throughout each year. Along with regular medical services, they are well established for providing access to dental services throughout the Bolivar Community. With that includes their providing access to care for many by offering a sliding scale fee discount to self-pay patients, including those who have health insurance, but qualify by income.

The county seat for Polk County is Bolivar, which is also the largest community in the county with a population just over 32,000 residents. Bolivar is located in Southwest Missouri, 30 miles north of Springfield, MO. It provides many conveniences and services to the rural area in which it is located. Greenfield, with a population of 1200 residents, is the county seat for Dade. Hermitage, with a population of 508 residents, is the county seat of Hickory.



POPULATION OVERVIEW

The Ozarks Health Commission (OHC) noted several important demographic and population trends within the three-county Bolivar Community. This community is home to 48,730 individuals, an increase of 10.9% between 2000 and 2010. Nearly 22% of community residents being minors under the age of 18, while approximately 41% are over the age of 55. Meaning, that the population is, on average, older than both the region and nation. Older residents are more likely to be living with chronic illnesses and require access to more health services. Further, approximately 57% of the community is within the age grouping of 18-64, which drives the workforce in the community.

In the three-county area, approximately 22% of the total population is living with a disability, which is higher than the regional rate of 17.3% and the national rate of 12.6%. This may contribute to access to care and health disparities amongst the residents living in the community with a disability. Factors such as this, must be considered when planning for improvement in rural versus urban areas.

Other factors that contribute to the overall vulnerability of the population of the community. Include people living in poverty, minorities, and the elderly. These populations may often experience higher rates of chronic illness and worse health outcomes. To ensure vulnerable and at-risk populations were considered when identifying and addressing community health needs, the Ozarks Health Commission identified them in each community using the Center for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI).

Using U.S. Census and American Community Survey data, the SVI identifies the most vulnerable groups across all comparative census tracts. Out of the highest vulnerability score of 1.0, the Bolivar Community has an overall SVI score of 0.6, meaning that it is more vulnerable than 60% of the rest of counties in the OHC Region. Scores for Socioeconomic Status (0.7), Household Composition and Disability (0.7), also demonstrate significant vulnerability of the local population. The Bolivar Community has rates of physical inactivity (23%), tobacco use (22.4%) and alcohol bingeing (15.7%). Physical inactivity and alcohol bingeing rates are lower than the OHC Region, Missouri, and the U.S. Tobacco use is higher than the OHC Region, Missouri, and the U.S. by 5.4% or less. These are all areas of concern which impact health outcomes.

BOLIVAR DEMOGRAPHICS



FAMILIES

Families with children make up 28% of the Bolivar Community population.



POPULATION

The Bolivar Community population has decreased by 2.6% since 2010.

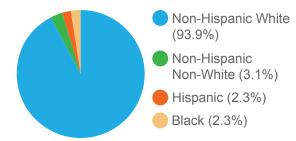


RURAL POPULATION



DISABILITY STATUS

RACE & ETHNICITY



WHAT MAKES A POPULATION VULNERABLE?

		Dade County	Hickory County	Polk County	Bolivar Community
CIO- MIC TUS	Below Poverty	0.87	0.62	0.31	0.60
	Unemployed	0.91	0.75	0.49	0.72
SOCIO NOMIC STATUS	Income	0.76	0.86	0.59	0.74
SOCIO- ECONOMIC STATUS	No High School Diploma	0.59	0.66	0.41	0.55
0 % >	Aged 65+	0.86	1.00	0.40	0.75
JOLE ON &	Under Age 18	0.13	0.02	0.52	0.22
HOUSEHOLD MPOSITION & DISABILITY	Disability Status	0.67	0.91	0.40	0.66
HOUSEHOLD COMPOSITION & DISABILITY	Single-Parent Households	0.47	0.01	0.82	0.44
MINORITY STATUS & LANGUAGE	Minority	0.50	0.22	0.52	0.41
	Speaks English "Less than Well"	0.47	0.84	0.32	0.55
HOUSING TYPE & TRANSPORTATION	Multi-Unit Structures	0.22	0.00	0.73	0.32
	Mobile Homes	0.80	1.00	0.55	0.78
	Crowding	0.92	0.20	0.83	0.65
	No Vehicle	0.18	0.16	0.39	0.24
	Group Quarters	0.54	0.04	0.81	0.46

Unless otherwise noted, all numbers are percentile rankings with values ranging from 0 to 1, with higher values indicative of greater vulnerability. Percentiles are from the CDC's SVI data.

Orange highlight: The population in this county is more vulnerable than 90% of all other counties in its respective state.

Blue highlight: The population in this county is more vulnerable than 85% of all other counties in its respective state.

Beige highlight: The population in this county is more vulnerable than 80% of all other counties in its respective state.

ASSESSED HEALTH ISSUES



Commission stakeholders began the RHA process with analysis of publicly available health data (secondary data) and participating health systems' emergency room utilization data (primary data) to identify health issues of greatest concern across the region. The result was a ranked list of eight Ozarks Health Commission Region health issues. A full description of the health issues and indicators used can be found in the OHC Regional Health Assessment.

To represent diverse views from across the region and population, qualitative data was garnered. Across the OHC Region these viewpoints were solicited via 75 individual interviews, 10 focus groups and 2,638 surveys. Methodologies used for the initial scoring/ranking of the health issues and the full report of the qualitative work can be found in the OHC Regional Report. This prioritization information can be used by organizations to develop community health improvement plans, guide decision making, and foster collaboration across initiatives for collective community impact.

- 1. Drug and other substance abuse treatment and rehabilitation services, including detox
- Emergency mental health services for issues such as suicidal thinking or actions, homicidal thinking or actions, self-harm, or harm to others
- 3. Integrated care, or where people can get medical care and counseling at the same time
- 4. Affordable, quality childcare
- 5. Drug and other substance abuse, education, prevention, and early intervention services
- Coordination of patient care between the hospital and other clinics, private doctors, or others
- 7. Counseling services for mental health issues such as depression, anxiety, trauma, or others for adults
- 8. Counseling services for mental health issues such as depression, anxiety, trauma, or others for adolescents and children
- 9. Affordable housing
- 10. Social services (other than healthcare) for people experiencing homelessness

COMMUNITY HEALTH PRIORITIES

Each Commission Community convened stakeholders to assess the feasibility of addressing the health issues identified through primary and secondary data sources, and further illuminated the qualitative community feedback. In the Bolivar Community, this was organized By the Polk County Health Center and Community Connections. Local data was collected from the local hospital, CMH, and secondary data was collected and analyzed from a variety of sources. Listening groups were also held to collect partner and community input. Finally, local survey data was collected by interviewing local partners and community members.



Substance use as a behavioral health disorder, known as a substance use disorder (SUD), encompasses the use of intoxicating substances in a manner which negatively effects the persons global wellness. For the purposes of this report, substances used include, but are not limited to, alcohol, opiates, stimulants, narcotics, benzodiazepines, and other prescribed or illicit substances that could cause poisoning. (Not included are things like carbon monoxide poisoning, pesticides, or venomous animals or plants.)

Recovery from substance use disorder is a process through which the individual improves that health and wellness, starts living a self-directed life and striving to reach a more fulfilling purpose. This comes in a variety of pathways, from public health and behavioral health providers, social supports, community resources and mutual aid. There are currently 22.75 million individuals openly in recovery in the US. Only 1 in 4 people needing substance use support and assistance will receive services.

The number one leading cause of death among adults aged 18-44 in Missouri is drug poisoning. Over 70% of these deaths involve opioids. (https://health.mo.gov/data/opioids/) In the Bolivar Community, the prevalence of substance use disorder (among Medicare patients) is greater than the rest of Missouri at 3.5%.

CMH conducted an assessment in relation to substance use and mental health which included the service areas of Polk, Hickory, and Dallas counties. The assessment found that the Medication Assisted Therapy program is currently serving 250 patients per month, with 18-20 new patients joining the program each month.

During the assessment, CMH found that Neonatal Abstinence Syndrome (NAS) rates are more than state averages. NAS is a group of conditions caused when a baby withdraws from certain drugs they are exposed to in the womb before birth. NAS is most often caused when a person uses opioids during pregnancy.

In the Bolivar Community, per 1,000 births, the rate of babies born with NAS is 8.1 babies in Dallas County, 8.7 babies in Hickory County, and 15.5 babies in Polk County with NAS. These rates are high compared to overall rate for Missouri, 7.51 babies born with NAS per 1,000 births.



The number one leading cause of death among adults aged 18-44 in Missouri is drug poisoning.

Over 70% of these deaths involve opioids.

DRUG POISONING MORTALITY

Bolivar 25.0
OHC Region 22.8
Missouri 25.3
United States 21.6

Rate per 100,000 population



Mental health includes a person's emotional, psychological and social well-being. It affects how individuals think, feel and act. A person's mental health status also contributes to how they handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Many factors contribute to mental health problems, including biology (factors such as genes or brain chemistry), life experiences (such as trauma or abuse) and family history. Within the broad category of mental health, mental illness specifically refers to all diagnosable mental disorders. Mental illness can be chronic or acute. An acute mental health crisis will require different intervention than managing a chronic mental illness.

Community-level data used to analyze and prioritize mental health is limited, but what local data is available is convincing and of great concern among care providers, public health and healthcare partners, media and the community. Poor mental health, the number of self-reported poor mental health days in a 30-day period, and the rate of depression in the Bolivar Community is higher than in Missouri and the U.S. Moreover, the Bolivar Community has a suicide mortality rate at least 48% worse than the national average.

POOR MENTAL HEALTH

Bolivar 15.7%

OHC Region 15.7%

Missouri 14.5%

United States 13.4%

DEPRESSION PREVALENCE

Bolivar 23.0%

OHC Region 21.3%

Missouri 20.8%

United States 18.4%

Medicare population only

SUICIDE MORTALITY RATE

Bolivar 20.4

OHC Region 22.1

Missouri 18.3

United States 13.8

Rate per 100,000 population



Obesity is a chronic health condition that concerns an excessive amount of body fat. Often times obesity is inherited, related to physiological and environments factors, (Social Determinants) and a combination of diet, physical activity and exercise abilities. Over time obesity can lead to multiple other concerning chronic conditions and diseases such as, Heart Disease, Type Two Diabetes, and some cancers.

Heart disease is a chronic health condition that refers to multiple types of heart conditions. Heart disease is the leading cause of death in the United States. The most common type of heart disease is coronary artery disease, this leads to what's commonly known as a heart attack; coronary heart disease prevalence is (9.6%) for the Bolivar community, which is higher than both the state and national percentages, along with the prevalence of high blood pressure at (37.4%) and high cholesterol at (40%). Heart disease is a vast concern for the Bolivar Community.

Diabetes is a chronic health condition that affects how your body turns food into energy. If you have diabetes, your body either doesn't make enough insulin or is resistant to the effects of insulin, leading to high blood sugar levels in the bloodstream. Over time, this can cause damage to multiple organs in the body, including the eyes, nerves, blood vessels and kidneys. It can also increase the risk of cardiovascular disease, decrease the body's immunity and lead to decreased life expectancy.

The progression to diabetes can be prevented or delayed with dietary changes and an active lifestyle. However, the rates of obesity and poor physical health in the Bolivar Community are higher than the state and national average. Obesity is caused by a number of contributing factors. A person's home or workplace can promote gaining weight; this is referred to an obesogenic environment. Modifying these environments at community and policy levels can decrease the risk of developing obesity and diabetes. For instance, workplaces can adopt wellness policies that promote or incentivize healthy eating and physical activity.

Through community input and survey, obesity was recognized as needing the most focus for improvement over other assessed health issues, except mental health and substance use. By addressing the high rates of obesity (35.2%) and poor physical health (16.7%) for the Bolivar Community we intended to lessen the rates of these issues, and encourage better living with new opportunities; in turn lessening the rates of heart disease, type two diabetes, and other chronic diseases.



Heart disease is a **vast concern** for the Bolivar Community.

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HEART DISEASE MORTALITY

Bolivar	199.4
OHC Region	212.3
Missouri	191.2
United States	164.8

Rate per 100,000 population

STROKE MORTALITY

Bolivar	48.4	
OHC Region	40.1	
Missouri	39.6	
United States	37.3	
Rate per	100,000 popula	tion

OBESITY PREVALENCE

Bolivar	35.2%
OHC Region	32.6%
Missouri	32.4%
United States	29.5%

POOR PHYSICAL HEALTH

Bolivar	16.7%
OHC Region	15.7%
Missouri	14.0%
United States	13.0%

SOCIAL DETERMINANTS OF HEALTH



Additional data critical to understanding the health of the population and the vulnerability of the Community was discerned by examining six groupings classified as social determinants of health: Economic Stability, Education Access and Quality, Healthcare Access and Quality, Neighborhood and Built Environment, Social and Community Context and Health Behaviors. The social determinants of health have a major impact on people's health, well-being, and quality of life while also contributing widely to health disparities and inequities. Therefore, examination of these factors is important as they play a significant role in the impact the assessed health issues have on the Bolivar Community.



In the United States, 3 in 10 people live in poverty, and many people can't afford things like healthy foods, health care, and housing. People with steady employment are less likely to live in poverty and more likely to be healthy, but many people have trouble finding and keeping a job. People with disabilities, injuries, or conditions like arthritis may be especially limited in their ability to work. In addition, many people with steady work still don't earn enough to afford the things they need to stay healthy.

In the Bolivar Community, close to half of residents (43.3%) live at or below 200% of the federal poverty level (FPL), meaning a family of four cannot earn more than \$25,750 annually. The percentage of children living in poverty is almost 10% higher, at 52.5%. In fact, the per capita income in the Bolivar Community is below the FPL for a family of four, at \$22,444.00, about 27% lower than the Missouri average income and nearly 35% lower than the national average.

POVERTY RATE

Bolivar children	52.5%
Bolivar population	43.3%
OHC children	52.1%
OHC population	40.7%
Missouri children	41.0%
Missouri population	32.1%
United States children	40.1%
United States population	30.9%
Below 200% Feder	al Poverty Level

In addition to living in poverty, many in the Bolivar Community struggle to find affordable housing, 25.2% percent of those in the Bolivar Community live in substandard housing according to the U.S. Census Bureau and 10.5% report a severe housing cost burden. There are long wait lists for lower cost rental housing, which is contributing to higher costs.

SEVERE HOUSING COST BURDEN

Bolivar 10.5%
OHC Region 10.9%
Missouri 11.0%

United States 14.0%



EDUCATION ACCESS & QUALITY

Education can be an indicator of health, with persons with higher levels of education often living healthier and longer lives. Only 12.7% of adults over 25 years old in the Bolivar Community do not have a high school diploma. This is very comparable to the state average of 10.01% and the national rate of 12.0%. The Bolivar Community expands with community members achieving college degrees. Those receiving their associates degree or higher account for 23.1% of the population, and 16.3% completing a bachelor's degree or higher.

NO HIGH SCHOOL DIPLOMA

Bolivar 12.7%
OHC Region 11.8%
Missouri 10.1%
United States 12.0%

ASSOCIATE'S DEGREE OR HIGHER

Bolivar 23.1%
OHC Region 30.0%
Missouri 37.1%
United States 40.6%

HEALTHCARE ACCESS & QUALITY

Many people in the United States don't get the health care services they need. About 1 in 10 people don't have health insurance. In the Bolivar Community, the rate of uninsured is significantly higher, with just under 20% of adults and just under 10% of children not having health insurance. People without insurance are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need. In addition, people may not trust the healthcare system. Some reasons for this may include lack of cultural awareness by providers, feeling unwelcome or uncomfortable in traditional clinical settings, previous negative experiences with healthcare providers, insufficient accommodations for the disabled, language barriers or clinics not having convenient times or locations

NO INSURANCE

NO IN	ISUKANCE
Bolivar children	9.0%
Bolivar adults	19.2%
OHC children	8.2%
OHC adults	18.3%
Missouri children	6.5%
Missouri adults	14.1%
U.S. children	5.6%
U.S. adults	12.8%

Those with the financial means to access healthcare in the Bolivar Community have nearly 6% fewer primary care providers per 100,000 residents to seek services with than the rest of Missouri and nearly 15% fewer the U.S. Moreover, the Bolivar Community has nearly 28% fewer mental health care providers than Missouri and more than 44% fewer than the U.S. Overall, the Bolivar Community struggles with retaining and attracting healthcare providers, with more than half (56.7%) of residents living in Health Professional Shortage Areas. A rate that is nearly twice as high as the state and national rates.

Input from the community highlighted that the low-income community has few resources to travel for healthcare due to unreliable transportation. They need more basic services in community, and to work with others to get more advanced care. To assist with transportation needs CMH offers health transit services for those with Medicaid. Medicare or private health insurance. Additionally, those with Medicaid can access transportation for healthcare appointments through their Medicaid provider. However, those individually who are uninsured have limited or no access to transportation services.

HEALTHCARE PROVIDER RATES

Bolivar dentists	22.9
Bolivar primary care	65.7
Bolivar mental health	39.0
Bolivar substance use	0.0
OHC dentists	44.3
OHC primary care	63.2
OHC mental health	70.0
OHC substance use	11.0
Missouri dentists	54.2
Missouri primary care	70.0
Missouri mental health	37.0
Missouri substance use	2.2
United States dentists	65.6
United States primary care	76.7
United States mental health	57.2
United States substance use	9.4
Rate per 100,000 po	opulation



NEIGHBORHOOD & BUILT ENVIRONMENT

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The neighborhoods people live in have a major impact on their health and well-being. Where we live affects the basics of our daily lives and health. When affordable housing is lacking it impacts families and where they can afford to live. In the Bolivar Community, 25% of community members live in substandard housing. The Bolivar Community also reports that 4.7% of community members have limited/low access to food, significantly better than the OHC Region, Missouri, and the United States However, per quarter, the Bolivar Community spends \$100 less on healthy foods than the national average.

However, 26 out of 100 households in the Bolivar Community have low or slow internet access, a rate higher than the OHC Region, Missouri, and the U.S. As evidenced by the COVID-19 pandemic, this lack of connectivity can affect resident's ability to learn, work, and play. In Hickory County, only 1 in 3 households have internet that is low or slow.

HOUSEHOLDS WITH LOW OR SLOW **INTERNET ACCESS**

Bolivar	26.0%
OHC Region	25.1%
Missouri	19.8%
United States	17.3%

HEALTH BEHAVIORS

Health behaviors include individual-level behaviors, often influenced by access or quality of services, that can impact the overall health of an individual or community. Measured health behaviors include physical activity, fruit and vegetable expenditures, smoking, alcohol binge drinking, sexually transmitted infection (STI) rates and the prevalence of HIV. These behaviors can affect a wide range of health, functioning, and quality-of-life outcomes and risks.

In the Bolivar Community, physical activity has continued to decline since the prior assessment in 2017. Nearly one in four (23.0%) residents reports no leisure time physical activity, which is higher than the national average.

Analysis of fruit and vegetable expenditures are a way of determining how many community members have the inclination and ability to enjoy healthy foods. In the Bolivar Community, a household spends just over \$640 on fruits and vegetables (fresh, frozen, or canned), which is just over \$100 less than the national average.

Additionally, the Bolivar community has a smoking rate slightly higher than the state average, and 5.4% higher than the national averages. (Michelle would like to include these percentages/and or a graph of some sort.TY-Hanna)

FRUIT AND VEGETABLE EXPENDITURE

Bolivar	\$643.48
OHC Region	\$635.03
Missouri	\$665.08
United States	\$744.71

CURRENT SMOKERS

Bolivar	22.4%
OHC Region	21.9%
Missouri	20.3%
United States	17.0%

PHYSICAL INACTIVITY

Bolivar	23.0%
OHC Region	26.0%
Missouri	24.5%
United States	22.1%



SOCIAL & COMMUNITY CONTEXT

Health begins where we live, learn and play. Community connections and social relationships can have a major impact on their health and well-being. Many people face challenges and dangers they can't control, like unsafe neighborhoods, discrimination or trouble affording the things they need. The Bolivar Community has total social vulnerability index (SVI) of 0.6, with 1.0 indicating the highest possible vulnerability. This is slightly higher than both state and national averages. SVI scores that are higher show areas that are more vulnerable to socio-economic factors that can influence their health choices and behaviors.

HOMELESS STUDENTS

3.0%	Bolivar
4.2%	OHC Region
4.0%	Missouri
3.0%	United States

CONCLUSION

The issues and trends discussed in the Bolivar Community summary have their limitations and cannot tell the full story of the health of these counties. Other factors, such as environmental, social and economic, impact individual and community health and provide context necessary to understanding the Community. Therefore, it is important to consider the Social Determinants of Health outlined in this summary when creating plans to address mental health, substance use & recovery, diabetes or any of the other assessed health issues.



DISSEMINATION

The Ozarks Health Commission Regional Health Assessment and related community reports are resources designed for public dissemination, and multiple dissemination methods listed below will reach a wide variety of audiences.

WEBSITES

Please visit the following websites to access the full RHA, Community Summaries, and related resources:

Ozarks Health Commission www.ozarkshealthcommission.org

Citizens Memorial Healthcare www.citizensmemorial.com

PRINTED COPIES

Printed copies will be available by request through hospital and public health partners. Please refer to the websites above or contact a participating organization directly.

SOCIAL MEDIA

Announcements of the availability of the regional health assessment, as well as community health improvement plans by each organization will be made via social media channels, including Facebook and Twitter.

Polk County Health Center facebook.com/polkcountyhealthcenter

Dade County Health Department facebook.com/dadecountyhealthdepartment

Hickory County Health Department facebook.com/HickoryCountyHealthDepartment

Citizens Memorial Healthcare facebook.com/CitizensMemorial

HEALTH SERVICES AVAILABLE

In addition to the websites of participating health systems and public health agencies, there are several robust resource directories available to assist consumers in locating care. These include:

Polk County Health Center polkcountyhealthcenter.org/

Dade County Health Department dadecountyhealthdept.com/

Hickory County Health Department hickorycountyhealth.org

Citizens Memorial Healthcare citizensmemorial.com

ACKNOWLEDGMENTS

The Ozark Health Commission Steering Committee expresses appreciation to the many organizations and stakeholders that contributed to this report. To see a complete list, please visit ozarkshealthcommission.org.

