2019 Community Health Needs Assessment

Northeast Arkansas

Baptist Memorial Hospital–Crittenden • NEA Baptist Memorial Hospital

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Our Commitment to Community Health

Baptist Memorial Health Care is dedicated to the health and well-being of the many communities we serve across the Mid-South. We believe strongly in corporate citizenship and the importance of collaboration with local organizations to build stronger and healthier communities.

To help us track community health and identify emerging concerns, Baptist conducts a Community Health Needs Assessment (CHNA) every three years. We use this comprehensive study to ensure our initiatives, activities and partnerships align with community needs.

Some of our key initiatives are listed below.

Healthy communities lead to lower health care costs, robust community partnerships and an overall enhanced quality of life.

Providing access to high-quality health care
Baptist ensures residents can receive care when they need it across the region. We reinvest resources in technology to bring the highest level of health care to people across the Mid-South. We invest in hospitals and health services to deliver care to communities the federal government considers as Medically Underserved Areas or Health Professional Shortage Areas. We extend our care through community clinics and mobile services to reach people who might not otherwise receive care. We subsidize services, such as emergency care, free and reduced services for the uninsured and preventive screenings that are essential for health, but not adequately covered by federal and state funding.

Developing community partnerships
We recognize that our hospitals are vital organizations within the communities we serve and we know that we cannot address every community need by ourselves. In order to promote health and quality of life, we collaborate with community partners who have expertise in social needs, specialty services, faith leadership, advocacy and essential resources. We also foster ongoing relationships with these partners and provide financial and in-kind gifts to support their work.

Investing in health care education and research
Baptist supports excellence in health care training and education through programs that focus on math, science and related subjects to prepare tomorrow's health care workforce. As we plan for the future, we provide training opportunities for emerging health care professionals and encourage students to pursue medicine, nursing and other allied health careers. Through leading-edge research and clinical trials, we help to advance learning in the medical field and develop new treatments for cancer and other diseases.

In these and many other ways, we demonstrate our commitment to the people we serve and our communities. In undertaking and funding regular community health needs assessments, we ensure our hospitals will be stronger partners in our neighborhoods and prepared to meet the future needs of all those who live there.

A Systemwide Approach to Community Health Improvement

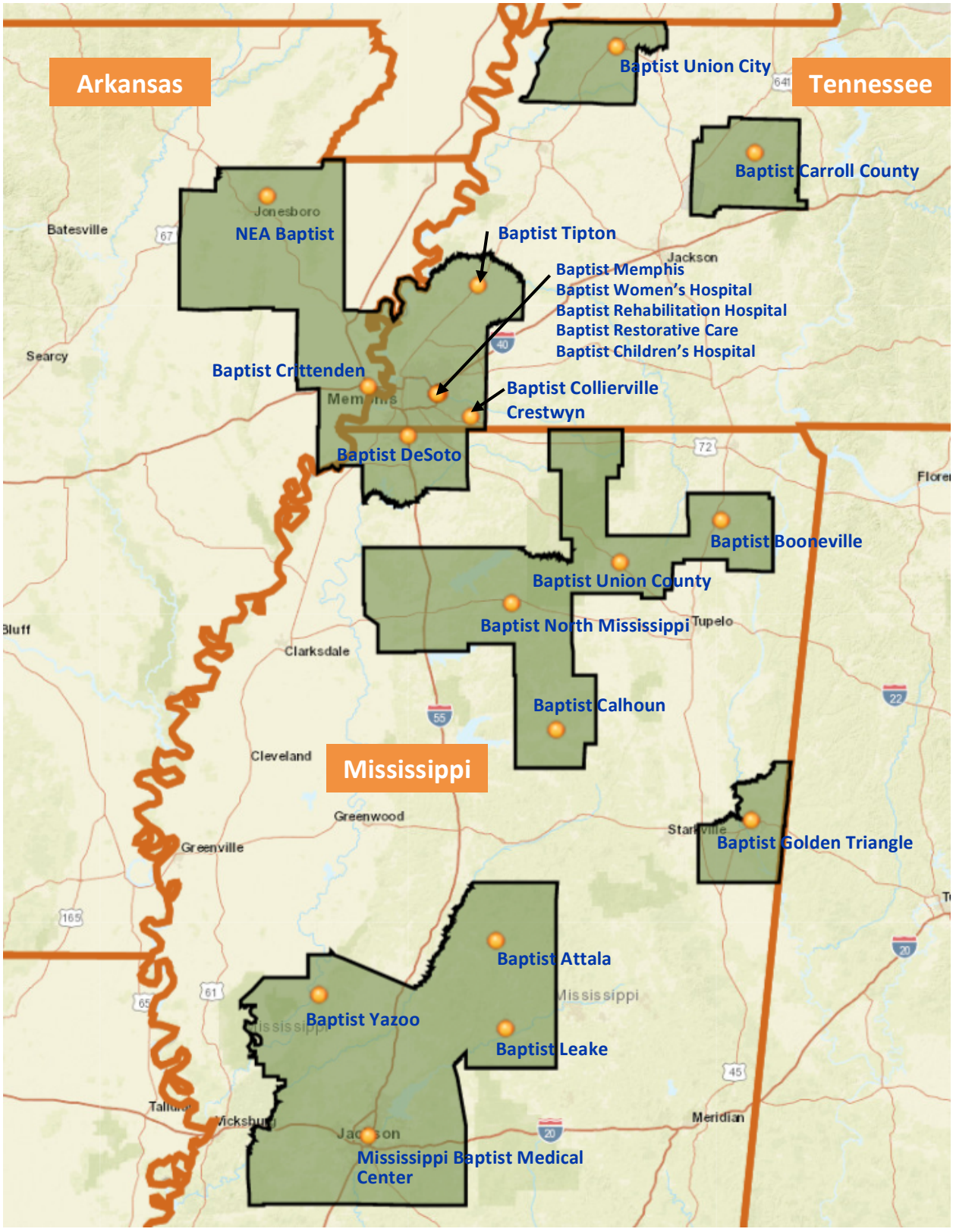
Baptist Memorial Health Care has 22 affiliate hospitals serving residents in three states. The CHNA focused on the primary service county of each not for profit Baptist Memorial hospital to identify health trends and unique disparities within these communities. Hospitals with overlapping service areas were grouped into regions for comparisons of health and socioeconomic data. Systemwide priorities were determined to address common health needs across the Mid-South. Specific strategies were outlined in each not for profit hospital's Implementation Plan to guide local efforts and collaboration with community partners.

2019 CHNA Geographic Regions and Primary Service Areas

Region	Primary Service Counties	Hospitals
Memphis Metro	Shelby County, TN	Baptist Memorial Hospital–Memphis Baptist Memorial Hospital–Collierville Baptist Memorial Hospital for Women Baptist Memorial Rehabilitation Hospital* Baptist Memorial Restorative Care Hospital Crestwyn Behavioral Health* Spence and Becky Wilson Baptist Children's Hospital
	Tipton County, TN	Baptist Memorial Hospital–Tipton
	DeSoto County, MS	Baptist Memorial Hospital–DeSoto
Northeast Arkansas	Craighead & Poinsett counties, AR	NEA Baptist Memorial Hospital
	Crittenden County, AR	Baptist Memorial Hospital–Crittenden
West Tennessee	Carroll County, TN	Baptist Memorial Hospital–Carroll County
	Obion County, TN	Baptist Memorial Hospital–Union City
North Mississippi	Lafayette & Panola counties, MS	Baptist Memorial Hospital–North Mississippi
	Benton and Union counties, MS	Baptist Memorial Hospital–Union County
	Prentiss County, MS	Baptist Memorial Hospital–Booneville
	Lowndes County, MS	Baptist Memorial Hospital–Golden Triangle
	Calhoun County, MS	Baptist Memorial Hospital–Calhoun
Central Mississippi	Attala, Hinds, Leake, Madison, Rankin and Yazoo counties, MS	Baptist Memorial Hospital–Mississippi Baptist Medical Center
	Attala County, MS	Baptist Memorial Hospital–Attala
	Leake County, MS	Baptist Memorial Hospital–Leake
	Yazoo County, MS	Baptist Memorial Hospital–Yazoo

*These entities are not required to conduct a CHNA.

Baptist's Affiliate Hospitals and Primary Service Counties



Northeast Arkansas Service Area 2019 CHNA Executive Summary

CHNA Hospital Partners and Study Service Area

Baptist Memorial Health Care has two hospitals in the Northeast Arkansas Service Area, which collaborated on the 2019 CHNA. The study encompassed Craighead, Crittenden and Poinsett counties in Arkansas, located along the Tennessee border. The following hospitals participated in the 2019 CHNA for the Northeast Arkansas Service Area.

- NEA Baptist
- Baptist Crittenden

CHNA Leadership

A Baptist Memorial Health Care steering committee, along with community representatives and partners, oversaw the 2019 CHNA. Community health consultants assisted in all phases of the CHNA, including project management, data collection and analysis, report writing and development of Implementation Plans.

Baptist 2019 CHNA Steering Committee
Donna Baugus, Manager of Survey Research
Cynthia Bradford, System Community Involvement Manager
Scott Fountain, Senior Vice President and Chief Development Officer
Tom Gladney, Director of Data Management and Decision Support
Bill Griffin, Executive Vice President and Chief Financial Officer
Caitlin Hayden, System Community Outreach and Special Events Coordinator
Kelley Jerome, General Counsel
Jeff Lann, Manager of Research and Marketing Development
Debbie Lassiter, Health Services Research Consultant
Cheryl Lee, Director of Tax and Compliance
Jim Messineo, Director of Revenue and Operations Audits
Brenna Piccirilli, Cost Accounting Analyst in Decision Support
Kellie Prescott, Cancer Program Coordinator
Anne Sullivan, MD, Chief Quality and Academic Officer
Henry Sullivant, MD, Vice President and Chief Medical Officer
Morgan Thornton, Finance and Health Research Intern
Kimmie McNeil Vaulx, System Director of Corporate Communications
Ann Marie Watkins Wallace, System Senior Community Outreach Coordinator

Consulting Team
Colleen Milligan, MBA, Director, Community and Population Health Planning
Catherine Birdsey, MPH, Research Manager
Jessica Losito, BA, Research Consultant

CHNA Methodology

The 2019 CHNA for Baptist's Northeast Arkansas Service Area was conducted from August 2018 to August 2019. Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health trends and disparities across each hospital's service area. The following research methods were used to determine community health needs.

- A review of public health and demographic data portraying the health and socioeconomic status of the community. A full listing of data references is included in Appendix A.
- A Key Informant Survey of 51 community representatives serving the Northeast Arkansas Service Area to identify community health priorities, underserved populations, partnership opportunities and other insights. A list of key informants and their respective organizations is included in Appendix B.
- Focus groups with 98 cancer survivors or caregivers to collect perspectives about their experiences, preferences and attitudes related to cancer diagnosis and care.
- Criteria-based prioritization of health issues to determine the most pressing health needs affecting the health status of Northeast Arkansas residents.

Community Engagement

Community engagement was an integral part of the CHNA research. In assessing the health needs of the community, Baptist solicited and received input from community leaders and residents who represent the broad interests of the community, including those with expertise in public health and members or representatives of medically underserved, low-income and minority populations. These individuals provided valuable information about health trends, insights about existing resources and gaps in services and perspectives about factors that contribute to health disparities.

Overview of the Northeast Arkansas Service Area

Craighead, Crittenden and Poinsett counties differ from each other and from the nation in a variety of ways. Crittenden and Poinsett counties are less populous than Craighead County, and unlike Craighead County, which is growing, Crittenden and Poinsett counties are declining in population. Craighead and Poinsett counties are less diverse than the nation in general, with roughly 4 out of 5 residents identifying as White. Crittenden County differs from the nation, Arkansas and the other counties in that more than 50% of the population comprises Black/African American residents. There tend to be greater numbers of young people in Craighead and Crittenden counties, and greater numbers of people 65-years-old or older living in Poinsett County than in the nation or Arkansas in general.

The median household income is lower than the national median in all three counties, and more individuals live in poverty. The median home value is also lower than the national median. While larger proportions of adults have completed a high school diploma than the national percent, far fewer adults in all three counties have completed a bachelor's degree or higher.

In general children and adolescents across the Northeast Arkansas Service Area are more likely to be insured than the national average, while people 18-years-old or older living in the Northeast are less likely to have health insurance. When stratified by race and ethnicity, insurance rates are generally consistent with the nation, with White residents more likely to be insured than Black/African Americans, Latino, Asians and minority populations.

Community Health Priorities

To improve community health, it is important to direct resources and activities to the most pressing and wide-ranging health needs in the community. Baptist determined health priorities for the 2019–2022 reporting cycle by using feedback from community partners and stakeholders, and taking into account its expertise and resources within the Northeast Arkansas Service Area. The prioritized health concerns, shown in alphabetical order, include the following:

Behavioral Health: Increase behavioral health screenings to initiate early treatment and improved outcomes for residents at all stages of life.

Cancer: Provide early detection and treatment to reduce death from breast, colorectal and lung cancers, and improve quality of life for patients.

Chronic Disease: Promote health as a community priority, and increase healthy lifestyle choices.

Maternal and Child Health: Improve birth outcomes for women and infants.

The rationale and criteria used to select these priorities included the following:

- Prevalence of disease and number of community members affected
- Rate of disease compared to state and national benchmarks
- Health disparities among racial and ethnic minorities
- Existing programs, resources and expertise to address the issue
- Input from representatives of underserved populations
- Alignment with concurrent public health and social service organization initiatives

Priority Health Needs in the Northeast Arkansas Service Area

Behavioral Health

Consistent with state averages, residents in the Northeast Arkansas Service Area report having more “poor mental health days” per month than the national average. Craighead, Crittenden and Poinsett counties all exceed the state and national rates for mental and behavioral disorders death. The suicide death rate in Poinsett County exceeds the state and the nation, and is double the Healthy People 2020 target.

Arkansas adults report less excessive drinking than the national average and the drug-induced death rate is lower in Arkansas than the national average. Despite favorability in these measures, the Arkansas' death rate for opioid overdose has increased four-fold since 1999 to a rate of 5.9 deaths per age-adjusted 100,000 people. The steep increase reflects national trends and Arkansas' rate is half the national rate of 13.3. Related, the rate of Neonatal Abstinence Syndrome (NAS) diagnosis increased across the state from 0.3 in 2000 to 4.8 in 2017. Some of the highest rates of NAS were in Craighead and Poinsett counties.

Alzheimer's disease is both more prevalent and more likely a cause of death across the Northeast Arkansas Service Area. The Alzheimer's disease death rate per age-adjusted per 100,000 for in Craighead (36.5) and Poinsett (37.3) counties exceeds the state (34.7) and national (26.6) rate. The death rate in Crittenden County is lower than the state and on par with the national rate.

Cancer

The incidence of cancer in Craighead and Crittenden counties is generally comparable to national and statewide rates, while the Poinsett County incidence rate exceeds all benchmarked geographies. Lung or bronchus cancer is the most prevalent and deadliest cancer across the Northeast Arkansas Service Area. The incidence and death rates for lung or bronchus cancer in Poinsett County are particularly high.

Cancer incidence remained stable or declined in Arkansas and the nation, but increased across the Northeast Arkansas Service Area from 2011 to 2015. When stratified by race, cancer death rates for Blacks/African Americans exceed state and national rates in all three counties; cancer death rates for Whites are also higher in Crittenden and Poinsett counties. Black/African American residents in Craighead County experience the greatest disparity in cancer death rates with rates 50 percentage points higher than Whites.

Higher death rates may reflect later stage diagnosis, which is consistent with professional and community feedback that lung and bronchus cancer can be asymptomatic until late stage. Focus group participants from current and prior year studies have consistently attributed increased cancer incidence to regional agriculture and the use of pesticides. Increased death rates, combined with poorer outcomes among underserved communities have reduced adherence to preventive screening schedules. These attitudes are slowly changing due to targeted outreach within the Black/African American community, faith-based initiatives and increased mortality among cancer patients. Early success in secondary lung screening protocols show promising results for earlier treatment and improved outcomes.

Chronic Disease

People living in Craighead, Crittenden and Poinsett counties are more likely to be obese and are less likely to engage in physical activity than their peers in Arkansas and the nation. While individual motivators and abilities play a role in physical activity levels, the lack of access to safe spaces for physical activity and high levels of food insecurity in these three counties are likely contributors to the levels of obesity, and the prevalence of chronic disease. Adults living in these

three counties are diagnosed with diabetes and heart disease at higher rates than adults across the nation, and are generally more likely to die from those conditions. Interventions that help residents assess their risk for diabetes and heart disease, as well as promote healthy lifestyles and improved health outcomes are needed. People living in Craighead, Crittenden and Poinsett counties are also more likely to smoke compared to Arkansas and national averages.

Maternal and Child Health

The number of pregnant women that receive early prenatal care in the Northeast Arkansas Service Area does not meet the Healthy People 2020 target. Early prenatal care consistently has a positive effect on the health of both the mother and baby by identifying underlying risks for the mother and preventing negative birth outcomes for the baby. Late or no prenatal care may contribute to increased rates of low birth weight and premature births across the service area.

High rates of teen births — while having decreased over the past decade — may contribute to late prenatal care and less favorable birth outcomes. The rate per 1,000 births that are to women under age 19 in Crittenden County (10.6) and Poinsett County (11.6) exceeds both the state (8.9) and national (5.4) rates. Teen births in Craighead County (8.3) are more closely aligned with the state, but are still above the national average.

Implementation Plan

Each of Baptist's two hospitals in Northeast Arkansas Service Area developed an Implementation Plan that will guide community health improvement activities for the 2019–2022 cycle. Each plan details the resources and strategies each hospital will undertake to address priority areas and unique needs within each service area. Where applicable, the Baptist hospitals will coordinate efforts and leverage system resources to reduce health disparities. Each hospital's Implementation Plan, along with 2019 CHNA reports, can be found on the Baptist Memorial Health Care website at https://www.baptistonline.org/about/chna.

Board Approval

Baptist Memorial Health Care's board of directors approved the CHNA report and Implementation Plan on Tuesday, Sept. 24, 2019.

Full Report of 2019 CHNA

Northeast Arkansas Service Area

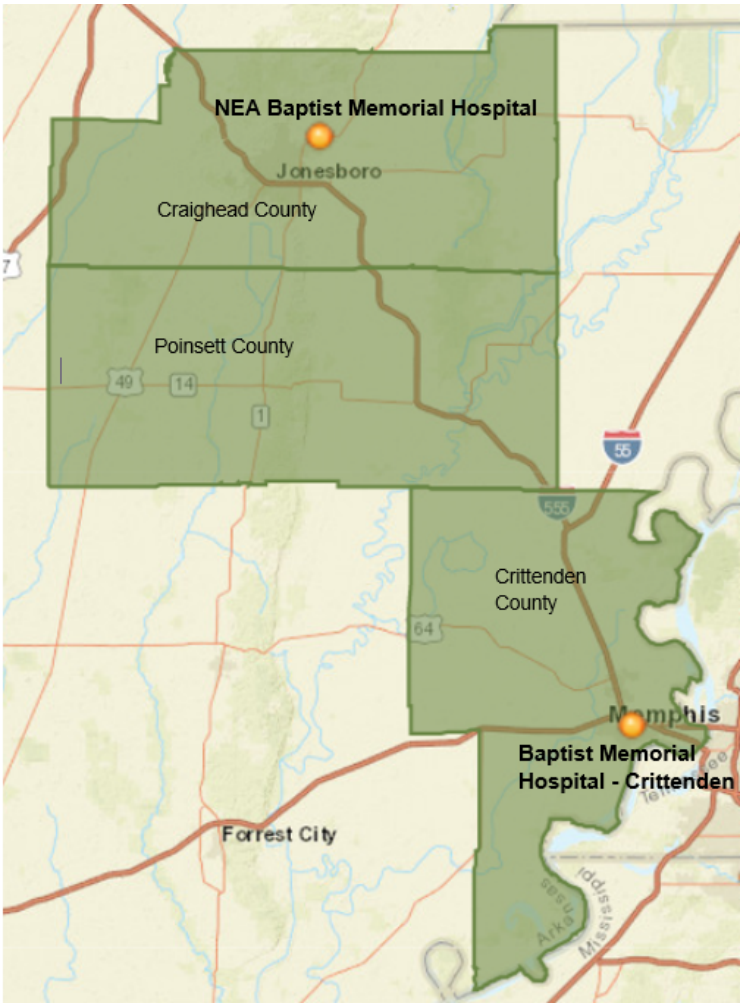
Baptist's Northeast Arkansas Service Area

CHNA Hospital Partners and Study Service Area

Baptist Memorial Health Care operates the following two hospitals in the Northeast Arkansas Service Area. Both of these hospitals collaborated on the 2019 CHNA. The study encompassed Craighead, Crittenden and Poinsett counties.

- NEA Baptist
- Baptist Crittenden

Northeast Arkansas Service Area



Northeast Arkansas Service Area Demographic Data Analysis

Background

Analyses of demographic and socioeconomic data are essential to understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**. Healthy People 2020 defines a health disparity as "a particular type of health difference that is closely linked with social, economic or environmental disadvantage."

Social determinants of health are factors within the environment in which people live, work and play that can affect health and quality of life.

Northeast Arkansas Service Area data are shown with state and national data sets to demonstrate broad trends and areas of strength and opportunity. Demographic analysis by ZIP Code provides a detailed view of population statistics. All reported data were provided by Environmental Systems Research Institute (ESRI) Business Analyst, 2018 and the U.S. Census Bureau unless otherwise noted.

Population Overview

The 2018 total population of the Northeast Arkansas Service Area is 184,501; Craighead County accounts for 60% of the population. The Craighead County population increased 14% from 2010 and is projected to increase 7% through 2023. The populations of Crittenden and Poinsett counties are projected to continue to have slow population growth decline through 2023.

Population Growth

	2018 Population	% Growth from 2010	% Growth by 2023
Craighead County	110,082	14.1%	7.2%
Crittenden County	49,858	-2.1%	-1.3%
Poinsett County	24,561	-0.1%	-0.1%
Arkansas	3,067,536	5.2%	2.8%

The racial composition of the three counties differs in comparison to each other and from the general population of the U.S. There are fewer Asian and Hispanic/Latino residents living in Craighead, Crittenden and Poinsett counties than in the nation or Arkansas in general. Individuals in these three counties are also more likely to speak English as their primary language than the typical Arkansas or American resident. People living in Craighead County are more likely to be White or Black/African American than the nation in general. Residents of Poinsett County are less diverse than the nation and Arkansas, and are much more likely to be White. Crittenden County differs from Craighead and Poinsett counties as well as Arkansas and the nation in that the population is roughly half Black/African American and half White.

2018 Total Population by Race

	White	Black or African American	Asian	Hispanic or Latino (any race)	Language Other than English Spoken at Home*
Craighead County	78.2%	15.2%	1.2%	5.2%	5.4%
Crittenden County	43.5%	52.8%	0.7%	2.7%	2.8%
Poinsett County	87.9%	8.1%	0.4%	3.1%	2.3%
Arkansas	75.2%	15.5%	1.6%	7.7%	7.1%
United States	70.0%	12.9%	5.7%	18.3%	21.2%

*Data are reported for 2012–2016 based on availability.

The anticipated population change by race and ethnicity for the Northeast Arkansas Service Area is generally consistent with the population change anticipated for the nation, which is marked by a decrease in the proportion of Whites and an increase in the proportion of people of color. The Black/African American population is projected to experience the greatest growth, particularly in Craighead County. However, the underlying distribution of race is different between these counties and does not change substantially from what it is today. Poinsett County, in particular, will maintain current racial and ethnic proportions through 2023.

2010–2023 Population Change as a Percentage of Total Population by Race

	White		Black/African American		Asian		Hispanic/Latino	
	2010	2023	2010	2023	2010	2023	2010	2023
Craighead County	81.2%	75.4%	13.1%	17.3%	1.1%	1.4%	4.4%	5.8%
Crittenden County	46.1%	41.6%	51.2%	53.9%	0.6%	0.7%	2.0%	3.4%
Poinsett County	89.9%	87.9%	7.2%	8.1%	0.2%	0.4%	2.2%	3.1%
Arkansas	77.0%	73.7%	15.4%	15.6%	1.2%	2.0%	6.4%	8.9%
United States	72.4%	68.2%	12.6%	13.0%	4.8%	6.4%	16.4%	19.8%

The populations of Craighead and Crittenden counties is generally younger than the state and nation as evidenced by median age. Conversely, Poinsett County is generally older than the state and nation, with proportionately fewer people under the age of 14 years and proportionately more people 65-years-old or older.

2018 Population by Age

	Under 14 years	15–24 years	25–34 years	35–54 years	55–64 years	65+ years	Median Age
Craighead County	19.8%	15.2%	15.4%	23.9%	11.0%	14.7%	34.7
Crittenden County	21.7%	13.7%	13.6%	24.7%	12.6%	13.7%	35.8
Poinsett County	18.2%	11.4%	12.6%	24.8%	14.1%	18.9%	41.6
Arkansas	18.9%	13.0%	13.5%	24.5%	12.9%	17.1%	38.6

United States	18.6%	13.3%	13.9%	25.3%	13.0%	16.0%	38.3

Income and Poverty Status

People living in Baptist's Northeast Arkansas Service Area have a lower median household income than the nation, are more likely to live in poverty, particularly children, and are more likely to receive Supplemental Nutrition Assistance Program (SNAP) benefits. In Crittenden County, 1 in 4 people live in poverty, including more than 1 in 3 children.

2012–2016 Household Income and Poverty Status

	Median Household Income	People in Poverty	Children in Poverty	Households with Food Stamp/ SNAP Benefits
Craighead County	$43,893	18.9%	27.6%	15.6%
Crittenden County	$39,407	24.6%	37.0%	23.5%
Poinsett County	$35,163	22.1%	34.7%	20.9%
Arkansas	$42,336	18.8%	26.8%	14.3%
United States	$55,322	15.1%	21.2%	13.1%

Consistent with the state average, people living in these areas are more likely to be employed as blue-collar workers than the typical American worker. The actual unemployment rate across the state and region was better than the estimated rate for 2018.

2018 Population by Occupation and Unemployment

	White-Collar Workforce	Blue-Collar Workforce	Unemployment Rate (2018 estimate)	Unemployment Rate (Oct. 2018)
Craighead County	56.0%	44.0%	4.7%	2.7%
Crittenden County	54.0%	46.0%	6.7%	3.7%
Poinsett County	49.0%	51.0%	6.3%	3.2%
Arkansas	56.0%	44.0%	4.4%	3.3%
United States	61.0%	39.0%	4.8%	3.5%

Note: Unemployment data are estimated for 2018 as the most recent actual rate reported by the Bureau of Labor Services is October 2018.

Housing Measures

The median home value in Arkansas and in these three counties in particular, is lower than the median home value across the nation. The median home value in Crittenden County is slightly lower than the state median, but nearly $100,000 less than the national median. In Poinsett County, the median home value is roughly three times lower than the national median.

Despite a lower median home value, a higher percentage of residents in Crittenden and Poinsett counties rent their home compared to the state and the nation. Craighead County has the highest percentage of residents who rent their home, exceeding state and national

percentages by 6–8 percentage points, but the percentage is likely impacted by Arkansas State University students.

2018 Population by Household Type

	Renter-Occupied	Owner-Occupied	Median Home Value
Craighead County	42.8%	57.2%	$140,217
Crittenden County	41.7%	58.3%	$120,866
Poinsett County	37.5%	62.5%	$78,724
Arkansas	34.5%	65.5%	$131,878
United States	36.9%	63.1%	$218,492

Similar percentages of renters living in the Northeast Arkansas Service Area pay 30% or more of their income on housing as renters in Arkansas and/or the nation in general, although the percentage is slightly higher in Crittenden County. Homeowners in all three counties are less financially burdened by mortgage expenses than American homeowners in general.

2012–2016 Housing-Cost Burden

	Percent of Renters Paying 30% or More of Income on Rent	Percent of Mortgages Costing 30% or More of Household Income
Craighead County	47.8%	17.5%
Crittenden County	54.6%	24.3%
Poinsett County	46.6%	25.9%
Arkansas	47.2%	24.1%
United States	51.1%	30.8%

Education Measures

Adults 25 years old or older living in Crittenden and Poinsett counties are more likely to have completed high school than adults in Arkansas or the nation, but less likely to have completed a bachelor's degree or higher. Additionally, nearly 1 in 5 adults in Crittenden and Poinsett counties have not completed high school. The University of Arkansas Jonesboro campus in Craighead County likely contributes to higher educational attainment percentages in that county, although percentages are lower than university towns regionally and nationally, suggesting less favorable conditions for graduating students to secure local employment.

2018 Population (25 Years or Over) by Educational Attainment

	Less than a High School Diploma	High School Graduate/GED	Bachelor's Degree or Higher
Craighead County	11.1%	33.7%	26.7%
Crittenden County	17.0%	35.2%	18.5%
Poinsett County	19.9%	42.5%	10.2%

Arkansas	13.7%	34.1%	22.8%
United States	12.3%	27.0%	31.8%

Health Disparities

People living in the Northeast Arkansas Service Area are more likely to live in poverty than their peers throughout the state. Among racial and ethnic groups, White residents living in Craighead and Crittenden counties are slightly less likely than the average Arkansas resident to experience poverty. However, Black/African American residents in all three counties and Hispanic/Latino residents in Craighead and Poinsett counties are more likely to live in poverty than their peers across the state.

2012–2016 Poverty by Race

	White		Black/African American		Hispanic/Latino	
	Count	Percentage	Count	Percentage	Count	Percentage
Craighead County	11,502	14.4%	5,308	39.5%	1,831	38.9%
Crittenden County	2,245	10.2%	9,115	37.0%	321	27.9%
Poinsett County	4,245	20.0%	638	45.6%	384	61.1%
Arkansas	347,867	15.5%	145,119	33.1%	62,517	30.8%

When stratified by race, the percentage of unemployed White or Black/African American service area residents is similar to statewide percentages. The percentage of unemployed Hispanics/Latinos workers in Crittenden and Poinsett counties is higher than the statewide percentage. Note these data are based on counts of less than 150 people.

2012–2016 Unemployment by Race

	White		Black/African American		Hispanic/Latino	
	Count	Percentage	Count	Percentage	Count	Percentage
Craighead County	3,208	4.8%	1,470	14.8%	209	7.0%
Crittenden County	753	4.2%	2,662	14.8%	143	19.6%
Poinsett County	1,068	6.2%	174	15.6%	65	16.4%
Arkansas	107,832	5.8%	44,587	12.9%	7,155	5.4%

The percentage of each population in Craighead and Crittenden counties that has achieved higher education degrees is similar to statewide percentages. Although the percentages in Poinsett County appear smaller, the underlying population is also smaller, making the percentages in this county less reliable than in the other two more populous counties.

2012–2016 Bachelor's Degree or Higher by Race

	White		Black/African American		Hispanic/Latino	
	Count	Percentage	Count	Percentage	Count	Percentage
Craighead County	14,958	26.5%	1,045	15.6%	265	11.3%
Crittenden County	3,469	21.9%	1,758	12.3%	44	6.7%
Poinsett County	1,494	10.0%	10	1.2%	1	0.4%
Arkansas	360,148	22.6%	39,915	14.5%	8,909	8.8%

ZIP Code Analysis

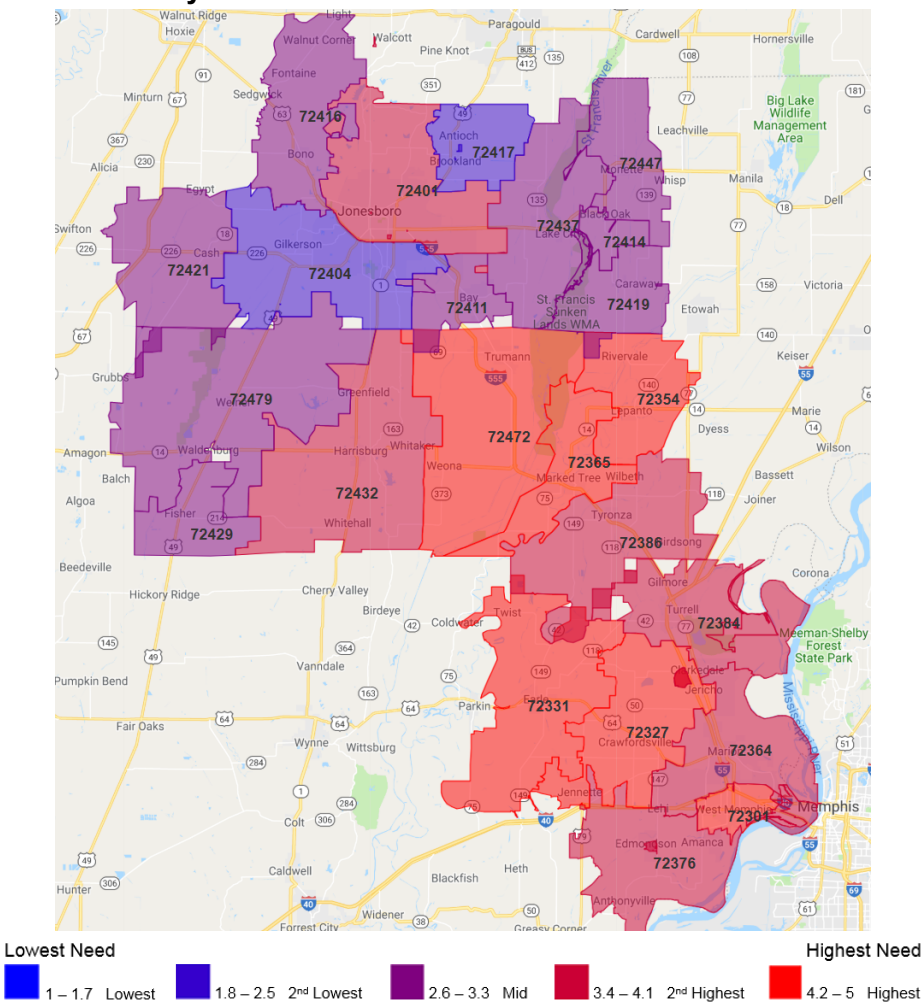
ZIP Code of residence is a strong predictor of health outcomes and disparities. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the ZIP Code-level. The CNI scores ZIP Codes on a scale of 1.0 (low need) to 5.0 (high need) based on data indicators across five socioeconomic barriers listed below.

- Income: Poverty among elderly households, families with children and single female-headed families with children
- Culture/Language: Minority populations and English-language barriers
- Education: Population over 25 years without a high school diploma
- Insurance coverage: Unemployment rate among population age 16 or over and population without health insurance
- Housing status: Householders renting their home

The weighted average CNI score for the Northeast Arkansas Service Area is 3.7, indicating higher than average overall community need.

The CNI score map on the following page reflects similar data findings as detailed within the county-level analysis and provides a closer look at health disparities. A full analysis of socioeconomic factors is included for each ZIP Code with a CNI score of 3.4 or greater, which is useful in pinpointing high-risk populations and prioritizing communities and neighborhoods on which to focus community health improvement efforts.

Community Need Index for Northeast Arkansas Service Area



The following tables list the social determinants of health that contribute to ZIP Code CNI scores and are often indicative of health disparities. ZIP Codes with a CNI score of 3.4 or greater are shown in comparison to their respective county and the state, and are presented in descending order by CNI score. Cells highlighted in yellow are more than two percentage points higher than the county statistic, but not necessarily statistically significant.

There are some similarities in the ZIP Codes measured in all three counties. Across the three counties, at least 1 in 10 households and one-quarter of children are living at or below the federal poverty level and roughly 1 in 5 adults have not completed a high school diploma. Generally, across all ZIP Codes in the three counties, 10% or more of the overall population is without health insurance. Roughly, 95% of households in all ZIP Codes are primarily English speaking.

There is some variability within and between the counties. Craighead County, particularly Jonesboro, trends younger than the comparison ZIP Codes, likely due to the presence of Arkansas State University. Households in poverty may also be attributed to university students

living in the area, however with the percentage of children in poverty (35.7%) reflects socioeconomic needs beyond a student population.

Measures for high school completion are low across Crittenden County. Approximately half of all children in Earle, West Memphis and Proctor live in poverty, yet far fewer households receive SNAP benefits.

In Poinsett County, Lepanto and Marked Tree residents experience the greatest socioeconomic disparities. Additionally, more children also live in poverty in Trumann and Tyronza compared to other ZIP codes and the county as a whole, and are less likely to receive SNAP benefits.

Craighead County
Social Determinants of Health Indicators for ZIP Codes With CNI Score ≥3.4

	House-holds in Poverty	House-holds Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unem-ployment	Less than HS Diploma	Without Health Insurance	CNI Score
Craighead County	**17.6%**	**15.6%**	**25.1%**	**5.4%**	**4.7%**	**11.1%**	**13.6%**	**3.4**
72401, Jonesboro	21.5%	20.5%	35.7%	6.8%	6.5%	11.9%	15.8%	4.0
Arkansas	**17.9%**	**14.3%**	**25.7%**	**7.1%**	**4.4%**	**13.7%**	**12.3%**	

Craighead County
Demographic Indicators for ZIP Codes With CNI Score ≥3.4

	White	Black/ African American	Hispanic/ Latino	18–24	25–34	35–44	45–54	55–64	65+
Craighead County	**78.2%**	**15.2%**	**5.2%**	**11.6%**	**15.4%**	**12.5%**	**11.4%**	**11.0%**	**14.7%**
72401, Jonesboro	70.1%	21.9%	6.5%	13.9%	15.2%	11.8%	10.4%	10.6%	15.2%
Arkansas	**75.2%**	**15.5%**	**7.7%**	**9.4%**	**13.5%**	**12.2%**	**12.3%**	**12.9%**	**17.1%**

Crittenden County
Social Determinants of Health Indicators for ZIP Codes With CNI Score ≥3.4

	House-holds in Poverty	House-holds Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unem-ployment	Less than HS Diploma	Without Health Insurance	CNI Score
Crittenden County	**20.9%**	**23.5%**	**37.0%**	**2.8%**	**6.7%**	**17.0%**	**11.5%**	**4.3**
72301, West Memphis	26.0%	30.4%	51.5%	1.8%	8.5%	18.5%	12.3%	4.6
72331, Earle	29.9%	31.5%	36.1%	1.7%	10.5%	26.6%	13.2%	4.6
72327, Crawfordsville	22.2%	21.2%	31.3%	9.1%	5.1%	26.2%	11.8%	4.4
72376, Proctor	10.6%	11.1%	50.2%	0.9%	5.6%	20.2%	19.1%	4.0
72384, Turrell	21.9%	14.6%	45.9%	4.5%	3.3%	25.0%	12.2%	3.8
72364, Marion	12.0%	13.5%	16.6%	3.8%	4.6%	10.9%	9.0%	3.8
Arkansas	**17.9%**	**14.3%**	**25.7%**	**7.1%**	**4.4%**	**13.7%**	**12.3%**	

Crittenden County
Demographic Indicators for ZIP Codes With CNI Score ≥3.4

	White	Black/ African American	Hispanic/ Latino	18–24	25–34	35–44	45–54	55–64	65+
Crittenden County	**43.5%**	**52.8%**	**2.7%**	**9.4%**	**13.6%**	**12.2%**	**12.5%**	**12.6%**	**13.7%**
72301, West Memphis	33.8%	63.2%	2.4%	9.6%	13.5%	11.2%	11.8%	12.1%	14.7%
72331, Earle	24.1%	74.1%	1.1%	9.9%	12.3%	10.3%	11.7%	12.0%	15.0%
72327, Crawfordsville	52.1%	44.0%	4.2%	8.2%	12.2%	12.8%	12.4%	15.2%	17.5%
72376, Proctor	37.7%	58.6%	3.7%	8.6%	11.4%	10.8%	13.3%	14.5%	16.4%
72384, Turrell	50.7%	46.6%	2.9%	7.7%	11.0%	13.0%	14.9%	14.8%	15.5%
72364, Marion	60.3%	34.5%	3.3%	9.5%	14.7%	14.6%	13.3%	12.5%	10.4%
Arkansas	**75.2%**	**15.5%**	**7.7%**	**9.4%**	**13.5%**	**12.2%**	**12.3%**	**12.9%**	**17.1%**

Poinsett County
Social Determinants of Health Indicators for ZIP Codes With CNI Score ≥3.4

	House-holds in Poverty	House-holds Receiving Food Stamps/ SNAP	Children in Poverty	Language Other than English Spoken at Home	Unem-ployment	Less than HS Diploma	Without Health Insurance	CNI Score
Poinsett County	**20.5%**	**20.9%**	**35.1%**	**2.3%**	**6.3%**	**19.9%**	**13.9%**	**4.0**
72354, Lepanto	33.5%	35.6%	47.2%	2.9%	12.8%	24.6%	17.9%	4.6
72365, Marked Tree	31.0%	28.6%	43.5%	4.8%	7.4%	21.0%	14.6%	4.4
72472, Trumann	20.2%	21.8%	38.6%	2.2%	6.0%	20.1%	12.9%	4.2
72386, Tyronza	19.9%	19.2%	40.5%	1.0%	5.8%	16.7%	13.5%	4.0
72432, Harrisburg	14.0%	14.2%	23.6%	1.9%	4.7%	19.2%	13.1%	3.4
Arkansas	**17.9%**	**14.3%**	**25.7%**	**7.1%**	**4.4%**	**13.7%**	**12.3%**	

Poinsett County
Demographic Indicators for ZIP Codes With CNI Score ≥3.4

	White	Black/ African American	Hispanic/ Latino	18–24	25–34	35–44	45–54	55–64	65+
Poinsett County	**87.9%**	**8.1%**	**3.1%**	**8.0%**	**12.6%**	**11.7%**	**13.1%**	**14.1%**	**18.9%**
72354, Lepanto	80.7%	13.3%	5.7%	8.2%	12.2%	11.9%	14.2%	15.3%	18.1%
72365, Marked Tree	71.2%	25.5%	2.4%	7.6%	12.1%	11.8%	12.7%	14.6%	19.6%
72472, Trumann	89.7%	6.4%	3.4%	8.3%	13.4%	11.3%	12.5%	13.3%	17.9%
72386, Tyronza	85.8%	11.3%	2.8%	6.7%	10.2%	12.9%	11.7%	16.6%	20.7%
72432, Harrisburg	93.8%	2.3%	8.5%	12.3%	12.1%	13.5%	13.5%	19.4%	8.5%
Arkansas	**75.2%**	**15.5%**	**7.7%**	**9.4%**	**13.5%**	**12.2%**	**12.3%**	**12.9%**	**17.1%**

Statistical Analysis of Health Indicators

Health indicators were analyzed across a number of health issues, including access to care, health behaviors and outcomes, chronic disease morbidity and mortality, mental health and substance use disorder trends and maternal and child health measures.

Data were compiled from secondary sources, including the Arkansas Department of Health, the Centers for Disease Control and Prevention (CDC), the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix A.

Health data focus on county-level reporting, which is generally the most recent and consistent data available. Health data for Baptist's service counties are compared to state and national averages and Healthy People 2020 (HP 2020) goals, where applicable, to provide benchmark comparisons. Healthy People is a U.S. Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

Age-adjusted rates are referenced throughout the report to depict the burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey of residents 18 years old or older conducted nationally by states as required by the CDC. A consistent survey tool is used across the United States to assess health risk behaviors, prevalence of chronic health conditions, access to care, preventive health measures and other health indicators. BRFSS results included in this report were provided by the Mississippi Department of Health.

The most recent data available at the time of this study were used unless otherwise noted.

Access to Health Care

According to the University of Wisconsin County Health Rankings & Roadmaps program, counties in Baptist's Northeast Arkansas Service Area received the following rankings for clinical care out of 75 counties in Arkansas. The rankings are based on a number of indicators, including health insurance coverage and provider access, with a rank of No. 1 being the best in the state.

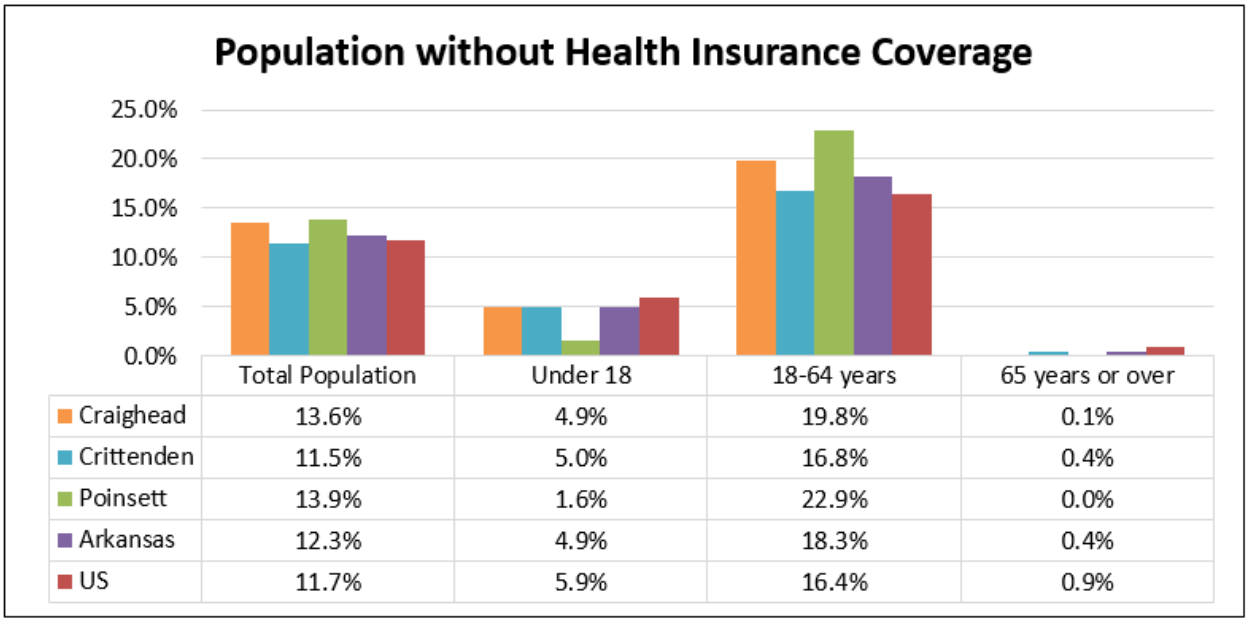
2018 Clinical Care County Health Rankings

No. 3 Craighead County (No. 2 in 2015)
No. 7 Crittenden County (No. 16 in 2015)
No. 55 Poinsett County (No. 52 in 2015)

Health Insurance Coverage

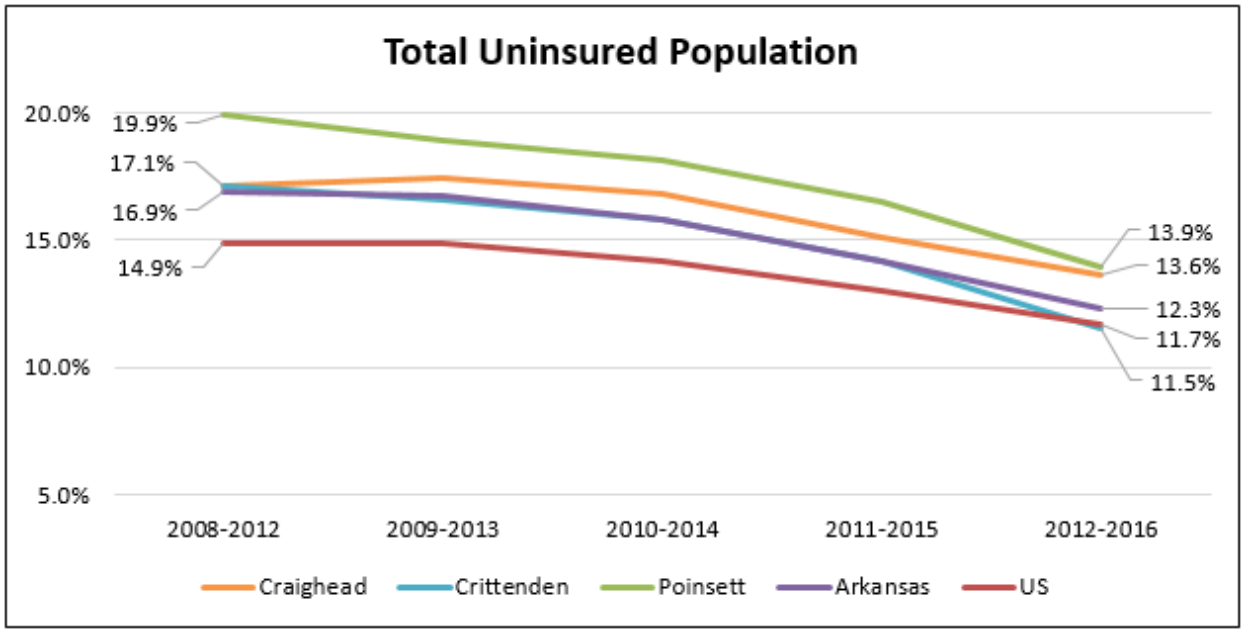
The percentage of uninsured is declining, but remains higher in Craighead and Poinsett counties than the state and the nation.

The percentage of uninsured people in Craighead and Poinsett counties is greater than the state and nation, while the percentage of uninsured people in Crittenden County is slightly less. When broken down by age, nearly all children in Poinsett County are insured, and children in Craighead and Crittenden counties are more likely to be insured than the nation. However, people 18 years old or older living in the Northeast Arkansas Service Area are less likely to have health insurance than the nation in general. The percent uninsured in all three counties has continued to trend downward at a similar pace as the rest of the nation.



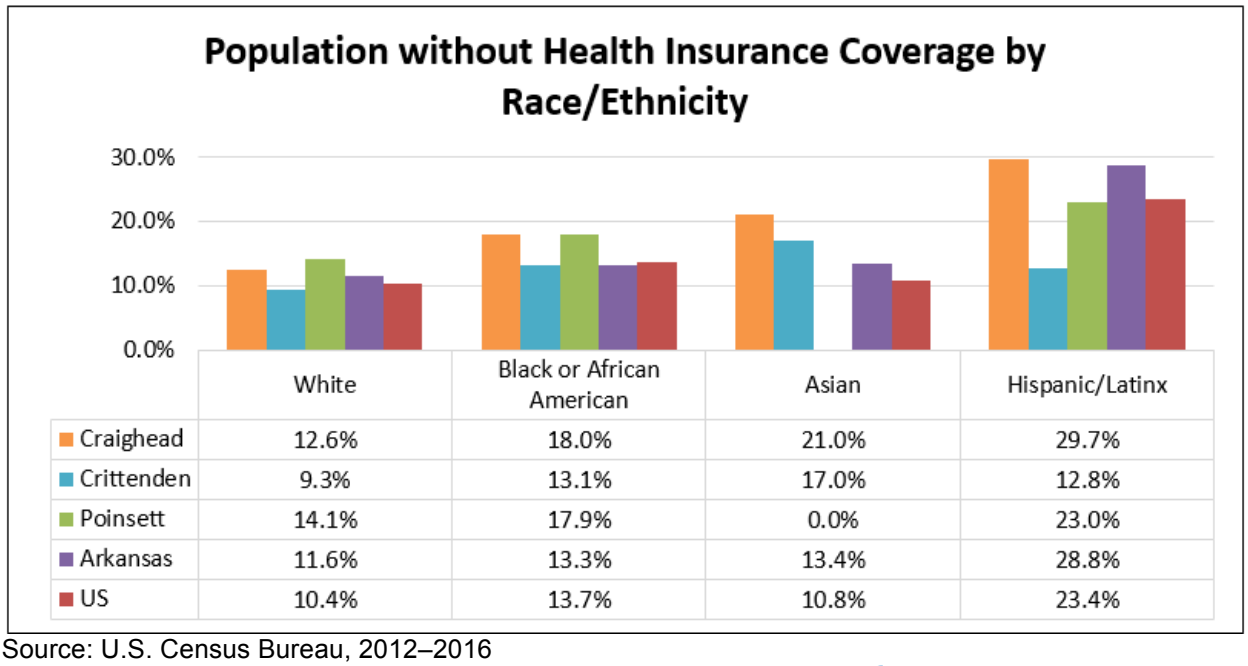
	Total Population	Under 18	18-64 years	65 years or over
Craighead	13.6%	4.9%	19.8%	0.1%
Crittenden	11.5%	5.0%	16.8%	0.4%
Poinsett	13.9%	1.6%	22.9%	0.0%
Arkansas	12.3%	4.9%	18.3%	0.4%
US	11.7%	5.9%	16.4%	0.9%

Source: U.S. Census Bureau, 2012–2016



Source: U.S. Census Bureau, 2008–2012 to 2012–2016

When stratified by race, the percentage of uninsured in Craighead and Poinsett counties for all reported race categories is generally higher than the state and nation. In Crittenden County, the percentage of uninsured is slightly lower than the state and nation in all categories except among Asians. The numbers of Asian and Hispanic/Latino people living in all three counties is relatively low; therefore, the percentage of uninsured in these race categories is less reliable than in more populous race categories.



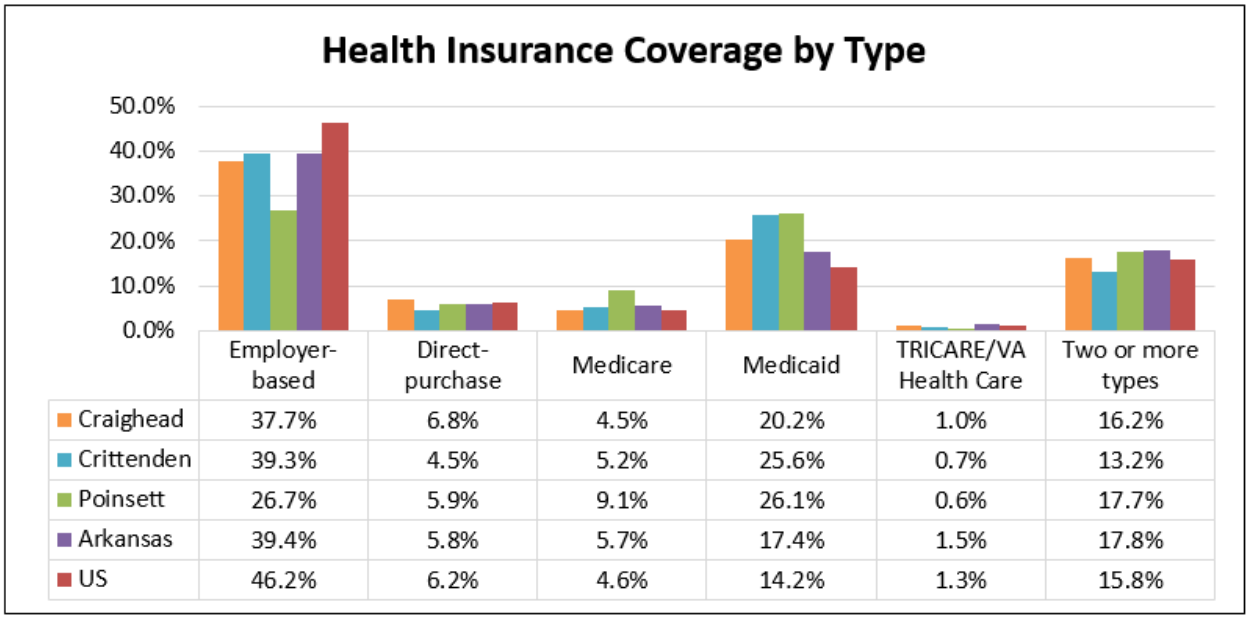
	White	Black or African American	Asian	Hispanic/Latinx
Craighead	12.6%	18.0%	21.0%	29.7%
Crittenden	9.3%	13.1%	17.0%	12.8%
Poinsett	14.1%	17.9%	0.0%	23.0%
Arkansas	11.6%	13.3%	13.4%	28.8%
US	10.4%	13.7%	10.8%	23.4%

Source: U.S. Census Bureau, 2012–2016

Comparable to the state and the nation, most people in the Northeast Arkansas Service Area get their health insurance

Residents in the service area are more likely to be covered by Medicaid insurance.

through their employer. However, residents of the three counties of the Northeast Arkansas Service Area are more likely to have health insurance coverage through Medicaid.



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE/VA Health Care	Two or more types
Craighead	37.7%	6.8%	4.5%	20.2%	1.0%	16.2%
Crittenden	39.3%	4.5%	5.2%	25.6%	0.7%	13.2%
Poinsett	26.7%	5.9%	9.1%	26.1%	0.6%	17.7%
Arkansas	39.4%	5.8%	5.7%	17.4%	1.5%	17.8%
US	46.2%	6.2%	4.6%	14.2%	1.3%	15.8%

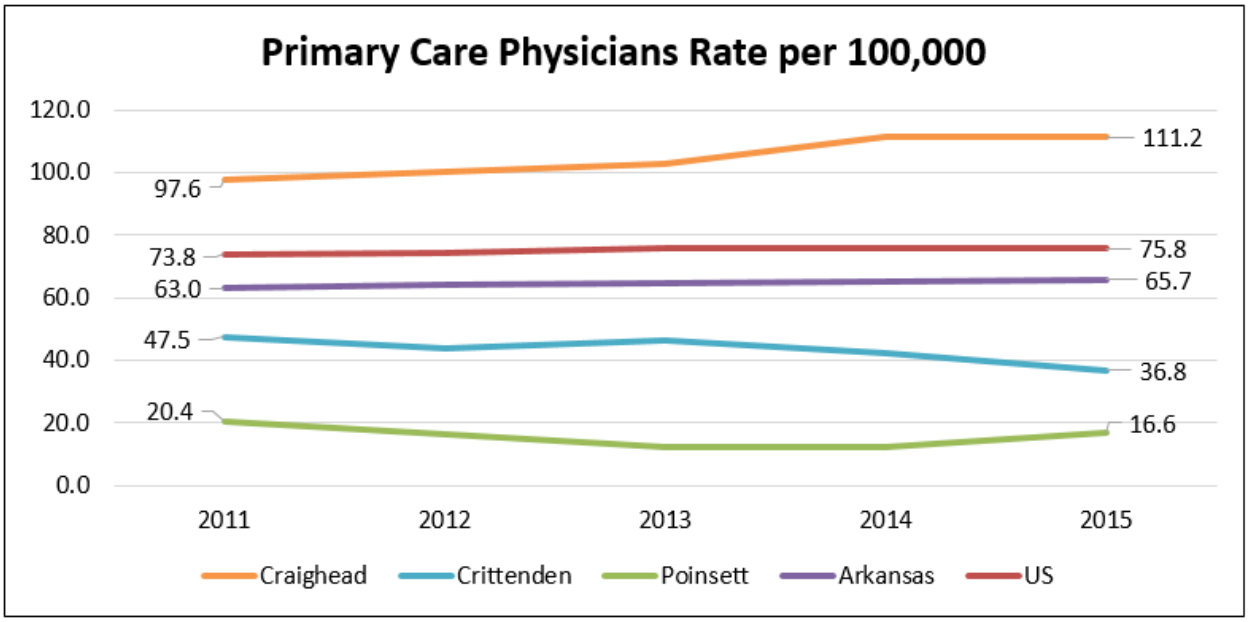
Source: U.S. Census Bureau, 2012–2016

Provider Access

Provider rates are measured by the number of providers per 100,000 people and are measured against state and national benchmarks for primary, dental and mental health care.

Craighead County exceeds the national rate of primary care physicians per 100,000 people, indicating better access to primary care. The rate of primary care physicians per 100,000 in Crittenden County (36.8) is nearly half of the national rate (75.8), indicating a barrier to accessing care. In Poinsett County, the rate of primary care physicians (16.6) is 4.5 times lower than the national rate. These rates may improve with the addition of the Baptist Crittenden Hospital. .

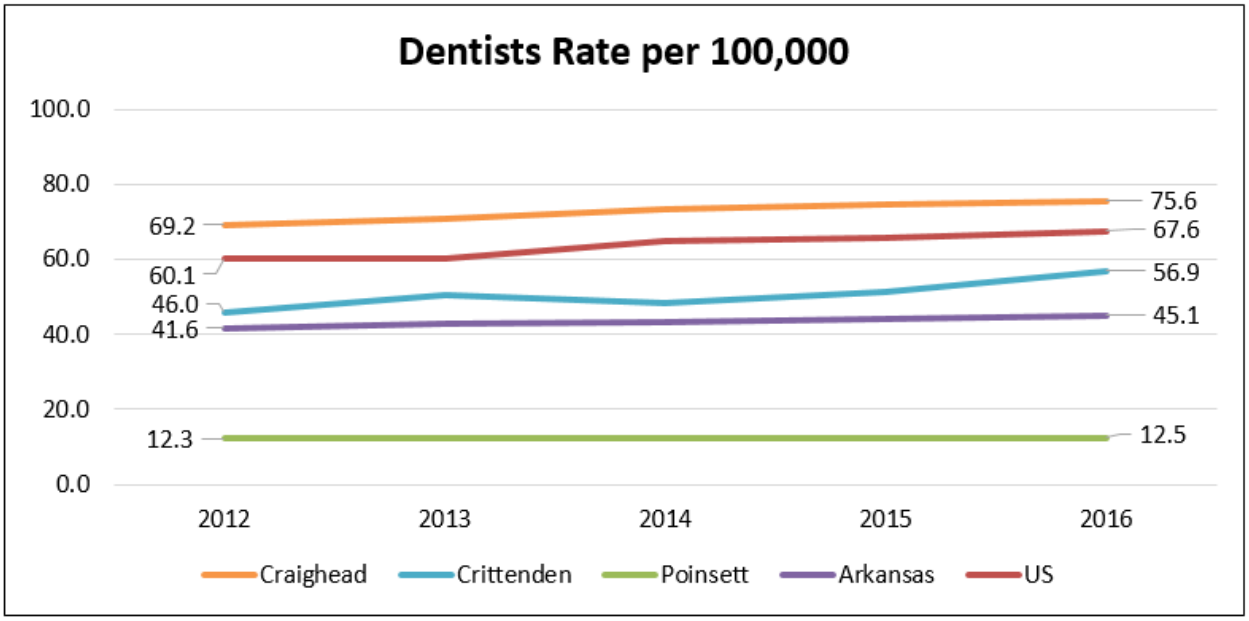
Craighead County has a higher rate of primary care physicians, dentists and mental health care providers than the state and the nation.



Source: Health Resources & Services Administration, 2011–2015
Note: Providers are identified by the location of their preferred professional/business mailing address. Provider rates do not take into account providers who serve multiple counties or who have satellite clinics.

Craighead County has more dentists per 100,000 than the nation and Arkansas, indicating better dental care access. While the rate of dentists per 100,000 population in Crittenden County is better than the statewide rate, it is less than the national rate. In Poinsett County, the dentist rate per 100,000 is 12.5; nearly 5.5 times lower than the national rate of 67.6, indicating a significant barrier to accessing dental care.

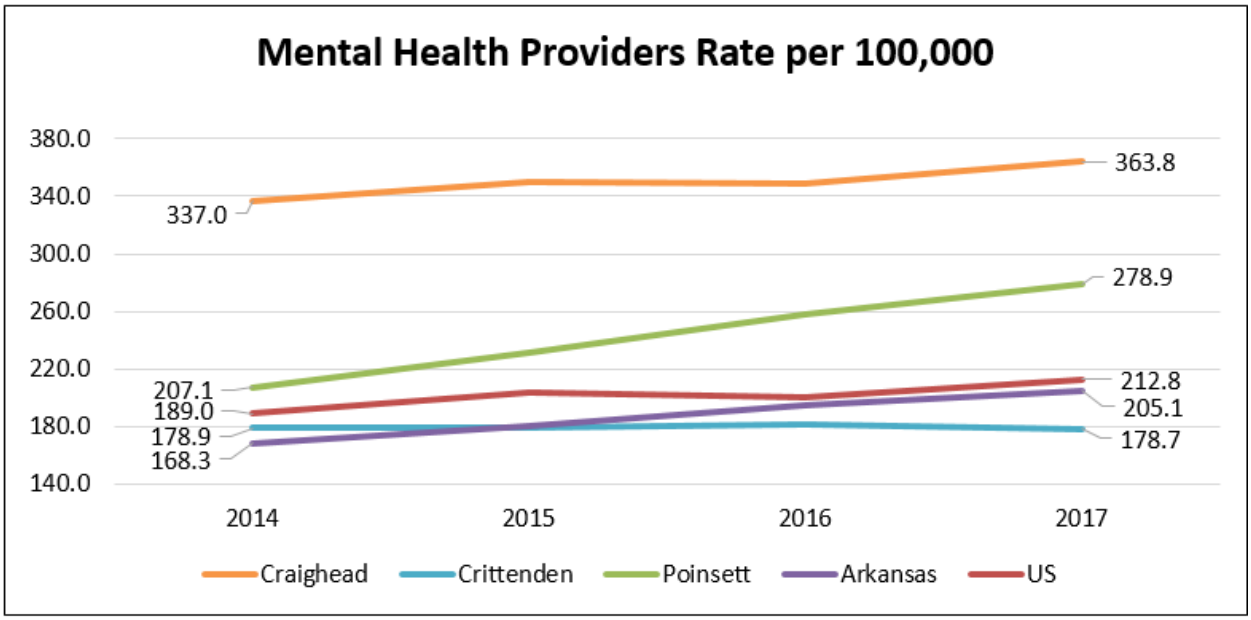
The rate of primary care physicians and dentists in Poinsett County is 5 times lower than state and national rates.



Source: Health Resources & Services Administration, 2012–2016

Both Craighead and Poinsett counties exceed the national and state rates for mental health providers, indicating better access to mental health care; these rates increased from 2014 to 2017. Crittenden County has a lower rate of mental health providers than both the nation and Arkansas, which has remained largely unchanged since 2014.

Mental health provider rates in Craighead and Poinsett counties exceed state and national rates, and are increasing.



Source: Centers for Medicare and Medicaid Services, 2014–2017
Note: An error occurred in the County Health Rankings method for identifying mental health providers in 2013. Data prior to 2014 are not shown.

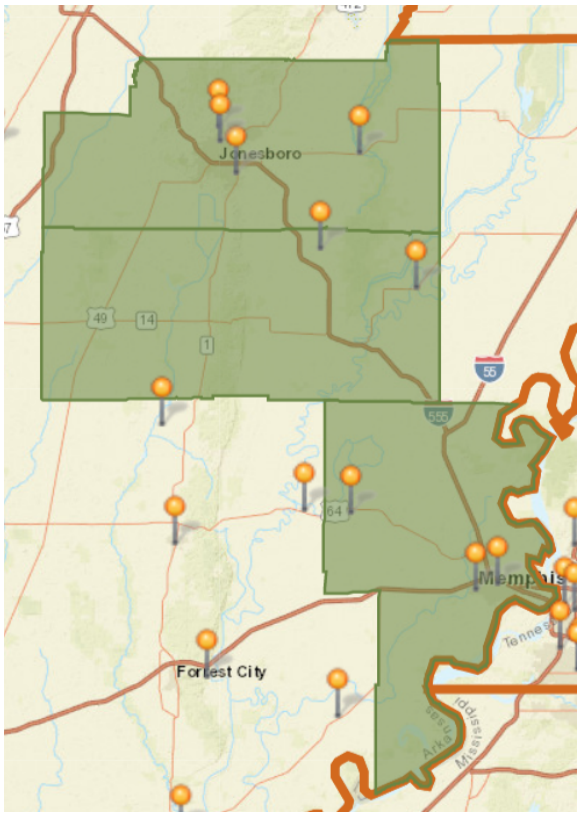
The Health Resources & Services Administration (HRSA) is responsible for designating Health Professional Shortage Areas (HPSAs), as well as Medically Underserved Areas (MUAs). Shortage areas are determined by a defined ratio of total health professionals versus the total population. Medically Underserved Areas are areas designated as having too few primary care providers, high infant mortality, high poverty or a large elderly population. The following HPSAs and MUAs are located in the Northeast Arkansas Service Area.

Health Professional Shortage Areas and Medically Underserved Areas in the Northeast Arkansas Service Area

Geographic Area	Medically Underserved Area	Health Professional Shortage Area(s)
Craighead County (All)		Low-income population (mental health care)
Craighead County: Buffalo Township/Lake City Township/Prairie Township		Low-income population (primary care)
Craighead County: Black Oak Township/Lester Township	x	Low-income population (primary care)
Crittenden County (All)	x	
Poinsett County (All)	x	Low-income population (primary care, dental care, mental health care)

The Health Resources & Services Administration also plays a role in designating Federally Qualified Health Centers (FQHCs). Federally Qualified Health Centers are defined as "community-based health care providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas." Services are provided on a sliding fee scale based on patients' ability to pay. A map of FQHC locations within the Northeast Arkansas Service Area is below. A listing of FQHCs within the service area can be found in Appendix C.

FQHC Locations In and Around the Northeast Arkansas Service Area



Overall Health Status

According to the University of Wisconsin County Health Rankings & Roadmaps program, Northeast Arkansas Service Area counties received the following rankings out of 75 counties for health outcomes in Arkansas. Health outcomes are measured in relation to premature death (before age 75) and quality of life, with a ranking of No. 1 being the best in the state.

2018 Health Outcomes County Health Rankings

No. 14 Craighead County (No. 10 in 2015)

No. 66 Crittenden County (No. 68 in 2015)

No. 67 Poinsett County (No. 69 in 2015)

All three counties and the state of Arkansas have a higher premature death rate, more adults reporting "poor" or "fair" health status and a higher 30-day average of poor physical and mental health days than the nation, suggesting a lower quality of life than the nation in general. Crittenden County has a higher premature death rate and more adults with "poor" or "fair" health status than the state and nation. Poinsett County has a higher premature death rate than the state, nation and Craighead and Crittenden counties.

Residents in the Northeast Arkansas Service Area have a higher premature death rate and report lower quality of life than national averages.

Health Outcomes Indicators
(Red = Higher Than the State or the Nation)

	Premature Death Rate per 100,000	Adults with "Poor" or "Fair" Health Status	30-Day Average –Poor Physical Health Days	30-Day Average –Poor Mental Health Days
Craighead County	8,936	21.0%	4.5	4.8
Crittenden County	11,466	25.0%	5.0	5.0
Poinsett County	13,026	24.0%	5.1	5.0
Arkansas	9,227	24.5%	5.0	5.2
United States	6,700	16.0%	3.7	3.8

Source: National Center for Health Statistics, 2014–2016; Centers for Disease Control and Prevention, 2016

Health Behaviors

Individual health behaviors include risky behaviors, such as tobacco use and obesity, or positive behaviors, such as exercise, good nutrition and stress management. Health behaviors may increase or reduce the likelihood of disease or early death. The prevalence of these health behaviors is provided below, with benchmark comparisons, as available.

Tobacco Use

Across the service area, the percent of adult smokers declined, but remains two times higher than the Healthy People 2020 goal.

Tobacco use is a significant contributor to heart disease, cancer, stroke, respiratory health, low birth weight, early death and other conditions. Healthy People 2020 sets a national target of no more than 12% for reported adult smoking. The percentage of adults using tobacco has decreased in all three counties since 2014; however, the percentage of adult smokers still exceeds the national percent, and remains nearly two times higher than the Healthy People 2020 target of 12%.

Tobacco Use Among Adults
(Green = Decrease of More Than 2 Points Since Last CHNA)

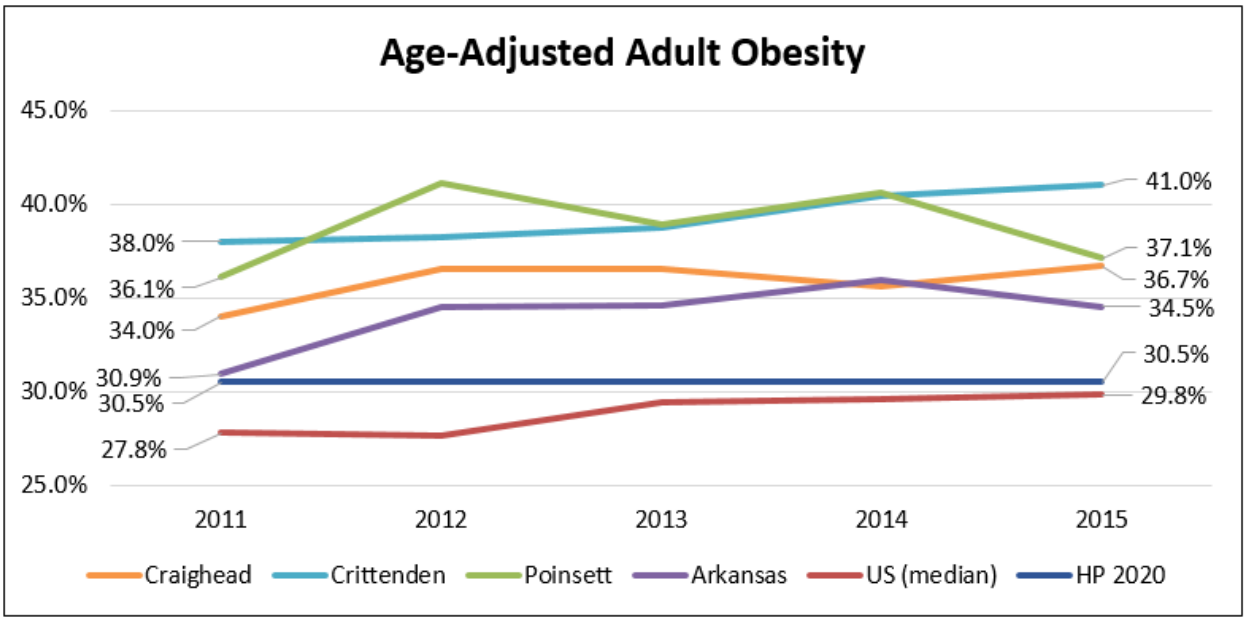
	Adult Smoking	
	2014	2016
Craighead County	24.1%	21.0%
Crittenden County	26.1%	24.0%
Poinsett County	25.3%	23.0%
Arkansas	24.7%	23.6%
United States	17.0%	17.0%
Healthy People 2020	12.0%	12.0%

Source: Centers for Disease Control and Prevention, 2014 & 2016; Healthy People 2020

Obesity

Approximately 40% of adults across the service area are obese, exceeding state and national benchmarks.

Overweight and obesity are associated with greater risk for a variety of diseases, including heart disease and diabetes, and contribute to decreased quality of life. The Healthy People 2020 target for adult obesity is no more than 30.5% of the population. The national average meets this target. In the Northeast Arkansas Service Area counties adult obesity increased from 2011 to 2015. The percentages exceed the state and national comparisons and have not met the Healthy People 2020 target.



Source: Centers for Disease Control and Prevention, 2011–2015

Healthy Eating and Food Insecurity

Food insecurity, defined as being without a consistent source of sufficient and affordable nutritious food, negatively impacts the opportunity for healthy eating and healthy weight management. Food insecurity reflects a variety of social factors, including employment, income, access to healthy food options, transportation, housing and other factors.

A higher percent of Arkansas residents are food insecure compared to the nation, and residents of Craighead, Crittenden and Poinsett counties are more food insecure than the state. Across all three counties, roughly 1 in 5 adults and 1 in 4 children experience food insecurity, which can negatively impact physical health, emotional well-being, school performance and other factors.

20% of adults and 15% of children in the service area are food insecure.

Access to free and reduced-price lunch for low-income school children can improve food insecurity for households with children. Eligibility for free lunch includes households with an income at or below 130% of the poverty threshold, while eligibility for reduced-price lunch includes households with an income between 130% and 185% of the poverty threshold.

More than 80% of children in Craighead and Crittenden counties qualify for free or reduced-price school lunches.

More than 4 out of 5 children in Crittenden and Poinsett counties qualify for free and reduced-price lunch. In Craighead County, roughly 3 out 5 children qualify for free or reduced-price lunch.

Food Insecurity
(Red = Higher Than the State or Nation)

	All Residents	Children
Craighead County	**17.5%**	**23.2%**
Crittenden County	**25.0%**	**25.8%**
Poinsett County	**18.0%**	**26.7%**
Arkansas	17.2%	23.2%
United States	12.9%	17.5%

Source: Feeding America, 2016

Children Eligible for Free or Reduced-Price School Lunch

	Percent
Craighead County	58.8%
Crittenden County	84.7%
Poinsett County	83.0%
Arkansas	63.6%

Source: National Center for Education Statistics, 2015–2016

Healthy Living

Healthy habits, such as regular exercise, are important for establishing and maintaining a healthy lifestyle. Access to physical activity opportunities promotes regular exercise. This includes access to parks, gyms, pools and other safe venues designed to facilitate activity.

Arkansas in general has lower access to physical activity and greater numbers of physically inactive adults than the nation. The Northeast Arkansas Service Area has less access to physical activity than the nation and greater numbers of physically inactive adults than the state and nation. Access to physical activity is of particular concern in Poinsett County where only 1 in 3 residents have access to physical activity, less than half of the national percentage. Interventions to improve healthy lifestyle habits would be valuable in these communities.

Nearly 2 in 5 adults in the service area do not get regular physical activity.

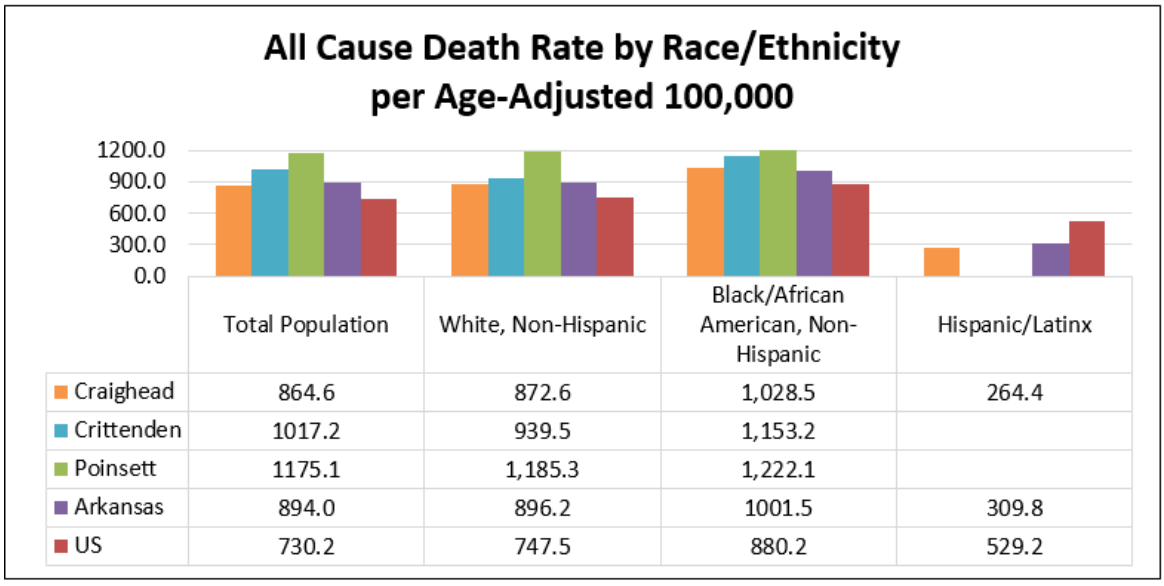
Physical Activity
(Red = Lower Access and Higher Inactivity Than the State and/or Nation)

	Access to Physical Activity	Physically Inactive Adults
Craighead County	**70.1%**	**33.5%**
Crittenden County	**71.6%**	**36.7%**
Poinsett County	**33.8%**	**39.9%**
Arkansas	65.6%	32.3%
United States	83.0%	23.0%

Source: Business Analyst, Delorme Map Data, ESRI, & U.S. Census Tigerline Files, 2010 & 2016; Centers for Disease Control and Prevention, 2014

Mortality

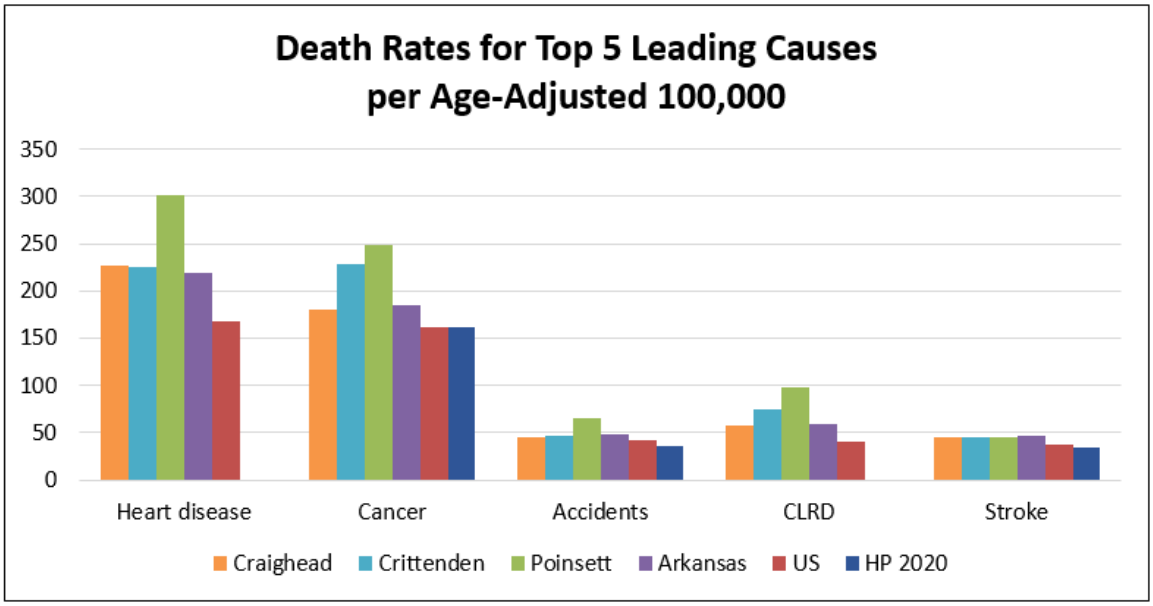
The following graph depicts the all cause age-adjusted death rate by county and by race/ethnicity. Death rates for White or Black/African American residents in Baptist's Northeast Arkansas Service Area are higher than the nation in general.



	Total Population	White, Non-Hispanic	Black/African American, Non-Hispanic	Hispanic/Latinx
Craighead	864.6	872.6	1,028.5	264.4
Crittenden	1017.2	939.5	1,153.2	
Poinsett	1175.1	1,185.3	1,222.1	
Arkansas	894.0	896.2	1001.5	309.8
US	730.2	747.5	880.2	529.2

Source: Centers for Disease Control and Prevention, 2012–2016
*Hispanic/Latino death rates are not available for Crittenden and Poinsett counties due to low counts.

The following chart profiles death rates for the top five causes of death in the nation. The death rates for all five causes are higher in Arkansas and Baptist's Northeast Arkansas Service Area than the nation in general. None of the three counties, nor the state of Arkansas, have met the Healthy People 2020 targets for the leading causes of death.



Source: Centers for Disease Control and Prevention, 2012–2016; Healthy People 2020

Chronic Diseases

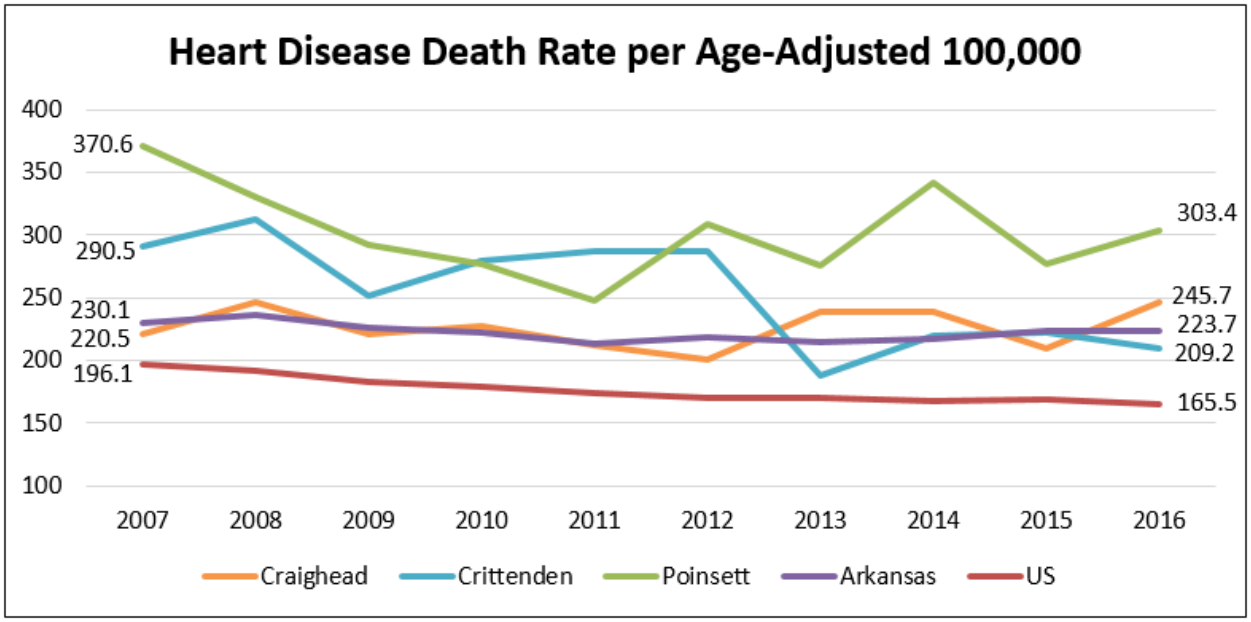
Chronic diseases are the leading causes of death and disability in the nation and disease rates continue to increase. Chronic diseases are often preventable through reduced health risk behaviors, such as not smoking and limiting alcohol use, increased physical activity, good nutrition and early detection of risk factors.

Heart Disease

The Poinsett County heart disease death rate declined, but remains nearly two times higher than the national rate.

Heart disease is a leading cause of death in the nation, and within Baptist's Northeast Arkansas Service Area. While there has been some variability in the heart disease death rate in the service area since 2007, the current rate of death in all three counties still exceeds the national rate. Only Crittenden County has a slightly lower rate than Arkansas. The rate of heart disease death in Poinsett County (303.4) is nearly two times greater than the national rate (165.5).

The heart disease death rate has generally declined in Crittenden and Poinsett counties, consistent with the nation. However, the Craighead County heart disease death rate increased over the past decade, particularly from 2012 to 2016.



Source: Centers for Disease Control and Prevention, 2007–2016

When stratified by race, the heart disease death rate for both Whites and Blacks/African Americans in Arkansas exceeds national rates. Consistent with the state and nation, across the Northeast Arkansas Service Area, Blacks/African Americans have a higher rate of heart disease death than Whites.

The Black/African American heart disease death rate is higher in all three counties compared to the state and the nation.

Heart Disease Death Rates per Age-Adjusted 100,000 by Race

	White, Non-Hispanic Death Rate	Black/African American, Non-Hispanic Death Rate	Hispanic/Latino Death Rate
Craighead County	226.5	327.3	NA*
Crittenden County	202.1	265.4	NA*
Poinsett County	301.6	393.6	NA*
Arkansas	217.4	262.7	72.0
United States	170.9	212.6	118.2

Source: Centers for Disease Control and Prevention, 2012–2016
*Hispanic/Latino death rates are not available at the county level due to low counts.

Coronary Heart Disease and Stroke

Coronary heart disease (CHD) is characterized by the buildup of plaque inside the coronary arteries. Several types of heart disease, including coronary heart disease, are risk factors for stroke. Healthy People 2020 sets a target for coronary heart disease death rate at 103.4, which the nation meets, but the state of Arkansas does not. Craighead County has met the Healthy People 2020 target for coronary heart disease death. Crittenden County has not met the Healthy People 2020 target or the national rate, but has a better rate than Arkansas. Poinsett County has a higher rate than any other geography listed here.

Healthy People 2020 sets a target for stroke death at 34.8, which the nation and Arkansas have not met. All three counties exceed the national rate and Healthy People 2020 target, and Crittenden and Poinsett counties exceed the Arkansas rate as well. While Craighead County has a better rate of stroke death than Arkansas, it is still higher than the nation and does not meet the Healthy People 2020 target.

None of the counties meet the HP 2020 goal for stroke death

Coronary Heart Disease and Stroke Death Rates
(Red = Higher Than the State and/or the Nation)

	Coronary Heart Disease Death per Age-Adjusted 100,000	Stroke Death per Age-Adjusted 100,000
Craighead County	**99.7**	**42.4**
Crittenden County	**130.3**	**47.9**
Poinsett County	**179.1**	**49.7**
Arkansas	133.7	46.0
United States	99.6	36.9
Healthy People 2020	103.4	34.8

Source: Centers for Disease Control and Prevention, 2014–2016

Cancer

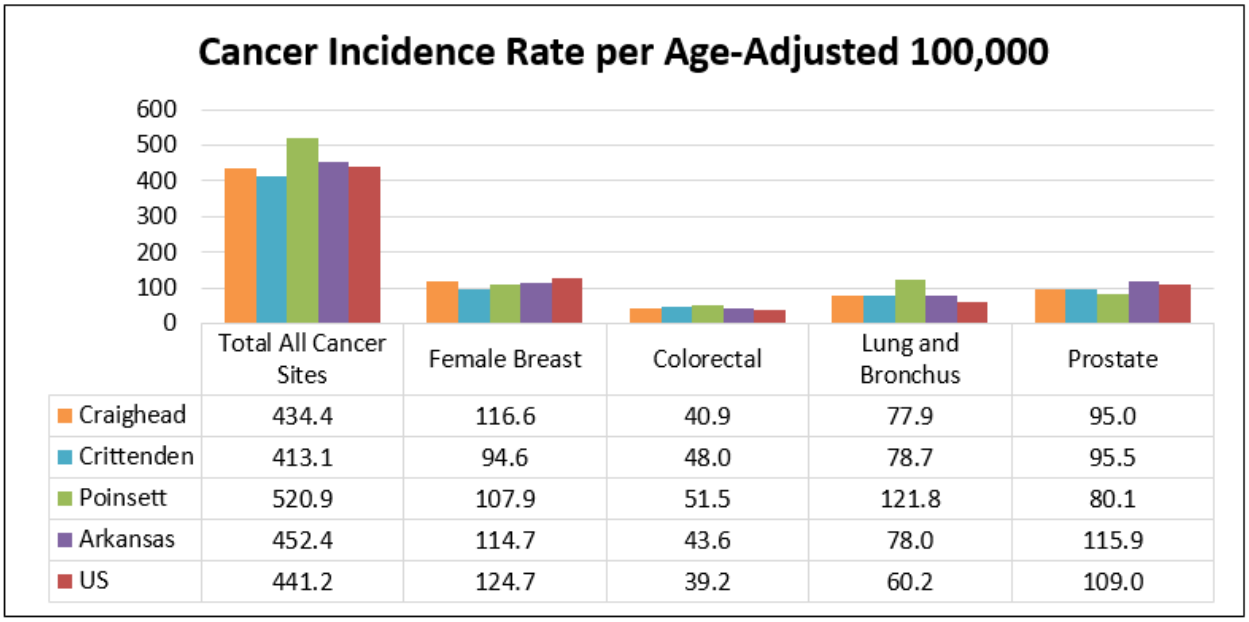
Cancer remains a leading cause of death, but if detected early, can often be effectively treated. The incidence of cancer in Craighead and Crittenden counties is generally comparable to national and statewide rates, while the Poinsett County incidence rate exceeds

Poinsett County has higher incidence and death rates due to cancer, particularly lung cancer, than all other reported geographies.

all listed geographies. The incidence of lung cancer in Poinsett County is particularly high.

It is notable that the incidence of female breast cancer and prostate cancer is generally lower in all three counties than the state and the nation. The death rate due to these types of cancers is also lower in Craighead County, which may indicate a lower level of disease in the county. In Crittenden County, the death rates due to female breast and prostate cancer are higher than state and national benchmarks, which may suggest delayed detection and treatment and a need for increased screening for these types of cancers. Poinsett County death rates due to female breast and prostate cancer are not reported due to low counts.

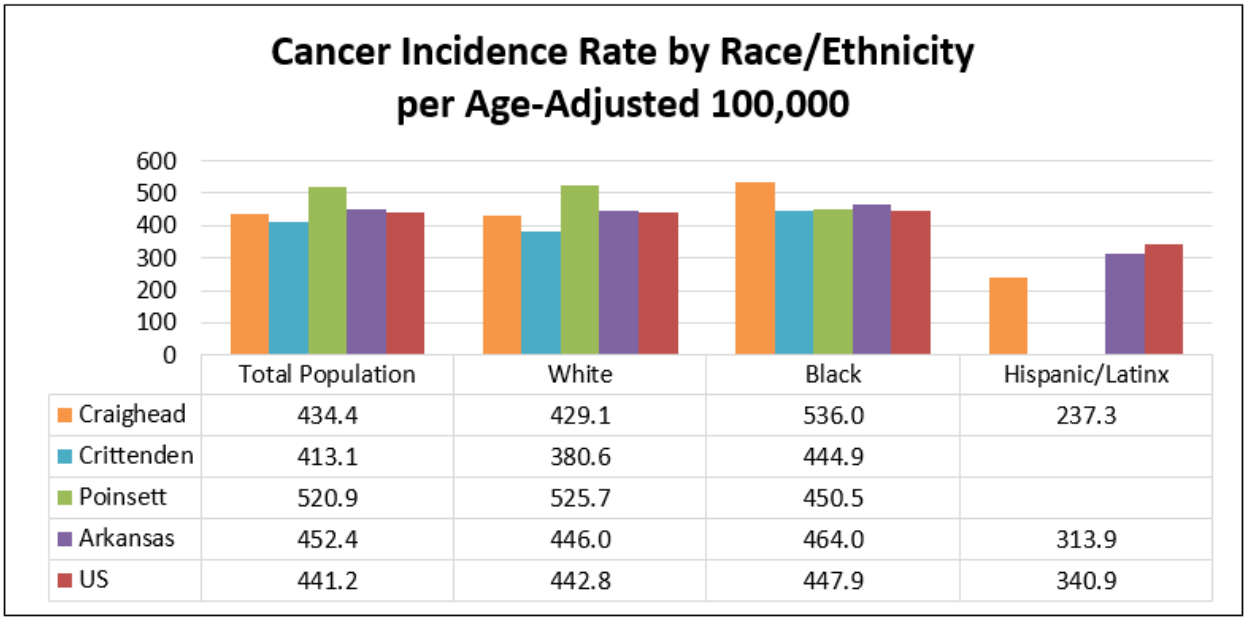
Crittenden County has lower incidence rates of female breast and prostate cancer, but higher death rates, which may indicate delayed detection and treatment.



	Total All Cancer Sites	Female Breast	Colorectal	Lung and Bronchus	Prostate
Craighead	434.4	116.6	40.9	77.9	95.0
Crittenden	413.1	94.6	48.0	78.7	95.5
Poinsett	520.9	107.9	51.5	121.8	80.1
Arkansas	452.4	114.7	43.6	78.0	115.9
US	441.2	124.7	39.2	60.2	109.0

Source: National Cancer Institute, 2011–2015

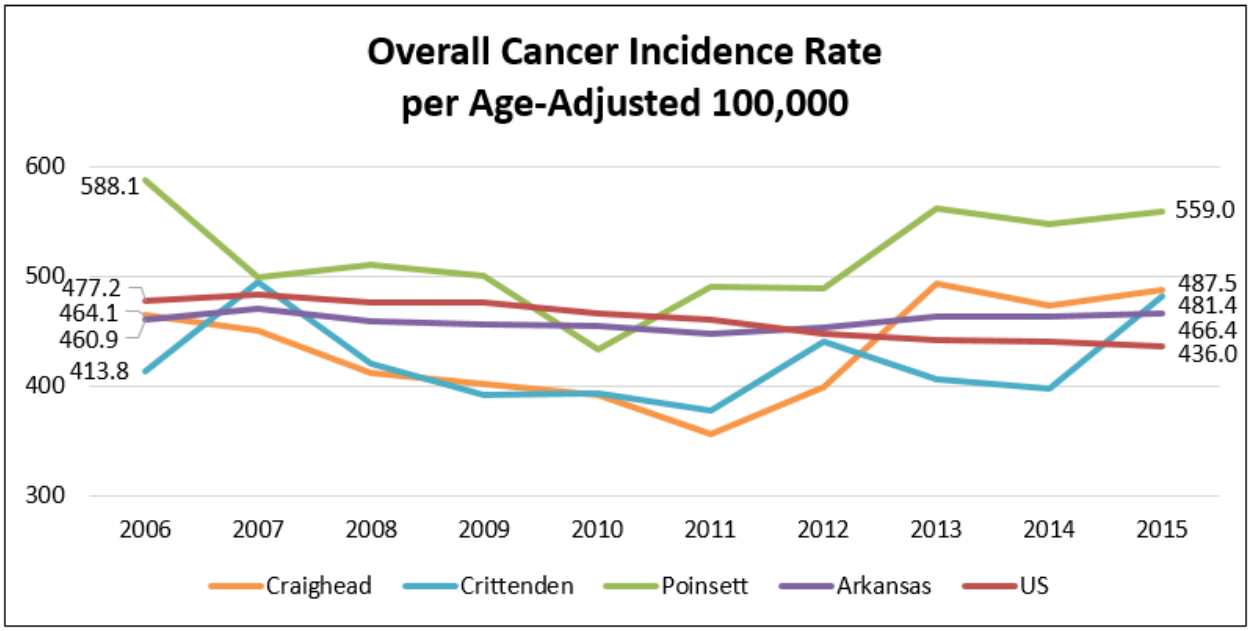
When stratified by race, the incidence of cancer in Poinsett County is highest among Whites, while the incidence of cancer in Craighead and Crittenden counties is highest among Blacks/African Americans.



	Total Population	White	Black	Hispanic/Latinx
Craighead	434.4	429.1	536.0	237.3
Crittenden	413.1	380.6	444.9	
Poinsett	520.9	525.7	450.5	
Arkansas	452.4	446.0	464.0	313.9
US	441.2	442.8	447.9	340.9

Source: National Cancer Institute, 2011–2015
*Hispanic/Latino cancer incidence data reported as available.

While there has been variability in the incidence of cancer in all three counties since 2006, the current incidence rate for all three counties remains higher than the state and national rates. Across all three counties, the incidence of cancer declined through 2010 or 2011, but increased through 2015.

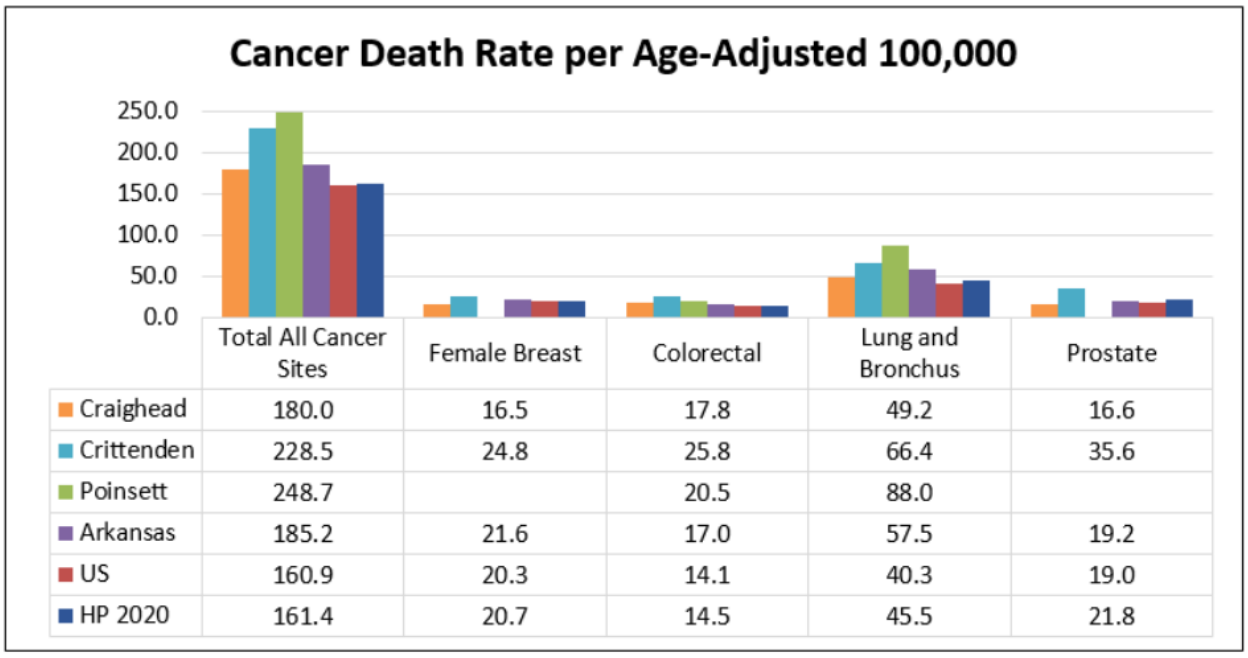


Source: National Cancer Institute, 2006–2015; Arkansas Cancer Registry, 2006–2015

Healthy People 2020 has set targets for cancer death overall and for the leading causes of cancer death, which are listed in the graph below. While the nation in general has met the Healthy People 2020 targets for cancer in all categories, the state of Arkansas has not yet.

Craighead County has met the Healthy People 2020 targets for female breast cancer and prostate cancer but has not yet met the targets for colorectal and lung cancers. Crittenden County has higher cancer death rates in all categories than Arkansas, the nation and Healthy People 2020. Poinsett County has the highest death rate due to lung cancer and cancer in general, and has not yet met the Healthy People 2020 targets in any cancer death category.

Crittenden County has higher cancer death rates in all categories than Arkansas, the nation and Healthy People 2020.



	Total All Cancer Sites	Female Breast	Colorectal	Lung and Bronchus	Prostate
Craighead	180.0	16.5	17.8	49.2	16.6
Crittenden	228.5	24.8	25.8	66.4	35.6
Poinsett	248.7		20.5	88.0	
Arkansas	185.2	21.6	17.0	57.5	19.2
US	160.9	20.3	14.1	40.3	19.0
HP 2020	161.4	20.7	14.5	45.5	21.8

Source: Centers for Disease Control and Prevention, 2012–2016; Healthy People 2020
*Female breast and prostate death rates are not available for Poinsett County due to low counts.

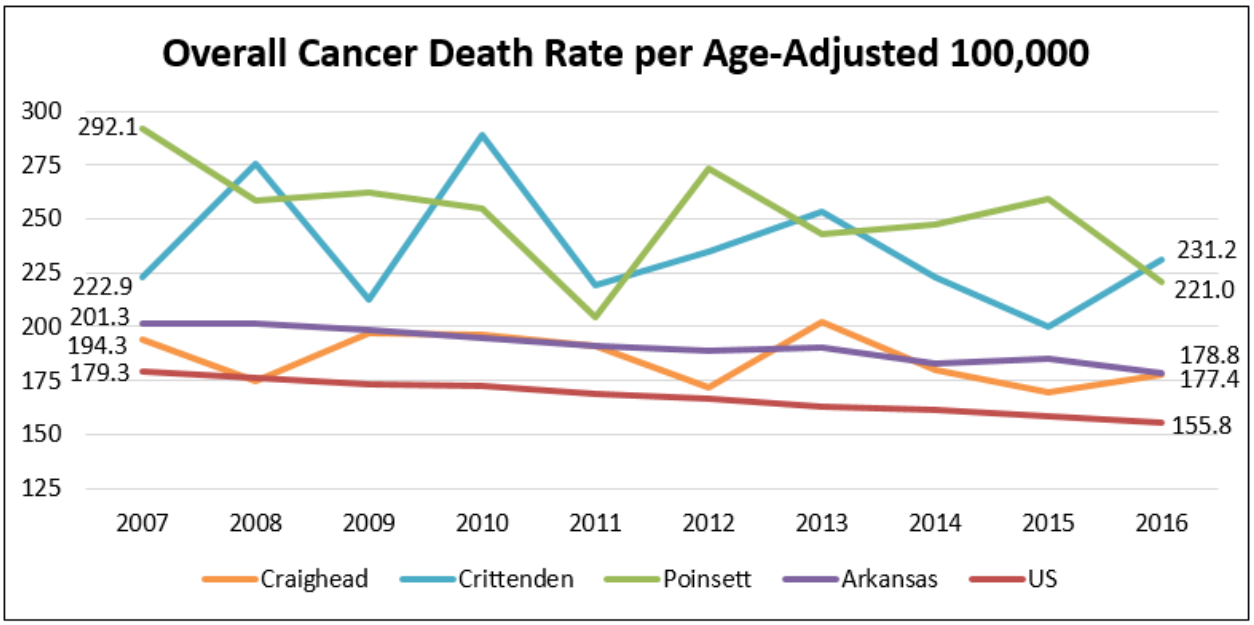
When stratified by race, Black/African American death rates due to cancer exceed state and national rates in all three counties. White cancer death rates are also higher in Crittenden and Poinsett counties.

Cancer Death Rates per Age-Adjusted 100,000 by Race

	White, Non-Hispanic Death Rate	Black/African American, Non-Hispanic Death Rate	Hispanic/Latino Death Rate
Craighead County	181.6	235.3	NA*
Crittenden County	227.2	241.3	NA*
Poinsett County	247.2	281.8	NA*
Arkansas	185.4	212.7	69.0
United States	165.7	190.0	112.6

Source: Centers for Disease Control and Prevention, 2012–2016
*Hispanic/Latino death rates are not available at the county level due to low counts.

There has been variability in the overall cancer death rates in all three counties since 2007. However, the overall cancer death rate in all three counties generally still exceeds both state and national rates.



Source: Centers for Disease Control and Prevention, 2007–2016

Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third most common cause of death in the nation. CLRD encompasses such diseases as chronic obstructive pulmonary disorder (COPD), emphysema and asthma, all of which contribute to lower quality of life and increased risk of early death.

The death rate of CLRD is higher in Crittenden and Poinsett counties than in the state or the nation.

The rate of death from CLRD is higher in Arkansas than in the nation, and higher in Crittenden and Poinsett counties than in Arkansas. When stratified by race, the death rate due to CLRD among Whites in Poinsett County and Crittenden County is two times greater or more than the national rate for Whites. In Crittenden County, the rate of death due to CLRD for Blacks/African Americans is more than 1.5 times greater than the rate for Blacks/African Americans in Arkansas or the nation in general.

CLRD Death Rates per Age-Adjusted 100,000 by Race

	Total Population	White, Non-Hispanic Death Rate	Black/African American, Non-Hispanic Death Rate	Hispanic/Latino Death Rate
Craighead County	57.6	60.6	NA*	NA*
Crittenden County	74.9	87.5	53.4	NA*
Poinsett County	98.2	103.1	NA*	NA*
Arkansas	59.3	64.3	28.1	9.3
United States	41.2	46.3	29.7	17.8

Source: Centers for Disease Control and Prevention, 2012–2016

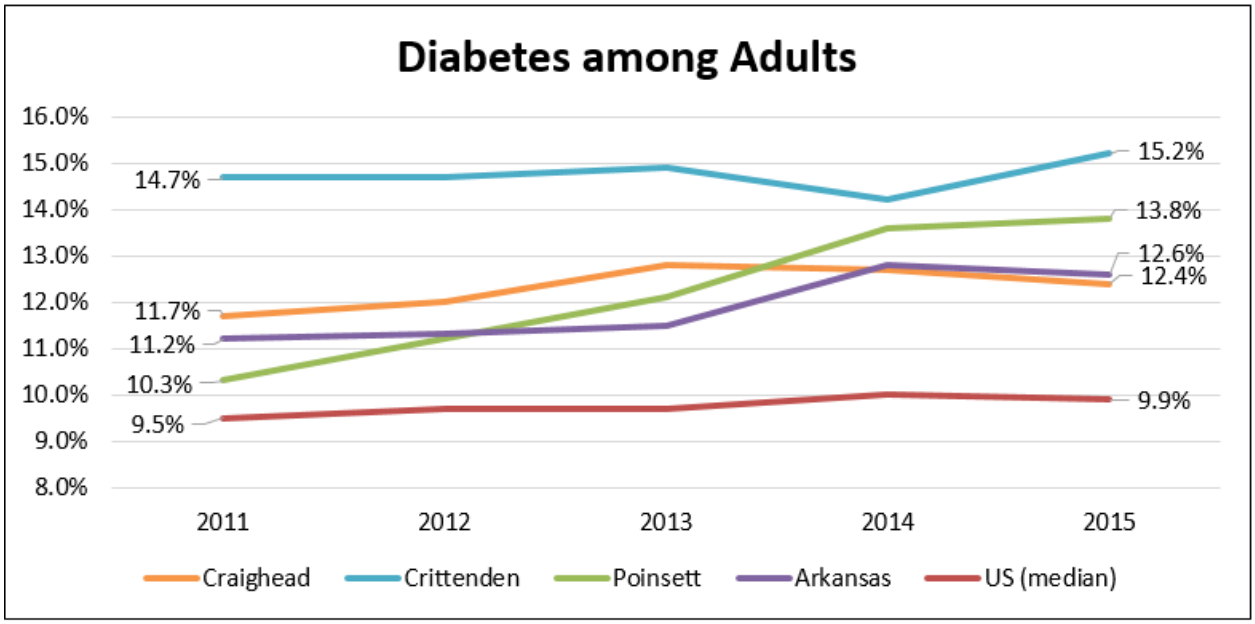
*Data are reported as available due to low counts. Hispanic/Latino death rates are not available at the county level due to low counts.

Diabetes

According to the American Diabetes Association, diabetes and prediabetes affect more than 110 million Americans and cost the nation $322 billion per year. Type 2 diabetes, the most common form, is preventable, and if diagnosed early, can often be reversed through improved diet and increased exercise.

The prevalence of diabetes among adults in Arkansas is greater than in the nation in general. In Craighead County, the prevalence of diabetes is similar to Arkansas, but higher than the nation in general. The prevalence of diabetes in Crittenden and Poinsett counties exceeds the prevalence in the nation and Arkansas.

More than 15% of adults in Crittenden County have diabetes.



Source: Centers for Disease Control and Prevention, 2011–2015

The rate of death due to diabetes is higher in Arkansas than in the nation in general. In Poinsett County, the rate of death due to diabetes is slightly higher than the statewide rate, including when stratified by race. In Craighead County, while the prevalence of diabetes is comparable with statewide prevalence, the death rate due to diabetes is less than half of the statewide rate, and nearly half of the national rate, even when stratified by race.

In Crittenden County, the diabetes death rate is nearly three times the national death rate. When stratified by race, the death rate from diabetes for White and Black/African American residents in Crittenden County is more than double the state and national rates.

The Crittenden County diabetes death rate is nearly three times greater than the national rate.

Diabetes Death Rates per Age-Adjusted 100,000 by Race

	Total Population	White, Non-Hispanic Death Rate	Black/African American, Non-Hispanic Death Rate	Hispanic/Latino Death Rate
Craighead County	11.8	11.2	NA*	NA*
Crittenden County	61.0	43.8	89.5	NA*
Poinsett County	26.9	27.1	NA*	NA*
Arkansas	24.6	21.9	47.6	13.9
United States	21.1	18.6	38.6	25.6

Source: Centers for Disease Control and Prevention, 2012–2016

*Data are reported as available due to low counts. Hispanic/Latino death rates are not available at the county level due to low counts.

Chronic Conditions Among Seniors

According to the CDC, "Among Medicare fee-for-service beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending." The tables below indicate the percentages of Medicare beneficiaries within Baptist's Northeast Arkansas Service Area who have been diagnosed with specific chronic conditions, followed by the average number of chronic disease diagnosis by county.

A higher percentage of Medicare beneficiaries in the service area have chronic diseases compared to national averages.

Seniors living in Northeast Arkansas Service Area are more likely to have two or more chronic conditions compared to seniors across the state and the nation. Chronic condition diagnoses among Medicare beneficiaries are more closely aligned with Arkansas statewide percentages, but are generally higher than the national averages.

Chronic Conditions among Medicare Beneficiaries 65 Years or Over
(Red = Higher than the State and/or Nation; Green = Lower than the State and/or nation)

	Craighead County	Crittenden County	Poinsett County	Arkansas	US
Alzheimer's	**16.7%**	**13.3%**	**14.0%**	12.8%	11.3%
Arthritis	**30.9%**	**30.1%**	**31.4%**	29.1%	31.3%
Asthma	6.1%	6.5%	6.2%	6.8%	7.6%
Cancer	7.0%	7.2%	7.2%	8.0%	8.9%
COPD	**12.3%**	**11.9%**	**14.0%**	11.8%	11.2%
Depression	**16.5%**	10.8%	**14.1%**	13.7%	14.1%
Diabetes	**25.5%**	**30.6%**	**28.1%**	24.8%	26.8%
Heart Failure	14.0%	**18.2%**	**15.1%**	15.2%	14.3%
High Cholesterol	**43.0%**	**47.5%**	**45.3%**	41.4%	47.8%
Hypertension	**60.6%**	**67.0%**	**64.3%**	58.9%	58.1%
Ischemic Heart Disease	**30.3%**	**29.7%**	**32.1%**	32.2%	28.6%
Stroke	**5.3%**	**4.5%**	**5.6%**	4.5%	4.2%

Source: Centers for Medicare & Medicaid Services, 2015

Number of Chronic Conditions among Medicare Beneficiaries 65 Years or Over
(Red = Higher Than the State and/or the Nation)

	Craighead County	Crittenden County	Poinsett County	Arkansas	US
0 to 1	**30.8%**	**29.5%**	**29.2%**	33.1%	32.3%
2 to 3	**31.4%**	**29.4%**	**32.0%**	30.5%	30.0%
4 to 5	**22.0%**	**24.0%**	**22.1%**	21.4%	21.6%
6 or more	**15.8%**	**17.0%**	**16.7%**	15.1%	16.2%

Source: Centers for Medicare & Medicaid Services, 2015

Regular screenings are essential for the early detection and management of chronic conditions. The following table lists diabetes and mammogram screenings among Medicare enrollees. Seniors in Craighead, Crittenden and Poinsett counties are generally equally as likely as their peers across Arkansas and the nation to be screened for diabetes (HbA1c) and breast cancer (mammogram).

Chronic Disease Screenings among Medicare Enrollees
(Red = Lower Than the State and/or the Nation)

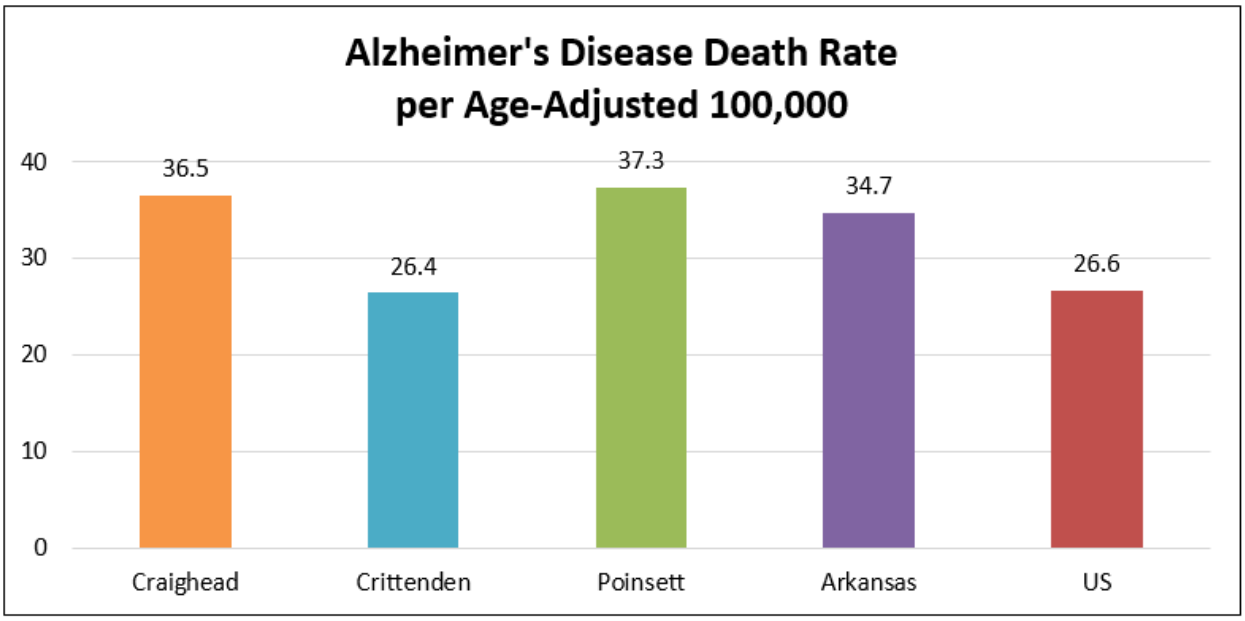
	Diabetes Screening (65–75 Years) Annual HbA1c Test	Breast Cancer Screening (Females 67–69 Years) Mammogram in Past Two Years
Craighead County	**83.0%**	66.6%
Crittenden County	88.5%	**55.6%**
Poinsett County	**82.7%**	**56.3%**
Arkansas	84.2%	58.1%
United States	85.0%	63.0%

Source: Dartmouth Atlas of Health Care, 2014

Alzheimer's disease is a type of dementia that causes problems with memory, thinking and behavior. Symptoms usually develop slowly and get worse over time, becoming severe enough to interfere with daily tasks. The disease weakens the body's defense mechanisms, increasing susceptibility to catastrophic infection and other causes of death related to frailty. Alzheimer's is the sixth leading cause of death in the United States. While there is no cure, treatment is focused on helping people maintain mental function, manage behavioral symptoms and slow or delay the symptoms of the disease.

Death rates due to Alzheimer's disease are higher in Craighead and Poinsett counties compared to the state and the nation

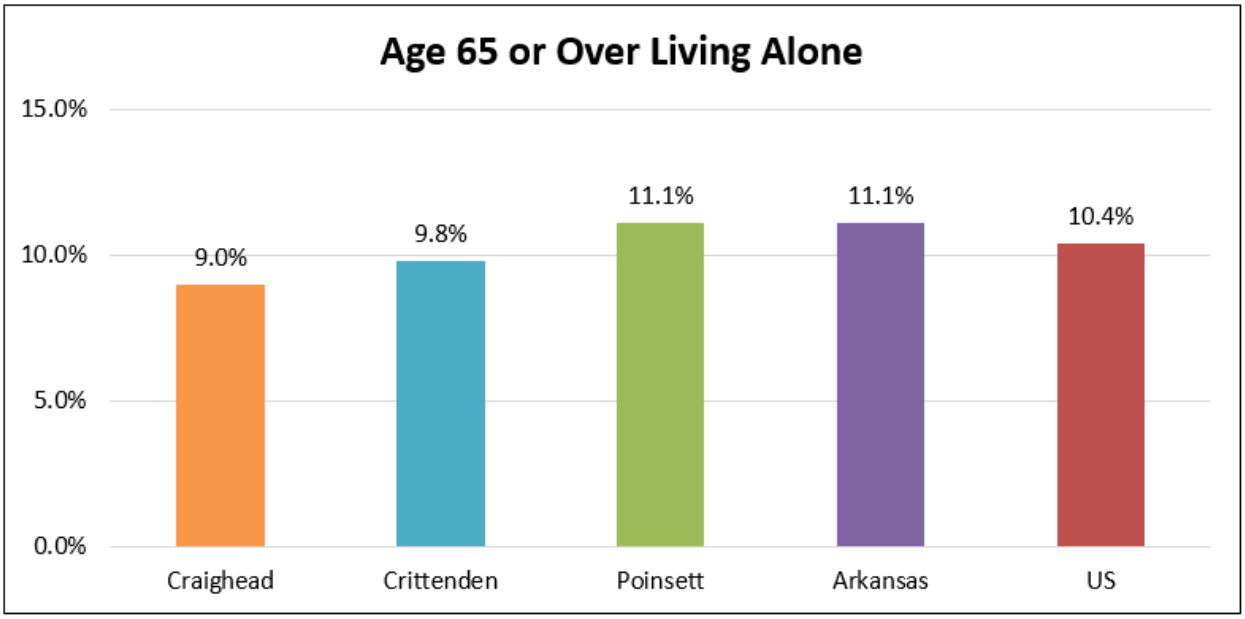
The Alzheimer's disease death rate in Arkansas is higher than the national rate. The death rate due to Alzheimer's disease in Crittenden County is lower than the Arkansas rate, but comparable to the national rate. The Alzheimer's disease death rate in Craighead and Poinsett counties exceeds the state and national rate. This presents an opportunity to provide targeted support to individuals, families and communities affected by higher rates of Alzheimer's deaths.



Source: Centers for Disease Control and Prevention, 2012–2016

Categorizations for cause of death can vary among reporting entities. Given the propensity for Alzheimer's to increase risk factors for other diseases, cause of death for individuals with the disease is not always attributed solely to Alzheimer's. Additional exploration of procedures for categorization of cause of death may further illuminate trends.

As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors age 65 or older who live alone. Roughly 1 in 10 people over age 65 in Craighead, Crittenden and Poinsett counties live alone, comparable to statewide and national percentages.



Source: American Community Survey, 2012–2016

Behavioral Health

Mental Health

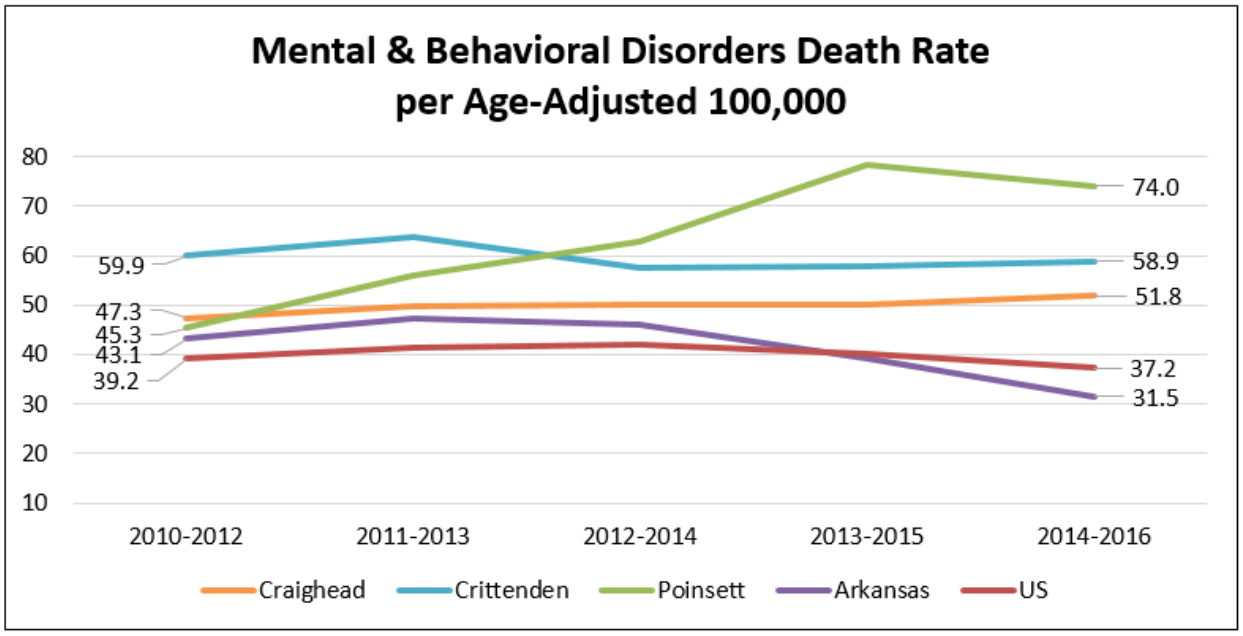
Mental and behavioral health disorders include a wide range of conditions, including disorders from psychoactive substance use, anxiety disorders, schizophrenia and other delusional disorders and mood or personality disorders. These disorders are not induced by alcohol and other psychoactive substances, but they may result from substance abuse.

Overall, residents across the Northern Arkansas Service Area report similar poor mental health days per month as the Arkansas state average, but the state and service area measures are higher than the national average. Craighead, Crittenden and Poinsett counties all exceed the state and national rates for mental and behavioral disorders death.

Mental Health Measures (5-Year Trends)
(Red = Higher than State and/or National Benchmarks)

	Suicide Death Rates	Suicide Rate per Age-Adjusted 100,000	Mental & Behavioral Disorders Deaths	Mental & Behavioral Disorders Death Rate per Age-Adjusted 100,000
Craighead County	86	**16.8**	262	**51.3**
Crittenden County	26	**10.6**	129	**60.1**
Poinsett County	26	**20.9**	98	**70.7**
Arkansas	2,648	17.7	6,673	38.6
United States	213,733	13.0	724,640	39.3
HP 2020	NA	10.2	NA	NA

Source: Centers for Disease Control and Prevention, 2012–2016; Healthy People 2020



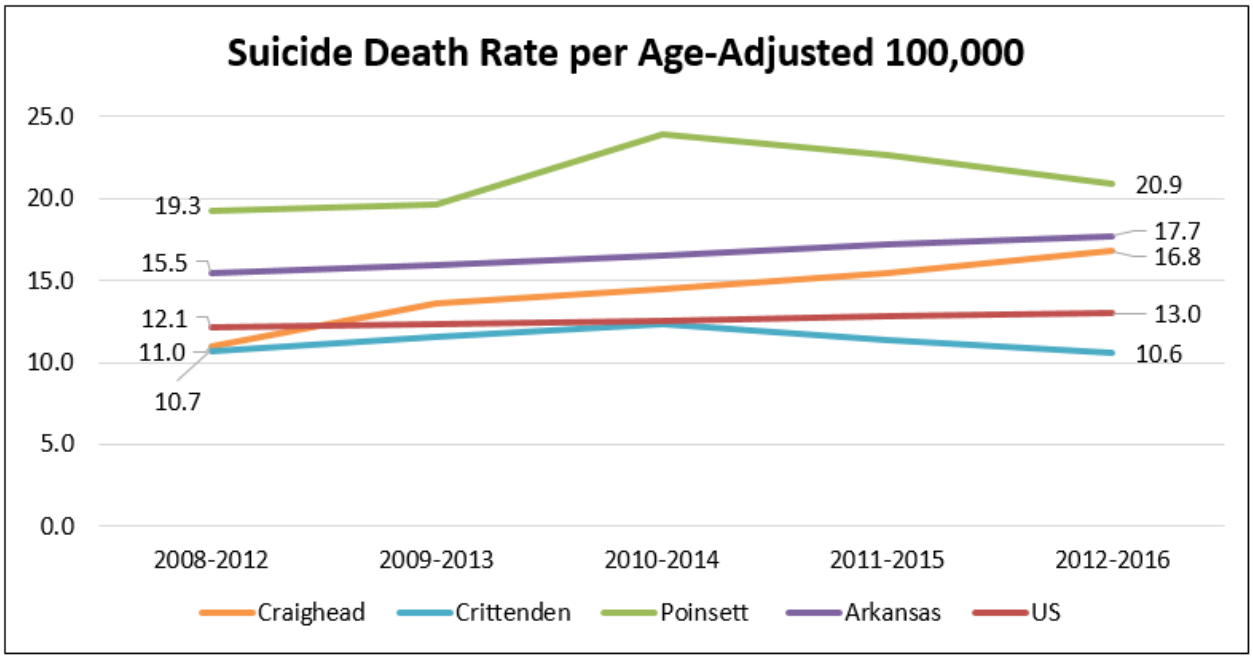
Source: Centers for Disease Control and Prevention, 2010–2012 to 2014–2016
Note: Mental and behavioral disorder deaths are trended as three-year aggregates to depict a more current state of disease. Suicide deaths are trended as five-year aggregates due to low death counts.

Living with behavioral health conditions can reduce an individual's life expectancy, particularly if they have co-occurring chronic conditions, such as heart disease or diabetes, or engage in such risky health behaviors as using tobacco, alcohol or drugs. Behavioral health disorders can reduce a patient's ability to effectively manage other chronic diseases, increasing disease complications and the need for medical care.

A myriad of barriers — including stigma, availability of providers, ability to afford or otherwise access care, among other individual and social constraints — can keep individuals from getting help with behavioral health needs.

The suicide rate in Poinsett County exceeds the state and the nation, and is double the Healthy People 2020 target.

Suicide is far from the top cause of death for those struggling with a behavioral health condition, but it is an important measure of community behavioral health and well-being. The suicide rate in Arkansas (17.7) exceeds the national rate. Crittenden County has a lower rate than the state and the nation, and meets the Healthy People 2020 target. Craighead County has a lower suicide rate than the state, but it is higher than the national rate and increasing. The suicide rate in Poinsett County exceeds the state and the nation, and is double the Healthy People 2020 target.



Source: Centers for Disease Control and Prevention, 2008–2012 to 2012–2016

Substance Use Disorder

Excessive drinking includes heavy drinking (two or more drinks per day for men; one or more drinks per day for women) and binge drinking (five or more drinks on one occasion for men; four or more drinks on one occasion for women). Arkansas has a smaller percentage of adults reporting excessive drinking than the nation in general, as well as a lower drug-induced death rate. Craighead, Crittenden and Poinsett counties have fewer adults reporting excessive drinking and lower drug-induced death rates than Arkansas and the nation. The percent of driving under the influence (DUI)-related deaths in these three counties is generally comparable to state and national percentages.

All three counties have fewer adults who report excessive drinking and a lower drug-induced death rate than the state and the nation.

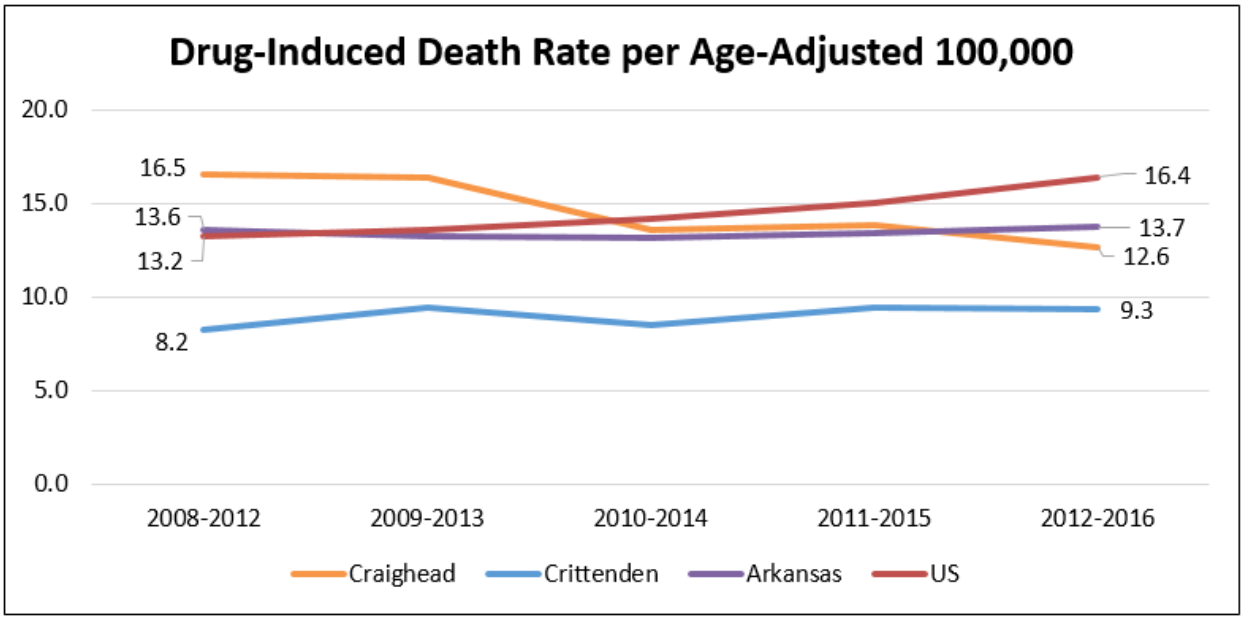
Drug-induced deaths include all deaths for which drugs are the underlying cause, including drug overdoses and deaths from medical conditions resulting from chronic drug use. Where data are available, the drug-induced death rate per 100,000 is lower than the national rate in all counties in the Northeast Arkansas Service Area. Death rates for the state and service areas have been stable or decreasing, counter to the national trend.

Substance Use Disorder Measures

	Excessive Drinking (Adults)	Percent of Driving Deaths from DUI	Drug-Induced Deaths	Drug-Induced Death Rate per Age-Adjusted 100,000
Craighead County	14.3%	28.9%	61	12.6
Crittenden County	13.5%	30.4%	22	9.3
Poinsett County	14.7%	25.0%	15	NA*
Arkansas	15.9%	27.4%	1,966	13.7
United States	18.0%	29.0%	262,672	16.4

Source: Centers for Disease Control and Prevention, 2012–2016 & 2016; National Highway Traffic Safety Administration, 2012–2016

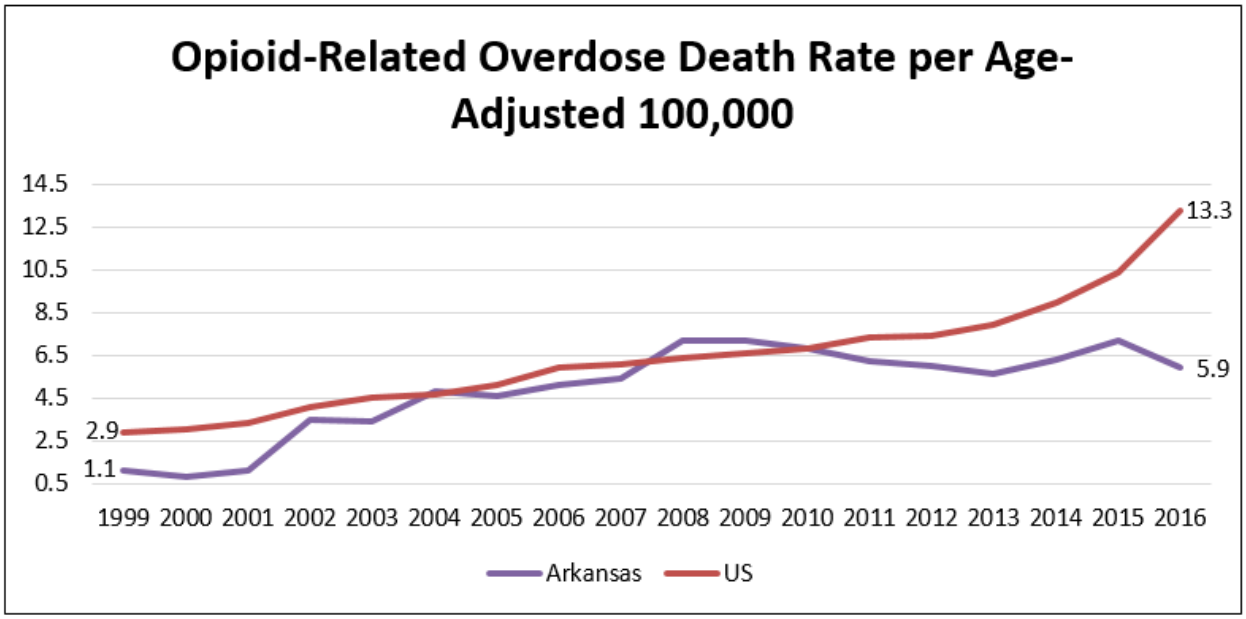
*Drug-induced death rates are not available for Poinsett County due to low counts.



Source: Centers for Disease Control and Prevention, 2008–2012 to 2012–2016
*Poinsett County is not trended due to data availability.

Opioids

A significant contributor to the number of drug-induced deaths across the nation and within Baptist's Northeast Arkansas Service Area is opioid overdose. According to the National Institute on Drug Abuse, in 2016, there were 169 opioid-related overdose deaths in Arkansas—a rate of 5.9 deaths per 100,000 persons compared to the national rate of 13.3.



Source: Centers for Disease Control and Prevention, 1999–2016

Medication assisted treatment (MAT) has been found to be an effective treatment for people struggling with opioid addiction. MAT uses FDA-approved medications, including buprenorphine (Suboxone, Subutex), methadone and extended release naltrexone (Vivitrol), in combination with counseling and behavioral therapies to provide a "whole-patient" approach to the treatment of substance use disorders. There are 19 facilities in Arkansas providing some form of MAT; two of these facilities are located within Baptist's Northeast Arkansas Service Area as shown below.

Opioid Treatment Services

	Facilities Providing Medication Assisted Treatment
Craighead County	1
Crittenden County	1
Poinsett County	0
Arkansas	19
United States	5,159

Source: American Foundation for AIDS Research, 2018

Neonatal Abstinence Syndrome (NAS)

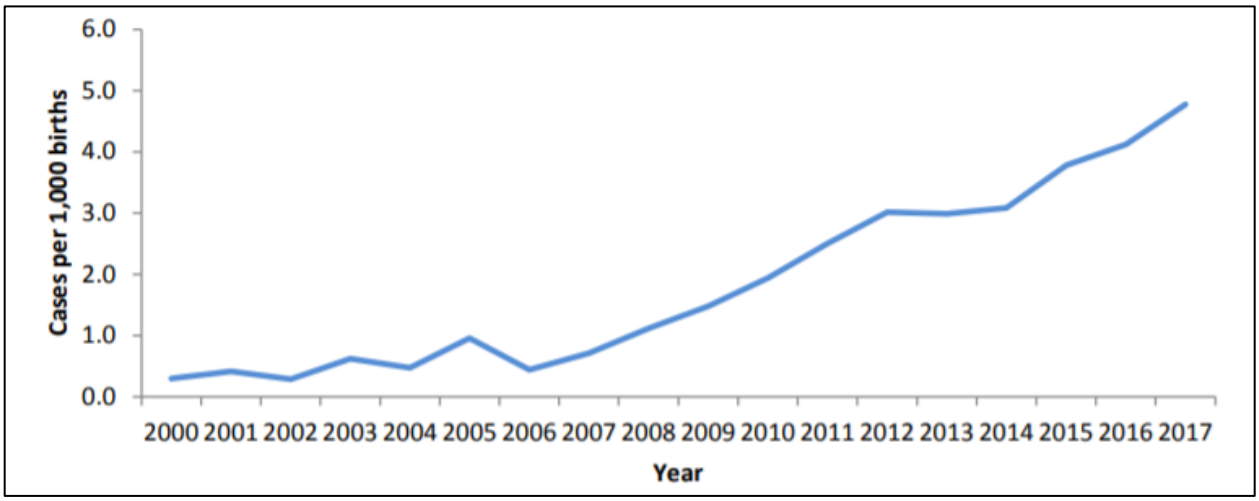
Neonatal abstinence syndrome (NAS) is a group of conditions caused when a baby withdraws from certain drugs he or she has been exposed to in the womb. Although most commonly associated with opioid exposure, other substances can also cause NAS, including antidepressants and benzodiazepines. In addition to the specific difficulties of withdrawal after birth, problems in the baby may include premature birth, seizures, respiratory distress, birth defects, poor growth and other developmental problems.

Due to a variety of challenges in screening infants for NAS, data is not consistently collected among health providers or state entities. Some states have mandated NAS reporting, yet data is likely underreported given the aforementioned challenges.

According to the Arkansas Department of Health's Neonatal Abstinence Syndrome in Arkansas 2000–2017 report, the rate of NAS diagnosis in Arkansas increased nearly fifteen fold between 2000 and 2017. The Department of Health identified the following key findings within the report:

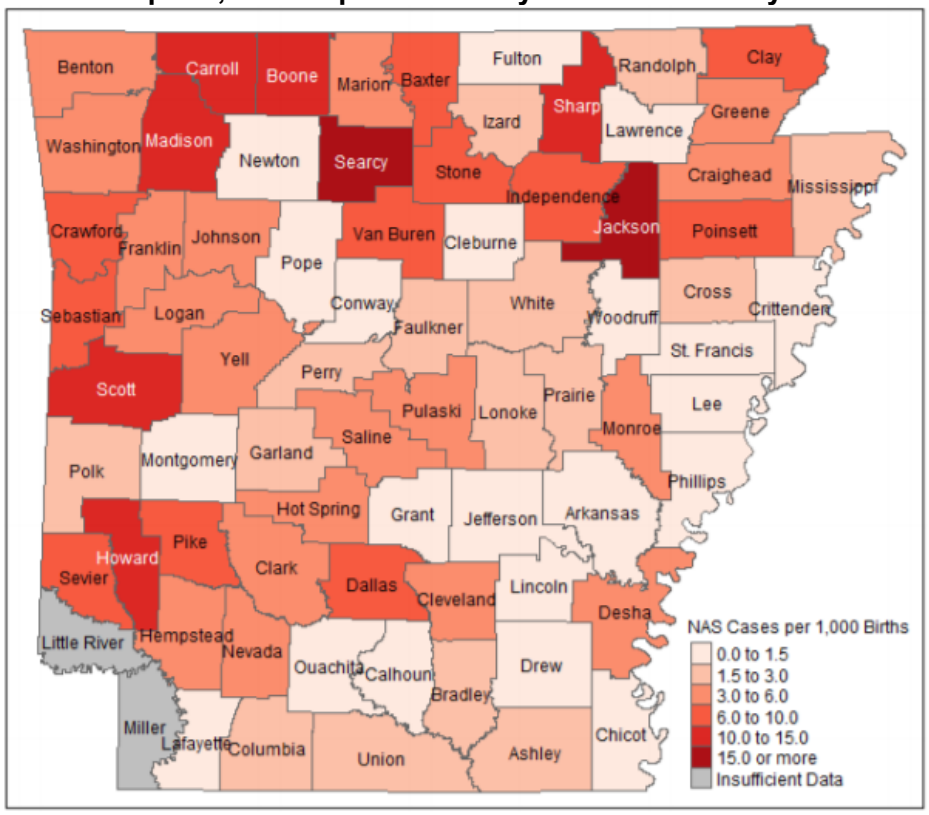
- The rate of NAS diagnosis increased from 0.3 in 2000 to 4.8 in 2017.
- The rate of NAS diagnosis was more prevalent among Whites than it was among non-Whites in Arkansas in 2017.
- In 2017, the median medical care costs for babies diagnosed with NAS were $28,270 compared to $4,446 for babies born without NAS.
- More than three quarters of Arkansas counties reported at least one case of NAS between 2014 and 2017. Some of the highest rates were from the Northwest and Northeast regions.

Rate of Neonatal Abstinence Syndrome per 1,000 Hospital Births



Source: Arkansas Department of Health, 2000–2017

Neonatal Abstinence Syndrome Diagnoses per 1,000 Hospital Births by Arkansas County



Source: Arkansas Department of Health, 2014–2017

Maternal and Infant Health

Total Births

The Northeast Arkansas Service Area counties have a higher birth rate than the state. Crittenden County has the highest birth rate and the highest percentage of births to non-White mothers. In 2016, 65% of births in Crittenden County were to Black/African American, non-Hispanic mothers.

2016 Births by Race

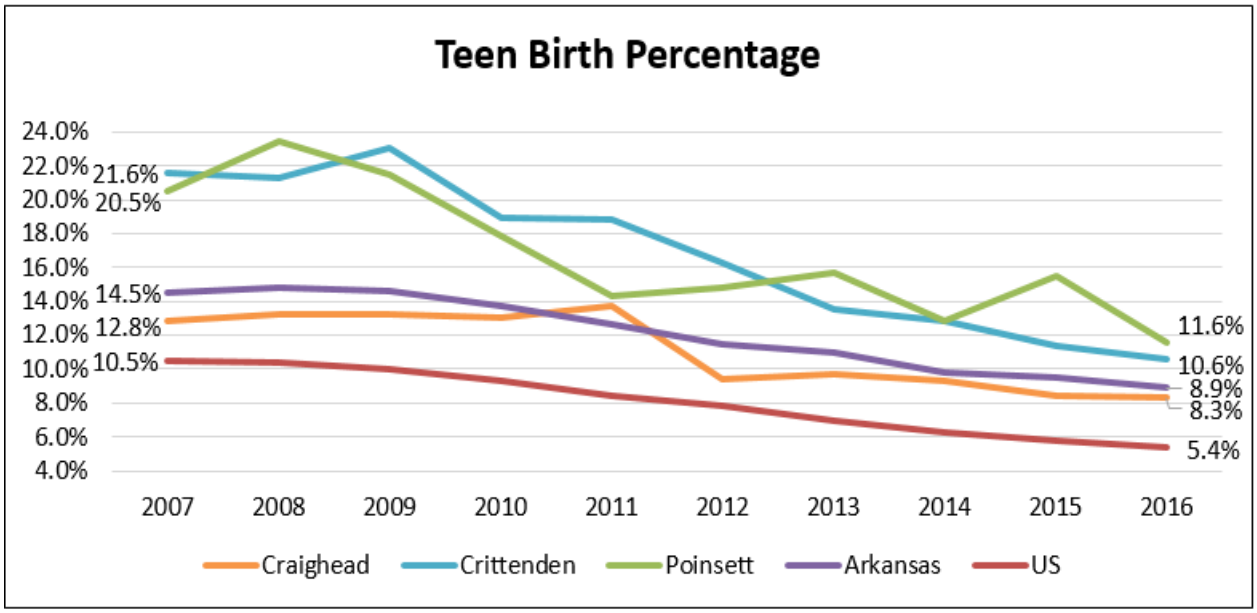
	Total Births	Birth Rate per 1,000	Percent of Total Births to White, Non-Hispanic Mothers	Percent of Total Births to Black/African American, Non-Hispanic Mothers	Percent of Total Births to Hispanic/ Latina Mothers
Craighead County	1,475	13.9	70.0%	21.6%	6.6%
Crittenden County	752	15.3	31.1%	65.2%	3.1%
Poinsett County	327	13.6	87.8%	7.6%	3.4%
Arkansas	38,231	12.8	66.3%	19.2%	10.6%

Source: Arkansas Department of Health, 2016

Births to Teens

Teen births in Crittenden and Poinsett counties are higher than state and national averages.

The percent of live births to teens under age 19 has been decreasing in the nation since 2007, and the same trend can be seen in Arkansas and all three counties. However, the percent of births to teens is higher in Arkansas than the nation. The percent of births to women under age 19 in Crittenden and Poinsett counties exceeds both the state and national percentages. In Craighead County, the percent of births to teens is similar to the statewide percentage, but still higher than the nation.



Source: Centers for Disease Control and Prevention, 2007–2016; Arkansas Department of Health, 2007–2016

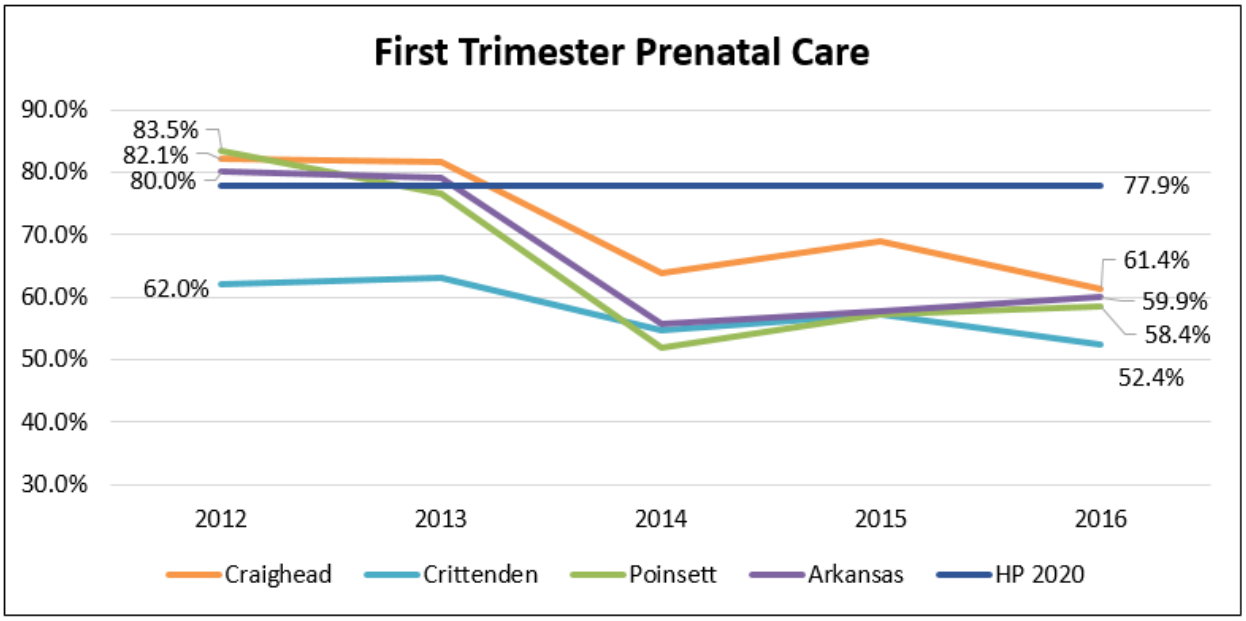
Prenatal Care

Engaging in prenatal care within the first trimester of pregnancy increases the chances that a mother will have a healthy pregnancy and a healthy birth. Entry into prenatal care after the first trimester can suggest barriers to care, such as lack of information, lack of access to health care, transportation challenges or behavioral health needs.

Healthy People 2020 sets a target of 77.9% of all pregnant women engaging in prenatal care in the first trimester of pregnancy. Since 2014, entry into prenatal care during the first trimester in Poinsett County has been increasing at a similar rate as Arkansas in general, but has still not met the Healthy People 2020 target. While there has been variability since 2014 in Craighead and Crittenden counties, it appears the percent of pregnant women entering prenatal care in the first trimester has been dropping, moving even further away from the Healthy People 2020 target.

No counties meet the Healthy People 2020 goal for first trimester prenatal care; percentages declined in Craighead and Crittenden counties from 2014-2016.

Note: In 2014, Arkansas implemented a change in how prenatal care is reported on the birth certificate. Prior to 2014, the certificate asked for the month of pregnancy in which prenatal care began. The new certificate asks for the last menstrual period or the clinical gestational age of the newborn to calculate when prenatal care began. Per the Department of Health, there are a very large number of birth records where the clinical gestational age is missing and there is a problem with certifiers recording the calendar date that prenatal care began, which causes the significant change in statistics regarding first trimester prenatal care.



Source: Arkansas Department of Health, 2012–2016; Healthy People 2020
*Starting in 2016, all of the U.S. reported data based on the 2003 US Certificate of Live Birth, providing national indicators for timing of prenatal care. In 2016, 77.1% of mothers across the nation access first trimester prenatal care. Data prior to 2016 are not reported.

Low Birth Weight and Premature Birth

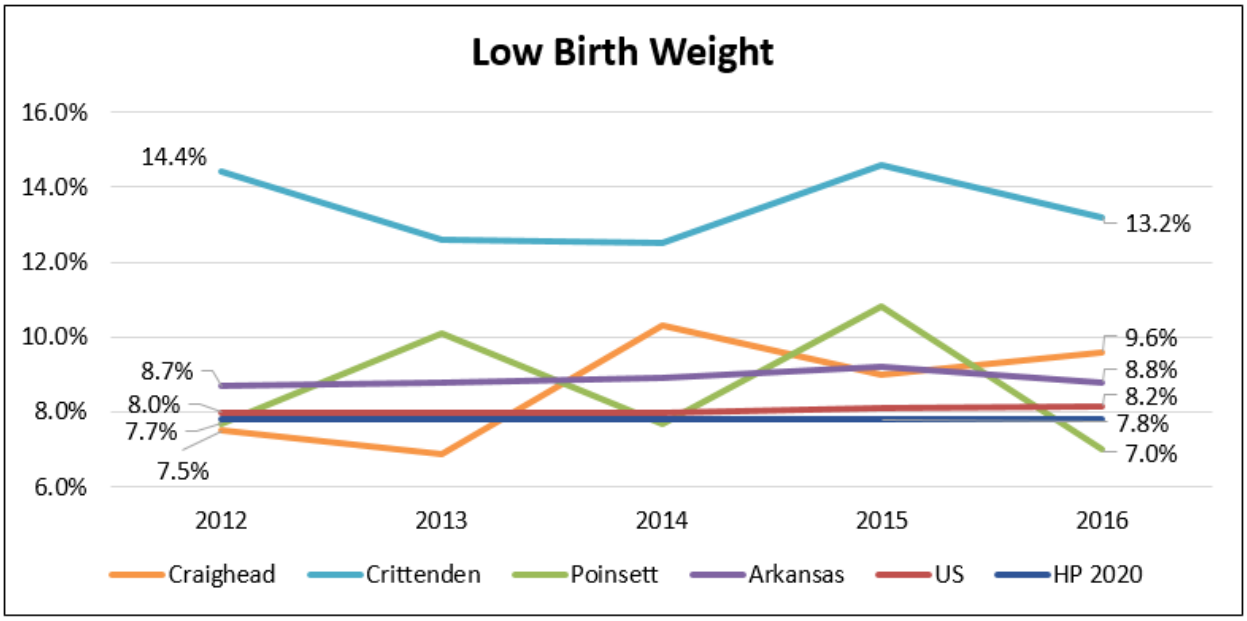
Delayed prenatal care can contribute to low birth weight and premature births. Premature birth is defined as birth before 37 weeks of pregnancy, and can contribute to infant death or disability. Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. It is often a result of premature birth, fetal growth restrictions or birth defects. It can be associated with a variety of negative birth outcomes.

The Crittenden County low birth weight percentage is nearly double the Healthy People 2020 goal.

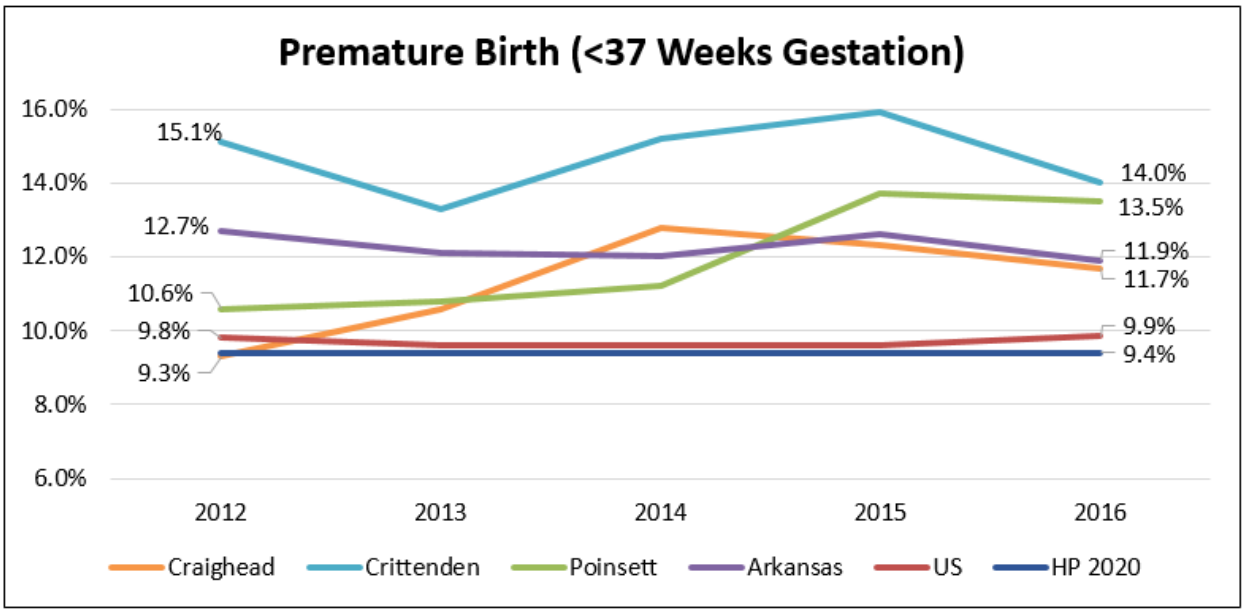
Healthy People 2020 sets a target of no more than 7.8% of all newborns having low birth weight. Neither the nation nor Arkansas has met the Healthy People 2020 target for low birth weight. While the low birth weight percentage in Poinsett County has been variable over time, the current percentage meets the Healthy People 2020 target. Both Craighead and Crittenden counties exceed the state and national percentages for low birth weight, and have not met the Healthy People 2020 target.

All counties have a higher percentage of premature births than the nation, and do not meet the Healthy People 2020 goal.

Healthy People 2020 sets a target of no more than 9.4% of all births occuring before 37 weeks of pregnancy. The nation has not yet met this target, and the Northeast Arkansas Service Area exceeds the national percent. Craighead County has a similar percent of preterm births as Arkansas, while Crittenden and Poinsett counties exceed the state, national and Healthy People 2020 percents.



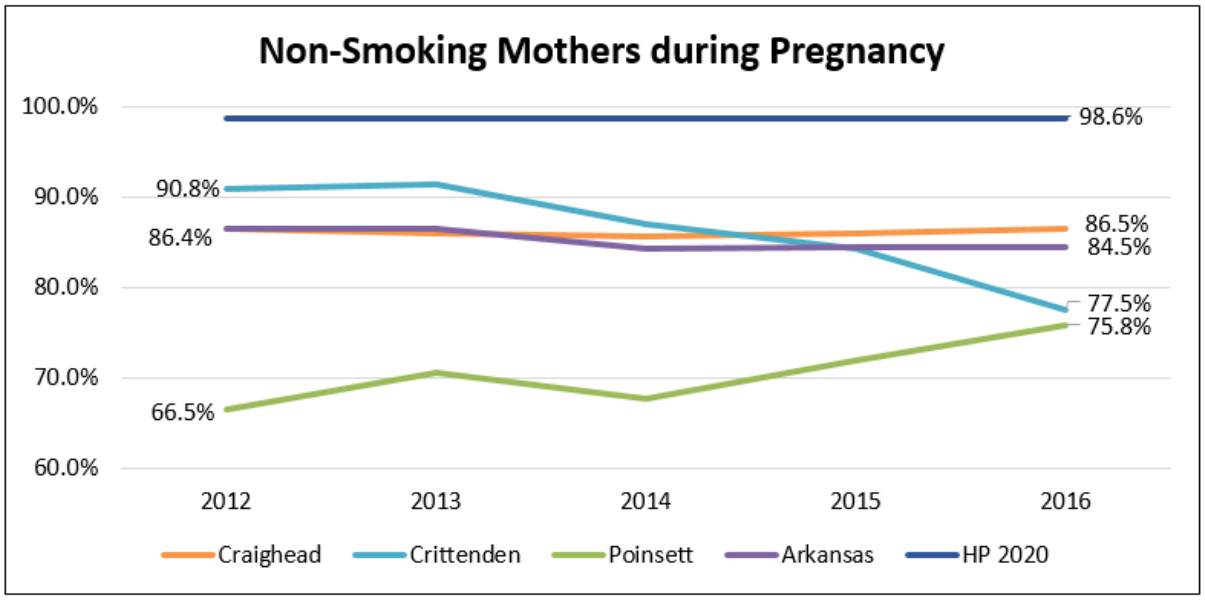
Source: Centers for Disease Control and Prevention, 2012–2016; Arkansas Department of Health, 2012–2016; Healthy People 2020



Source: Centers for Disease Control and Prevention, 2012–2016; Arkansas Department of Health, 2012–2016; Healthy People 2020

Smoking During Pregnancy

Smoking during pregnancy is associated with a variety of negative birth outcomes, including low birth weight and premature birth. Healthy People 2020 sets a target of reducing the number of pregnant women who smoke to 1.4%. None of the counties in the Northeast Arkansas Service Area meet the Healthy People 2020 target for smoking during pregnancy. However, non-smoking among pregnant women increased 9 percentage points in Poinsett County from 2012 to 2016.



Source: Arkansas Department of Health, 2012–2016; Healthy People 2020
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators for tobacco use during pregnancy. In 2016, 92.8% of mothers across the nation reported not smoking during pregnancy. Data prior to 2016 are not reported.

Maternal and Child Health Disparities

Maternal and child health indicators are presented in the table below by race and ethnicity for each county in Baptist's Northeast Arkansas Service Area. In Craighead County, Black/African American mothers are less likely to access prenatal care in the first trimester and more likely to deliver low birth weight and/or premature babies than their White and Hispanic/Latina peers. In Crittenden County, White women are less likely to access prenatal care during the first trimester, but among the least likely to deliver low birth weight and/or premature babies. In Poinsett County, Black/African American women are less likely to access prenatal care during the first trimester than their peers, but they are among the least likely to smoke during pregnancy or deliver premature babies.

Maternal and Child Health Indicators by Race

	Craighead County	Crittenden County	Poinsett County
Women with First Trimester Care			
Total Population	61.4%	52.4%	58.4%
White, Non-Hispanic	67.6%	48.5%	59.4%
Black/African American, Non-Hispanic	47.6%	54.0%	44.0%
Hispanic/Latina	41.2%	60.9%	60.0%
Low Birth Weight Infants			
Total Population	9.6%	13.2%	7.0%
White, Non-Hispanic	7.5%	7.3%	8.0%
Black/African American, Non-Hispanic	18.0%	16.5%	0.0%
Hispanic/Latina	5.2%	4.3%	0.0%
Non-Smoking Women During Pregnancy			
Total Population	86.5%	77.5%	75.8%
White, Non-Hispanic	85.0%	73.8%	75.3%
Black/African American, Non-Hispanic	87.1%	78.6%	80.0%
Hispanic/Latina	97.9%	87.0%	80.0%
Premature Births			
Total Population	11.7%	14.0%	13.5%
White, Non-Hispanic	10.5%	12.4%	13.9%
Black/African American, Non-Hispanic	16.7%	14.7%	12.0%
Hispanic/Latina	9.3%	17.4%	10.0%

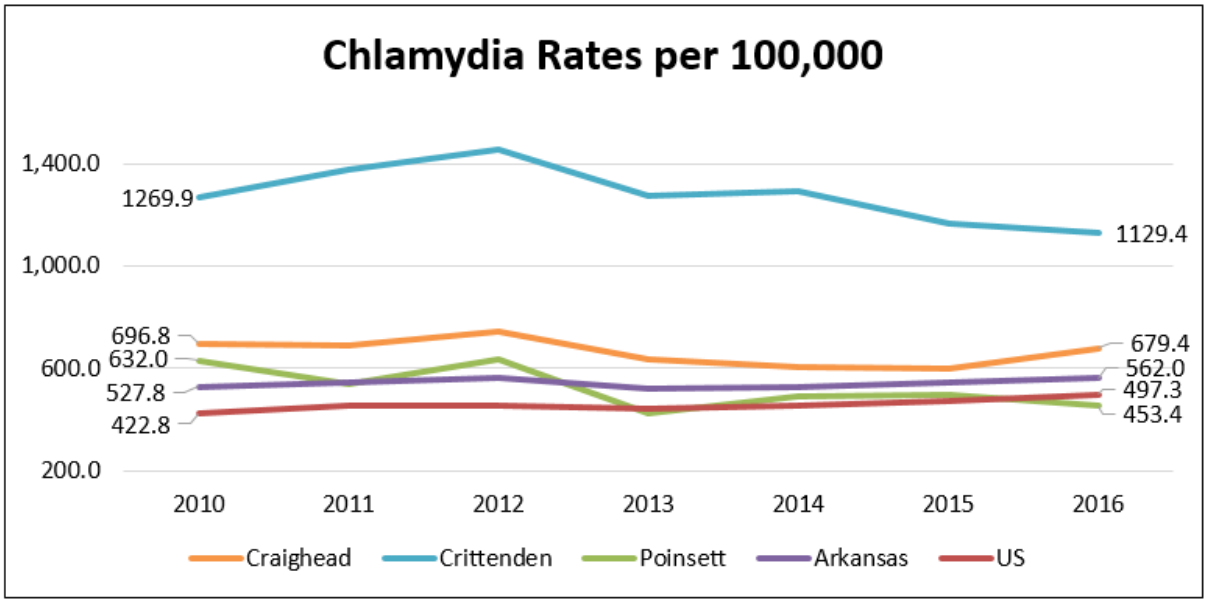
Source: Arkansas Department of Health, 2016

Notifiable Diseases

Sexually Transmitted Infections
Sexually transmitted infections (STIs) that require reporting to the CDC, state and local health bureaus upon detection include chlamydia, gonorrhea and HIV.

The Crittenden County chlamydia and gonorrhea infection rates are more than two times greater than the state and national rates.

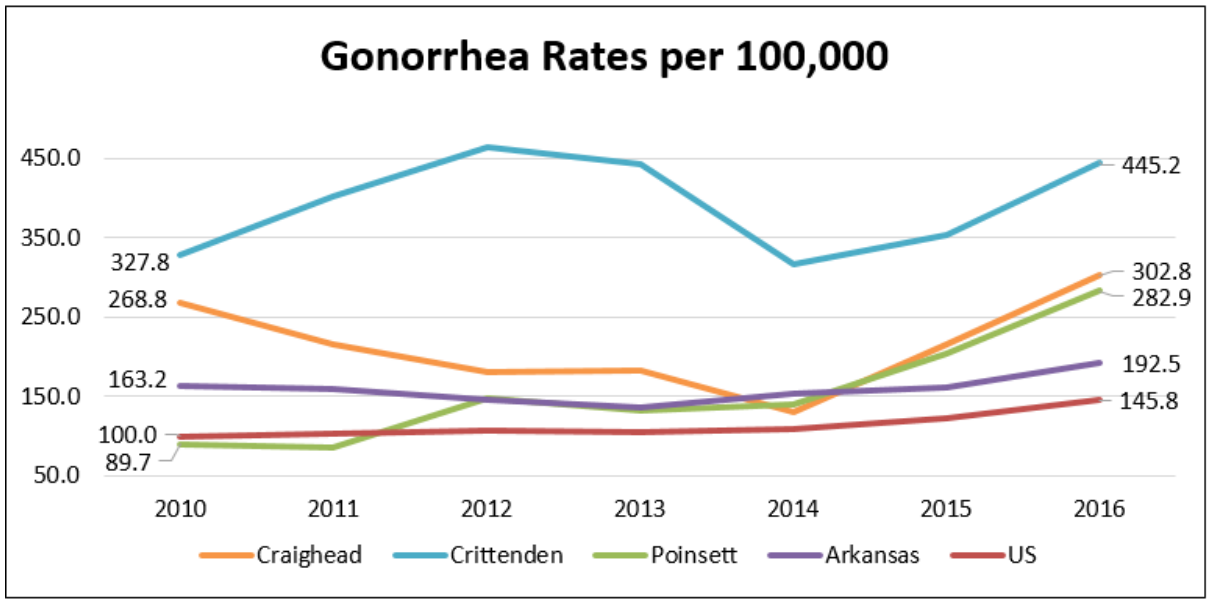
Chlamydia is both preventable and treatable, but if left untreated can lead to serious complications and decreased quality of life. The rate of chlamydia infection in Arkansas is slightly greater than the national rate. In Craighead and Crittenden counties, the rate of chlamydia infection exceeds the state and national rates; the Crittenden County rate is more than two times greater. The rate of chlamydia infection in Poinsett County is similar to the national rate, and slightly lower than the statewide rate.



Source: Centers for Disease Control and Prevention, 2010–2016

Gonorrhea infection rates in the service area exceed state and national benchmarks, and are increasing.

Gonorrhea is also preventable, treatable and can contribute to serious health complications and reduced quality of life. The rate of gonorrhea infection in Arkansas is greater than the national rate. Craighead and Poinsett counties have rates of gonorrhea infection that are roughly double the national rate, and appear to be rapidly increasing. In Crittenden County, the rate of gonorrhea infection is three times greater than the national rate, and is also increasing. This represents an opportunity for education, prevention, detection and treatment to improve the health and quality of life for people in all counties in the Northeast Arkansas Service Area.



Source: Centers for Disease Control and Prevention, 2010–2016

HIV prevalence is the number of people living with HIV infection at a given time, such as at the end of a year. According to the CDC, “At the end of 2015, an estimated 1.1 million persons aged 13 and older were living with HIV infection in the U.S., including an estimated 162,500 (15%) persons whose infections had not been diagnosed.” While there is no cure for HIV, it is preventable and treatable as a chronic disease if diagnosed early.

The rate of HIV infection in Arkansas is lower than the national rate. Both Craighead and Poinsett counties have an HIV prevalence rate lower than the state and the nation. However, the prevalence of HIV in Crittenden County exceeds both state and national rates. This represents an opportunity for continued intervention to ensure people living with HIV in this region and in Crittenden County in particular are accessing consistent and proper care for the maintenance of their disease, and that efforts are continued towards prevention, education and testing.

HIV prevalence in Crittenden County is double the state prevalence rate.

HIV Prevalence

	Cases	Rate Per 100,000
Craighead County	122	142.9
Crittenden County	205	523.3
Poinsett County	19	95.2
Arkansas	5,308	214.8
United States	971,524	362.3

Source: Centers for Disease Control and Prevention, 2015

Secondary data findings were analyzed as part of the 2019 CHNA to inform health priorities. Secondary data is valuable for tracking and benchmarking community health status indicators, as well as for identifying emerging community needs.

Key Informant Survey Findings

Background

A Key Informant Survey was conducted with community representatives within Baptist's Northeast Arkansas Service Area to solicit information about health needs among residents. A total of 51 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious and social leaders; policy makers; elected officials; and others representing minority, low-income or other underserved populations. A list of the represented community organizations and the key informants' respective titles is included in Appendix B. Key informant's names are withheld for confidentiality.

Survey participants were asked a series of questions about their perceptions of community health status, health drivers, barriers to care, community infrastructure and gaps in services. A summary of findings from their responses is included below.

Summary of Findings

- The top community health concerns, in rank order according to key informants, are heart disease and stroke, overweight/obesity, diabetes, mental health conditions, cancer and drug or alcohol abuse. The findings are consistent with results from the 2016 CHNA Key Informant Survey, with the addition of mental health conditions as a top concern.
- Nearly 90% of key informants identified health habits as a top five contributor to health concerns. Ability to afford health care was the second most identified health concern by 45% of informants.
- When asked if various health care services are available in the community, respondent mean scores were between 2.31 and 3.32 out of 5, indicating overall disagreement or neutral perspectives. Availability of substance use disorder providers and receipt of recommended preventive screenings and checkups received the lowest mean scores.
- When asked to rate community dimensions affecting social determinants of health, respondent mean scores were between 2.65 and 2.94 out of 5, indicating overall "poor" or "average" ratings. Consistent with the 2016 survey results, health and health care was seen as the strongest dimension. Mean scores for all dimensions decreased from the 2016 CHNA.
- More than 50% of key informants indicated that their organization currently collaborates with Baptist to improve the health of the local community; 80% expressed interest in collaboration opportunities.
- Consistent with the top community health concerns and contributing factors selected by informants, nearly 60% chose health and wellness education and programs as a missing resource. More than 40% of informants selected outlets for physical activity, substance abuse services, transportation options and healthy food options.

Survey Participants

More than one-third of key informants indicated that they served all populations across Baptist's Northeast Arkansas Service Area. The most commonly served special population groups were children/youth and low-income/poor. "Other" populations served, as indicated by respondents, included members of the Jonesboro Regional Chamber of Commerce and Jonesboro Unlimited, single parents, military veterans, college age students and employees.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (serve all populations)	35.3%	18
Children/Youth	35.3%	18
Low-Income/Poor	29.4%	15
Families	27.5%	14
Men	27.5%	14
Women	25.5%	13
Seniors/Elderly	25.5%	13
Black/African American	21.6%	11
White	19.6%	10
Hispanic/Latino	17.6%	9
Disabled	15.7%	8
Uninsured/Underinsured	11.8%	6
American Indian/Alaska Native	9.8%	5
Asian/Pacific Islander	7.8%	4
Homeless	7.8%	4
LGBTQ+ Community	7.8%	4
Other	7.8%	4
Immigrant/Refugee	5.9%	3

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

Health Perceptions

Choosing from a wide-ranging list of health issues, key informants were asked to rank order what they perceived as the top five health concerns affecting the population(s) they serve. An option to "write in" any issue not included on the list was provided. The informants were then asked to similarly rank order what they saw as the top five contributing factors for their selected health concerns. The top 10 responses for each question are depicted in the tables below. The tables are rank ordered by the percentage of respondents that selected the issue within the top five health concerns. The number of informants that selected the issue as the No. 1 health concern is also shown.

Approximately 65% of informants chose heart disease and stroke and overweight/obesity among their top five community health concerns. Nearly 1 in 4 informants also chose overweight/obesity as their No. 1 health concern, the highest of any health issue. Diabetes and mental health conditions were selected among their top five health concerns by approximately 55%–61% of informants and as their top health concerns by 1 in 5 informants. Cancer and drug

or alcohol abuse rounded out the top health concerns with 51% selecting them among their top five health concerns and 18% selecting them as their No. 1 health concerns.

A similar Key Informant Survey was conducted as part of the Baptist 2016 CHNA. The top five health concerns identified by 2016 survey respondents, in rank order, were heart disease, overweight/obesity, cancer, diabetes and substance abuse. The 2019 survey results indicate similar perception of the impact of chronic conditions and substance abuse, and increased concern for mental health conditions.

Top 10 Health Concerns Affecting Residents

Ranking	Health Concern	Top 5 Health Concerns Selected by Informants		Top (No. 1) Health Concern Selected by Informants	
		Percent*	Count	Percent	Count
1	Heart disease and stroke	65.3%	32	4.1%	2
2	Overweight/Obesity	65.3%	32	22.4%	11
3	Diabetes	61.2%	30	8.2%	4
4	Mental health conditions	55.1%	27	12.2%	6
5	Cancer	51.0%	25	18.4%	9
5	Drug or alcohol abuse	51.0%	25	18.4%	9
7	Respiratory disease	24.5%	12	2.0%	1
8	Tobacco use	18.4%	9	0.0%	0
9	Disability	12.2%	6	2.0%	1
10	Alzheimer's disease/dementia	10.2%	5	2.0%	1

*Key informants were able to select multiple health concerns. Percentages do not add up to 100%.

Nearly 90% of key informants selected health habits as a top five contributor to health concerns. Ability to afford health care was the second most identified contributor with 45% of informants selecting it among their top five choices. It is worth noting that 20% of informants selected ability to afford health care as their No. 1 choice, the highest of any factor. Poverty and drug/alcohol use were selected by approximately one-third of informants as top five contributors to health concerns; 1 in 10 informants saw them as top contributors.

The top contributing factors identified by 2016 CHNA Key Informant Survey respondents, in rank order, were drug/alcohol abuse, lack of knowledge/awareness of the value of preventative care/screenings, lack of physical activity, inability to afford care, lack of good nutrition and stress. The 2019 survey results indicate greater perceived impact of health habits and economic barriers.

Top 10 Contributing Factors to Community Health Concerns

Ranking	Contributing Factor	Top 5 Contributors Selected by Informants		Top (No. 1) Contributor Selected by Informants	
		Percent*	Count	Percent	Count
1	Health habits (diet, physical activity)	87.8%	43	16.3%	8
2	Ability to afford health care (doctor visits, prescriptions, deductibles, etc.)	44.9%	22	20.4%	10
3	Poverty	34.7%	17	8.2%	4
4	Drug/Alcohol use	30.6%	15	12.2%	6
5	Education attainment	26.5%	13	6.1%	3
6	Health literacy (ability to understand health information)	24.5%	12	2.0%	1
7	Availability of healthy food options	22.4%	11	6.1%	3
8	Environmental quality	20.4%	10	6.1%	3
8	Lack of preventive health care (screenings, annual check-ups)	20.4%	10	6.1%	3
10	Cultural beliefs/preferences	20.4%	10	0.0%	0
10	Inadequate or no health insurance	20.4%	10	0.0%	0

*Key informants were able to select multiple contributing factors. Percentages do not add up to 100%.

To expand upon their quantitative responses to the previous questions, informants' were invited to provide free-form comments about the topics. Verbatim comments are included below by overarching theme.

Access to Care

- *"Our county hospital closed in August of 2014 and many people have gone without health care. Most refuse to go to Memphis because of no transportation. West Memphis did have a public transportation system but stopped that earlier this year because of lack of funds to support it. On a good note, Crittenden County has partnered with Baptist to build a hospital and it's scheduled to be open for business in December 2018."*
- *"[Limited] hours of operation for service providers is a real issue also."*
- *"Although this is a college campus, I am more aware of employee concerns via insurance/benefits committee work. Affordable insurance options, changing health care plans, medication costs impact faculty and staff in different ways."*

Health Habits and Chronic Disease

- *"We primarily deal with 18–25 year old students, but obesity is a significant concern. There is not a norm surrounding healthy eating or exercise in this region; so many of these students are on their way to serious health problems. Tobacco use —"chew" is much more common than cigarettes and is used exclusively by males — I'd say that in a given class, 2–8% of the class will be actively using chewing tobacco during class. Use is more concentrated amongst students from an agricultural background."*

- *"I do believe that medical providers do everything in their power to help with the financial obligations of their cancer patients... let's help communities, big and small and all cultures with better detection, earlier detection thus better results for diagnosis, treatment and normalized life."*
- *"Social determinants are a key issue in the Jonesboro and surrounding communities. Relative to food, most people choose not to select healthy options even if they can afford it and deplore activity. The level of education in our region is a concern, which is a contributor to health disparities and correlated to crime/violence. People lack self-discipline and self-control; it's easy to see why the state of health is what it is in our region."*

Mental Health and Substance Abuse

- *"A large number of mental health patients in this region experience significant generational difficulties and come from a low education, low socioeconomic background. Employment, education (including parenting) and healthy modeling are all very important steps needed to break this generational trend."*
- *"A lot of families are not receptive to therapy due to cultural beliefs."*
- *"College students across the country have mental health and suicidal ideation concerns, and those are no different here. However, it's not openly discussed here in the way that it is in other parts of the country."*

Health Care Access

Key informants were asked to rate their agreement to statements pertaining to the health of the community and access to care using a scale of (1) "strongly disagree" to (5) "strongly agree."

Approximately 57% of informants "disagreed" or "strongly disagreed" that their community is healthy, while 18% of informants "agreed" or "strongly agreed" that their community is healthy. Access to adequate and timely health services is a key contributor to the health of a community.

Cultural sensitivity among providers and availability of transportation for medical appointments and other services received the highest mean scores among health care access indicators. Approximately 50% of informants "agreed" or "strongly agreed" that these services exist within the community. Nonetheless, transportation services were not considered to be widely available across the community. More than one-third of respondents "disagreed" or "strongly disagreed" that transportation is available to residents.

The number of providers treating mental health and substance use disorder conditions is a top concern for the service area. Approximately 49% of informants "disagreed" or "strongly disagreed" that there are a sufficient number of mental health providers, while 57% "disagreed" or "strongly disagreed" that there are a sufficient number of substance use disorder providers.

Access to primary care and recommended preventive screenings are also top concerns for the area. Approximately 41% of informants stated that residents do not have a regular primary care provider and 48% stated that residents do not receive preventive screenings and checkups.

Resident Health Care Access in Descending Order by Mean Score

	Informants Strongly Disagree	Informants Disagree	Informants Neither Agree nor Disagree	Informants Agree	Informants Strongly Agree	**Mean Score (1–5)**
Providers in our community are culturally sensitive to race, ethnicity and cultural preferences of patients.	8.0%	10.0%	34.0%	38.0%	10.0%	**3.32**
Residents in our community have available transportation for medical appointments and other services.	5.9%	31.4%	11.8%	41.2%	9.8%	**3.18**
There are a sufficient number of providers that accept Medicaid in our community.	3.9%	21.6%	33.3%	39.2%	2.0%	**3.14**
Residents have health insurance.	3.9%	27.5%	31.4%	35.3%	2.0%	**3.04**
Residents in our community have a regular primary care provider/doctor/practitioner that they usually go to for health care.	5.9%	35.3%	29.4%	27.5%	2.0%	**2.84**
There are a sufficient number of mental health providers in our community.	17.6%	31.4%	21.6%	25.5%	3.9%	**2.67**
Residents receive recommended preventive screenings and check-ups.	14.0%	34.0%	36.0%	14.0%	2.0%	**2.56**
I would describe our community as healthy.	17.6%	39.2%	25.5%	13.7%	3.9%	**2.47**
There are a sufficient number of providers treating substance use disorders in our community.	27.5%	29.4%	29.4%	11.8%	2.0%	**2.31**

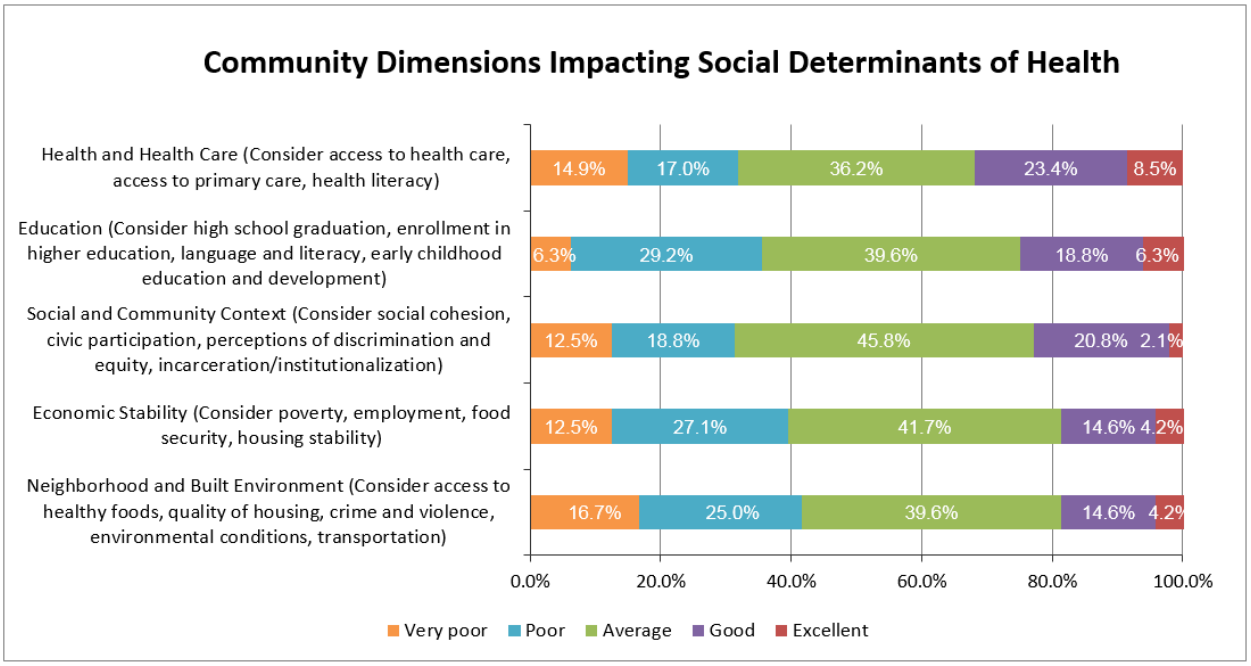
Social Determinants of Health

Healthy People 2020 defines social determinants of health as conditions in the environment in which people are born, live, learn, work, play, worship and age that affect a wide range of health, function and quality of life outcomes and risks. Informants were asked to rate five community dimensions that most highly affect social determinants of health — economic stability; education; health and health care; neighborhood and built environment; and social and community context using a scale of (1) “very poor” to (5) “excellent.”

The mean score for each dimension is listed in the table below in rank order, followed by a graph showing the scoring frequency. Mean scores were between 2.65 and 2.94, with most respondents rating the listed dimensions as “poor” or “average.” Consistent with the 2016 Key Informant Survey results, health and health care was seen as the strongest community dimension. Overall, mean scores for all dimensions decreased from the 2016 survey results.

Ranking of Community Dimensions That Impact Social Determinants of Health in Descending Order by Mean Score

Ranking	Community Dimension	2019 Results	2016 Results
		Mean Score	Mean Score
1	Health and Health Care	2.94	3.41
2	Education	2.90	3.29
3	Social and Community Context	2.81	3.35
4	Economic Stability	2.71	3.06
5	Neighborhood and Built Environment	2.65	3.12

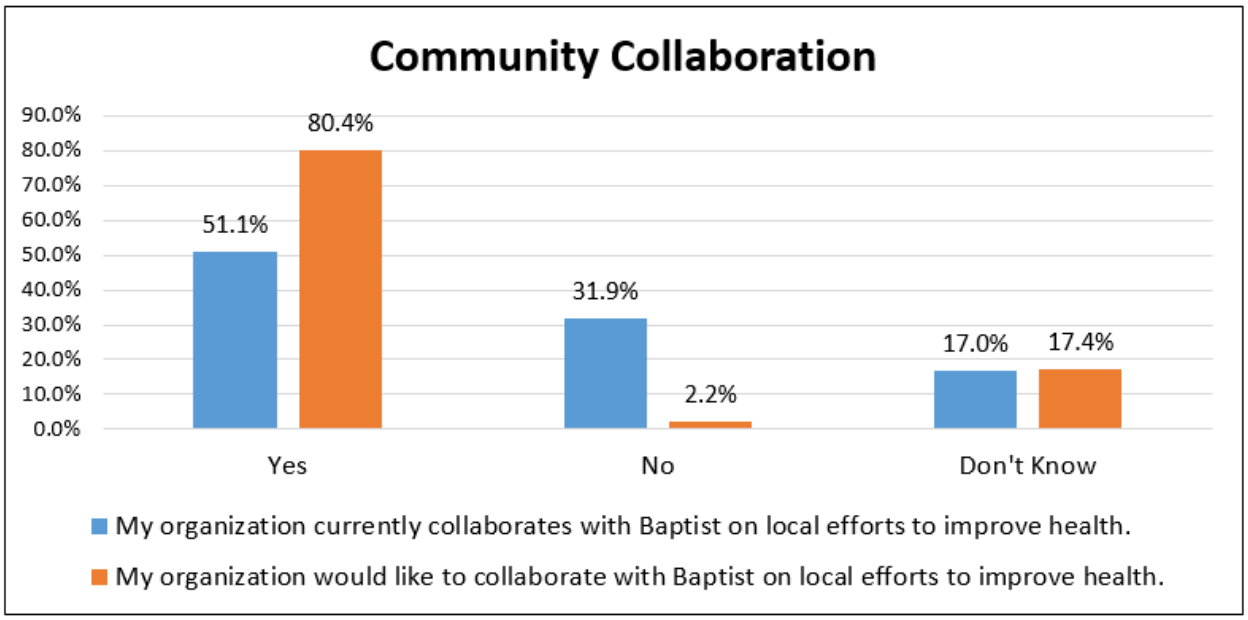


Key informants acknowledged the effect of social determinants — particularly poverty — as key underlying factors of health issues within the community. Specific comments related to poverty and other social determinants are included below.

- *"The populations we serve — mainly in the schools — are very economically diverse. We see children who get their only meals at school to students who are driving brand-new vehicles in the 10th grade. Overall, we tip much more toward the lower end of the socioeconomic scale."*
- *"The lower paid staff struggle with many of these [social determinants]."*
- *"Quality health service providers are not found in poor and true urban areas."*
- *"Even though I rated our space high, there are still significant issues in all of these areas. I would like the hospitals, city and university to identify one common issue per year as an area of focus — have a plan and put forth "extra efforts" toward that end. Over time, that could make a difference."*

Leveraging Community Resources to Impact Health

More than half of key informants indicated that their organization currently collaborates with Baptist to improve the health of the local community. Approximately 80% of informants expressed interest in collaboration opportunities with Baptist.



Key informants were asked what resources are missing in the community that would help residents optimize their health. Respondents could choose as many options as they saw needed. Nearly 60% of informants chose health and wellness education and programs as a missing resource within the community. Approximately half of informants included outlets for physical activity and substance abuse services. Transportation and healthy food options rounded out the top five identified missing resources by informants.

Top Missing Resources Within the Community

Ranking	Resource	Percent of Informants	Number of Informants
1	Health and wellness education and programs	57.8%	26
2	Outlets for physical activity (parks, recreation centers, gyms, walking trails, etc.)	48.9%	22
3	Substance abuse services	46.7%	21
4	Transportation options	44.4%	20
5	Healthy food options	42.2%	19
6	Mental health services	37.8%	17
7	Affordable housing	35.6%	16
8	Adult education (GED, training, workforce development)	33.3%	15
8	Community clinics/Federally Qualified Health Centers (FQHCs)	33.3%	15
8	Multi-cultural or bilingual health care providers	33.3%	15
8	Social services assistance (housing, electric, food, clothing)	33.3%	15
12	Community health screenings (blood pressure, cancer risk, stroke, etc.)	31.1%	14

Specific comments related to missing resources in the community are included below. Several informants indicated that the listed resources are available in the community, but that the demand for these resources is greater than the supply and/or eligibility criteria exclude individuals in need.

- *"We have a food bank on campus and one in Jonesboro. There are also backpack programs at area schools that help with children without access to meals on weekends. I'm sure all of these programs fall short of the need. We have the highest incidence and mortality from breast cancer in Northeast Arkansas — mostly due to lack of mammography in some counties and patients lost to follow up. It is likely that other diagnoses have similar numbers."*
- *"Rural communities do not have parks, walking trails or other recreational facilities."*
- *"Most of the options above require that the person must meet certain criteria to receive them. We see a lot of people who have hit a wall and are unable to secure certain things they need. This is oftentimes the reason they cross the river to Planned Parenthood and have an abortion!!! Maddening."*
- *"Jonesboro has lots of services available. Many [organizations] are restricted by federal or state law in what they can and cannot do, so [programs] may not be as comprehensive as they could be. Service agencies are not coordinated. Education is where it all begins; we need greatly expanded and enhanced services at the pre-school level. Drugs are destabilizing family units."*

Key Informant Survey findings were considered in conjunction with statistical secondary data to determine health priorities and action planning.

Summary of Focus Groups

Background

As part of the 2019 CHNA, focus groups were conducted in communities across the Baptist Mid-South service area with residents who have had experiences with cancer. The objectives of the focus groups were to collect perspectives on provider awareness of local and regional cancer services; collect patient experiences related to care delivery; understand consumers' views on preventive screenings; define barriers to accessing cancer services; and collect socioeconomic insights and barriers to care management. In total, 98 people participated in the discussion groups.

Memphis Metro Service Area
Germantown: 15 attendees
Southaven: 12 attendees

Northeast Arkansas Service Area
Jonesboro: 12 attendees

North Mississippi Service Area
Batesville: 9 attendees
Columbus: 14 attendees

Central Mississippi Service Area
Canton: 17 attendees
Carthage: 7 attendees
Jackson: 12 attendees

Recruitment efforts did not produce enough participants to hold focus groups in the West Tennessee Service Area.

Key Discussion Takeaways

Perceptions related to cancer diagnosis as a "death sentence" are slowly changing. Long-held regional beliefs that cancer diagnosis is a "death sentence" are slowly changing as new technologies and treatment options produce improved outcomes and quality of life for survivors. Patients express positive experiences with care and regard care options as high quality across the region. Insurance remains a key driver in decision-making for cancer care, while provider referrals and recommendations from family and friends are highly considered.

Trust in providers, shared faith, bedside manners rank highly after expertise. Patients value expertise and honesty with diagnosis, prognosis, preparation for path ahead and regular check-ins via phone. Nearly all focus group participants relied on spiritual or religious beliefs and practices to help them cope with their condition and appreciated when their providers prayed with them. Nurse navigators were seen as valuable in helping patients and families navigate their first experience with a serious medical condition.

Most focus group participants discovered their cancer diagnosis through routine screening. Individuals were more likely to get cancer screenings if they knew someone personally who was diagnosed with cancer. Cancer survivors are influential advocates for preventive screenings and early treatment. Opportunity exists to encourage patients to share stories with their communities, such as faith congregations, employer groups, civic and social clubs, etc., to educate community members on the benefits of early diagnosis, improved outcomes for cancer care and advances in treatment and screening techniques.

Fear and discomfort are the most common reasons for intentionally delayed screenings. Patients are reluctant to be proactive in assessing cancer risk for fear of positive results and discomfort of procedures. Perceptions are changing as advances in cancer treatment improve outcomes and quality of life for survivors. More advocacy is needed to educate people about the benefits of early detection and new methods for screening. Policies and funding to help uninsured and underinsured residents receive equitable care are needed to reduce disparities among African American and low-income populations.

- *"People need to know that cancer doesn't mean death anymore."*
- *"They think if they don't know; it won't happen to them."*
- *"If you lose your breast, you won't be a woman. They aren't aware of options for plastic surgery and reconstruction."*
- *"In this day and age, there has to be a better way to screen my breast than flattening it between two bars."*

Limited insurance, transportation and after-hours care are barriers to screenings. The more rural the community, the more challenges exist to accessing screenings. Participants suggested that health care providers offer free or low-cost screenings at hair and nail salons, churches and area businesses. Mobile screenings in rural and isolated communities were recommended to bring services to residents, as was providing a "one-stop shop" to conduct multiple cancer

screenings at one time. Focus group participants in rural areas were less able to recall health fairs and free community screenings than more populous areas.

Leverage mammography screening success to promote other screenings. Mammography screening are among the most regularly recommended and received cancer screenings, regardless of risk factors. Community perception holds that lung cancer predominantly affects past or current smokers. Within the region, environmental factors are a significant risk factor for lung cancer, although this is largely unknown within the population. Participants recommended increased awareness and advocacy campaigns to encourage screening and awareness of lung cancer prevalence.

- *"Lung cancer is one of the most common and deadly cancers, but people only get screened if they're a smoker."*

Education about insurance coverage for screenings is needed. Patients often misunderstand costs and coverage for wellness screenings vs. diagnostic testing. Education about potential for follow-up diagnostic tests and the benefits of further analysis, including better outcomes, may mitigate concerns.

Few participants received screenings at health fairs. Focus group participants were generally reminded by their primary care providers to receive recommended screenings and did so within an outpatient setting. Symptoms and other concerns prompted screenings outside of age-related recommendations. Generally, residents in more rural locations were not aware of any free or community screenings held within their neighborhoods. Participants were not adverse to receiving free screenings at a health fair or other community event.

Cost was not a deterrent for treatment, but financial expense of cancer care has a huge impact on patient finances. Information on fees and financial assistance is needed ahead of treatment. Participants did not forgo treatment because of cost. Deductibles, coinsurance are concerns, but participants "find a way" to afford care. Patients often rely on family, churches, support from local foundations, hospital payment plans or charity care to finance cancer treatment. A few participants were forced to declare bankruptcy due to their treatment costs. Others anticipated making monthly payments *"for the rest of my life."* Patients would like a better estimate of expected costs and knowledge of financial assistance options ahead of treatment. Participants received unexpected bills for their care. Recommendations were to provide information during initial appointments about available financial assistance. Written materials are most useful so patients can refer to the information later. Ease of application and assistance with completing forms is necessary to ensure all patients can access programs. Streamline paper application across all programs with a single application. Some participants are able to work throughout their treatment; others rely on short-term disability insurance or needed to quit their jobs. Savings, retirement, loans and other finances are used to pay for care and have a long-term effect on the whole family.

- *"It changes your entire future. My husband and I had plans for retirement. We don't anymore."*

- *"The gas costs to get back and forth to treatment really added up."*

Cancer brings loss of control in life and changes in family structure that affect mental well-being. Cancer treatment is emotionally draining for patients and caregivers. Women are especially affected. Health care providers, staff, advocates and others should help patients to prepare for what's to come and provide support throughout treatment. Patients and caregivers seek in-home services for personal care, home maintenance and meal delivery. They recommend providing a list of community resources in MyChart and other hospital communications. Meal delivery and prep services were seen as the most needed services, and critical to recovery.

- "I couldn't even make it to the kitchen when I was in treatment."
- "We don't have an appetite. We need meals that are pre-made and nourishing and that are delivered to the house."

Support groups for survivors and caregivers are valuable, but few are available in rural areas. Participants prefer support groups that are specific to their diagnosis, but appreciate general support groups for exchanging information and resources. Cancer care providers can ensure rural support networks by working with local partners to coordinate support groups, education sessions and other opportunities for networking and social support.

Faith communities are a primary support system for cancer patients and their families. Volunteers provide transportation, meals, financial support and other services. Churches also serve as prevention partners through medical ministries, cancer screening events and trusted connections to the community. Participants recommended that health and human service providers offer a resource guide on where to find additional services.

Patients need transportation, escorts to frequent appointments; rural patients are most affected. Treatment and physician visits can be frequent and present transportation challenges for patients. Participants recommended satellite clinics in rural communities, bundled treatments and wider services provided through home care. Patients rely on family and friends to transport them to chemotherapy, radiation and other appointments. Rural community members drive one to two hours for care, sometimes daily. A few participants lied to a provider about having a driver and drove themselves to and from treatment appointments.

- "It's hard to get a commitment from people every day."
- "I feel like a burden."
- "Medicaid van requires advanced scheduling and has wait times of several hours. When you're done with chemo, you just want to go home. You don't want to wait for hours in a waiting room."

Focus group findings were reviewed with Baptist's CHNA committee and correlated with statistical secondary data and Key Informant Survey findings to inform priority health needs and community health improvement strategies.

Evaluation of Impact From the 2016–2019 CHNA Implementation Plan

In 2016, Baptist Memorial Health Care completed a Community Health Needs Assessment and developed a supporting three-year (2016–2018) Community Health Improvement Plan to address identified health priorities. Health priorities included behavioral health, cancer, chronic disease management and prevention and maternal and child health. The strategies utilized to address the health priorities support Baptist's commitment to the people it serves and the communities they live in.

2016 Health Priority Goals

Behavioral Health: Improve outcomes for residents with a mental health or substance abuse condition and their families.

Cancer: Provide early detection and treatment to reduce cancer mortality rates and improve quality of life for patients living with cancer.

Chronic Disease Management and Prevention: Reduce risk factors for chronic disease and improve management of chronic disease through healthy lifestyle choices.

Maternal & Child Health: Improve birth outcomes for women and infants.

Completed Strategies

- Fostered health care workforce development through sponsorship of Nurse Camp, a summer program for high school students to shadow medical professionals and NYIT College of Osteopathic Medicine at Arkansas State University Project H.E.A.R.T. (Health Education Advocacy Reflection and Training), a camp for high school students to learn about career opportunities in health care and the overall well-being of the community
- Hosted free HealthTalk luncheon events, including Living with Diabetes, Finding the Good in Grief and Advances in Joint Replacement
- Offered free monthly support groups for individuals affected by diabetes
- Offered free monthly surgical weight loss seminars, nutrition classes and support groups to provide information on weight loss and healthy eating
- Offered Hands-Only CPR and Early Heart Attack Care Education events
- Participated in various community health fairs and events, including the Women's Day Health Fair, Nettleton Senior Girls Health Fair, Trumann Community Health Fair, Community Helpers Day and employer health events
- Provided financial and in-kind contributions to community agencies and events, including the Arkansas Hospital Education and Research Trust, Community Health Education Foundation, Family Crisis Center, Food Bank of NEA, Jonesboro Chamber of Commerce, March of Dimes, Muscular Dystrophy Association, The Learning Center, Treble Clef Special Needs Music Program and United Way, among others

- Provided free meeting space for community blood drives
- Provided monthly childbirth and breastfeeding classes for new and expectant mothers to promote healthy birth outcomes
- Sponsored community events, including Heart Day at NEA, Camp Good Grief Family Day and ShareHope Annual Candlelight Vigil, among others
- Supported the Jonesboro Unlimited Momentum initiative, a collaborative strategy to attract, grow and retain high paying jobs in Jonesboro and Craighead County

By providing health education and opportunities for residents to participate in programs to improve their health, Baptist Memorial Health Care helped thousands of our community members lead healthier lives. We believe strongly in corporate citizenship and recognize the importance of collaboration with local organizations to build stronger and healthier communities. We remain committed to supporting community health improvement in line with our mission and vision.

Priorities for 2019–2022 CHNA Implementation Plan

Prioritization of Health Needs

To achieve community health improvement, it is imperative to prioritize resources and activities toward the most pressing and wide-ranging health needs within the community. The Baptist CHNA Steering Committee reviewed findings from the CHNA research, comparing statistical data from public health and socioeconomic measures with input received from key informants and focus group participants. The committee sought to determine unique and common health needs and disparities for each hospital service area, service regions and the Mid-South service area to effectively leverage resources across the system to address community health needs.

The rationale and criteria used to select health priorities included:

- Prevalence of disease and number of community members impacted
- Rate of disease in comparison to state and national benchmarks
- Health disparities among racial and ethnic minorities
- Existing programs, resources and expertise to address the issue
- Input from representatives of underserved populations
- Alignment with concurrent public health and social service organization initiatives

The 2019 CHNA research findings indicated that priority areas identified in the 2016 CHNA were still relevant and among the highest health needs across the region. Building upon its work over the past two CHNAs, while recognizing emerging health needs and a changing health care delivery environment, Baptist adopted the following systemwide priority health needs. The priorities are supported by systemwide goals for community health improvement and local hospital service area strategies.

Systemwide Community Health Priorities and Goals

Baptist determined the following health concerns were priorities on which to focus during the 2019–2022 reporting cycle.

Behavioral Health: Increase behavioral health screenings to initiate early treatment and improved outcomes for residents at all stages of life.

Cancer: Provide early detection and treatment to reduce death from breast, colorectal and lung cancers, and improve quality of life for patients.

Chronic Disease: Promote health as a community priority, and increase healthy lifestyle choices.

Maternal and Child Health: Improve birth outcomes for women and infants.

Hospital Implementation Plans

Supported by systemwide goals for community health improvement, individual hospitals developed specific strategies that reflect local needs, unique challenges, community assets and health disparities within the hospitals' service areas. Individual plans are available upon request and can be found on Baptist Memorial Health Care's website at https://www.baptistonline.org/about/chna along with the 2019 CHNA reports.

Board Approval

On Tuesday, Sept. 24, 2019, the Baptist Memorial Health Care corporate board reviewed and adopted this report (2019 CHNA) along with plans to create Implementation Plans for each hospital in Baptist's Northeast Arkansas Service Area.

Appendix A: Public Health Secondary Data References

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Appendix B: Key Informant Survey Participants

Key Informant Organization	Key Informant Title/Role	City/State
Allen Engineering Corporation	President/CEO	Paragould, AR
American Red Cross	Executive Director	Jonesboro, AR
Anchor Packaging	HR Site Lead	Jonesboro, AR
Arkansas Blue Cross	Social Work	Jonesboro, AR
Arkansas Single Parent Scholarship Fund	Program Manager	Statewide
Arkansas State University	Associate Vice Chancellor	Jonesboro, AR
Arkansas State University	Administrator	Jonesboro, AR
Arkansas State University	Program Director/Assistant Professor	Jonesboro, AR
Arkansas State University	Faculty	Jonesboro, AR
Arkansas State University	Associate Professor Emeritus	Jonesboro, AR
Arkansas State University	Associate Professor	Jonesboro, AR
Arkansas State University	Associate Professor	Jonesboro, AR
Arkansas State University	Assistant Professor of Business	Jonesboro, AR
Arkansas State University	Associate Professor	Jonesboro, AR
BancorpSouth	AVP, CRA Specialist	Jonesboro, AR
BMHCC–Internal Audit	Director of Operations and Revenue Audits	Memphis, TN
Crittenden County Government	County Judge	Marion, AR
DeltaARTS	Artistic Director	West Memphis, AR
DNW Outdoors	Secretary/Treasurer	Jonesboro, AR
Evolve Bank & Trust	Vice President, Commercial Lender	Jonesboro, AR
Families, Inc.	CEO	Jonesboro, AR
Food Bank of NEA	Outreach Coordinator	Jonesboro, AR
Gordon Community and Cultural Center, Inc.	Executive Director	Abbeville, MS
Helping Neighbors Food Pantry	Board Member	Jonesboro, AR
Jonesboro Public Schools	Director of Mental Health Services	Jonesboro, AR
Jonesboro Public Schools	School Counselor	Jonesboro, AR
Jonesboro Unlimited	Director of Workforce Development & Existing Industry	Jonesboro, AR
Kait 8	Sales	Jonesboro, AR
Le Bonheur	Administration	Memphis, TN
March of Dimes	Senior Manager of Development for Memphis/Jackson	Memphis, TN
Master Group	President/Owner	Jonesboro, AR
Master Group	Owner	Jonesboro, AR
MidSouth Sales	Owner	Jonesboro, AR
Military Officers Association of America, NE Arkansas Chapter	Vice President	Jonesboro, AR
NEA Baptist Memorial Hospital	Fitness Coordinator	Jonesboro, AR
NEA Baptist Memorial Hospital	Community Foundation Board Member	Jonesboro, AR
NEA Baptist Memorial Hospital	Administrative Director of Quality	Jonesboro, AR
NEA Baptist Memorial Hospital	Board Member	Jonesboro, AR
NEA Baptist Memorial Hospital	Community Volunteer	Jonesboro, AR
Non Profit	Administrative Assistant	Jonesboro, AR

Key Informant Organization	Key Informant Title/Role	City/State
Options on Main	Executive Director	Jonesboro, AR
Optus Inc.	Vice President, HR	Jonesboro, AR
ProMatura	President	Oxford, MS
Pulmonary & Sleep Diagnostics	Community Educator	Paragould, AR
Retired from Public Education	Former Administrator and Classroom Teacher	Jonesboro, AR
The Learning Center of NEA	DOS	Jonesboro, AR
The Marketing Spectrum	President/CEO	Memphis, TN
United Way of Northeast Arkansas	Executive Director	Jonesboro, AR
Vitalant	Senior Donor Recruitment Representative	Memphis, TN
Westside Consolidated School District	Professional School Counselor	Jonesboro, AR
Woodsprings Pharmacy and Home Medical Equipment	HME Manager	Jonesboro, AR

Appendix C: Federally Qualified Health Center Locations

Craighead County

Location	Address
ARcare – 22	2816 Fox Meadow Ln., Jonesboro, AR 72404
ARcare – 55	1530 N Church St., Jonesboro, AR 72401
ARcare – 59	416 E Washington Ave., Jonesboro, AR 72401
ARcare – 65	1009 Highway 18, Lake City, AR 72437

Crittenden County

Location	Address
ASU Mid South Community College	2000 W Broadway Ave., West Memphis, AR 72301
Earle Family Health Center	216 Arkansas St., Earle, AR 72331
East Arkansas Family Health Center, Inc.	900 N 7th St., West Memphis, AR 72301

Poinsett County

Location	Address
East Arkansas Family Health Center	102 W Broad St., Lepanto, AR 72354
Truman Family Health Center	417 W Main St., Trumann, AR 72472