2022 Community Health Needs Assessment

Northeast Arkansas

Baptist Memorial Hospital–Crittenden • NEA Baptist Memorial Hospital

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Table of Contents

OUR COMMITMENT TO COMMUNITY HEALTH 2
OVERVIEW OF THE 2022 CHNA 3
SYSTEMWIDE APPROACH TO COMMUNITY HEALTH IMPROVEMENT 3
CHNA LEADERSHIP 4
METHODOLOGY AND COMMUNITY ENGAGEMENT 5
COMMUNITY HEALTH PRIORITIES 5
BOARD APPROVAL 6
NORTHEAST ARKANSAS SERVICE AREA DESCRIPTION 7
SOCIAL DETERMINANTS OF HEALTH 8
OUR COMMUNITY 13
PRIORITY HEALTH NEEDS 15
COVID-19 IMPACT ON COMMUNITIES 19
SERVICE AREA POPULATION STATISTICS 24
HEALTH STATISTICS 48
ACCESS TO HEALTH CARE 48
HEALTH RISK FACTORS AND CHRONIC DISEASE 52
AGING POPULATION 62
BEHAVIORAL HEALTH AND SUBSTANCE USE DISORDER 66
YOUTH HEALTH 73
MATERNAL AND INFANT HEALTH 77
KEY INFORMANT SURVEY RESULTS 84
PATIENT ACCESS TO CARE AND SERVICES SURVEY RESULTS 92
EVALUATION OF HEALTH IMPACT 106
APPENDIX A: SECONDARY DATA SOURCES 112
APPENDIX B: KEY INFORMANT SURVEY PARTICIPANTS 114

Our Commitment to Community Health

Baptist Memorial Health Care (Baptist) 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, we conduct 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.

Providing access to high-quality health care
We ensure 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. 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 foster ongoing relationships with these partners and provide financial and in-kind gifts to support their work.

Investing in health care education and research
We support 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.

Overview of the 2022 CHNA

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 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 socio-economic data. Systemwide priorities were determined to address common health needs across the Mid-South. Specific strategies were outlined in each hospital's implementation plan to guide local efforts and collaboration with community partners.

2022 CHNA Geographic Regions and Primary Service Areas

Region	Primary Service Counties	Hospitals
Memphis Metro	Shelby and Fayette counties, 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 and 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 and 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

CHNA Leadership

A Baptist Memorial Health Care steering committee, along with community representatives and partners, oversaw the 2022 CHNA. These individuals served as liaisons to their organizations and the communities served by their entities.

2022 CHNA Steering Committee Members

Donna Baugus; Survey Research Manager

Cynthia Bradford; System Community Involvement Manager

Abby Brann; System Community Involvement Coordinator

David Garrison; System Finance Director

Tom Gladney; Data Management and Decision Support Director

Bill Griffin; Executive Vice President and Chief Financial Officer

Caitlin Hayden; System Senior Community Involvement Coordinator

Kelley Jerome; Internal Audits Manager

Briana Jegier, PhD; Program Chair & Associate Professor, Baptist Health Sciences University

Taylor Jones; Strategic Planning Data Analyst

Saju Joy, MD; Senior Vice President and Chief Medical Officer

Jeff Lann; Research and Marketing Development Manager

Michelle McDonald, PhD; Dean of General Education and Health Studies, Baptist Health Sciences University

Jim Messineo; Revenue and Operations Audits Director

Keith Norman, DMin; Vice President, Chief Government Affairs and Community Relations Officer

Shivani Patel; Health Services Research Intern

Anne Sullivan, MD; Chief Quality and Academic Officer

Kimmie Vaulx; System Corporate Communications Director

Ann Marie Wallace; System Senior Community Involvement Coordinator

Nicholas Weaver; System Community Involvement Coordinator

Baptist partnered with Community Research Consulting (CRC) to conduct the CHNA. CRC is a woman-owned business that specializes in conducting stakeholder research to illuminate disparities and underlying inequities and transform data into practical and impactful strategies to advance health and social equity. Our interdisciplinary team of researchers and planners have worked with hundreds of health and human service providers and their partners to reimagine policies and achieve measurable impact. Learn more about our work at buildcommunity.com.

Methodology and Community Engagement

The 2022 CHNA was conducted from July 2021 to August 2022 and included quantitative and qualitative research methods to determine health trends and disparities affecting service area residents. Through a comprehensive view of statistical health indicators and community stakeholder feedback, a profile of priority areas was determined. The findings will guide health care services and health improvement efforts, as well as serve as a community resource for grant making and advocacy, and support the many programs provided by health and social service partners.

Community engagement was an integral part of the 2022 CHNA. In assessing community health needs, input was solicited and received from persons who represent the broad interests of the community, as well as underserved, low-income and minority populations. These individuals provided wide perspectives on health trends, expertise about existing community resources available to meet those needs and insights into service delivery gaps that contribute to health disparities and inequities.

Baptist sought to engage individuals and communities historically underrepresented and underserved by health care services to illuminate diverse perspectives on community needs and inform community health improvement strategy. Consumer interviews and focus groups were hosted across the Baptist service areas with the goal of garnering stakeholder feedback and recommendations to improve health and the health care experience by addressing access to care challenges and underlying social determinants of health and inequities. This feedback is reflected in Baptist's approach to defining the 2022-25 priority areas and developing each hospital Community Health Improvement Plan (CHIP).

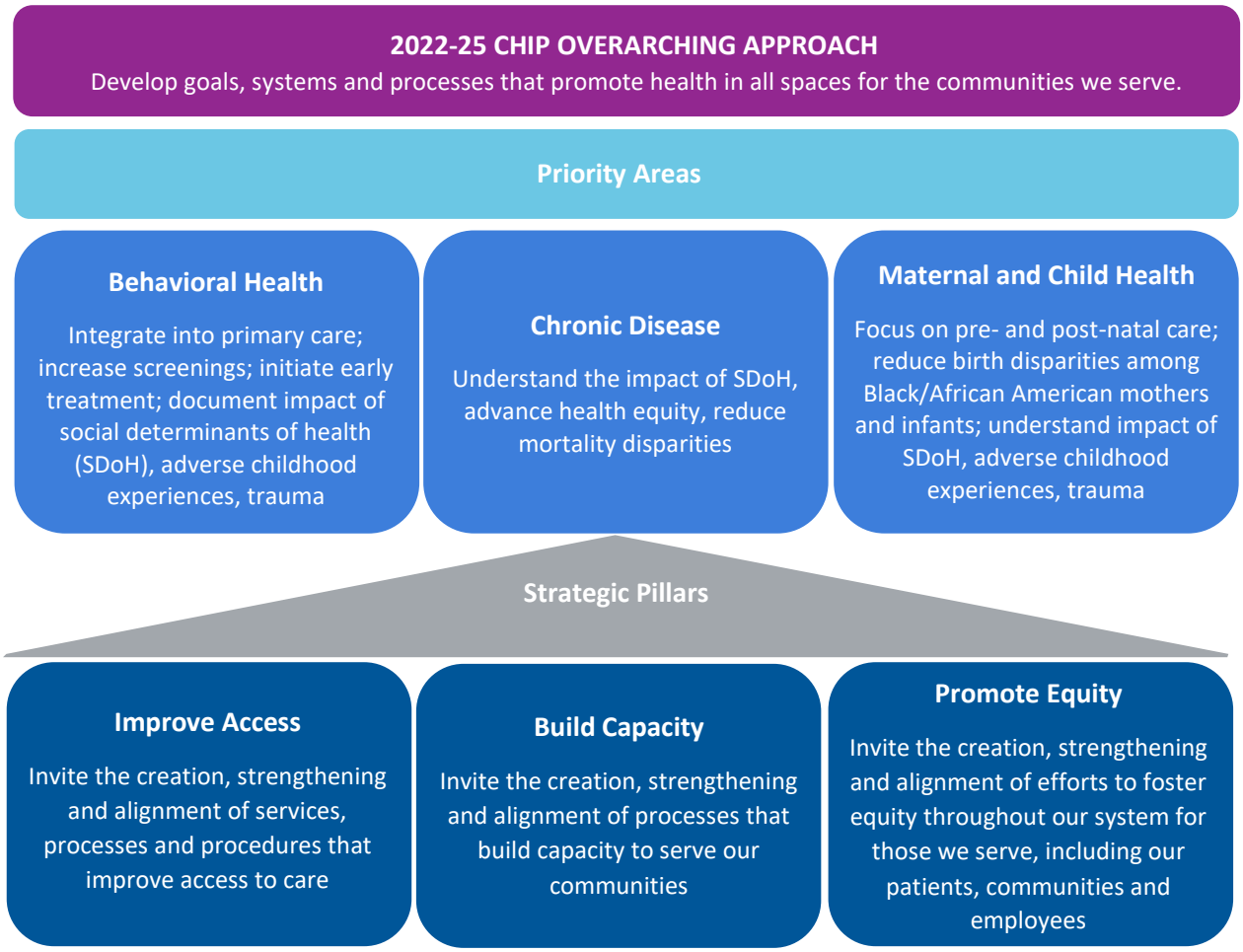
The following research methods were used to determine community health needs:

- Analysis of existing secondary data sources, including public health statistics, demographic and social measures and health care utilization
- Key Informant Surveys to assess perceived health priorities, perspectives on emerging health trends and recommendations to advance community health improvement
- Patient Access to Care and Services Survey to understand health care providers' perspectives on barriers to care, the impact of social determinants of health, cultural competencies and other factors that impede optimal outcomes for patients
- Consumer interviews and focus groups with individuals representing Black, Indigenous and People of Color (BIPOC) and other populations historically underserved by health care services to inform community health improvement strategy

Community Health Priorities

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, Baptist collected feedback from community partners and sought to align with community programs, population health management strategies and diversity, equity and inclusion initiatives.

In defining the 2022-25 priority areas and developing hospital CHIPs, Baptist outlined an overarching approach that promotes health in all spaces for the communities they serve and centers health equity strategies. The approach is illustrated in the graphic below.



Board Approval

The 2022 CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The research findings will be used to guide community benefit initiatives for the collaborating Baptist hospitals and to engage local partners to collectively address identified health needs.

Baptist is committed to advancing initiatives and community collaboration to support the issues identified through the CHNA. The 2022 CHNA report was presented to the Baptist Board of Directors and approved in September 2022.

Following the board's approval, the CHNA report was made available to the public via the Baptist website at baptistonline.org/about/chna.

Baptist Northeast Arkansas Service Area Description

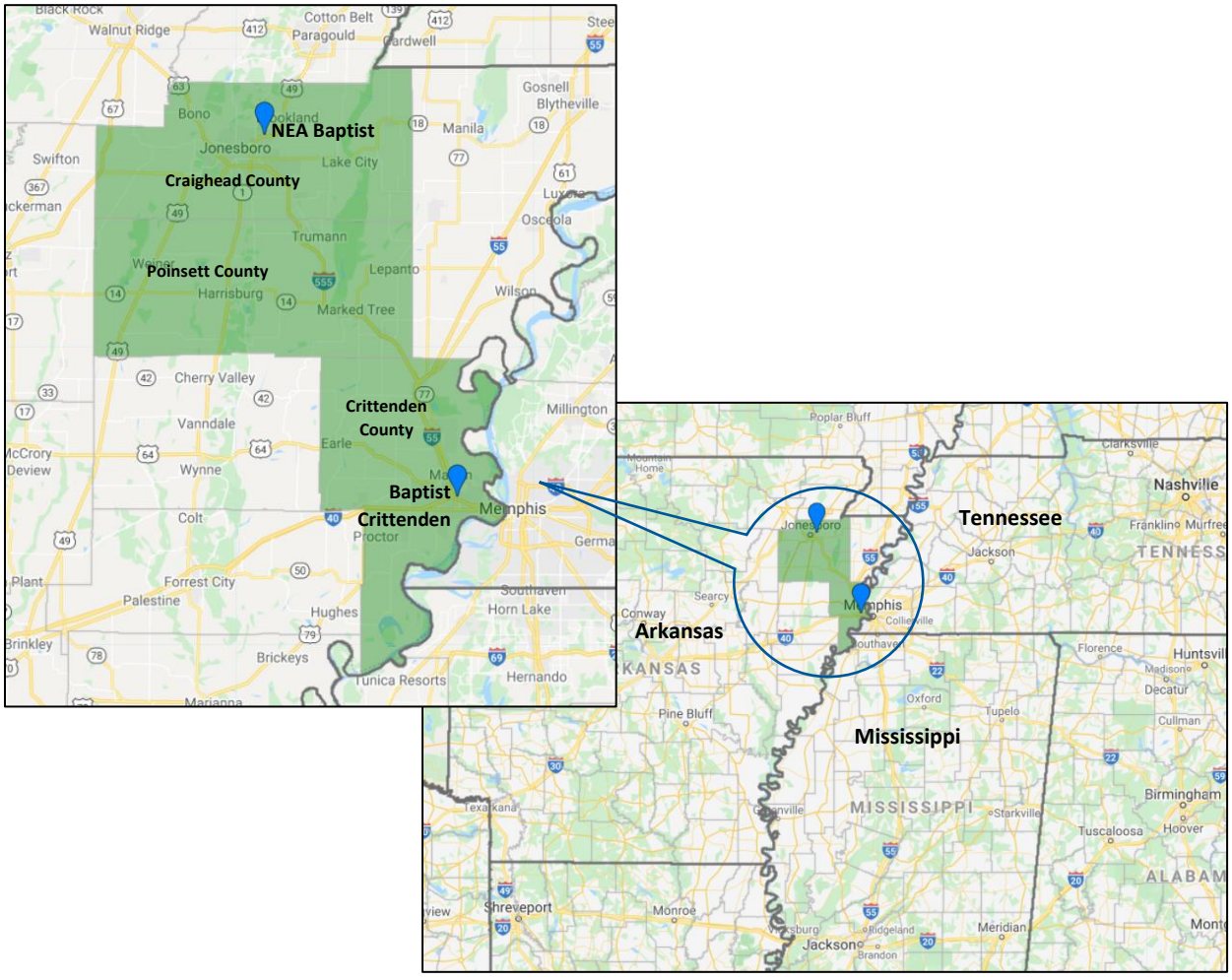
Baptist has 22 affiliate hospitals serving residents in three states. For purposes of the CHNA, Baptist focused on the primary service county(ies) of each of its not-for-profit hospitals to identify health trends and unique disparities within these communities. Hospitals with overlapping service areas were grouped into regions for comparisons of health and socio-economic data.

Baptist has two hospitals in the Northeast Arkansas service area, which collaborated on the 2022 CHNA. The study encompassed Craighead, Crittenden and Poinsett counties in Arkansas, located along the Tennessee border. Select data for service area ZIP codes are also shown throughout the report.

The following hospitals participated in the 2022 CHNA for the Northeast Arkansas service area.

- NEA Baptist Memorial Hospital (NEA Baptist)
- Baptist Memorial Hospital-Crittenden (Baptist Crittenden)

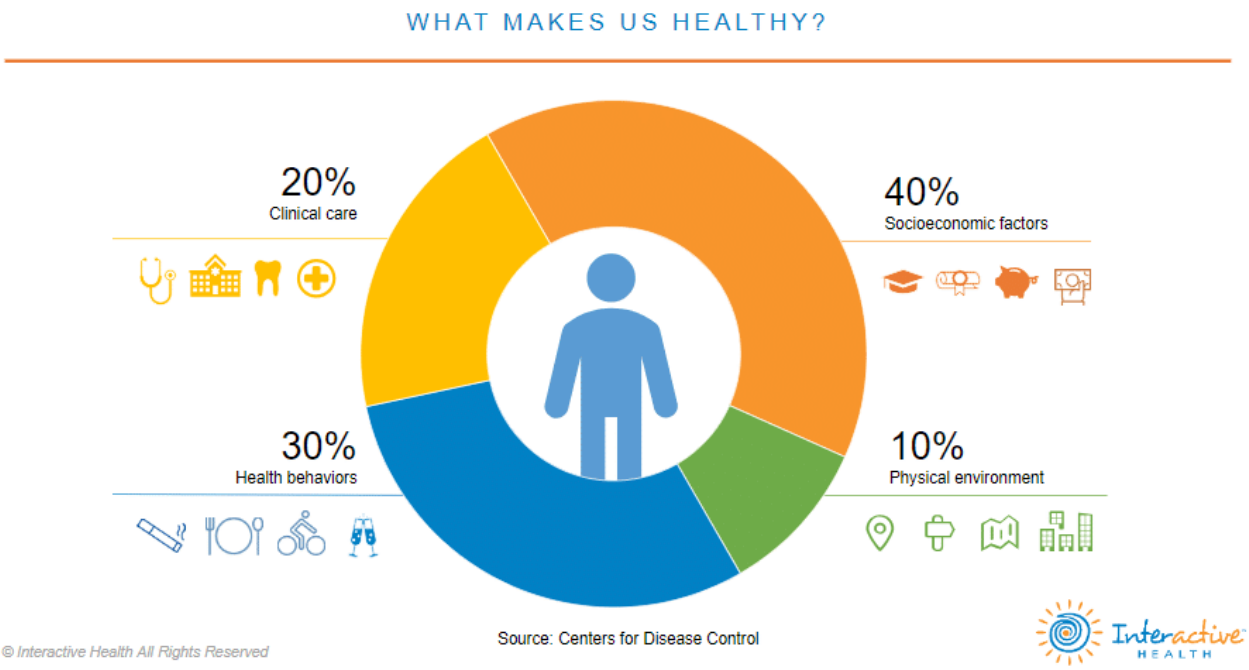
Baptist Northeast Arkansas Service Area



Social Determinants of Health: The connection between our communities and our health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health risks and outcomes. Healthy People 2030, the national benchmark of the United States (U.S.) Centers for Disease Control and Prevention (CDC) for health, recognizes SDoH as central to its framework, naming "social and physical environments that promote good health for all" as one of the four overarching goals for the decade. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, health care access and quality, neighborhood and built environment and social and community context.

The mix of ingredients that influence each person's overall health profile include individual behaviors, clinical care, environmental factors and social circumstance. While health improvement efforts have historically targeted health behaviors and clinical care, public health agencies, including the U.S. Centers for Disease Control, widely hold that at least **50% of a person's health profile is determined by SDoH.**



Addressing SDoH is a primary approach to achieving *health equity.* Health equity encompasses a wide range of social, economic and health measures but can be simply defined as "a fair opportunity for every person to be as healthy as possible." In order to achieve health equity, we need to look beyond the health care system to dismantle systematic inequities born through racism and discrimination like power and wealth distribution, education attainment, job opportunities, housing and safe environments, to build a healthier community for all people now and in the future.

Understanding Health Equity

Social determinants of health are in part responsible for the unequal and avoidable differences in health status within and between communities. In the Northeast Arkansas service area some of these inequities fall along lines of race, particularly affecting Black/African American communities. As the CDC notes, throughout the U.S. centuries of racism have had a profound impact on communities of color, and this impact creates "inequities in access to a range of social and economic benefits—such as housing, education, wealth and employment. These conditions—often referred to as social determinants of health—are key drivers of health inequities within communities of color, placing those within these populations at greater risk for poor health outcomes."

Through understanding the obstacles to health equity and how those obstacles create disparate outcomes, such as decreased average life expectancy, community partners can plan strategically to decrease health care barriers and improve health outcomes.

A key SDoH metric is poverty. Overall poverty declined in Arkansas and the Northeast Arkansas service area since the 2019 CHNA, but residents continue to have lower incomes and higher poverty than the nation and economic indicators vary widely among populations. Across Arkansas, approximately 25% of Black/African American, Latinx, multiracial and other race populations live in poverty compared with 14% of the white population.

Wealth and poverty disparities have a direct impact on overall health and well-being. For example, in Craighead County, an area of overall economic strength relative to other Arkansas communities, 31.9% of Black/African American residents live in poverty compared to 12.5% of white residents. While Craighead County reports the highest average life expectancy in the region, Black/African American people live an average of four years less than white people. This finding is consistent with other disparate health outcomes, including higher death rates due to chronic conditions like heart disease and cancer.

Residents of select ZIP codes in the Northeast Arkansas service area experience significant socio-economic disparities that disproportionately affect Black/African American residents. In Crittenden County, in the majority Black/African American communities of West Memphis ZIP code 72301 and Earle ZIP code 72331, approximately one-quarter of residents live in poverty. Average life expectancy within West Memphis is among the lowest in the region at 72 years or less. It is also worth noting disparities within Poinsett County, where Black/African American residents comprise a small proportion of the total population (7.8%), but more than half experience poverty.

Key Social Determinants of Health Metrics by County and Race

	People in Poverty		Adults with a Bachelor's Degree		People without Health Insurance	
	White	Black	White	Black	White	Black
Craighead County	12.5%	31.9%	27.6%	15.9%	8.0%	8.6%
Crittenden County	12.0%	30.7%	22.8%	11.9%	6.6%	9.5%
Poinsett County	17.9%	56.4%	11.4%	8.3%	10.9%	19.8%

Source: U.S. Census Bureau, American Community Survey, 2015-2019

Average Life Expectancy by County and Race

	Overall Life Expectancy	White Life Expectancy	Black Life Expectancy	Difference (White – Black)
Craighead County	77.0	77.1	73.1	-4.0
Crittenden County	72.8	74.2	71.1	-3.1
Poinsett County	71.4	71.2	68.8	-2.4

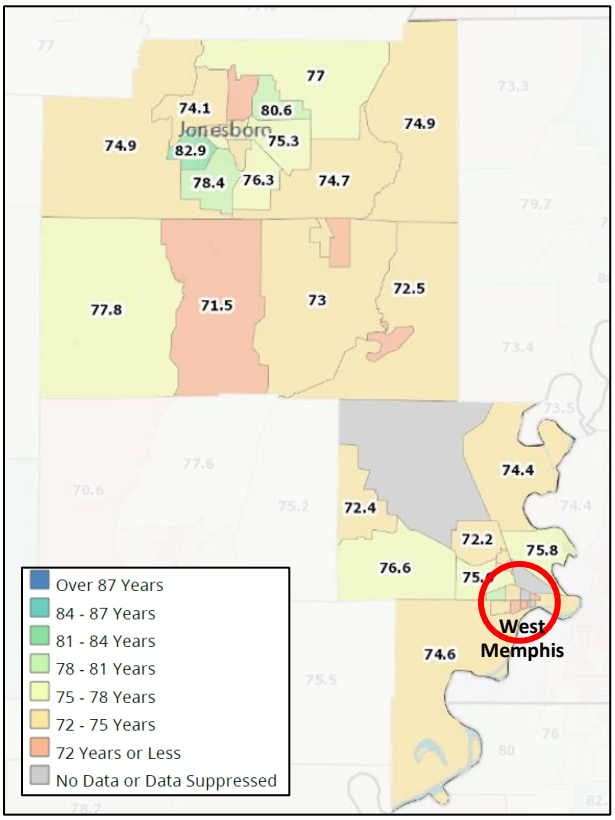
Source: National Vital Statistics System, 2017-2019

Areas of Socio-Economic Disparity within the Northeast Arkansas Service Area and Disproportionate Impact on Communities of Color

ZIP Code	People in Poverty	Adults Not Completing High School	People without Health Insurance	Racial Composition	
				Black	White
72301, West Memphis	26.1%	18.5%	9.1%	58.0%	36.3%
72331, Earle	22.1%	25.3%	7.1%	63.5%	20.8%
US Benchmark	13.4%	12.0%	8.8%	12.7%	72.5%

Source: U.S. Census Bureau, American Community Survey, 2015-2019

Average Life Expectancy by Census Tract



As part of the 2022 CHNA, a Patient Access to Care and Services Survey was conducted among health care providers and support staff across the Baptist regions. The survey findings demonstrated how SDoH impact clinical care and ultimately health outcomes.

Among respondents serving the Northeast Arkansas service area, nearly 65% "agreed" or "strongly agreed" that SDoH negatively impacted the health of patients and families they serve, and 73% "agreed" or "strongly agreed" that the COVID-19 pandemic negatively impacted health due to delayed preventive or maintenance care. Similarly, approximately 57% of participants "agreed" or "strongly agreed" that the pandemic exacerbated the negative impact of SDoH.

Survey participants across the Baptist regions indicated awareness of the impact of SDoH, but pointed to a lack of resources as a limitation in responding to these issues, as indicated in the following comments:

> *"An effort is made to enlist help for patient needs post D/C (discharge). But little follow up due to lack of staff."*
>
> *"We do not screen because we do not currently have resources to refer and follow up with patients. However, we GREATLY need to implement screening and referral practices in our specialty clinic. SDoH impacts our patients in all aspects of life and chronic illness management."*
>
> *"We cannot impact the patients' socio-economic status, nor provide transportation when they have none. All we can do is treat them with respect and dignity while we have them here."*

Several Northeast Arkansas service area providers shared specific cases in which the SDoH impacted patients. For example:

> *"Homeless population often checks-in to the hospital facility for various nonurgent complaints. But usually are seeking shelter, food and temporary relief from outside elements."*
>
> *"I have several patients that live in rural areas/out of town that have difficulty getting transportation to appointments. I recently had a patient who has a government issued phone and the minutes run out before the end of the month. Therefore, he frequently gets calls about scheduling appointments that do not go through. Pt reports he typically has to go the last 7-10 days of every month with essentially no phone service other than texts."*
>
> *"In our community we serve a wide number of Spanish speaking patients. Most have trouble understanding paperwork or what is being told to them, and others cannot communicate their needs. There is also a scarcity of translators. A large percentage of our community struggle with reading and comprehension (adults and children). If people can't read or don't feel comfortable asking for help, they will not use the resources provided."*

Collectively, SDoH were identified as the top clinical service gap by survey participants across the Baptist regions. Among the top identified needs was transportation, followed by insurance coverage and economic security. Insurance coverage included both access or insured status and affordable coverage (e.g., copays). Economic security included income or financial support and job opportunities.

COVID-19 Demonstrated Inequities

The COVID-19 pandemic both highlighted and deepened socio-economic and health inequities. According to the Community Vulnerability Index developed by Surgo Ventures, the Northeast Arkansas service area was considered more vulnerable to COVID-19 than other parts of the U.S. Among the factors impacting this finding were unemployment, financial insecurity and older age and underlying health issues. Of note, Crittenden County was identified as having "very high" vulnerability to COVID-19 and more vulnerable than 85% of other counties in the nation.

By the end of 2020, average national unemployment was double what it was at the beginning of the year. Within the Northeast Arkansas service area, all counties, particularly Crittenden County, saw an increase in unemployment in 2020. Crittenden County reported average unemployment in 2020 of 8.3% compared with a statewide average of 6.1%. While unemployment has since declined, pandemic-level rates will likely have a lasting economic and social impact on the community.

As of Sept. 2021, the Northeast Arkansas service area had a combined 33,312 COVID-19 cases and 439 related deaths. All three counties comprising the service area had a higher case rate than Arkansas overall. Poinsett County also exceeded the statewide death rate by more than 150 points. Nationally, COVID-19 cases and deaths have been disproportionately higher among Black/African American and Latinx people. Arkansas differs from the nation in that COVID-19 cases among racial and ethnic groups were largely proportional to their representation within the overall population, although the high proportion of "unknown" racial makeup should be explored to confirm this finding.

As part of the Key Informant Survey, 23 community representatives serving the Northeast Arkansas service area provided their feedback on a wide range of health and social needs and opportunities. Among respondents, 90% "agreed" or "strongly agreed" that COVID-19 had a negative impact on the health and well-being of the people their organization served. When asked to provide recommendations on how community organizations can better serve priority populations in light of COVID-19 and demonstrated societal inequities, respondents provided the following select comments:

> *"An active movement of local clinics into these neighborhoods might be a good start. These may be available in some areas, but they are not here. It would also be valuable to offer some degree of counseling and social service as part of a total health care in more distressed areas."*
>
> *"Developing liaisons for these communities that also work to promote cultural competency within Baptist's frontline staff."*
>
> *"Help with better coordination of care, access to pharmaceuticals, good housing, better transportation, reliable internet access, mental health services."*
>
> *"Offering physical health screenings, resources and education to those with mental health challenges and/or diagnosis. A strong partnership with local community mental health provider to inform their clients of your services."*
>
> *"Partner with CBOs to create a coalition to influence behaviors and health trends. Advocate for the elimination of food insecure zones."*

Our Community

Population Trends/Changes

Since 2010, Arkansas saw a smaller increase in population (+3.3%) than the U.S. overall (+7.4%). Within the Northeast Arkansas service area, and consistent with the 2019 CHNA, Craighead County was the only county to experience population growth, which was more than double the national growth percentage. The Craighead County population comprises 61% of the total Northeast Arkansas service area population. Jonesboro is the most populous city, and home to Arkansas State University's main campus, which may influence local population trends.

Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and health care needs. Within the Northeast Arkansas service area, Craighead and Crittenden counties have a younger demographic than the state and nation overall, with proportionately more youth and young adults and fewer older adults age 55 or older. The Poinsett County population differs from other service area counties with an older demographic. Approximately 30% of Poinsett County residents are age 55 or older compared with 24% to 26% in other counties.

The proportion of older adult residents increased across Arkansas, the nation and the Northeast Arkansas service area. This finding suggests health needs and support services for older adults will likely continue to grow in coming years.

Racial and ethnic diversity varies widely within the Northeast Arkansas service area. Poinsett County is less diverse than the state and nation with approximately 84% of residents identifying as white. Craighead County largely mirrors the state, and both areas are less diverse than the nation with approximately 70% of residents identifying as white. Diversity in Craighead County is largely centered in Jonesboro. Consistent with the 2019 CHNA, Crittenden County is the most diverse community with a majority Black/African American population that spans most of the county. Approximately 54% of Crittenden County residents identify as Black/African American compared with 12% nationally.

Racial and ethnic diversity is increasing statewide and nationally, particularly for Asian, other race, multiracial and Latinx groups. The multiracial population increased nearly 300% from the 2010 Census in all service area counties. The "other race" category has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race.

Socio-Economic Trends

Consistent with the 2019 CHNA, the Northeast Arkansas service area has an average Community Need Index score of 3.7 out of a maximum score of 5.0, indicating higher overall community socio-economic need. The CNI is a ZIP code-based index of community socio-economic need calculated nationwide. The CNI scores ZIP codes on a scale of 1.0 to 5.0, with 1.0 indicating a ZIP code with the least need and 5.0 indicating a ZIP code with the most need compared to the U.S. national average of 3.0.

Wide differences in wealth and poverty can be seen among populations residing in the Northeast Arkansas service area. Wealth disparities primarily affect Black/African American, Latinx and multiracial

residents, who are 2 to 6 times more likely to experience poverty than white residents. These significant contrasts within common communities point toward underlying inequities.

Comparing CNI scores with population statistics demonstrates the adverse impact of SDoH on populations that historically and continually experience inequities. West Memphis ZIP code 72301 and Earle ZIP code 72331 continue to have the highest CNI scores in the Northeast Arkansas service area at 5.0, the maximum score. Residents of West Memphis ZIP code 72301 and Earle ZIP code 72331 comprise majority Black/African American populations. As noted previously, average life expectancy within West Memphis is among the lowest in the region. In this way we can begin to see how inequities perpetuate persistent disparities in health and social outcomes.

Rural Health Challenges

While Craighead County is home to Arkansas State University and Crittenden County includes the city of West Memphis, much of the Northeast Arkansas service area is rural. There are specific challenges facing residents of rural communities. According to the CDC, “rural Americans are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease and stroke than their urban counterparts.” The CDC notes that rural Americans are likely to be older and sicker than their urban counterparts.

There are a number of reasons why rural populations are at greater risk for poorer outcomes, including environmental challenges such as longer drives to receive both emergency and routine care. In addition, according to the CDC, rural Americans tend to have higher rates of cigarette smoking, high blood pressure and obesity. The challenges residents face as a result of these disparities impact health care access in a variety of ways.

Priority Health Needs

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, Baptist collected feedback from community partners and sought to align with community programs, population health management strategies and diversity, equity and inclusion initiatives. Baptist will focus efforts on the following community health priorities over the next three-year cycle:

- Behavioral Health
- Chronic Disease
- Maternal and Child Health

Behavioral Health

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 risky health behaviors like tobacco or drug use. Behavioral health disorders can reduce a patient's ability to effectively manage other conditions, increasing disease complications and the need for medical care.

Nearly 1 in 5 adults across Arkansas and the Northeast Arkansas service area report having poor mental health on 14 or more days during a 30-day period, a higher proportion than the nation overall. This measure is an indicator of persistent, and likely severe, mental health issues, which may impact quality of life and overall wellness.

Consistent with overall poorer mental health reported among adults, the suicide death rate steadily increased statewide over the past decade and exceeds the national rate. Within the Northeast Arkansas service area, Poinsett County has a higher prevalence of frequent mental distress and a suicide death rate that is double the national rate. Craighead and Crittenden counties have a lower suicide death rate that more closely mirrors the nation.

Arkansas has historically reported a higher percentage of youth attempting suicide than the nation. In 2019, 11.5% of Arkansas high school students reported an attempted suicide compared with 8.9% of students across the nation. When considered by subpopulation, attempted suicides were highest among students identifying as lesbian, gay or bisexual (LGB), followed by Black/African Americans and females.

While Arkansas overall has historically reported fewer accidental drug overdose deaths than the nation, provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever. Based on a rolling 12-month count, the number of drug overdose deaths in Arkansas is predicted to have increased 39% from March 2020 to March 2021, compared with a national increase of 30.8%. Within the Northeast Arkansas service area, Crittenden County has historically had a higher and increasing rate of death than the state.

Nearly one-third of respondents to the Key Informant Survey selected mental health conditions as one of the top five concerns for the people their organization serves, and availability of specialty care services, including mental health care, was noted as a missing resource within the community.

Similarly, in the Patient Access to Care and Services Survey, after SDoH, the top identified clinical service gaps were mental health services, with a focus on psychiatry and psychology and services that are covered by insurance. One provider in the Northeast Arkansas service area shared the following comment:

> *"Our social workers/behavioral health department is wonderful but understaffed. Having counselors and even a psychiatrist to make mental health treatment more accessible would be especially helpful. Working with community partners to help provide transportation to appointments. We technically do offer help with transportation but the last time I referred a patient for this, I was basically told there are not enough funds in the account to continue this program."*

Chronic Disease

Adult residents of Arkansas and the Northeast Arkansas service area generally experience more health risk factors and higher prevalence and mortality due to chronic disease than their peers nationally. Adults in Crittenden and Poinsett counties have more health risk factors than the state average. These health disparities correlate with existing SDoH differences, including lower access to care, lower income, higher poverty and/or lower educational attainment.

Arkansas adults have historically higher prevalence of obesity and diabetes compared to national benchmarks. Within the Northeast Arkansas service area, it is worth noting that adult obesity and diabetes increased sharply in Craighead County from 2017 to 2019. As of 2019, 38.4% of Craighead County adults are estimated to have obesity and 12.2% are estimated to have diabetes. Despite this finding, Craighead County has a declining rate of death due to diabetes that is lower than state and national benchmarks, potentially indicating better disease management and/or access to care.

Arkansas overall has a higher rate of death due to diabetes than the nation, and contrary to the U.S., it increased statewide. Consistent with national trends, Black/African Americans across Arkansas have a disproportionately higher rate of death from diabetes than other racial or ethnic groups. Within the Northeast Arkansas service area, death rate data by race is limited due to low counts. Available data for Crittenden County indicate similarly high death rates among both Black/African American and white residents. This finding may indicate widespread access to care and disease management barriers.

Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. Arkansas and the Northeast Arkansas service area have a higher proportion of adults with high blood pressure and/or high cholesterol than the nation overall. Crittenden and Poinsett counties have the highest proportion of adults with these conditions and higher death rates due to heart disease. The Poinsett County heart disease death rate exceeds the statewide benchmark by 100 points. Within Poinsett and Craighead counties, the heart disease death rate for Black/African Americans is nearly 50-points higher than the rate for whites.

Cancer is the second leading cause of death nationally. Arkansas overall reports higher cancer incidence and death rates than the nation. This finding is likely reflective of both increased health risk factors and lower access to cancer screenings for early detection and treatment. Within the Northeast Arkansas service area, Crittenden and Poinsett counties exceed state and national benchmarks for cancer

incidence and death. Recent and historical trends provide deeper insight into this disparity. Crittenden County has historically had a similar or lower cancer incidence rate as the nation, but a higher death rate, a finding that is often indicative of delayed detection and a need for preventive screenings.

Poinsett County continues to report the highest cancer incidence and death rates in the service area. Cancer disparities in Poinsett County are largely due to disparities in lung cancer. Lung cancer incidence and death rates in Poinsett County are double or more than national rates, although the death rate declined from the 2019 CHNA.

Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). All Northeast Arkansas service area counties have a higher prevalence of adult asthma and COPD compared to national benchmarks; Crittenden and Poinsett counties also exceed state benchmarks. Respiratory disease disparities in Crittenden and Poinsett counties are due in part to higher smoking rates among adults, among other environmental factors like older housing stock.

Consistent with state and national benchmarks, the Northeast Arkansas service area is aging, and older adults in this area experience more health disparities. All service area counties report a higher prevalence of comorbidities among older adult Medicare beneficiaries compared to state and national benchmarks, and all counties saw an increase in comorbidities from the 2019 CHNA. Poinsett County has the highest proportion of older adults age 65 or older and the highest proportion of older adult Medicare beneficiaries with multiple chronic conditions, estimated at 75.9% compared with a national average of 70.3%. Northeast Arkansas service area older adults are also more likely to have a disability when compared to state and national benchmarks, potentially challenging disease management efforts.

Within Craighead and Poinsett counties, it is worth noting that a higher proportion of older adult Medicare beneficiaries have been diagnosed with Alzheimer's disease and both counties have a higher rate of death from Alzheimer's disease than the nation. The Poinsett County Alzheimer's disease death rate increased nearly 100 points in recent years.

Social determinants of health, such as economic stability, health care access and racism, are in part responsible for the unequal and avoidable differences in health status within and between communities, such as the disparities seen within the Northeast Arkansas service area and between white and Black/African American residents. Addressing barriers to care based on the SDoH is critical to ensure health equity for all residents and to improve outcomes and rates of chronic disease.

Respondents to the Patient Access to Care and Services Survey identified health education and programs among the top community factors that would help improve SDoH for patients and residents. Health education/program topics included diabetes, asthma and preventative care. Other top needed community factors included transportation and social workers or case managers. When asked to describe the ideal scenario for addressing SDoH in the care setting, survey participants serving the Northeast Arkansas Service Area provided the following select comments:

> *"Feedback I have heard from patients: It is hard to get in contact with the correct person/department. A lot of paperwork and billing has been moved online and people do not*

always have access to a phone with internet or a computer at home. It is important to be able to serve everyone regardless of their resources. Staff should be trained and highly aware of SDoH and how it is affecting that patient."

"Identifying barriers to regular health maintenance, following up with each patient after an ED visit or hospital stay and helping to coordinate follow up with their primary care physician. Providing transportation to/from if necessary or overcoming access barriers if telehealth visits are an option."

"Our care site would have translators and staff that is welcoming and inviting ready to assist with paperwork and answering any questions the patient may have. Patients that we interact with are more likely to be consistent in their checkups when they have had a pleasurable experience from ALL staff members including receptionist."

Maternal and Child Health

Consistent with the 2019 CHNA, all Northeast Arkansas service area counties have a higher rate of birth than the state and nation, although the birth rate declined from the prior assessment. Crittenden County has the highest rate of birth in the service area, and consistent with overall demographic trends, the birth rate was highest among Black/African American residents.

Arkansas overall reports poorer birth outcomes than the nation, including fewer pregnant people receiving early prenatal care, a higher proportion of low birth weight and premature births and higher infant and maternal death rates. These findings are more pronounced in the Northeast Arkansas service area, particularly in Crittenden County, where fewer than 57% of pregnant people receive first trimester prenatal care, more than 15% of babies are born premature and/or with low birth weight and the infant mortality rate exceeds state and national rates. Disparities in Crittenden County largely reflect disparities experienced by Black/African American residents.

Across Arkansas, fewer than 65% of Black/African American pregnant people receive first trimester prenatal care compared to 75% of white pregnant people. Nearly 18% of Black/African American babies are born premature compared with 11.4% of white babies, and 14.9% of Black/African American babies have low birth weight compared to 7.8% of white babies. The statewide infant mortality rate for Black/African Americans is 70% higher than the white infant mortality rate; the maternal mortality rate is more than 80% higher. These disparities are consistent across the Northeast Arkansas service area.

Positive birth outcomes for the Northeast Arkansas service area include a declining rate of teen births and increasing prenatal care access in Craighead and Poinsett counties. As of 2019, the teen birth rate for Craighead and Poinsett counties was similar to state or national rates. In Poinsett County, the proportion of pregnant people receiving first trimester prenatal care increased more than 15 points from 2018 to 2019. Notably, access to care among Black/African Americans increased significantly to 77.3%, nearly meeting the Healthy People 2020 goal of 77.6%.

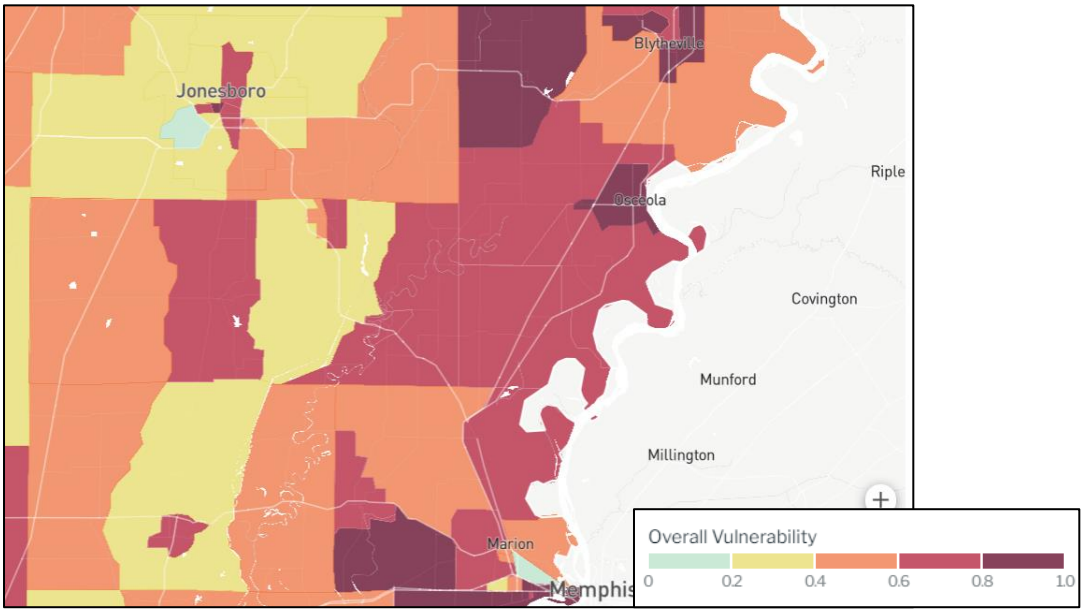
A full summary of CHNA findings for the Northeast Arkansas service area follows.

COVID-19 Impact on Communities

COVID-19 is the name of the disease caused by the SARS-CoV-2 virus. "CO" stands for corona, "VI" for virus and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19. Surgo Ventures developed the Community Vulnerability Index to measure how well any community in the U.S. could respond to the health, economic and social consequences of COVID-19 without intentional response and additional support.

Using this scale, Northeast Arkansas service area counties have “high” or “very high” vulnerability compared to other parts of the U.S. Among the factors impacting this score are unemployment, financial insecurity, housing and transportation challenges, which refers to overcrowded housing, housing affordability concerns and limited transit options. Communities with higher vulnerability have pre-existing economic, social and physical conditions that may make it hard to respond to and recover from a COVID-19 outbreak.

COVID-19 Community Vulnerability Index



	Vulnerability Level	Description
Craighead County	High	More vulnerable than 69% of U.S. counties
Crittenden County	Very high	More vulnerable than 86% of U.S. counties
Poinsett County	High	More vulnerable than 64% of U.S. counties

Source: COVID Act Now

COVID-19 infection is typically measured by case incidence, which looks at the number of daily new cases per 100,000. When calculating case incidence, an important part of understanding how COVID-19 is affecting certain communities is to analyze the demographics of the community. The COVID-19 pandemic has highlighted health disparities along racial, ethnic and economic lines in the U.S. The following analysis depicts COVID-19 infection for all of the Northeast Arkansas service area, as well as by age group and race and ethnicity.

As of Sept. 23, 2021, the Northeast Arkansas service area had a combined 33,312 COVID-19 cases and 439 related deaths. **All three counties comprising the service area had a higher case rate than Arkansas overall. Poinsett County also exceeded the statewide death rate by more than 150 points.** This finding is consistent with Poinsett County's older demographic and access to care barriers. Individuals aged 65 or older have had the highest COVID-19 death rate nationwide. Poinsett County also has a higher uninsured percentage and lower health care provider availability than other service area counties.

The Craighead County COVID-19 case rate exceeded the statewide rate, but the death rate was lower, potentially indicating either milder disease cases and/or better access to early and appropriate care. This finding is consistent with overall stronger SDoH factors within Craighead County compared to the state as a whole.

COVID-19 Cases and Deaths (as of Sept. 23, 2021)

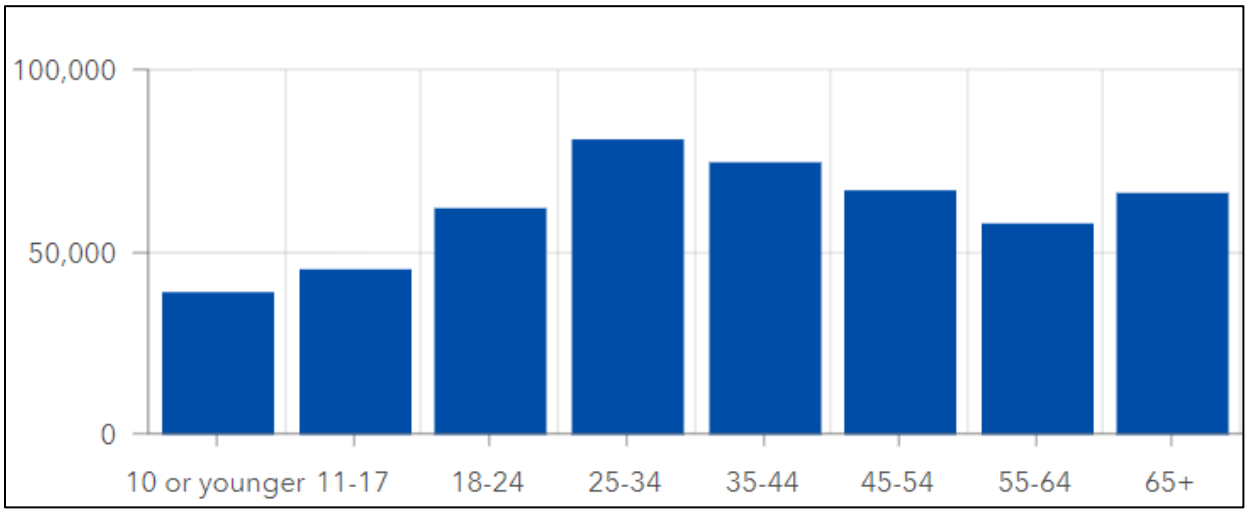
	Cases		Deaths	
	Total Cases	Cases per 100,000*	Total Deaths	Deaths per 100,000*
Craighead County	20,340	18,286	226	203
Crittenden County	8,328	17,291	117	243
Poinsett County	4,644	20,222	96	418
Northeast Arkansas Service Area Total	33,312	--	439	--
Arkansas	488,316	16,215	7,528	250

Source: Arkansas Department of Health

*Rates calculated based on 2020 population counts.

COVID-19 has affected all age groups. **While older adults were among the earliest and hardest hit by COVID, active cases within Arkansas indicate adults aged 25-44 are leading new cases.** As of Sept. 23, Arkansas adults aged 25 to 34 and 35 to 44 accounted for 14.9% and 13.7% of active cases, respectively.

Arkansas Total COVID-19 Cases by Age Group



Source: Arkansas Department of Health, Sept. 23, 2021

Arkansas COVID-19 Cases and Deaths by Age Group (as of Sept. 23, 2021)

Age Group	Cases		Deaths	
	Count	Percent of Total	Count	Percent of Total
10 or younger	38,271	7.8%	3*	0.0%*
11-17	45,034	9.2%		
18-24	61,781	12.7%	20	0.3%
25-34	80,143	16.4%	85	1.1%
35-44	74,326	15.2%	198	2.6%
45-54	66,170	13.6%	448	6.0%
55-64	57,006	11.7%	1,083	14.4%
65+	65,585	13.4%	5,691	75.6%

Source: Arkansas Department of Health

*Includes deaths among individuals 17 or younger.

Nationally, COVID-19 cases and deaths have been disproportionately higher among Black/African Americans and Latinx. Arkansas differs from the nation in that COVID-19 cases among racial and ethnic groups were largely proportional to their representation within the overall population, although the high proportion of "unknown" racial makeup should be explored to confirm this finding. **Across the state, Native Hawaiian or other Pacific Islander residents had the highest COVID-19 death rate with a rate that was 50% higher than the white death rate.** While the Native Hawaiian or other Pacific Islander death rate was based on a small death count (n=62) compared with other racial and ethnic groups, disparities in exposure and care access should be explored.

Arkansas COVID-19 Cases and Deaths by Race and Ethnicity (as of Sept. 23, 2021)

	Percent of Total Population	Percent of Total Cases	Percent of Total Deaths	Death Rate per 100,000*
White	70.2%	66.6%	77.9%	277.3
Black or African American	15.1%	15.5%	15.0%	248.1
Latinx origin (any race)	8.5%	9.2%	3.6%	105.5
Multiple race	7.1%	0.5%	0.3%	8.9
Other race	4.5%	5.2%	4.1%	225.6
Asian	1.7%	0.9%	0.6%	81.0
American Indian or Alaska Native	0.9%	0.3%	0.3%	88.3
Native Hawaiian or Other Pacific Islander	0.5%	0.8%	0.8%	426.6
Unknown	NA	10.2%	1.1%	NA

Source: Arkansas Department of Health

*Rates calculated based on 2020 population counts.

COVID-19 vaccination will be essential to managing the pandemic. The following table shows the percentage of eligible residents either partially or fully vaccinated. **Arkansas had lower vaccine coverage than the nation; Northeast Arkansas service area counties, particularly Crittenden, had lower vaccine coverage than the state.** In Crittenden County, approximately 54% of residents identify as Black/African American, and only 33.2% of eligible Black/African American residents were fully vaccinated.

COVID-19 Vaccination among Population Age 12 or Older (as of Sept. 23, 2021)

	Total Vaccinated	
	Partially Vaccinated	Fully Vaccinated
Craighead County	10.8%	43.7%
Crittenden County	10.0%	37.2%
Poinsett County	10.5%	41.7%
Arkansas	11.7%	51.5%
United States	10.6%	64.3%

Source: Arkansas Department of Health & Centers for Disease Control and Prevention

The CDC has prioritized vaccine equity, defined as preferential access and administration to those who have been most affected by COVID-19. Among the prominent racial and ethnic groups within the region, vaccine coverage was generally consistent in Crittenden and Poinsett Counties, with approximately one-third of eligible residents fully vaccinated. **In Craighead County, wide disparities in vaccine coverage were seen among racial and ethnic groups with 42.3% of whites fully vaccinated compared with 34.8% of Latinx and 28.2% of Black/African Americans.**

COVID-19 Fully Vaccinated by Race and Ethnicity (as available)

	Craighead County	Crittenden County	Poinsett County
All Residents	43.7%	37.2%	41.7%
White	42.3%	32.2%	39.9%
Black or African American	28.2%	33.2%	33.5%
American Indian/Alaska Native	11.7%	25.5%	6.7%
Native Hawaiian/Pacific Islander	55.1%	46.8%	30.6%
Latinx (any race)	34.8%	34.1%	33.2%

Source: Arkansas Department of Health, Sept. 23, 2021

Service Area Population Statistics

Demographics

Since 2010, Arkansas saw a smaller increase in population (+3.3%) than the U.S. overall (+7.4%). Within the Northeast Arkansas service area, and consistent with the 2019 CHNA, Craighead County was the only county to experience population growth. **Population growth within Craighead County was more than double the national growth percentage.** The Craighead County population comprises 61% of the total Northeast Arkansas service area population. Jonesboro is the most populous city, and home to Arkansas State University's main campus, which may influence local population trends. The Crittenden and Poinsett county populations declined by -2,739 and -1,618 people, respectively.

2020 Total Population

	Total Population	Percent Change Since 2010
Craighead County	111,231	+15.3% ↑
Crittenden County	48,163	-5.4% ↓
Poinsett County	22,965	-6.6% ↓
Arkansas	3,011,524	+3.3%
United States	331,449,281	+7.4%

Source: U.S. Census Bureau, Decennial Census

Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and health care needs. The age distribution and median age of Arkansas is consistent with the nation. Within the Northeast Arkansas service area, Craighead and Crittenden counties have a younger demographic, with proportionately more youth and young adults and fewer older adults age 55 or older. The Poinsett County population differs from other service area counties with an older demographic. Approximately 30% of Poinsett County residents are age 55 or older compared to 24% to 26% in other counties.

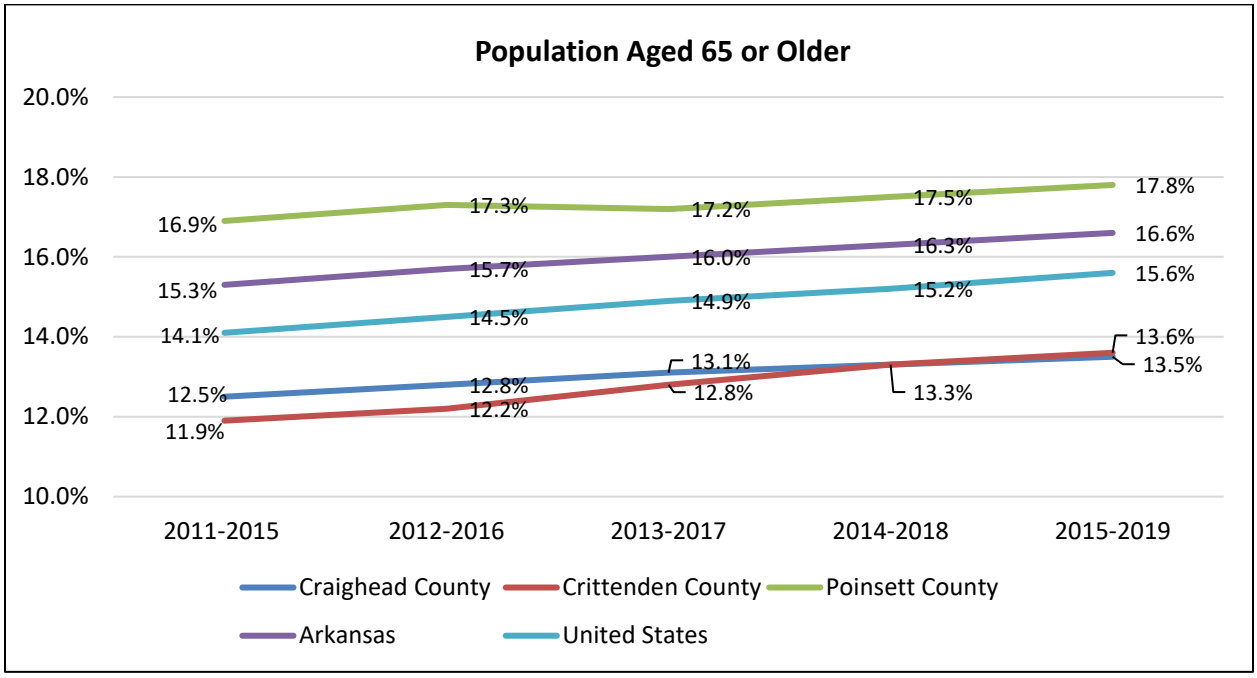
The proportion of older adult residents increased across Arkansas, the nation and the Northeast Arkansas service area. Nationally, among older adults age 65 or older, the 65 to 74 age category is the fastest growing demographic, largely due to the aging of the baby boomer generation. This finding suggests health needs and support services for older adults will likely continue to grow in coming years.

While the older adult population increased in all Northeast Arkansas service area counties, youth under age 18 comprise approximately 1 in 4 residents.

2015-2019 Population by Age

	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median Age
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
Craighead County	24.9%	13.5%	15.3%	13.0%	11.5%	10.9%	13.5%	34.2
Crittenden County	27.3%	13.6%	13.2%	11.9%	12.6%	12.4%	13.6%	35.2
Poinsett County	23.8%	17.8%	12.3%	11.7%	13.4%	13.0%	17.8%	40.1
Arkansas	23.5%	9.5%	13.1%	12.3%	12.4%	12.7%	16.6%	38.1
United States	22.6%	9.4%	13.9%	12.6%	13.0%	12.9%	15.6%	38.1

Source: U.S. Census Bureau, American Community Survey



Source: U.S. Census Bureau, American Community Survey

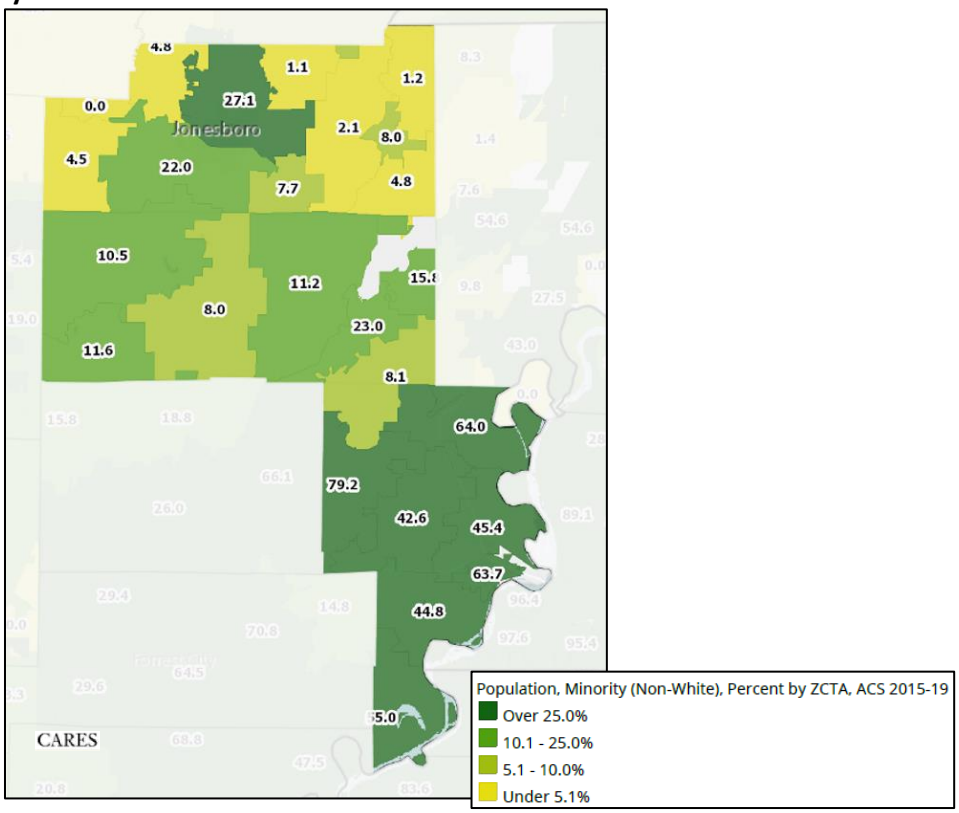
Racial and ethnic diversity varies widely within the Northeast Arkansas service area. Poinsett County is less diverse than the state and nation with approximately 84% of residents identifying as white. Craighead County largely mirrors the state, and both areas are less diverse than the nation with approximately 70% of residents identifying as white. Diversity in Craighead County is largely centered in Jonesboro. Consistent with the 2019 CHNA, Crittenden County is the most diverse community with a majority Black/African American population that spans most of the county. Approximately 54% of Crittenden County residents identify as Black/African American compared with 12% nationally.

2020 Population by Race and Ethnicity

	White	Black or African American	Asian	American Indian / Alaska Native	Native Hawaiian / Pacific Islander	Other Race	Two or More Races	Latinx origin (any race)
Craighead County	72.5%	16.6%	1.5%	0.3%	0.1%	3.1%	5.9%	6.0%
Crittenden County	40.0%	53.8%	0.7%	0.3%	0.0%	1.4%	3.8%	3.0%
Poinsett County	84.4%	7.8%	0.3%	0.4%	0.0%	2.0%	5.1%	3.6%
Arkansas	70.2%	15.1%	1.7%	0.9%	0.5%	4.5%	7.1%	8.5%
United States	61.6%	12.4%	6.0%	1.1%	0.2%	8.4%	10.2%	18.7%

Source: U.S. Census Bureau, Decennial Census

2015-2019 Non-White Population
by ZIP Code in the Northeast Arkansas Service Area



Racial and ethnic diversity is increasing statewide and nationally, particularly for Asian, other race, multiracial and Latinx groups. **The multiracial population increased nearly 300% from the 2010 Census in both Arkansas and the U.S.** The "other race" category has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race.

Consistent with overall population growth within Craighead County, the county saw growth across all reported racial and ethnic groups. In comparison to the state and nation, growth was higher among Black/African American and Latinx groups. **The population of Crittenden and Poinsett counties declined**

from the 2010 Census, and both counties saw declines in the racial groups comprising the majority of their population. Notably, the white population declined more than 10% in both counties compared with a statewide decline of approximately 6%.

Population Change among Prominent Racial and Ethnic Groups, 2010 to 2020

	White	Black or African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Craighead County	+3.0%	+46.1%	+57.4%	+47.3%	+287.3%	+57.3%
Crittenden County	-17.8%	-0.6%	+8.6%	+69.1%	+226.6%	+40.8%
Poinsett County	-12.2%	+0.5%	+35.6%	+64.1%	+253.3%	+52.7%
Arkansas	-5.8%	+0.9%	+43.6%	+36.7%	+274.6%	+38.1%
United States	-8.6%	+5.6%	+35.5%	+46.1%	+275.7%	+23.0%

Source: U.S. Census Bureau, Decennial Census

Many Roads Lead to Home

Arkansas and the Northeast Arkansas service area are home to proportionately fewer immigrants than the nation overall. More than 95% of service area residents were born in the U.S. compared to a national average of 85%. Consistent with this finding, few residents across Arkansas or the Northeast Arkansas service area speak a primary language other than English.

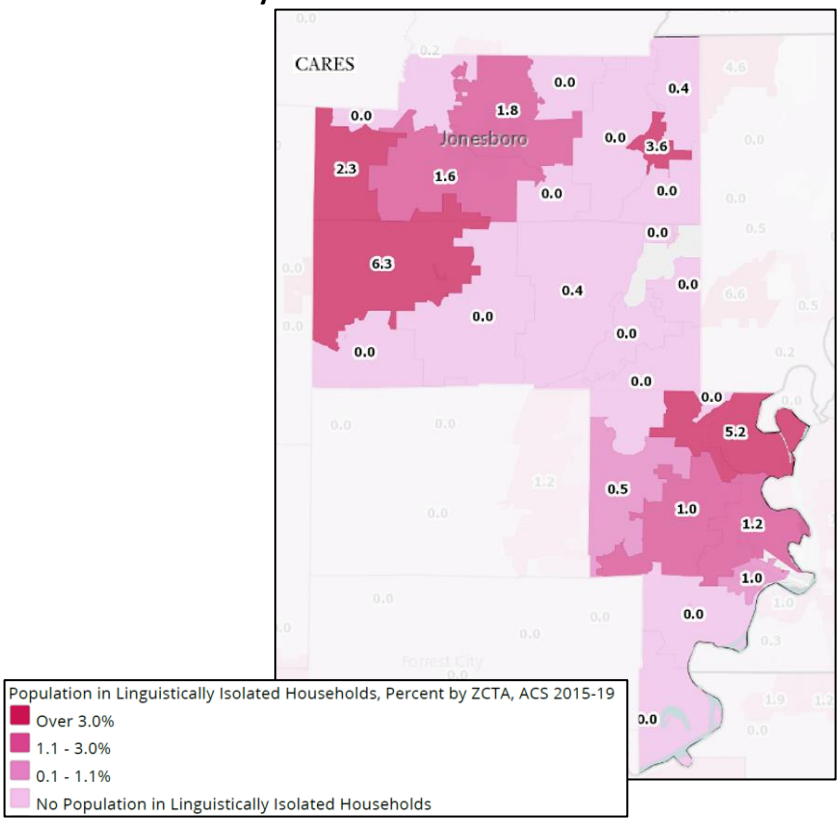
At the ZIP code-level, Weiner, 72479 in Poinsett County has the largest proportion of linguistically isolated households (6.3%) in the service area. Linguistically isolated households are defined as persons who cannot speak English at least "very well" or who do not live in a household where an adult speaks English "very well." Approximately 9% of residents in Weiner ZIP code 72479 identify as Latinx, the largest proportion in Poinsett County.

2015-2019 Nativity and Citizenship Status

	U.S. citizen, born in the U.S.	U.S. citizen, born in Puerto Rico or U.S. Island Areas	U.S. citizen, born abroad of American parent(s)	U.S. citizen by naturalization	Not a U.S. citizen	Speak Primary Language Other Than English
Craighead County	95.2%	0.1%	0.7%	1.1%	2.9%	5.7%
Crittenden County	98.0%	0.0%	0.3%	0.4%	1.4%	2.9%
Poinsett County	98.9%	0.0%	0.1%	0.3%	0.7%	2.3%
Arkansas	94.4%	0.1%	0.6%	1.6%	3.2%	7.5%
United States	84.9%	0.6%	1.0%	6.7%	6.8%	21.6%

Source: U.S. Census Bureau, American Community Survey

2015-2019 Population in Linguistically Isolated Households by ZIP Code in the Northeast Arkansas Service Area



Poverty

Overall poverty declined in Arkansas and the Northeast Arkansas service area since the 2019 CHNA, but residents continue to have lower incomes and higher poverty than the nation. Approximately 24% of Arkansas children live in poverty compared with 18.5% nationally. Consistent with the 2019 CHNA, Crittenden and Poinsett counties exceed statewide poverty percentages with nearly 1 in 4 people and 1 in 3 children living in poverty.

Statewide and nationally, poverty declined for all reported racial and ethnic groups from the 2019 CHNA, but people of color continue to be disproportionately impacted. Across Arkansas, approximately one-quarter of Black/African American, Latinx, multiracial and other race populations live in poverty compared with 14% of the white population.

Wide differences in wealth and poverty can be seen within county comparisons in the Northeast Arkansas service area. Wealth disparities are more prevalent among people of color with Black/African Americans, Latinx and multiracial populations 2 to 6 times more likely to experience poverty than white populations. These significant contrasts within common communities point toward underlying inequities.

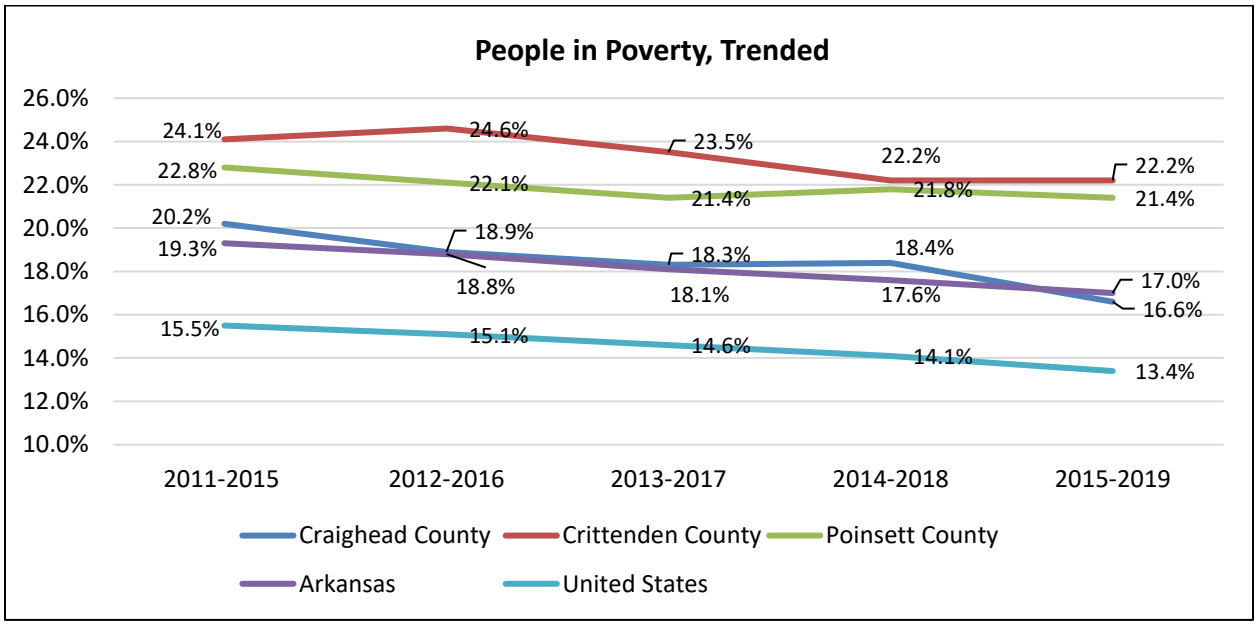
Note, income and poverty data reflect pre-COVID-19 findings and likely do not demonstrate economic hardship experienced by individuals and families during the pandemic. Unemployment and food insecurity data for 2020 and 2021 provide insight into the economic impact of the pandemic.

COVID-19 had a significant impact on unemployment rates across the nation. By the end of 2020, average national unemployment was double what it was at the beginning of the year. **Within the Northeast Arkansas service area, all counties, particularly Crittenden County, saw an increase in unemployment in 2020.** While unemployment has since declined, pandemic-level rates will likely have a lasting economic and social impact on the community.

Economic Indicators

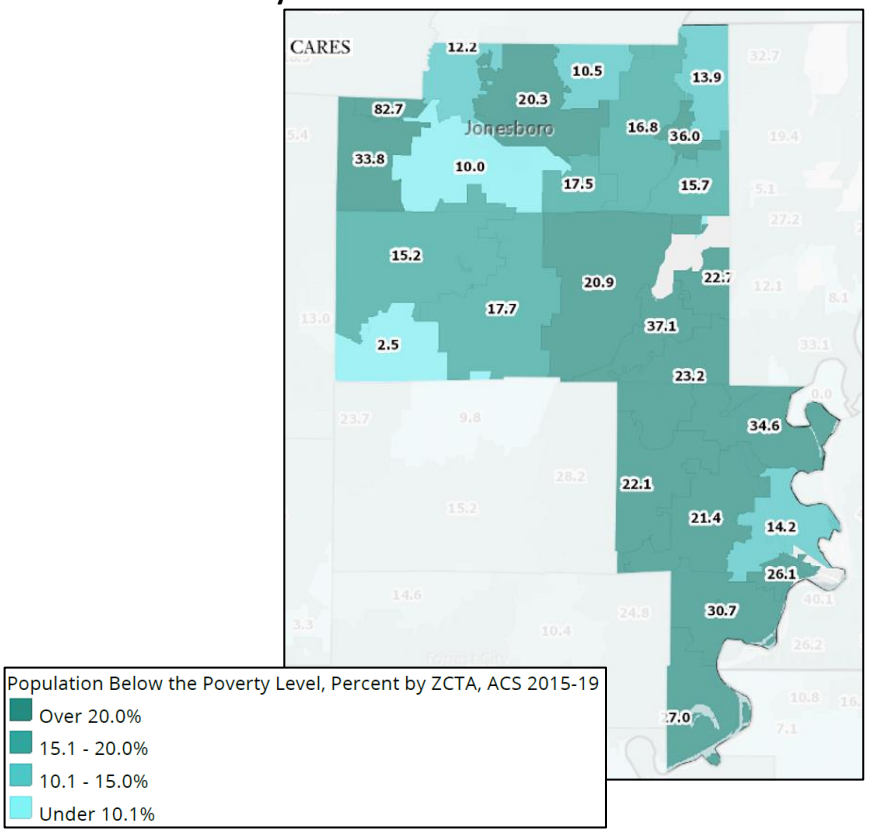
	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Income and Poverty (2015-2019)					
Median household income	$47,286	$40,161	$40,921	$47,597	$62,843
People in poverty	16.6%	22.2%	21.4%	17.0%	13.4%
Children in poverty	22.2%	34.3%	34.8%	23.7%	18.5%
Older adults (65+) in poverty	7.6%	11.5%	10.0%	10.3%	9.3%
Households with SNAP* benefits	12.7%	19.6%	18.2%	12.1%	11.7%
Unemployment					
January 2020	3.3%	4.9%	4.5%	4.2%	4.0%
2020 average	5.3%	8.3%	5.5%	6.1%	8.1%
July 2021	3.8%	6.3%	4.3%	4.6%	5.7%

Source: U.S. Census Bureau, American Community Survey & U.S. Bureau of Labor Statistics
*Supplemental Nutrition Assistance Program



Source: U.S. Census Bureau, American Community Survey

2015-2019 Population in Poverty
by ZIP Code in the Northeast Arkansas Service Area



2015-2019 People in Poverty among Prominent Racial and Ethnic Groups with 2019 CHNA Comparison (2012-2016)

	White	Black / African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Craighead County	**12.5%** ↓	**31.9%** ↓	**28.5%** ↑	**33.0%** ↓	**29.5%** ↓	**28.7%** ↓
2019 CHNA	14.4%	39.5%	23.7%	41.7%	37.9%	38.9%
Crittenden County	**12.0%** ↑	**30.7%** ↓	**10.0%** ↑	**78.5%** ↑	**26.2%** ↓	**40.5%** ↑
2019 CHNA	10.2%	37.0%	6.5%	40.9%	37.0%	27.9%
Poinsett County	**17.9%** ↓	**56.4%** ↑	**83.3%** ↓ **(n=10)**	**72.4%** ↓	**40.4%** ↑	**47.8%** ↓
2019 CHNA	20.0%	45.6%	100%	75.8%	28.2%	61.6%
Arkansas	**14.1%**	**29.3%**	**12.1%**	**27.6%**	**23.2%**	**25.6%**
2019 CHNA	15.5%	33.1%	13.9%	31.4%	25.7%	30.8%
United States	**11.1%**	**23.0%**	**10.9%**	**21.0%**	**16.7%**	**19.6%**
2019 CHNA	12.4%	26.2%	12.3%	25.4%	19.3%	23.4%

Source: U.S. Census Bureau, American Community Survey

*Arrows indicate an increase or decrease or greater than one percentage point. Low population counts are noted in parentheses and should be interpreted with caution.

Food Insecurity

Food insecurity is defined as not having reliable access to a sufficient amount of nutritious, affordable food. Food insecurity is associated with lower household income and poverty, as well as poorer overall health status. Similar to unemployment rates, COVID-19 had a profound impact on food insecurity, particularly among children. From 2019 to 2020, the percentage of food insecure children was projected to increase 3 percentage points across Arkansas.

The proportion of food insecure residents was projected to increase in all Northeast Arkansas service area counties from 2019 to 2020, but consistent with unemployment rates, Crittenden County saw disproportionately larger increases in food insecurity. **From 2019 to 2020, the proportion of food insecure children in Crittenden County increased nearly 6 percentage points.**

Projected food insecurity declined in 2021 but continues to be higher than pre-pandemic years. In 2021, approximately one-third of children in Crittenden County and one-quarter of children in Poinsett County are projected to be food insecure compared to 23% statewide and 18% nationally. **During the 2020-2021 school year, nearly 90% of students in Crittenden County and 94% of students in Poinsett County participated in the free or reduced-price lunch program at school.**

Trended and Projected Food Insecurity

	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
All Residents					
2021 (projected)	**17.4%**	**18.8%**	**20.8%**	**17.6%**	**12.9%**
2020 (projected)	**18.3%**	**19.7%**	**21.5%**	**18.3%**	**13.9%**
2019	16.0%	16.4%	19.5%	16.6%	10.9%
2018	16.8%	19.3%	19.3%	17.3%	11.5%
2017	17.2%	23.8%	17.6%	17.3%	12.5%
Children					
2021 (projected)	**22.5%**	**31.0%**	**28.0%**	**22.9%**	**17.9%**
2020 (projected)	**24.3%**	**32.9%**	**29.6%**	**24.4%**	**19.9%**
2019	20.2%	27.0%	26.0%	21.4%	14.6%
2018	21.8%	26.5%	28.1%	23.1%	15.2%
2017	22.6%	26.1%	26.8%	23.6%	16.1%

Source: Feeding America

Children Participating in Free and Reduced-Price Lunch Program

	2020-2021 School Year		2019-2020 School Year		2018-2019 School Year	
	Total Student Enrollment	Percent Free / Reduced Lunch	Total Student Enrollment	Percent Free / Reduced Lunch	Total Student Enrollment	Percent Free / Reduced Lunch
Craighead County	19,195	67.3%	19,362	70.5%	19,124	66.2%
Crittenden County	9,401	88.9%	9,617	88.7%	9,674	88.7%
Poinsett County	3,616	94.4%	3,724	94.5%	3,827	92.9%
Arkansas	473,004	65.6%	479,432	64.9%	478,318	63.5%

Source: Arkansas Department of Education

Education

High school graduation is one of the strongest predictors of longevity and economic stability. Excluding Craighead County, adult residents of the Northeast Arkansas service area are less likely to complete high school or pursue higher education when compared to the state and nation. **Consistent with the 2019 CHNA, nearly 1 in 5 adults in Crittenden and Poinsett counties have not completed high school.** Craighead County adults are more likely to attain higher education than their peers statewide.

Educational attainment disparities within the Northeast Arkansas service area generally correlate with both rural communities and areas of socio-economic inequity. In the outer portions of Craighead and Poinsett counties, approximately 1 in 4 adults have not completed high school. In Turrell ZIP code 72384 in Crittenden County, 31.6% of adults have not completed high school, 34.6% of residents live in poverty and approximately 64% of residents identify as non-white.

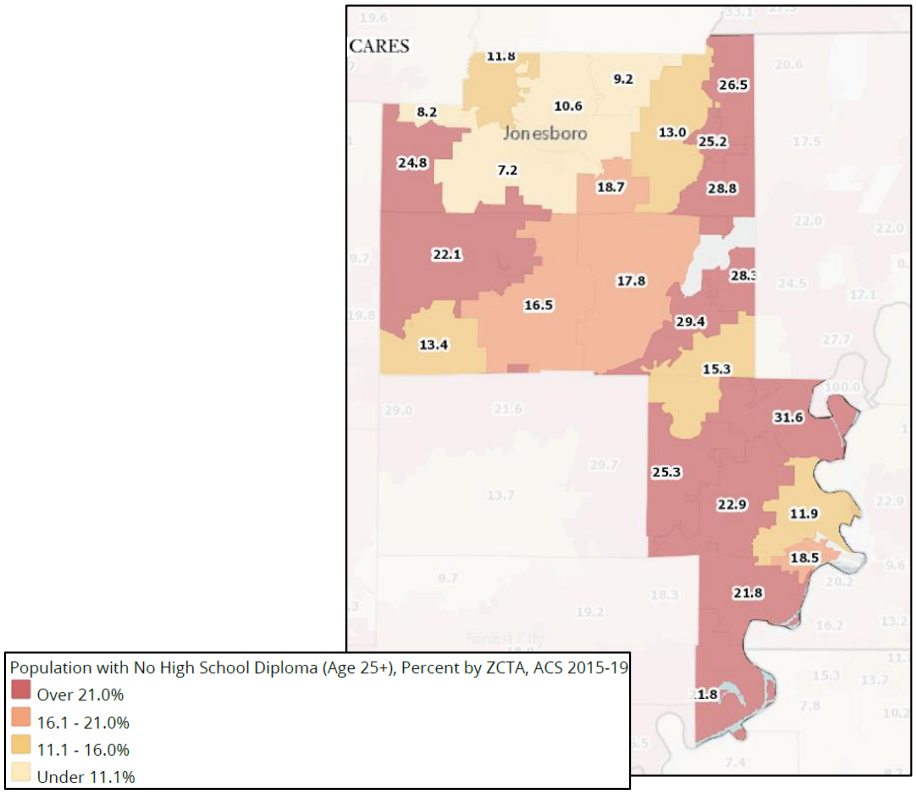
Consistent with state and national trends, Northeast Arkansas service area adults of Asian descent are the most likely of any other population group to attain higher education, while Black/African American, Latinx and other race adults are the least likely to attain higher education. Educational attainment increased for white residents in all Northeast Arkansas service area counties from the 2019 CHNA, but results were more varied for other racial and ethnic groups. **Of note, education attainment declined consistently for multiracial adults, the fastest growing demographic in the region.**

2015-2019 Population (Age 25 or Older) by Educational Attainment

	Less than high school diploma	High school graduate (includes GED)	Some college or associate's degree	Bachelor's degree	Graduate or professional degree
Craighead County	10.7%	34.6%	28.5%	16.5%	9.7%
Crittenden County	17.4%	34.8%	30.4%	11.9%	5.5%
Poinsett County	19.7%	43.1%	26.2%	7.9%	3.25
Arkansas	13.4%	34.0%	29.5%	14.8%	8.3%
United States	12.0%	27.0%	28.9%	19.8%	12.4%

Source: U.S. Census Bureau, American Community Survey

2015-2019 Population with No High School Diploma by ZIP Code in the Northeast Arkansas Service Area



2015-2019 Population with a Bachelor's Degree by Prominent Racial and Ethnic Group with 2019 CHNA Comparison (2012-2016)

	White	Black/African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Craighead County	**27.6%** ↑	**15.9%**	**50.1%** ↓	**21.5%** ↑	**21.3%** ↓	**14.0%** ↑
2019 CHNA	26.5%	15.6%	56.8%	6.9%	27.2%	11.3%
Crittenden County	**22.8%** ↑	**11.9%**	**46.9%** ↑	**0.0%**	**11.8%** ↓	**5.9%** ↓
2019 CHNA	21.9%	12.3%	26.8%	0.0%	22.3%	6.7%
Poinsett County	**11.4%** ↑	**8.3%** ↑	**83.3% (n=10)**	**1.3% (n=1)**	**7.1%** ↓	**0.9% (n=3)**
2019 CHNA	10.0%	1.2%	100%	0.0%	7.8%	0.4%
Arkansas	**24.3%**	**15.8%**	**49.4%**	**8.6%**	**21.7%**	**10.3%**
2019 CHNA	22.6%	14.5%	50.5%	7.2%	23.0%	8.8%
United States	**33.5%**	**21.6%**	**54.3%**	**12.0%**	**31.9%**	**16.4%**
2019 CHNA	31.6%	20.0%	52.1%	10.8%	29.1%	14.7%

Source: U.S. Census Bureau, American Community Survey
*Arrows indicate an increase or decrease or greater than one percentage point. Low population counts are noted in parentheses and should be interpreted with caution.

Housing

Housing is the largest single expense for most households and should represent 30% of a household's monthly income. **The median home value for Arkansas is less expensive than the median home value for the U.S. overall, and fewer homeowners are considered housing cost burdened compared with the U.S. benchmark.** Median home value is highest in Craighead County, and the percentage of cost burdened homeowners increased slightly from the 2019 CHNA from 17.5% to 18.4%.

Despite having lower median home values than the state and/or nation, fewer residents in the Northeast Arkansas service area own their home. Homeownership in all three counties is consistent with the 2019 CHNA. This disparity is likely due to in part to financial barriers and higher poverty among residents of the Northeast Arkansas service area. Lack of homeownership perpetuates financial insecurity, as renters generally experience less stable housing costs and approximately half are considered cost burdened. The student population at Arkansas State University also contributes to a higher renter proportion in Craighead County.

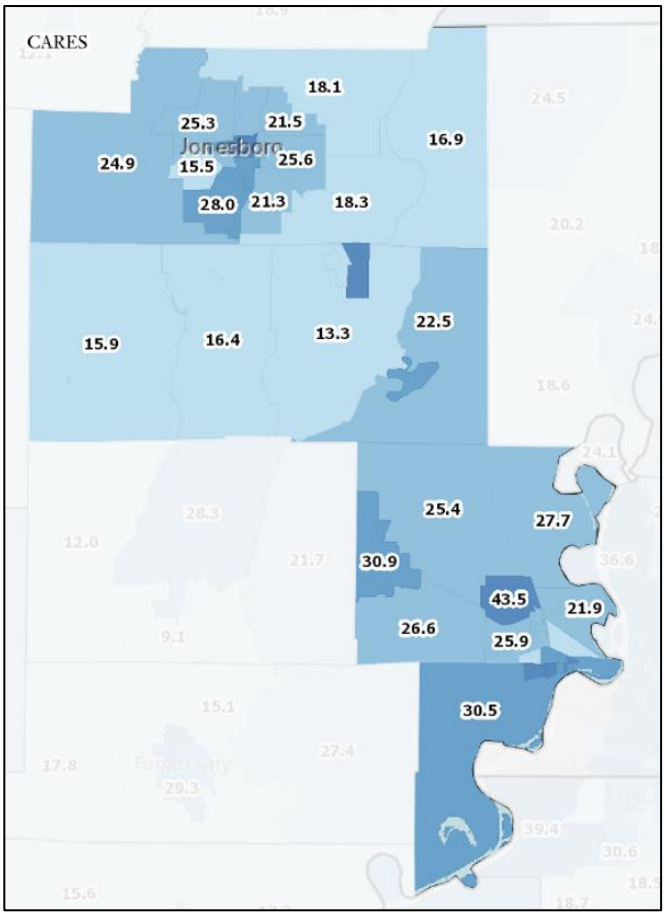
2015-2019 Housing Indicators

	Owners			Renters		
	Occupied Units	Median Home Value	Cost-Burdened*	Occupied Units	Median Rent	Cost-Burdened*
Craighead County	57.1%	$140,700	18.4%	42.9%	$757	45.7%
Crittenden County	57.4%	$114,600	23.0%	42.6%	$732	52.0%
Poinsett County	62.9%	$78,800	18.5%	37.1%	$603	47.0%
Arkansas	65.6%	$127,800	22.2%	34.4%	$745	44.9%
United States	64.0%	$217,500	27.8%	36.0%	$1,062	49.6%

Source: U.S. Census Bureau, American Community Survey
*Defined as spending 30% or more of household income on rent or mortgage expenses.

The following map depicts the percentage of cost burdened households by census tract within the service area. While the prevalence of housing cost burden is generally low across the counties, pockets of disparity exist, particularly in Crittenden County and in Jonesboro. Areas with higher housing cost burden generally correlate with areas of higher poverty and/or student populations.

2015-2019 Cost Burdened Households
by Census Tract in the Northeast Arkansas Service Area



Cost Burdened Households (Housing Costs Exceed 30% of Household Income), Percent by Tract, ACS 2015-19

- Over 35.1%
- 28.1 - 35.0%
- 21.1 - 28.0%
- Under 21.1%
- No Data or Data Suppressed

Arkansas overall has newer housing stock in comparison with the nation. Approximately 23% of housing units in Arkansas were built after 1999 compared with 19% nationwide. Within the Northeast Arkansas service area, Craighead County has newer housing than the state, while Poinsett County has older housing than the state and nation. Crittenden County largely mirrors Arkansas housing stock availability.

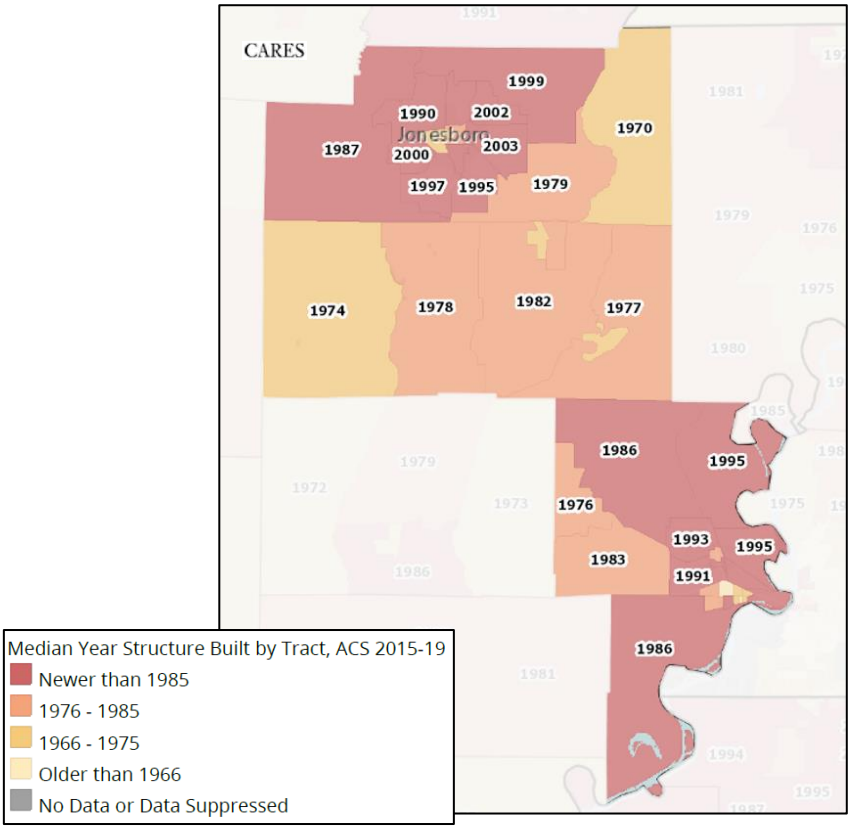
2015-2019 Housing by Year Built

	Before 1980	1980-1999	2000-2009	2010-2013	2014 or Later
Craighead County	35.3%	33.4%	16.5%	8.0%	6.6%
Crittenden County	47.6%	31.3%	17.4%	1.8%	1.8%
Poinsett County	56.6%	29.7%	9.6%	2.3%	1.7%
Arkansas	43.8%	32.8%	16.4%	4.0%	3.0%
United States	53.6%	27.3%	14.0%	2.7%	2.5%

Source: U.S. Census Bureau, American Community Survey

The following map depicts the median year that housing structures were built by census tract within the service area. **Availability of newer housing is largely centered around Jonesboro and the neighboring Memphis Metro area in Crittenden County.**

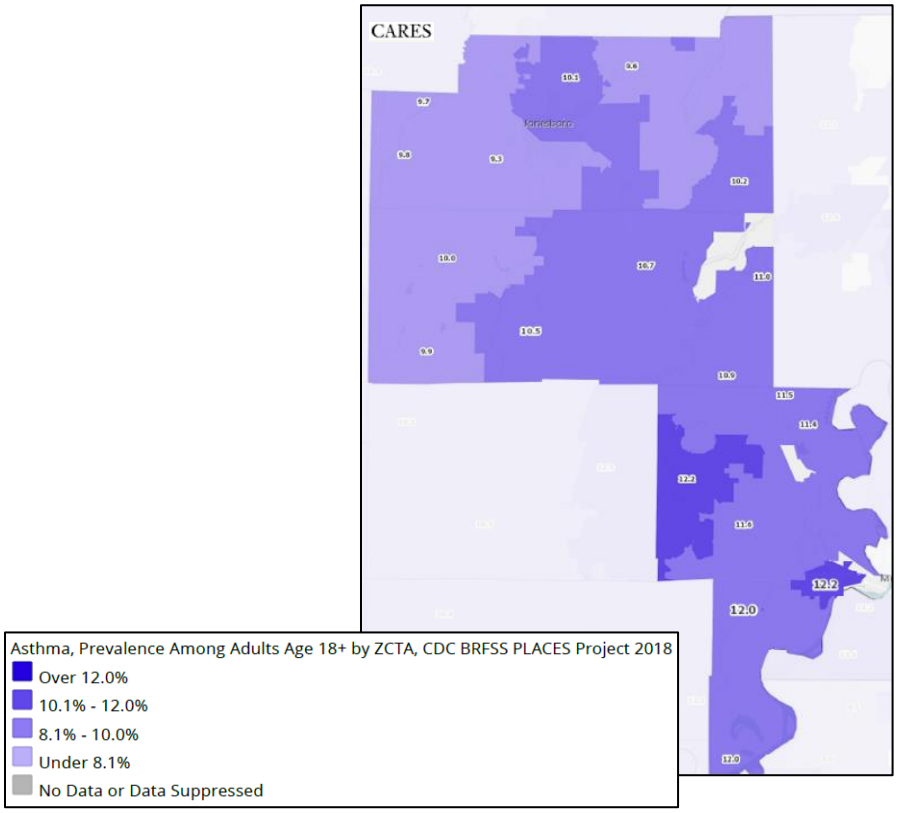
2015-2019 Median Year of Housing Build
by Census Tract in the Northeast Arkansas Service Area



Quality and affordable housing has a direct impact on health. Unhealthy housing puts residents at risk of health issues including lead poisoning, asthma, injury and other chronic diseases. Housing built before 1979 may contain lead paint and other hazardous materials like asbestos.

Arkansas residents have a slightly higher prevalence of asthma than their peers nationwide. As of 2018, 9.9% of Arkansas adults reported having a current asthma diagnosis compared with 9.1% nationally. The following map depicts adult asthma prevalence by ZIP code in the Northeast Arkansas service area. **Areas of higher asthma prevalence in Poinsett County, western Crittenden County and the West Memphis area align with areas with older housing.**

2018 Adult Asthma Prevalence by ZIP Code in the Northeast Arkansas Service Area



Asthma is the most common chronic condition among children, and a leading cause of school absenteeism and hospitalization. In 2019, 25.6% of Arkansas children reported ever being diagnosed with asthma compared with 21.8% of children nationwide. Nationally, Black/African American and Latinx children are more likely to live in rented households and areas with older housing. These trends, coupled with other SDoH barriers, contribute to a disproportionately higher prevalence of asthma among Black/African American and Latinx children compared with other racial groups. **In Arkansas, 33% of Black/African American children have been diagnosed with asthma compared with 24.3% of white children.**

2019 High School Students Ever Diagnosed with Asthma

	Arkansas	United States
Total	25.6%	21.8%
Race and Ethnicity		
Black or African American	33.1%	29.2%
White	24.3%	19.8%
Latinx origin (any race)	19.4%	21.0%

Source: Centers for Disease Control and Prevention, YRBS

The Point-in-Time (PIT) count is a count of sheltered and unsheltered people experiencing homelessness required by the United States Department of Housing and Urban Development (HUD) for communities that participate in its Continuum of Care (CoC) program. The count is usually conducted in the last 10 days of January each year. Sheltered locations include emergency shelters and transitional housing. Unsheltered locations include cars, streets, parks, etc.

The HUD CoC program is designed to provide the services and resources needed to assist individuals and families experiencing homelessness. As part of their planning responsibility, each CoC entity must conduct a PIT count of homeless persons at least biennially. Arkansas has four CoC programs that cover its urban centers in Little Rock and Fayetteville and the remainder of its largely rural communities. The following data, provided by Arkansas CoCs, provide insight into the statewide homeless population and service gaps.

As of 2020, Arkansas had a total of 2,366 people experiencing homelessness. Half of these individuals resided in the Little Rock/Central Arkansas region. More than 1 in 5 (21.7%) individuals were chronically homeless, having experienced homelessness for at least one year, and nearly 1 in 10 individuals were veterans or youth under age 18.

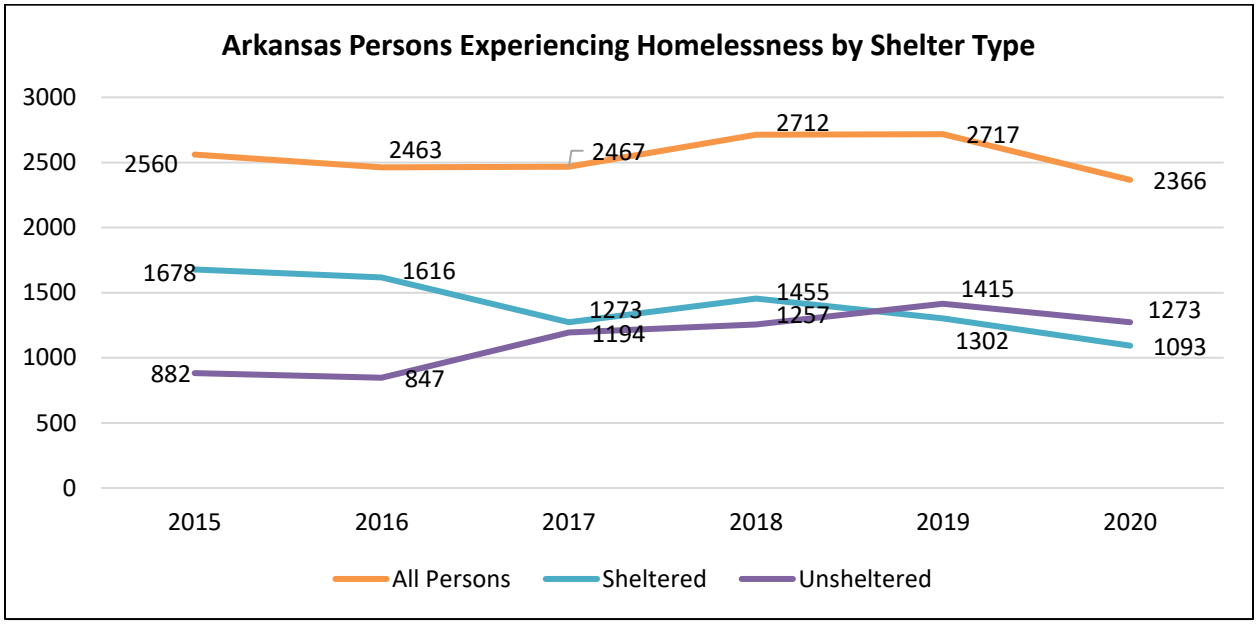
While the majority of homeless individuals identified as white (57.2%), Black/African Americans were disproportionately represented. **Black/African American people represent 15% of the total Arkansas population, but 38% of individuals experiencing homelessness in 2020.**

Prior to 2020, the number of people experiencing homelessness was increasing in Arkansas, as was the number of unsheltered individuals. While the number of people experiencing homelessness decreased in 2020, it may have increased in 2021 due to economic hardships for individuals and families resulting from the COVID-19 pandemic. The 2021 PIT count is pending release and results should be interpreted with caution as many CoC programs did not conduct an unsheltered homeless count due to pandemic restrictions.

2020 Arkansas Point-in-Time Homeless Count by Continuum of Care (CoC) Program

	Little Rock / Central Arkansas CoC	Fayetteville / Northwest Arkansas CoC	Southeast Arkansas CoC	Balance of State CoC	Arkansas Statewide
Total	1,186	352	55	773	2,366
Household Type					
Individuals	1,071	309	31	662	2,073
Families	115	43	24	111	293
Individual Characteristics					
Chronically homeless	272	98	16	128	514
Under age 18	79	41	13	62	195
Veterans	121	33	0	34	188
Race and Ethnicity					
White	528	276	35	514	1,353
Black/African American	613	37	18	233	901
Other race	45	39	2	26	112
Hispanic/Latinx	28	12	1	12	53

Source: U.S. Department of Housing and Urban Development Exchange



Source: U.S. Department of Housing and Urban Development Exchange

Related to housing concerns is access to computers and internet service. Termed the "digital divide," there is a growing gap between the underprivileged members of society—especially poor, rural, elderly and disabled populations—who do not have access to computers or the internet and the wealthy, middle-class and young Americans living in urban and suburban areas who have access.

Arkansas overall has lower digital access than the nation. Crittenden and Poinsett counties have lower computer device access, particularly desktop and laptop access, than the state. Internet access in Crittenden and Poinsett counties is similar to the state average. Consistent with higher socio-economics within Craighead County, the county has higher computer and internet access than the state, largely mirroring national averages.

2015-2019 Households by Digital Access

	With Computer Access			With Internet Access	
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Craighead County	91.1%	72.0%	82.4%	81.7%	81.6%
Crittenden County	83.3%	58.5%	74.6%	76.6%	76.3%
Poinsett County	83.8%	56.7%	74.1%	74.7%	74.0%
Arkansas	86.2%	67.5%	76.2%	73.5%	73.0%
United States	90.3%	77.8%	79.9%	83.0%	82.7%

Source: U.S. Census Bureau, American Community Survey

Illuminating Health Inequities

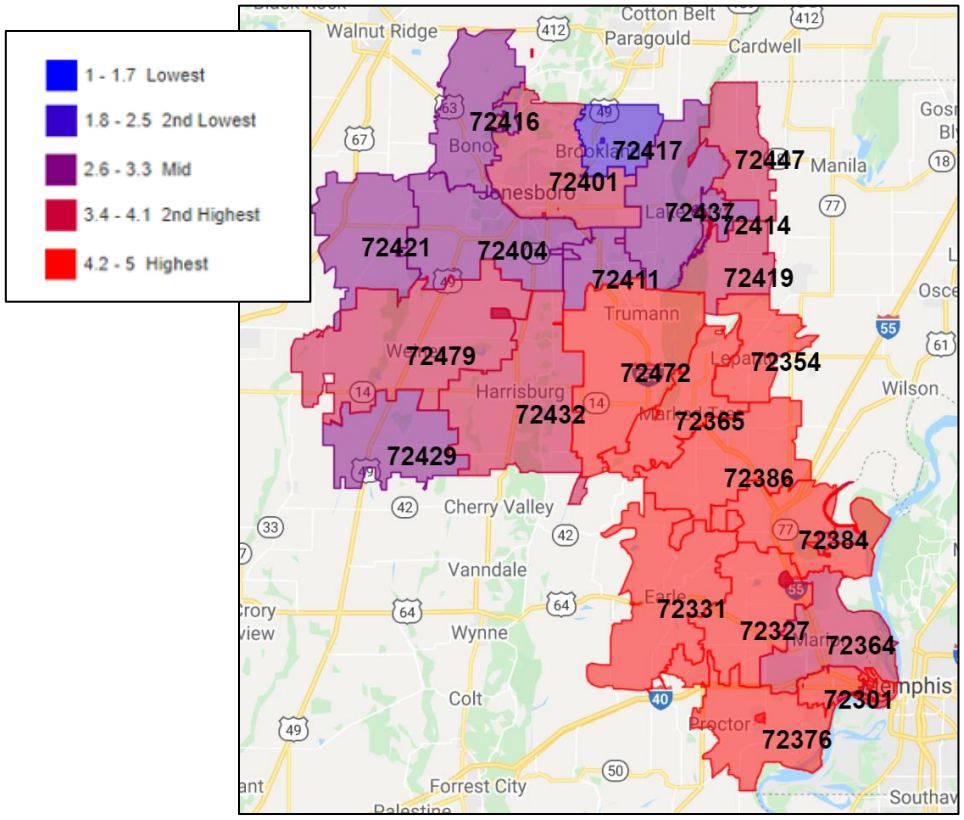
A host of indexes are available to illustrate the potential for health disparities and inequities at the community-level based on SDoH. A description of each index is provided below followed by data visualizations of each tool that show how well Northeast Arkansas service area communities fare compared to state and national benchmarks.

Tools for Identifying Disparity

The following data visualizations illustrate the potential for health disparities and inequities at the community-level based on SDoH barriers. A description of each data visualization tool is provided below:

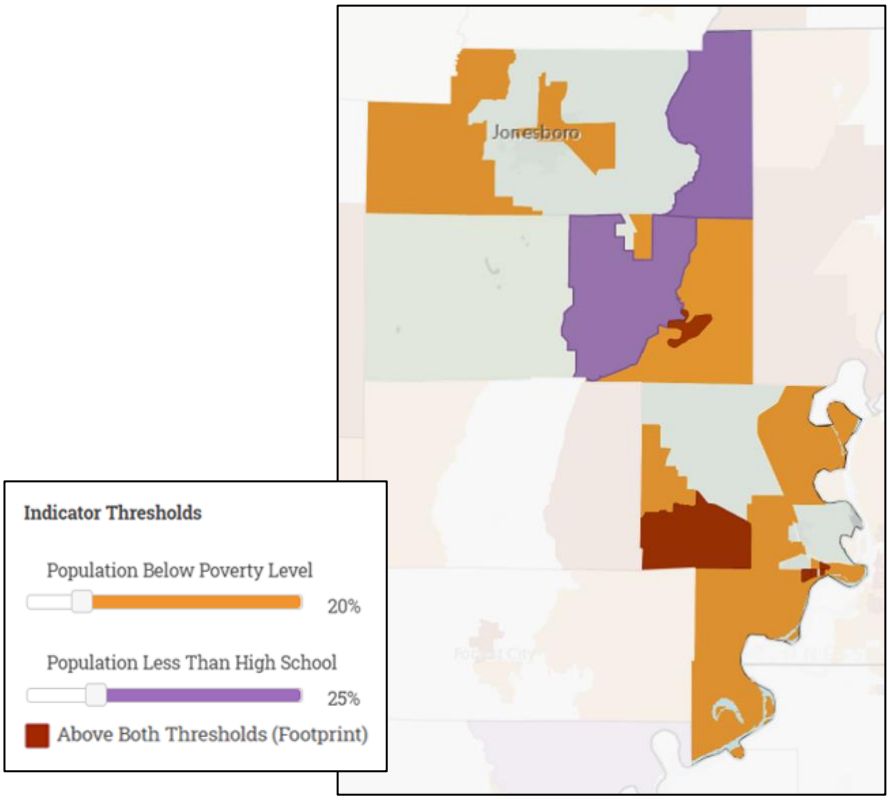
- **Community Need Index (CNI)**: The CNI is a ZIP code-based index of community socio-economic need calculated nationwide. The CNI scores ZIP codes on a scale of 1.0 to 5.0, with 1.0 indicating a ZIP code with the least need and 5.0 indicating a ZIP code with the most need compared to the U.S. national average of 3.0. The CNI weights, indexes and scores ZIP codes by socio-economic barriers, including income, culture, education, insurance and housing.
- **Vulnerable Population Footprint**: The Vulnerable Population Footprint identifies areas where high concentrations of people living in poverty and people living without a high school diploma overlap. Areas are reported by census tract. Census tracts are statistical subdivisions of a county that have roughly 4,000 inhabitants.
- **Area Deprivation Index (ADI)**: The ADI provides a census block group measure of socio-economic disadvantage based on income, education, employment and housing quality. ADI scores are displayed at the block group level on a scale from 1 (least disadvantaged) to 10 (most disadvantaged). A block group is a subdivision of a census tract and typically contains between 250 and 550 housing units.
- **Racial Disparities and Disproportionality Index (RDDI):** The RDDI was developed by the Corporation for Supportive Housing (CSH) to assess unique systems and measure whether a racial and/or ethnic group's representation in a particular public system is proportionate to, over or below their representation in the overall population. The index can be viewed as the likelihood of one group experiencing an event, compared to the likelihood of another group experiencing that same event. Results are provided on a state-by-state basis.

Community Need Index

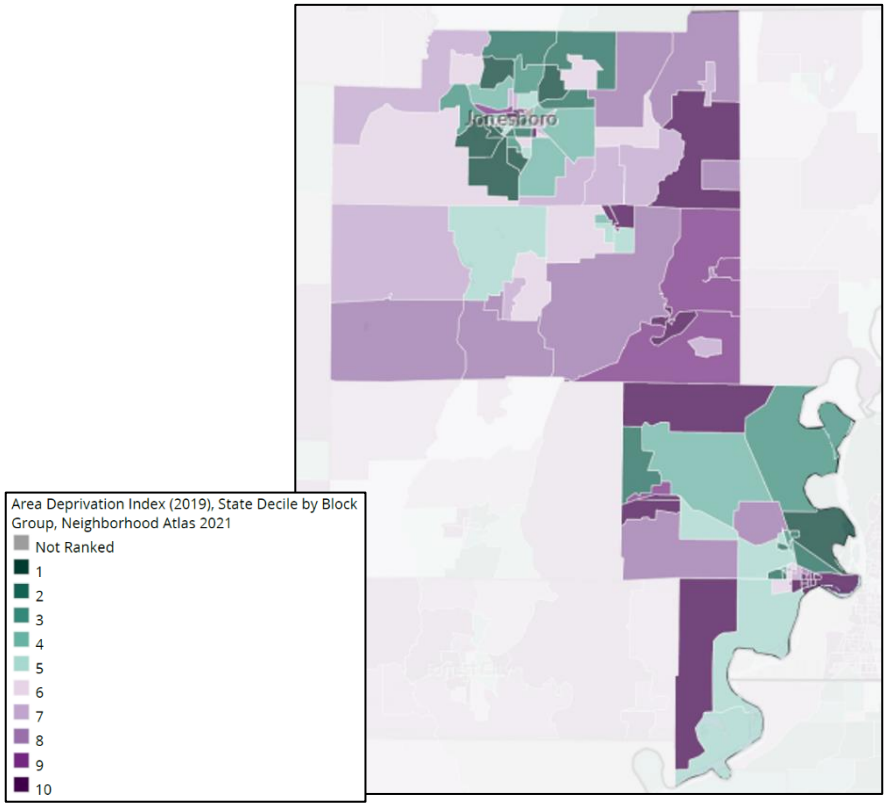


ZIP Code	Town	CNI Score
72417	Brookland	2.4
72404	Jonesboro	2.6
72411	Bay	3.0
72421	Cash	3.0
72429	Fisher	3.0
72414	Black Oak	3.2
72416	Bono	3.2
72437	Lake City	3.2
72432	Harrisburg	3.4
72479	Weiner	3.4
72364	Marion	3.6
72419	Caraway	3.6
72401	Jonesboro	3.8
72447	Monette	3.8
72386	Birdsong	4.2
72472	Trumann	4.2
72376	Proctor	4.4
72384	Turrell	4.4
72327	Crawfordsville	4.6
72354	Lepanto	4.6
72365	Marked Tree	4.6
72301	West Memphis	5.0
72331	Earle	5.0

Vulnerable Population Footprint



Area Deprivation Index



Consistent with the 2019 CHNA, the Northeast Arkansas service area has an average CNI score of 3.7, indicating higher overall community need. **All of the ZIP codes comprising Craighead, Crittenden and Poinsett counties, with the exception of Brookland 72417, score in moderate to high need categories. Of the ZIP codes scoring in the highest CNI category of 4.2 or higher, nearly all saw an increase in their score from the 2019 CHNA.**

West Memphis ZIP code 72301 and Earle ZIP code 72331 continue to have the highest CNI scores in the Northeast Arkansas service area. Both ZIP codes saw an increase in their score from the 2019 CHNA, from 4.6 to 5.0, the highest index score. Comparing CNI scores with population statistics demonstrates the adverse impact of SDoH on populations that historically and continually experience inequities. Residents of West Memphis ZIP code 72301 and Earle ZIP code 72331 are among the most diverse populations in the region with more than half of residents identifying as Black/African American. In this way we can begin to see how inequities perpetuate persistent disparities in health and social outcomes.

The following table lists the SDoH that contribute to ZIP code CNI scores and are often indicative of health disparities. ZIP codes with a CNI score of 3.4 or higher are shown, in descending order, by CNI score.

2015-2019 Social Determinants of Health by Geography
Red = Higher CNI Score from the 2019 CHNA

ZIP Code (County)	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than HS Diploma	Without Health Insurance	2022 CHNA CNI Score	2019 CHNA CNI Score
72301, West Memphis (Crittenden)	26.1%	41.3%	2.0%	18.5%	9.1%	5.0	4.6
72331, Earle (Crittenden)	22.1%	20.0%	1.1%	25.3%	7.1%	5.0	4.6
72327, Crawfordsville (Crittenden)	21.4%	32.5%	11.6%	22.9%	10.2%	4.6	4.4
72354, Lepanto (Poinsett)	22.7%	42.4%	1.6%	28.3%	16.0%	4.6	4.6
72365, Marked Tree (Poinsett)	37.1%	47.7%	2.6%	29.4%	13.2%	4.6	4.4
72376, Proctor (Crittenden)	30.7%	85.2%	2.2%	21.7%	10.4%	4.4	4.0
72384, Turrell (Crittenden)	34.6%	55.0%	5.6%	31.6%	8.4%	4.4	3.8
72386, Tyronza (Poinsett)	23.2%	37.8%	0.0%	15.3%	9.25	4.2	4.0
72472, Trumann (Poinsett)	20.9%	35.5%	2.2%	17.7%	10.9%	4.2	4.2
72401, Jonesboro (Craighead)	20.3%	28.9%	6.6%	10.5%	9.5%	3.8	4.0
72447, Monette (Craighead)	13.9%	28.2%	3.2%	26.4%	6.0%	3.8	3.0
72364, Marion (Crittenden)	14.2%	19.4%	3.5%	11.9%	7.1%	3.6	3.8
72419, Caraway (Craighead)	15.7%	19.4%	1.8%	28.8%	8.1%	3.6	2.8
72432, Harrisburg (Poinsett)	17.7%	29.6%	1.5%	16.5%	8.6%	3.4	3.4
72479, Weiner (Poinsett)	15.1%	19.4%	10.4%	22.1%	13.6%	3.4	3.2
Arkansas	17.0%	23.7%	7.5%	13.4%	8.5%	NA	NA
United States	13.4%	18.5%	21.6%	12.0%	8.8%	NA	NA

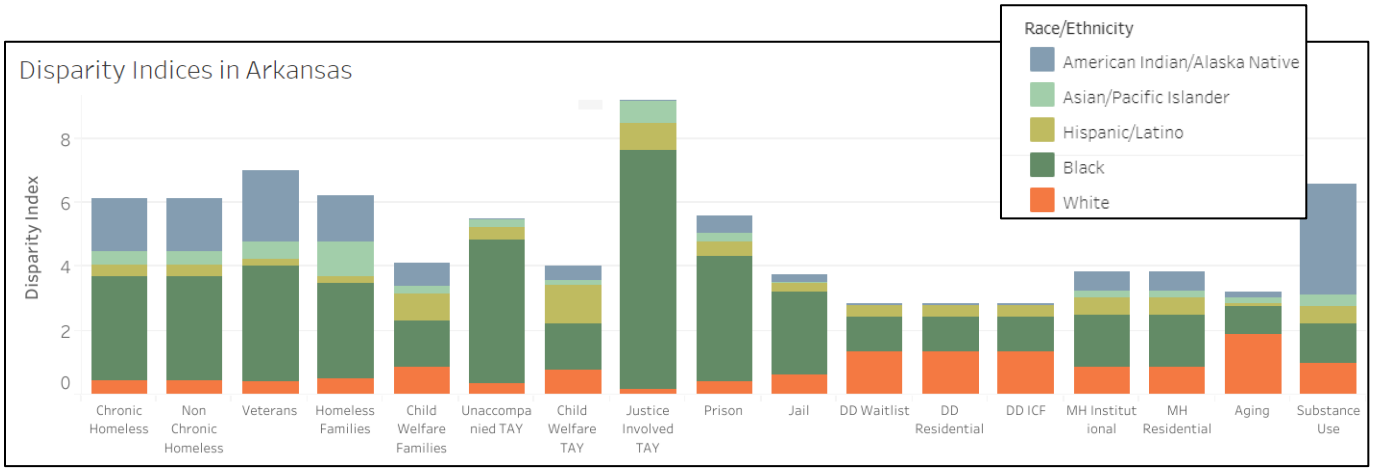
Source: U.S. Census Bureau, American Community Survey

2015-2019 Population (Pop.) by Prominent Racial and Ethnic Groups

ZIP Code (County)	Total Pop.	White	Black or African American	Two or More Races	Latinx origin (any race)
72301, West Memphis (Crittenden)	24,259	36.3%	58.0%	4.8%	1.5%
72331, Earle (Crittenden)	3,010	20.8%	63.5%	15.7%	2.5%
72327, Crawfordsville (Crittenden)	1,589	57.4%	32.8%	9.8%	8.3%
72354, Lepanto (Poinsett)	2,359	84.2%	8.5%	6.4%	4.7%
72365, Marked Tree (Poinsett)	2,679	77.0%	14.8%	7.5%	3.2%
72376, Proctor (Crittenden)	1,851	55.2%	39.0%	2.3%	0.1%
72384, Turrell (Crittenden)	888	36.0%	49.2%	14.0%	1.8%
72386, Birdsong (Poinsett)	2,050	92.0%	6.0%	1.9%	0.5%
72472, Trumann (Poinsett)	9,167	88.9%	4.0%	5.8%	3.6%
72401, Jonesboro (Craighead)	58,725	72.9%	19.2%	3.1%	6.1%
72447, Monette (Craighead)	1,902	98.8%	0.4%	0.7%	2.4%
72364, Marion (Crittenden)	15,874	54.6%	34.3%	8.7%	3.9%
72419, Caraway (Craighead)	1,497	95.2%	0.9%	3.3%	5.9%
72432, Harrisburg (Poinsett)	6,454	92.0%	0.8%	6.5%	1.0%
72479, Weiner (Poinsett)	1,406	89.5%	3.1%	5.1%	8.8%
Arkansas	2,999,370	76.7%	15.3%	2.7%	7.5%
United States	324,697,795	72.5%	12.7%	3.3%	18.0%

Source: U.S. Census Bureau, American Community Survey

The RDDI measures whether a racial group's representation in a particular public system is proportionate to their representation in the overall population. Public systems include homelessness, veterans, prison systems, child welfare, developmental disabilities, mental health institutions, aging population and substance use. An index of 1 signifies equal representation; an index below 1 signifies underrepresentation and an index above 1 signifies overrepresentation in a system. **Across Arkansas, Black/African American residents have the highest index of 3.23, indicating overrepresentation in public systems. Black/African American residents are most overrepresented in prison and justice systems.** This finding is consistent with systemic issues of racism within the nation's criminal justice system that leads to disproportionate incarceration and sentencing among people of color.



Source: Corporation for Supportive Housing
*TAY: Transition-age youth; DD: Developmental Disability; MH: Mental Health

Life expectancy is another measure of adverse SDoH. Across Arkansas, life expectancy is highest for Latinx and Asian residents. Life expectancy disparity trends are largely reflected in mortality data presented in this report. In all service area counties, Black/African American people have a higher all-cause death rate compared with white people. Across Arkansas and the nation, the all-cause death rate for Black/African American people is more than 100 points higher than the death rate for white people.

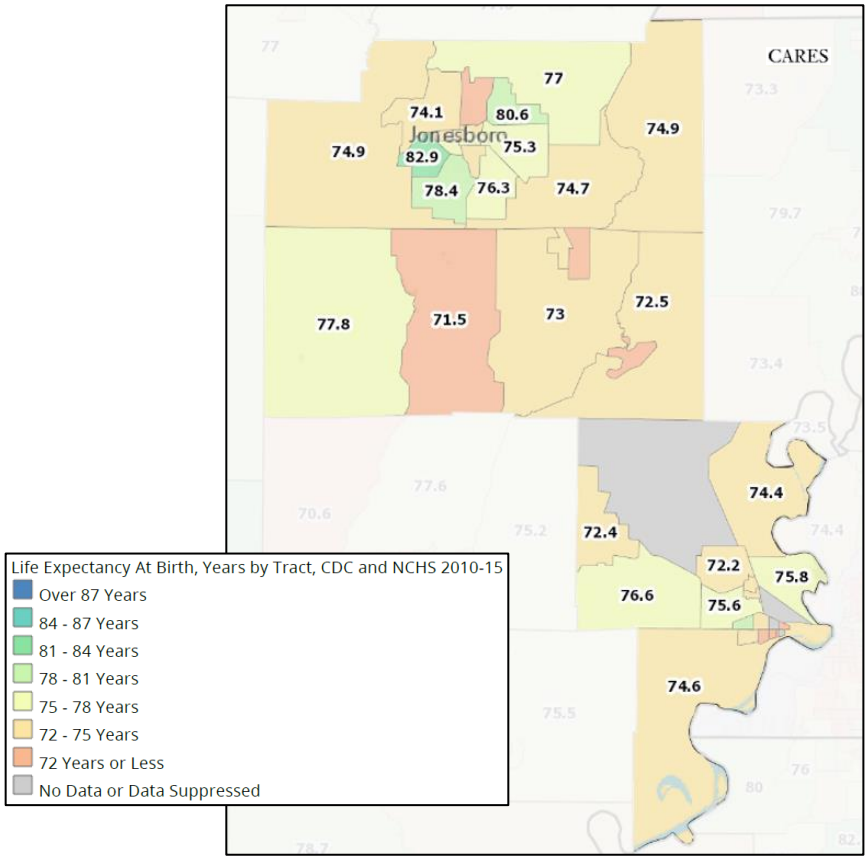
The following map shows average life expectancy at the census tract-level. Areas of lower life expectancy largely align with areas of more socio-economic barriers and racial inequities. For example, within Jonesboro in Craighead County, there is a nearly 9-year difference in life expectancy between neighboring census tracts.

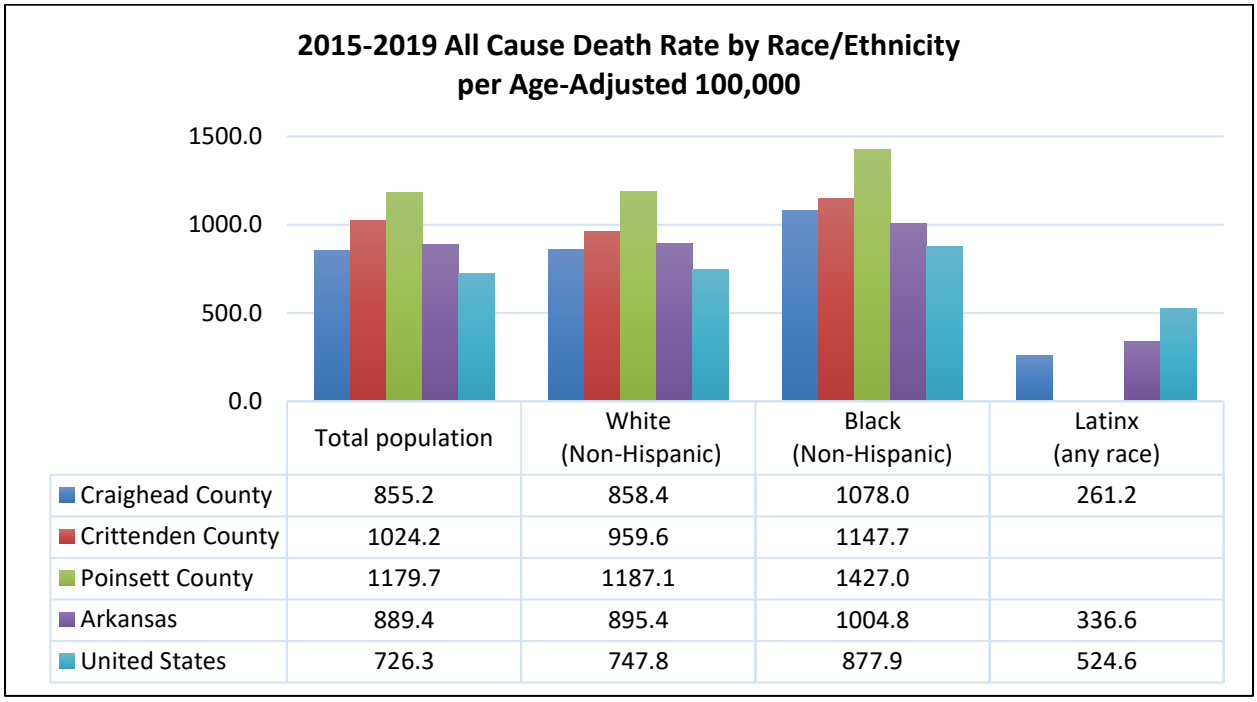
2017-2019 Life Expectancy by Race and Ethnicity

	Overall Life Expectancy	White	Black	Asian	Latinx origin (any race)
Craighead County	77.0	77.1	73.1	NA	NA
Crittenden County	72.8	74.2	71.1	NA	NA
Poinsett County	71.4	71.2	68.8	NA	NA
Arkansas	76.0	76.1	73.1	85.1	91.5

Source: National Vital Statistics System

2010-2015 Life Expectancy at Birth by Census Tract





	Total population	White (Non-Hispanic)	Black (Non-Hispanic)	Latinx (any race)
Craighead County	855.2	858.4	1078.0	261.2
Crittenden County	1024.2	959.6	1147.7	
Poinsett County	1179.7	1187.1	1427.0	
Arkansas	889.4	895.4	1004.8	336.6
United States	726.3	747.8	877.9	524.6

Source: Centers for Disease Control and Prevention
*Latinx data are shown by county as available.

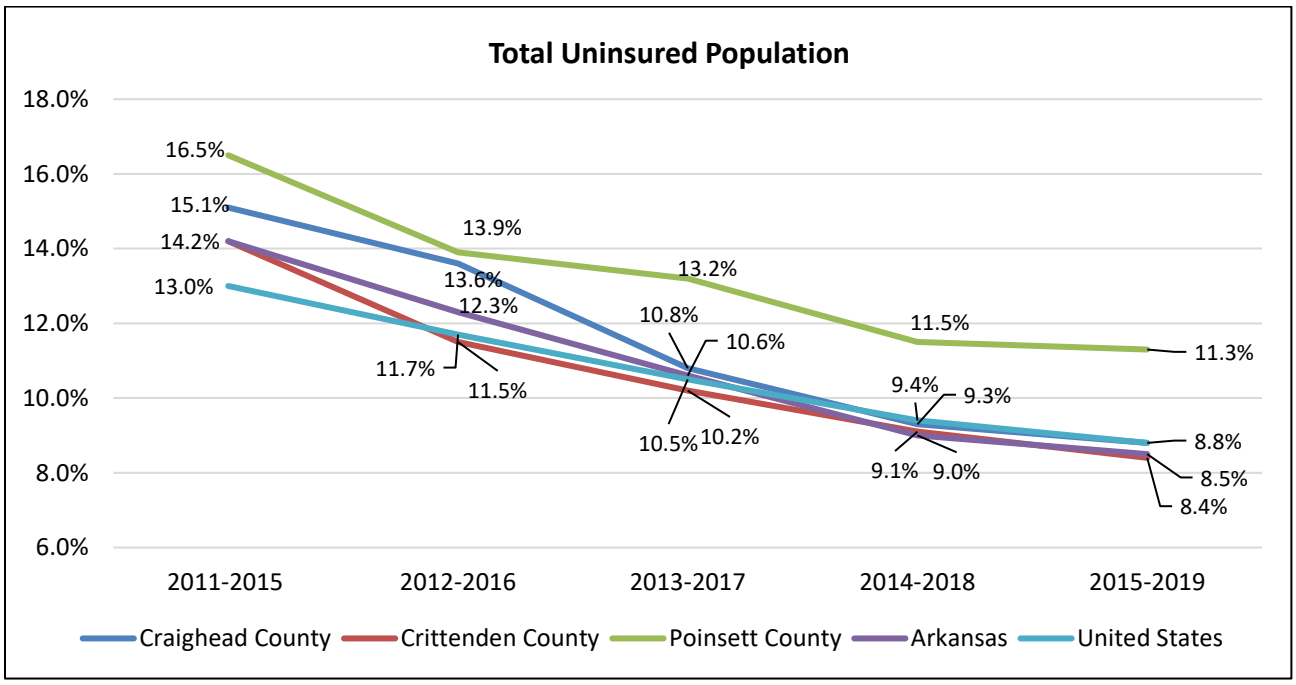
A Closer Look at Health Statistics

Access to Health Care

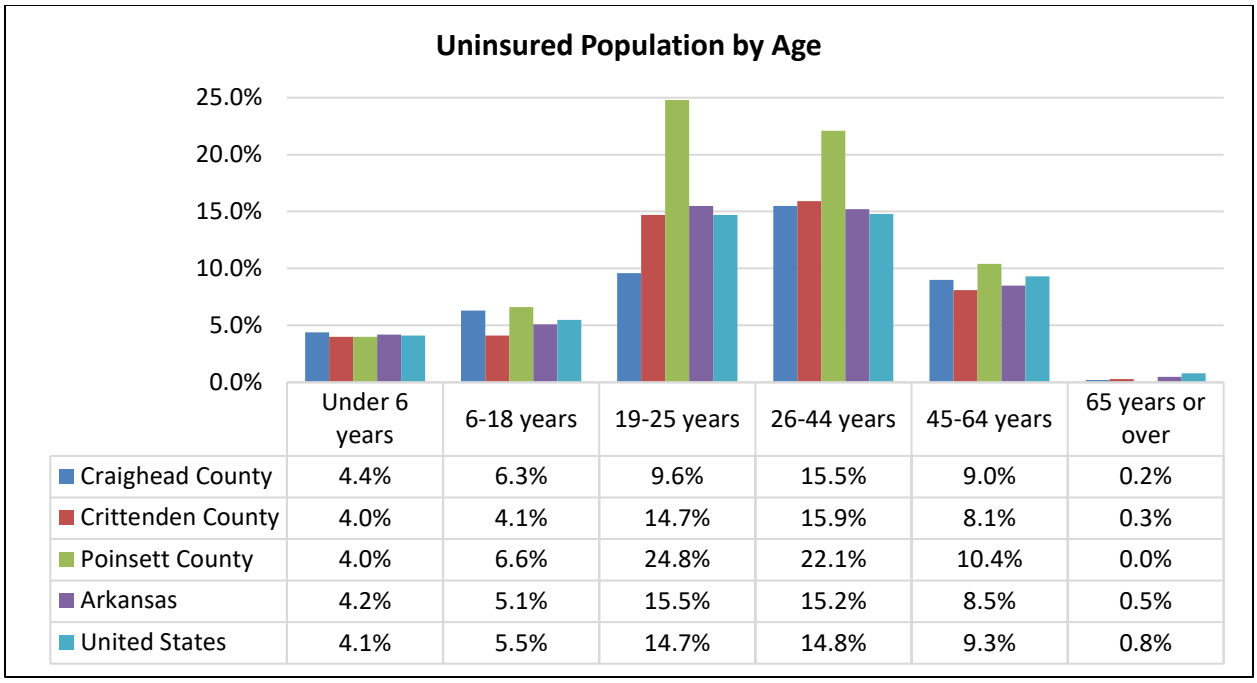
The percentage of uninsured residents in Arkansas and the Northeast Arkansas service area declined at a faster rate than the nation over the past five years. From 2011-2015 to 2015-2019, the percent uninsured declined approximately 5 to 6 percentage points across the service area. The decline in uninsured residents likely corresponds with the expansion of Medicaid in Arkansas in 2013. **The proportion of Medicaid insured residents increased in all service area counties from the 2019 CHNA.**

Residents in all Northeast Arkansas service area counties, excluding Poinsett, are more likely to be insured than their peers nationally, although no counties meet the HP2030 goal of 92.1% insured residents. **In Poinsett County, approximately one-quarter of working age adults 19 to 44 years are uninsured compared with 15% statewide and nationally.** Among insured Poinsett County residents, more than one-third have Medicaid coverage compared to 20% nationally. Crittenden County also has a high percentage of Medicaid insured residents at 35.1%. Craighead County has the largest proportion of privately insured residents, although the proportion is lower than the state and nation.

Statewide, the uninsured percentage declined for all racial and ethnic groups, but individuals of color continue to be disproportionately uninsured compared to white people. Nearly one-quarter of "other race" residents and Latinx are uninsured compared to 7.7% of white residents. "Other race" has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race. Of note, Black/African American residents saw the largest percent uninsured decline from 2011-2015 to 2015-2019 and have a similar uninsured percentage as white residents.

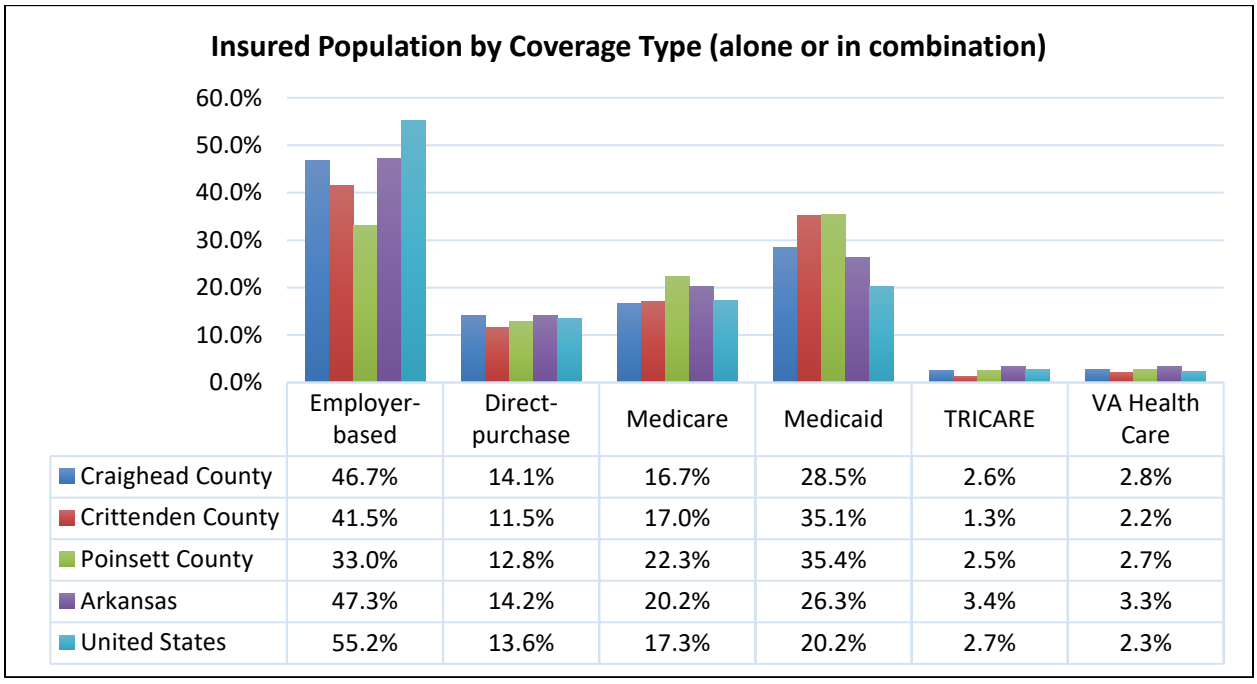


Source: U.S. Census Bureau, American Community Survey



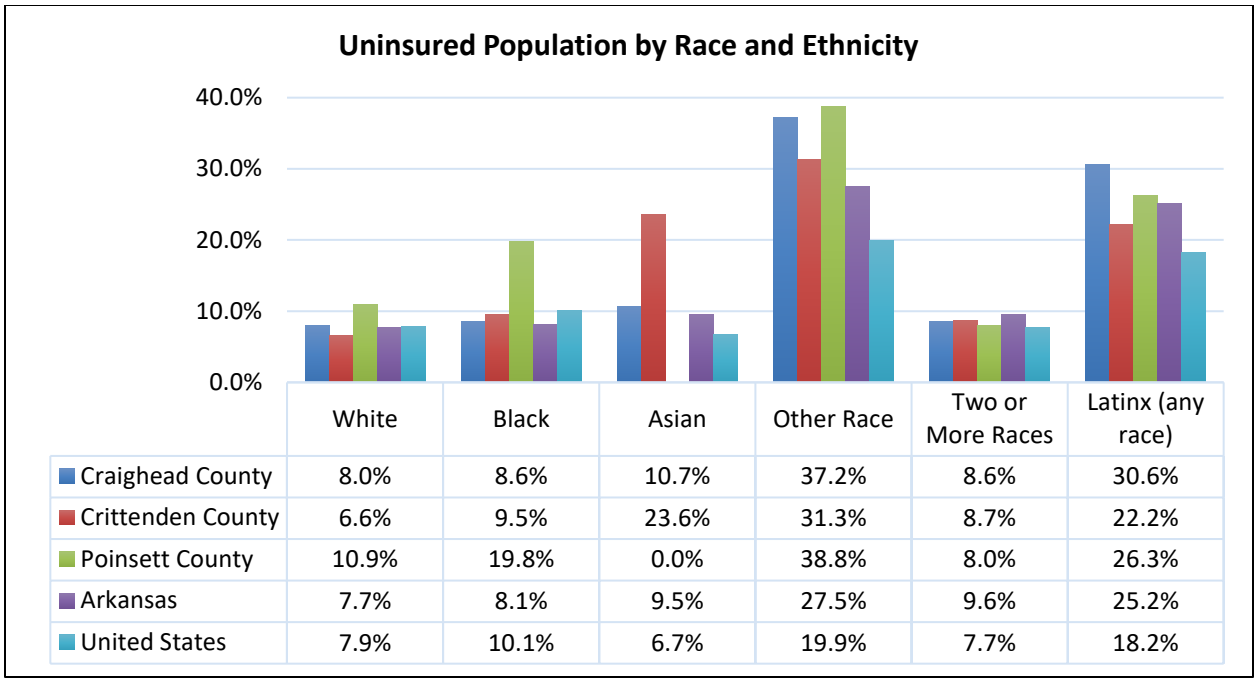
	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Craighead County	4.4%	6.3%	9.6%	15.5%	9.0%	0.2%
Crittenden County	4.0%	4.1%	14.7%	15.9%	8.1%	0.3%
Poinsett County	4.0%	6.6%	24.8%	22.1%	10.4%	0.0%
Arkansas	4.2%	5.1%	15.5%	15.2%	8.5%	0.5%
United States	4.1%	5.5%	14.7%	14.8%	9.3%	0.8%

Source: U.S. Census Bureau, American Community Survey



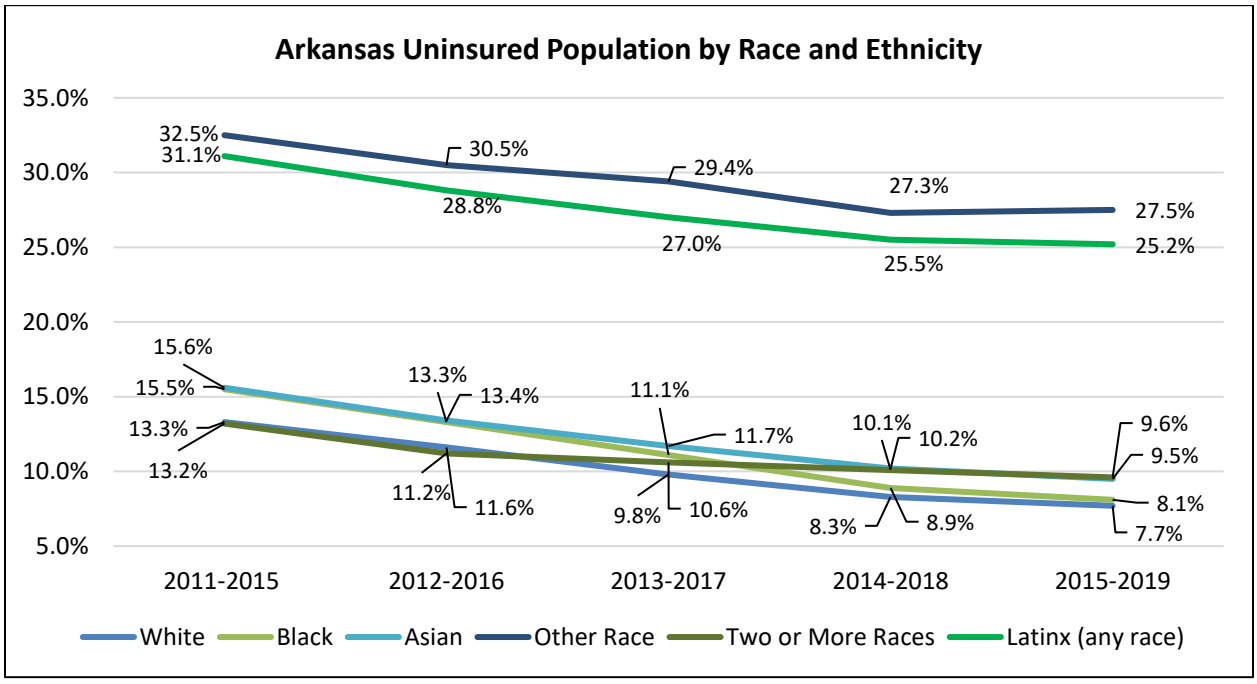
	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Craighead County	46.7%	14.1%	16.7%	28.5%	2.6%	2.8%
Crittenden County	41.5%	11.5%	17.0%	35.1%	1.3%	2.2%
Poinsett County	33.0%	12.8%	22.3%	35.4%	2.5%	2.7%
Arkansas	47.3%	14.2%	20.2%	26.3%	3.4%	3.3%
United States	55.2%	13.6%	17.3%	20.2%	2.7%	2.3%

Source: U.S. Census Bureau, American Community Survey



	White	Black	Asian	Other Race	Two or More Races	Latinx (any race)
Craighead County	8.0%	8.6%	10.7%	37.2%	8.6%	30.6%
Crittenden County	6.6%	9.5%	23.6%	31.3%	8.7%	22.2%
Poinsett County	10.9%	19.8%	0.0%	38.8%	8.0%	26.3%
Arkansas	7.7%	8.1%	9.5%	27.5%	9.6%	25.2%
United States	7.9%	10.1%	6.7%	19.9%	7.7%	18.2%

Source: U.S. Census Bureau, American Community Survey



Source: U.S. Census Bureau, American Community Survey

Availability of health care providers also impacts access to care and health outcomes. Arkansas overall has fewer primary care providers than the nation, although access is gradually improving. The rate of primary care physicians per 100,000 population increased from the 2019 CHNA from 65.7 to 66.4.

Within the Northeast Arkansas service area, primary care providers are concentrated in Craighead County, where the rate of providers exceeds both the state and nation. Crittenden and Poinsett counties have fewer primary care providers, and **Poinsett County is designated by the Federal Department of Health and Human Services as a Health Professional Shortage Area (HPSA) for low-income individuals.** Despite differences in access to primary care, a similar, higher percentage of adults across the service area have had a recent physical checkup in comparison to the nation.

Arkansas overall has lower dental provider access than the nation and fewer adults receiving regular dental care. Northeast Arkansas service area adults are also less likely to receive dental care, even when they reside in counties with overall better provider access. Craighead County has a higher dentist provider rate than the state and nation, but the proportion of adults receiving dental care is on par with the state and lower than the national average. The Crittenden County dentist provider rate exceeds the statewide rate by nearly 20 points, but fewer adults receive regular care. Poinsett County is a dental HPSA for low-income individuals and fewer than 50% of adults receive dental care compared to 66% nationally.

When viewed at the ZIP code-level, Crittenden County has wide disparities in adult dental care access. In the western portion of the county, as few as 43% to 45% of adults receive regular dental care compared to 60% in the eastern portion of the county. Areas of access disparity correlate with areas of high poverty and racial diversity.

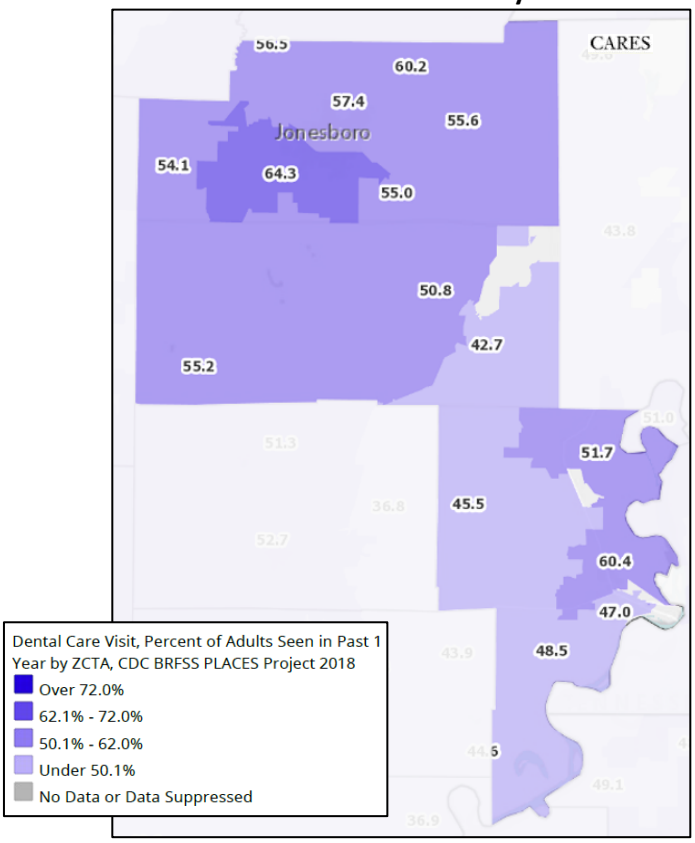
COVID-19 had a significant impact on access to care. Individuals nationwide delayed regular preventive and maintenance care due to fear of contracting COVID-19 in a health care setting and new financial constraints, among other concerns. **Nationally, the percentage of adults receiving a routine physical checkup declined from 77.6% in 2019 to 76% in 2020. Delayed care access was more pronounced in Arkansas, where 74% of adults received a routine physical checkup in 2020 compared to 77.8% in 2019.** Note: county-level data for 2020 are not yet available.

Primary and Dental Provider Rates and Adult Health Care Access

	Primary Care		Dental Care	
	Physicians per 100,000 Population (2018)	Routine Checkup within Past Year (2018)*	Dentists per 100,000 Population (2019)	Dental Visit within Past Year (2018)*
Craighead County	115.1	77.1%	75.2	59.3%
Crittenden County	31.0	80.2%	64.6	51.3%
Poinsett County	16.7	76.0%	17.0	49.8%
Arkansas	66.4	75.6%	47.6	56.0%
United States	75.8	75.1%	71.4	66.2%

Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, PLACES & BRFSS
*Data are reported as age-adjusted percentages.

Northeast Arkansas Service Area Adults with an Annual Dental Visit by ZIP Code



Health Risk Factors and Chronic Disease

Routine preventive care contributes to fewer health risk factors and better health status. Despite more adults in the Northeast Arkansas service area accessing primary care services, they are less healthy than their peers statewide and/or nationally, with more health risk factors and higher prevalence and mortality due to chronic disease.

Arkansas adults overall have increased risk factors for chronic disease, including lack of physical activity and tobacco use. Within the Northeast Arkansas service area, adults in Crittenden and Poinsett counties have more health risk factors than the state average. These health disparities correlate with existing differences in socio-economic factors and physical environment, including lower access to care, lower income, higher poverty and/or lower educational attainment.

The following report sections further explore health risk factors and chronic disease, and their connection to underlying SDoH. Social determinants of health not only lead to poorer health outcomes and the onset of disease, but they are also likely to impede disease management and treatment efforts, further exacerbating poorer health outcomes.

2018 Age-Adjusted Adult (18+) Physical Health Outcomes

	Physical Health Not Good for 14 or More Days in Past 30 Days	No Leisure-Time Physical Activity in Past 30 Days
Craighead County	14.9%	31.0%
Crittenden County	17.3%	37.4%
Poinsett County	18.1%	35.5%
Arkansas	15.3%	29.5%
United States	11.8%	23.6%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

2018 Age-Adjusted Adults (18+) Who Are Current Smokers*

	Percentage
Craighead County	22.4%
Crittenden County	24.1%
Poinsett County	27.6%
Arkansas	23.7%
United States	15.9%

Source: Centers for Disease Control and Prevention, BRFSS

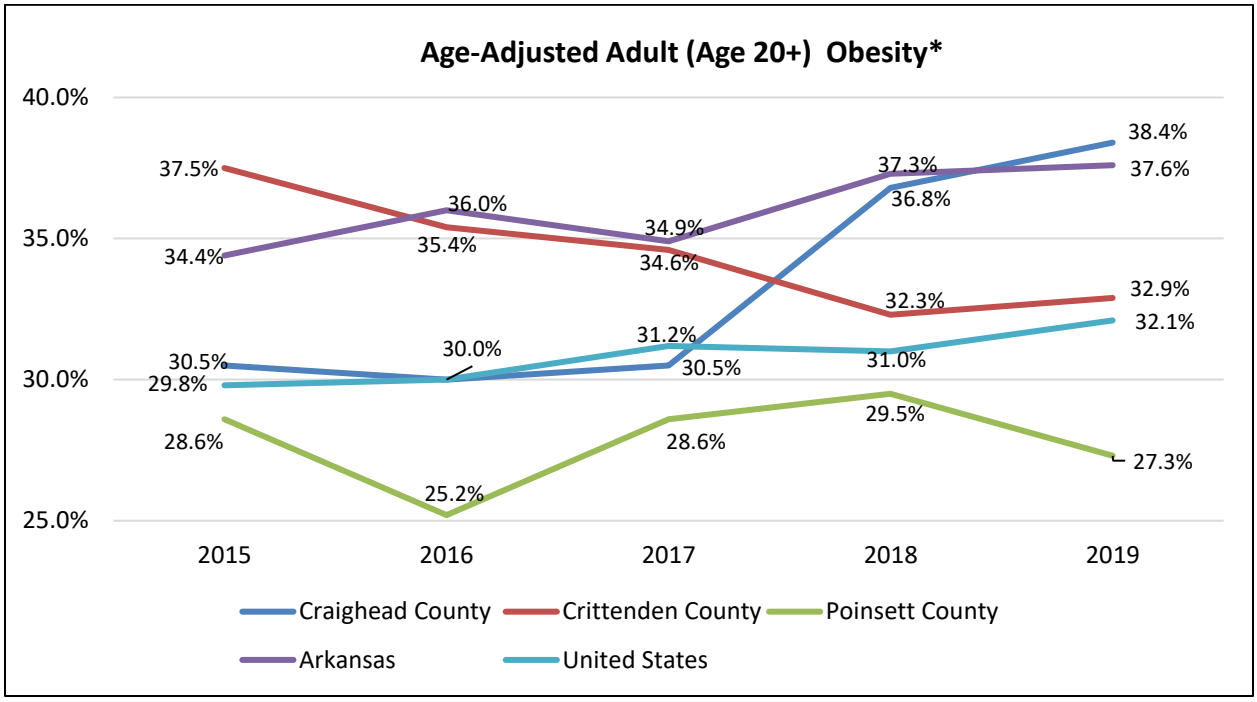
*A change in reporting methodology occurred in 2018 providing age-adjusted county percentages. Data prior to 2018 were reported as crude percentages and are not comparable.

Obesity and Diabetes

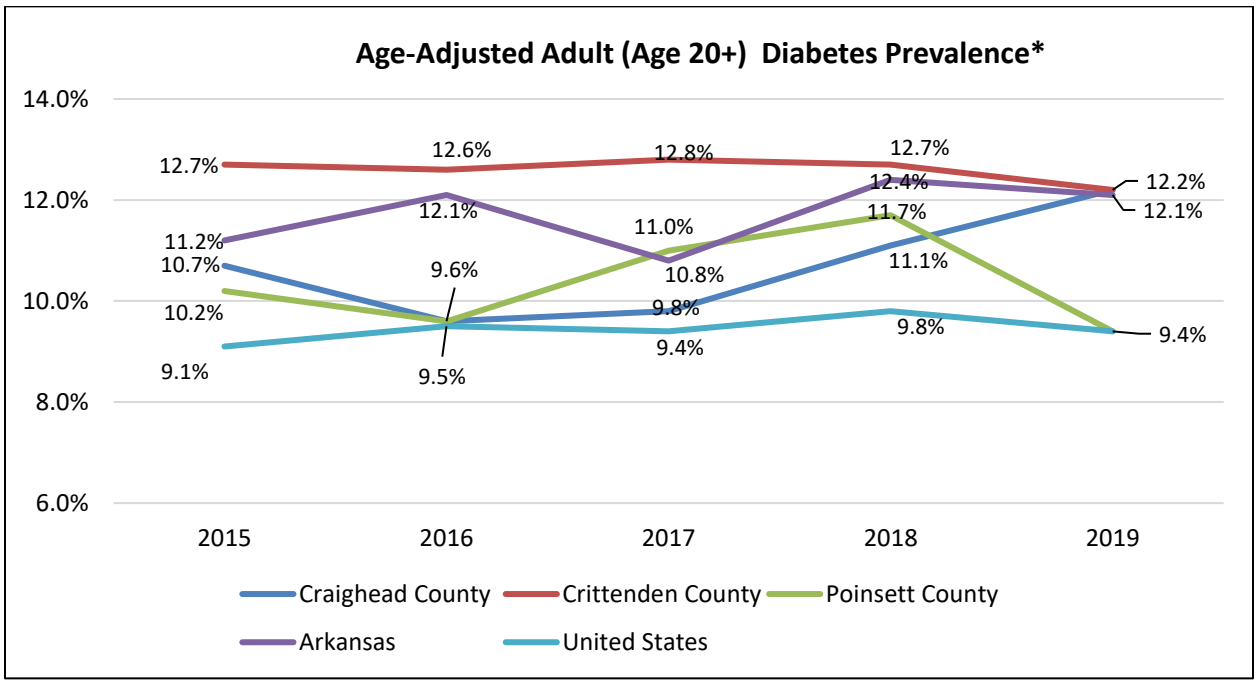
Arkansas adults overall have historically higher prevalence of obesity and diabetes compared to national benchmarks. Within the Northeast Arkansas service area, adult obesity and diabetes increased sharply in Craighead County from 2017 to 2019. **As of 2019, 38.4% of Craighead County adults are estimated to have obesity and 12.2% are estimated to have diabetes.** Adult obesity and diabetes prevalence and the diabetes death rate declined in Crittenden County in recent years, but diabetes prevalence is also estimated at 12.2% and the diabetes death rate is double the national death rate. Adult obesity and diabetes prevalence has been variable in Poinsett County; current percentages are similar to or lower than national percentages.

Note: State and national obesity and diabetes prevalence data are reported for adults aged 18 or older, while county-level data are reported for adults age 20 or older, based on data availability. Comparisons between the counties, state and nation should be interpreted with caution.

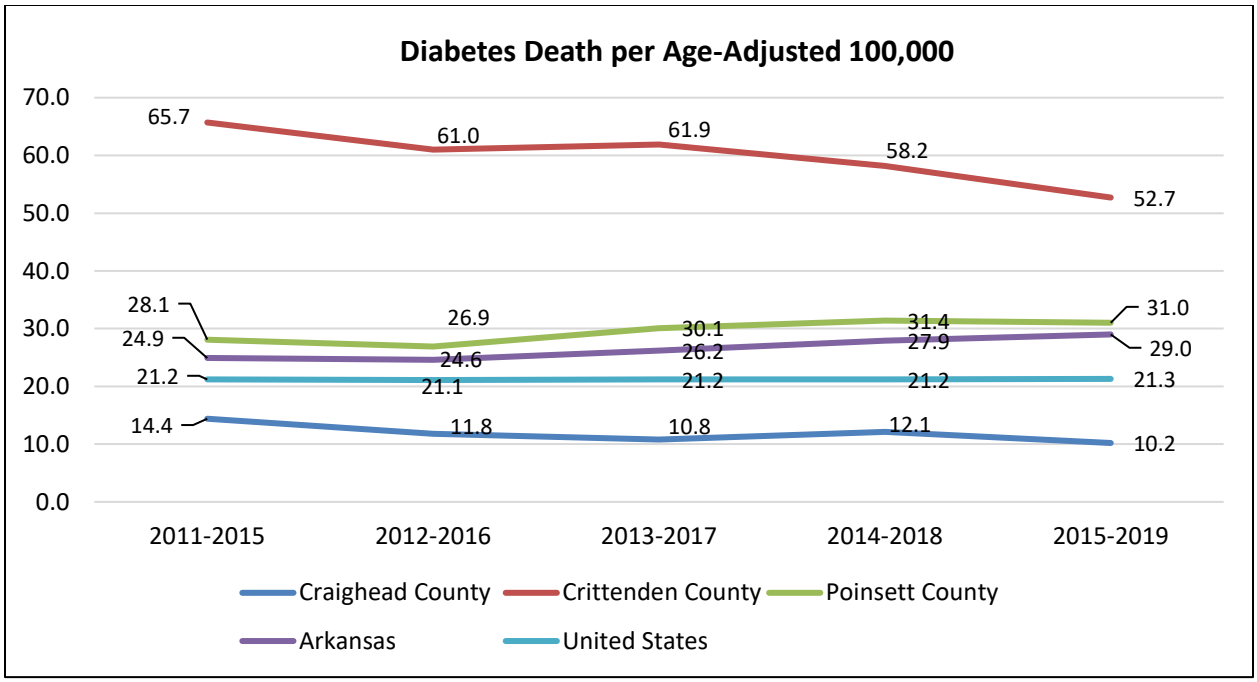
Arkansas overall also has a higher rate of death due to diabetes than the nation, and contrary to the U.S., the diabetes death rate increased statewide. Consistent with national trends, Black/African American residents across Arkansas have a disproportionately higher rate of death from diabetes than other racial or ethnic groups. Notably, **the diabetes death rate among Black/African American residents is double the death rate for white residents.** Within the Northeast Arkansas service area, it is worth noting that within Crittenden County, Black/African American and white residents have a similarly high diabetes death rate, indicating potentially widespread access to care and disease management barriers.



Source: Centers for Disease Control and Prevention, U.S. Diabetes Surveillance System & BRFSS
*State and national data are reported as a percentage of adults age 18+ based on data availability.



Source: Centers for Disease Control and Prevention, U.S. Diabetes Surveillance System & BRFSS
*State and national data are reported as a percentage of adults age 18+ based on data availability.



Source: Centers for Disease Control and Prevention

2015-2019 Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Total Population	10.2	52.7	31.0	29.0	21.3
White, Non-Hispanic	10.0	50.3	28.8	26.3	18.8
Black or African American, Non-Hispanic	NA	57.5	NA	52.3	38.3
Latinx origin (any race)	NA	NA	NA	19.3	25.1

Source: Centers for Disease Control and Prevention

Heart Disease

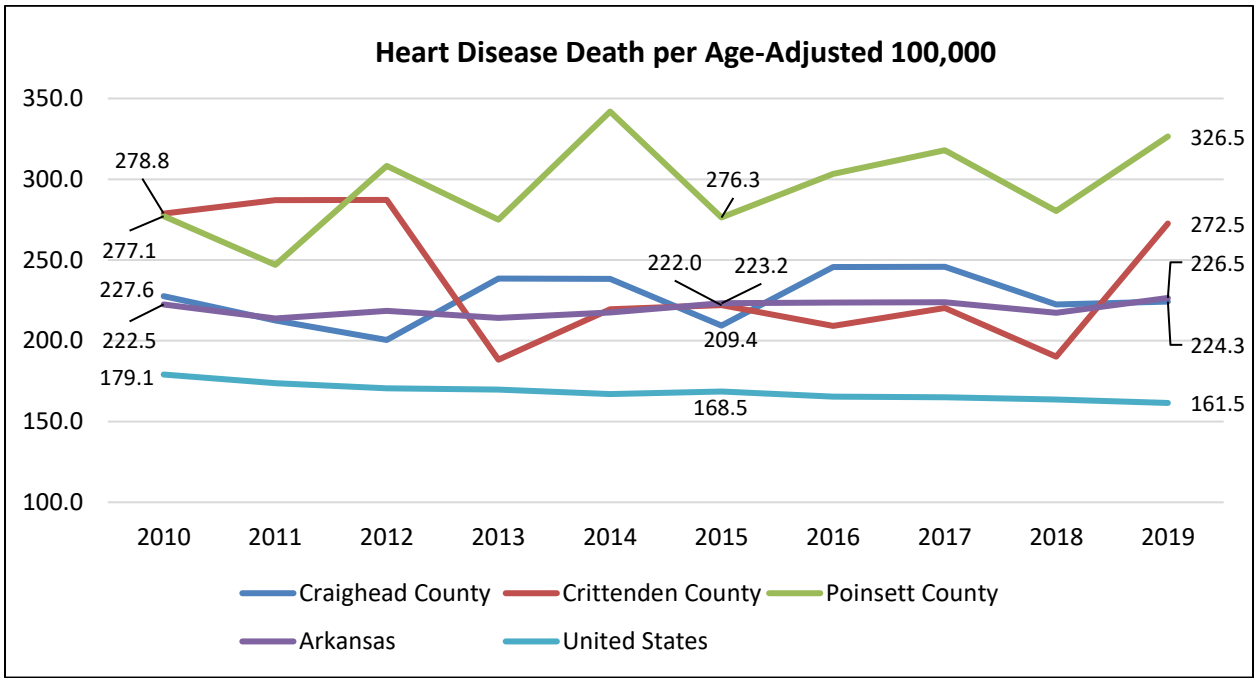
Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. **Arkansas and the Northeast Arkansas service area have a higher proportion of adults with high blood pressure and/or high cholesterol than the nation overall.** Crittenden and Poinsett counties have the highest proportion of adults with high blood pressure and/or high cholesterol and higher death rates due to heart disease. Poinsett County has historically had a high heart disease death rate and currently exceeds the statewide benchmark by 100 points. Crittenden County had a similar death rate as the state in 2018 but saw a spike in deaths in 2019 that should continue to be monitored. Craighead County largely mirrors the state for both heart disease prevalence and death rates.

Across Arkansas and the nation, heart disease death rates are higher among Black/African American residents than other racial or ethnic groups. **Within Craighead and Poinsett counties, there is a nearly 50-point difference in heart disease death rates between Black/African American and white residents.**

2017 Age-Adjusted Adult (Age 18+) Heart Disease Risk Factors Prevalence

	Adults with High Blood Pressure	Adults with High Cholesterol
Craighead County	35.2%	29.5%
Crittenden County	41.9%	32.3%
Poinsett County	38.0%	32.6%
Arkansas	37.7%	31.8%
United States	29.7%	29.3%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2015-2019 Heart Disease Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Total Population	229.4	222.6	300.3	222.9	164.8
White, Non-Hispanic	231.4	193.9	304.6	223.4	168.5
Black or African American, Non-Hispanic	279.9	225.2	352.6	252.3	208.7
Latinx origin (any race)	NA	NA	NA	82.2	113.9

Source: Centers for Disease Control and Prevention

Cancer

Cancer is the second leading cause of death nationally. Arkansas overall reports higher cancer incidence and death rates than the nation. This finding is likely reflective of both increased health risk factors and lower access to cancer screenings for early detection and treatment. Within the Northeast Arkansas service area, Craighead County largely mirrors statewide findings.

Crittenden and Poinsett counties have higher cancer incidence and death rates than the state and nation; recent and historical trends provide deeper insight into this finding. **Crittenden County has historically had a similar or lower cancer incidence rate as the nation, but a cancer death rate that exceeded both the state and nation. Low cancer incidence, coupled with high cancer death, is often indicative of delayed detection and treatment and a need for preventive screenings.** Crittenden County reports some of the lowest adult cancer screening prevalence in the service area. The recent spike in cancer deaths in Crittenden County from 2017 to 2018 should also be explored.

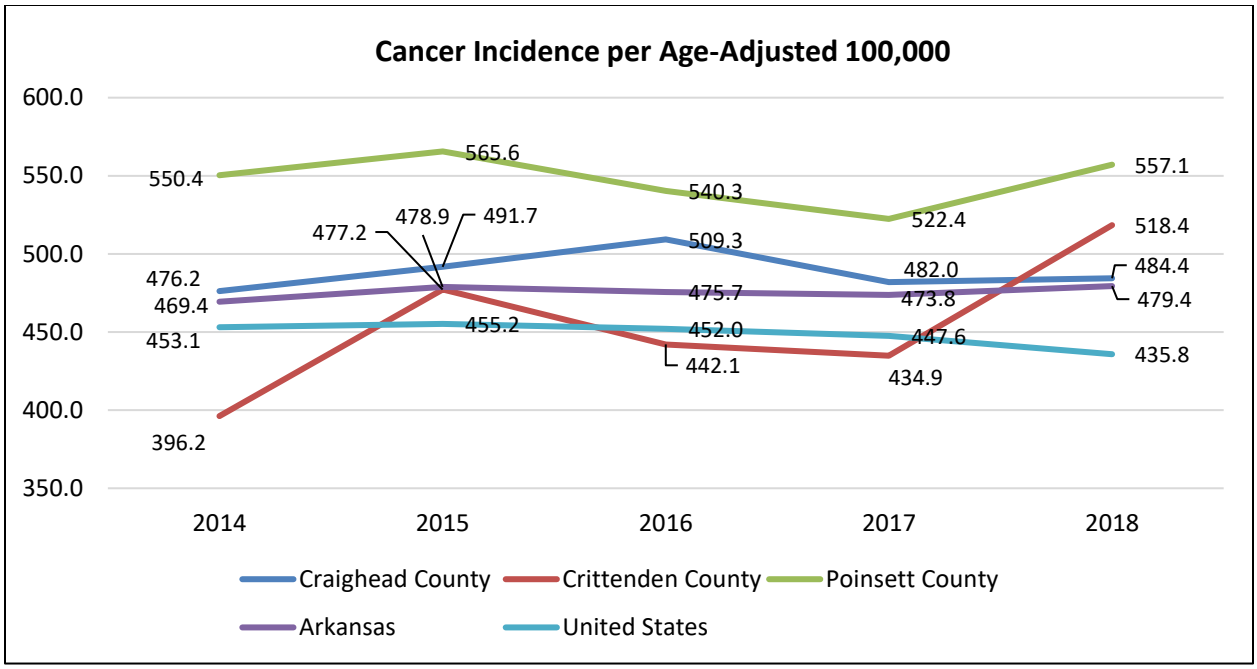
Poinsett County continues to report the highest cancer incidence and death rates in the service area. The county death rate exceeds the national death rate by nearly 75 points. **High cancer incidence and death rates in Poinsett County are largely due to disparities in lung cancer and may be a result of a higher prevalence of adult tobacco use.** Lung cancer incidence and death rates in Poinsett County are double or more than national rates, although the death rate declined from the 2019 CHNA. It is worth noting that all three Northeast Arkansas service area counties have a higher lung cancer death rate than the nation.

Consistent with other reported morbidity and mortality disparities, Black/African American people across Arkansas and the nation report disproportionately higher rates of cancer death compared to other racial and ethnic groups. Arkansas differs from the nation in that Black/African American people also report a higher rate of cancer incidence. This finding suggests increased health risk factors and less access to cancer screenings and early treatment, likely rooted in SDoH differences. **Within the Northeast Arkansas service area, cancer disparities are most evident in Craighead County, where Black/African American residents report notably higher cancer incidence and death rates compared to white residents.**

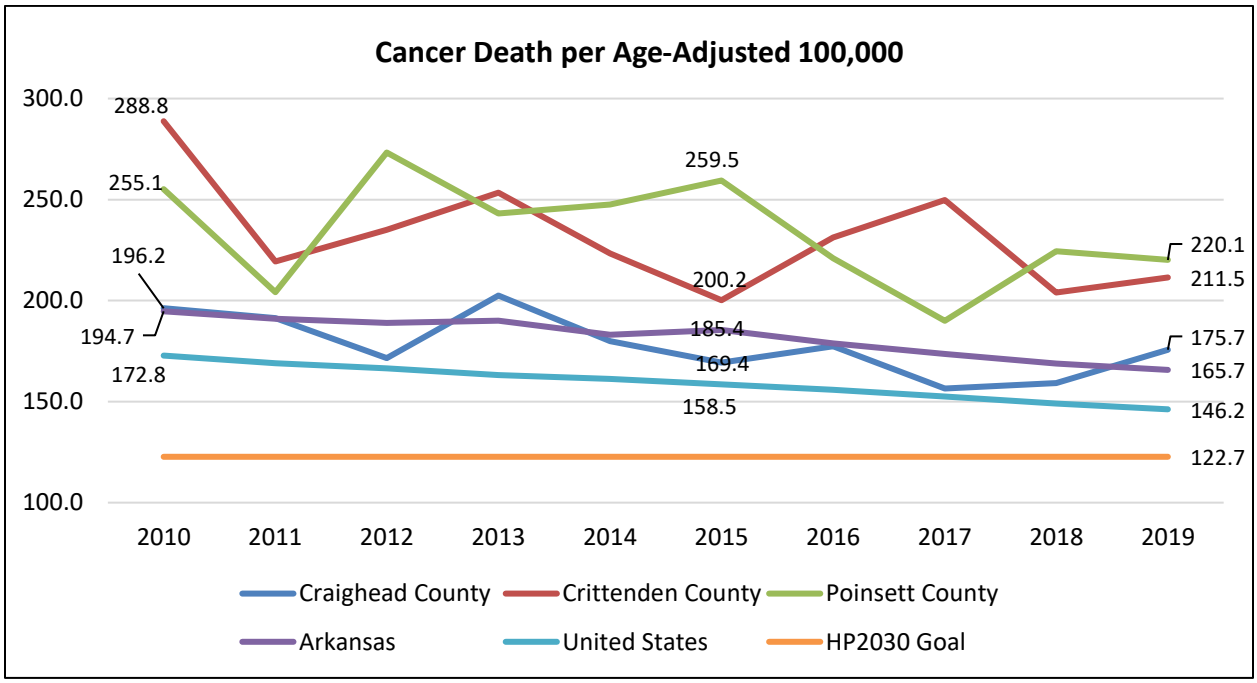
2018 Age-Adjusted Adult Cancer Screening Practices

	Mammogram in the Past 2 Years (50-74 years)	Cervical Cancer Screening (21-65 years)	Colon Cancer Screening (50-74 years)
Craighead County	72.9%	84.8%	64.2%
Crittenden County	74.4%	83.9%	57.9%
Poinsett County	68.4%	81.4%	58.4%
Arkansas	71.6%	76.0%	64.3%
United States	77.8%	85.5%	65.0%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Arkansas Cancer Registry & Centers for Disease Control and Prevention, United States Cancer Statistics

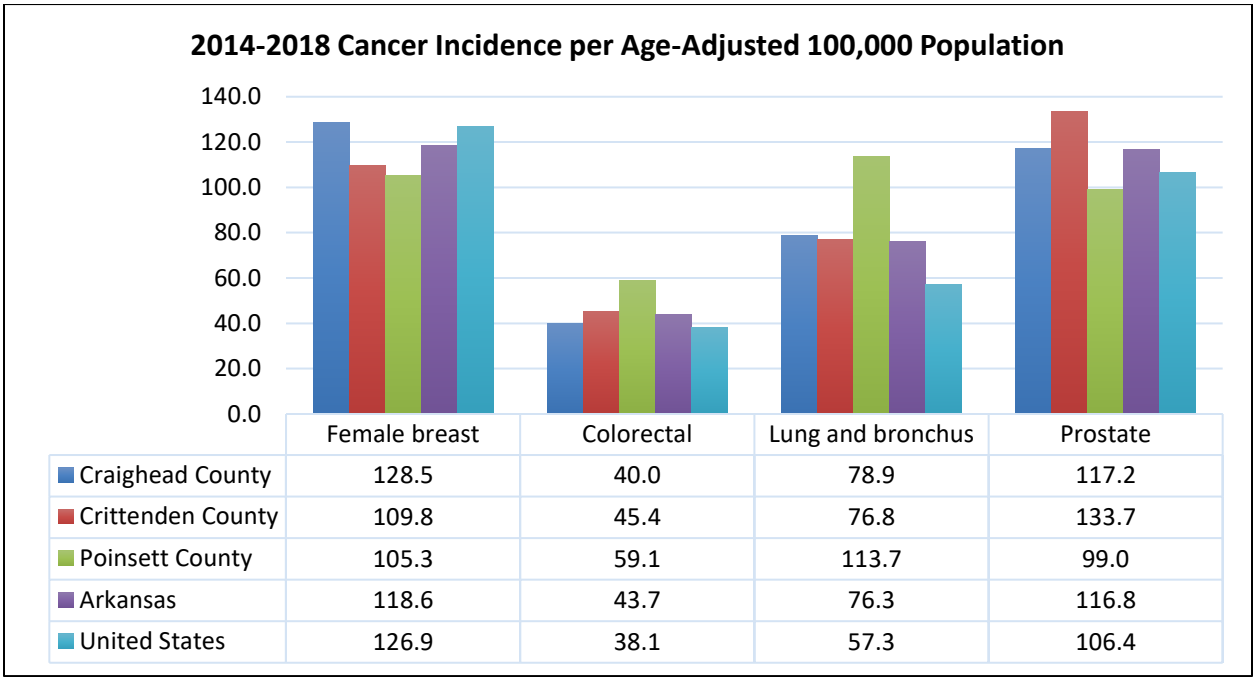


Source: Centers for Disease Control and Prevention

2014-2018 Age-Adjusted Cancer Incidence and Death per 100,000 Population by Race and Ethnicity

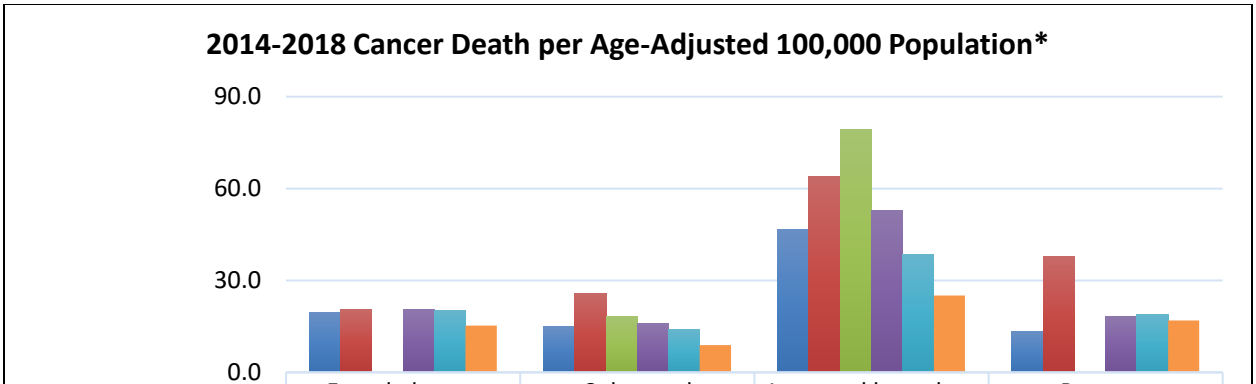
	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Cancer Incidence					
Total Population	488.4	453.9	546.8	475.6	449.0
White	479.1	419.5	548.7	469.1	451.3
Black or African American	596.2	453.1	524.5	490.2	445.4
Latinx origin (any race)	311.5	NA	NA	324.6	345.5
Cancer Death					
Total Population	168.2	221.7	228.5	177.8	155.6
White	167.4	205.0	230.7	178.4	156.4
Black or African American	232.3	259.5	220.1	203.8	177.6
Latinx origin (any race)	NA	NA	NA	66.6	111.3

Source: Arkansas Cancer Registry & Centers for Disease Control and Prevention



	Female breast	Colorectal	Lung and bronchus	Prostate
Craighead County	128.5	40.0	78.9	117.2
Crittenden County	109.8	45.4	76.8	133.7
Poinsett County	105.3	59.1	113.7	99.0
Arkansas	118.6	43.7	76.3	116.8
United States	126.9	38.1	57.3	106.4

Source: Arkansas Cancer Registry & Centers for Disease Control and Prevention, United States Cancer Statistics



	Female breast	Colorectal	Lung and bronchus	Prostate
Craighead County	19.5	15.0	46.6	13.3
Crittenden County	20.5	25.8	63.8	37.9
Poinsett County		18.1	79.2	
Arkansas	20.4	15.9	52.9	18.3
United States	20.1	13.9	38.4	18.9
HP2030	15.3	8.9	25.1	16.9

Source: Centers for Disease Control and Prevention
*Data are reported by county as available.

Respiratory Disease

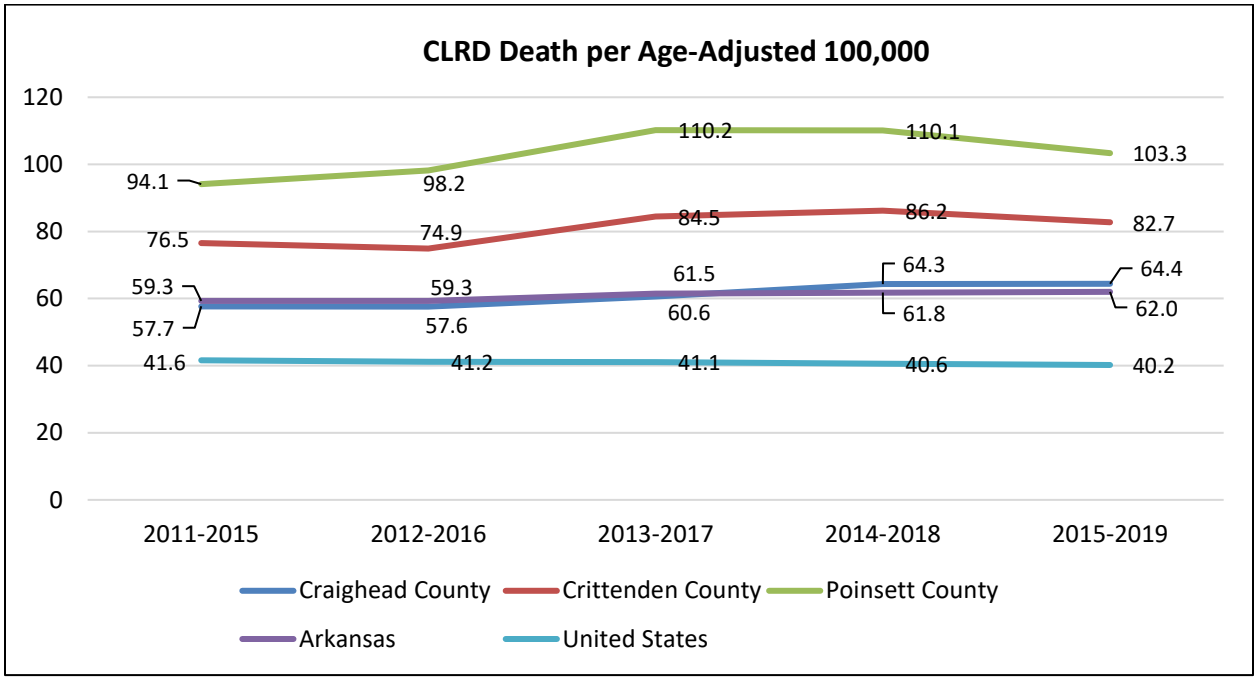
Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). All Northeast Arkansas service area counties have a higher prevalence of adult asthma and COPD compared to national benchmarks; Crittenden and Poinsett counties also exceed state benchmarks. **Respiratory disease disparities in Crittenden and Poinsett counties are due in part to higher smoking rates among adults and older housing stock, which is more likely to contain hazardous materials that can trigger asthma.** Poinsett County has the highest prevalence of adult smoking and COPD, and the highest death rate due to lung cancer, in the service area.

Contrary to the nation, the CLRD death rate slowly increased in Arkansas and Craighead County over the past five years. Consistent with having a higher prevalence of respiratory disease, Crittenden and Poinsett counties report higher CLRD death rates than both the state and nation, although rates slightly declined in recent years. Consistent with the nation, white people living in Arkansas and the Northeast Arkansas service area have higher rates of CLRD death than other racial or ethnic groups.

2018 Age-Adjusted Adult (Age 18+) Respiratory Disease Prevalence

	Adults with Current Asthma Diagnosis	Adults with COPD
Craighead County	9.7%	8.0%
Crittenden County	11.3%	8.8%
Poinsett County	10.7%	10.1%
Arkansas	9.9%	8.0%
United States	9.1%	6.2%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

2015-2019 CLRD Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Total Population	64.4	82.7	103.3	62.0	40.2
White, Non-Hispanic	66.2	100.6	107.2	67.5	45.5
Black or African American, Non-Hispanic	NA	56.4	NA	32.3	29.8
Latinx origin (any race)	NA	NA	NA	10.5	17.0

Source: Centers for Disease Control and Prevention

Aging Population

Arkansas is an aging state. Approximately 29.3% of Arkansas residents are age 55 or older and 16.6% are age 65 or older; national averages are 28.5% and 15.6%, respectively.

According to Centers for Medicare & Medicaid Services data, 70.8% of Arkansas Medicare beneficiaries age 65 or older have two or more chronic conditions, a similar proportion as the nation overall (70.3%). Within the Northeast Arkansas service area, all service area counties report a higher prevalence of comorbidities among older adults compared to state and national benchmarks, and all counties saw an increase in comorbidities from the 2019 CHNA. **Poinsett County has the highest proportion of older adults age 65 or older and the highest proportion of older adult Medicare beneficiaries with multiple chronic conditions.** Poinsett County saw the largest increase in the proportion of older adult beneficiaries with multiple chronic conditions from the 2019 CHNA, from 70.8% to 75.9%.

In addition to rising chronic disease prevalence, Northeast Arkansas service area older adults are more likely to have a disability when compared to state and national benchmarks. Nearly half of older adults in Craighead and Poinsett counties and more than 40% of adults in Crittenden County report a disability compared with 34.5% nationwide. The most common disability among service area older adults is ambulatory (walking), followed by hearing or independent living. Without appropriate support services, disabilities can impede disease management and treatment efforts and further exacerbate poorer health outcomes

2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Craighead County	28.1%	31.6%	23.0%	17.3%
Crittenden County	26.6%	29.4%	24.1%	19.9%
Poinsett County	24.1%	30.7%	25.1%	20.2%
Arkansas	29.2%	29.5%	23.1%	18.2%
United States	29.7%	29.4%	22.8%	18.2%

Source: Centers for Medicare & Medicaid Services

2015-2019 Older Adult Population by Disability Status

	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Total population	17.6%	16.8%	22.3%	17.3%	12.6%
65 years or older	46.3%	43.5%	46.6%	41.5%	34.5%
Ambulatory	32.4%	28.2%	33.5%	27.4%	21.9%
Hearing	18.9%	14.6%	21.1%	17.9%	14.3%
Independent living	19.8%	18.8%	19.2%	16.5%	14.2%
Cognitive	11.3%	8.3%	8.9%	10.3%	8.6%
Vision	9.2%	8.9%	8.9%	8.2%	6.3%

Source: U.S. Census Bureau, American Community Survey

Across Arkansas there is opportunity to improve older adult health status through better access to preventive services, such as recommended vaccines and cancer screenings. **Across all Northeast Arkansas service area counties, about 1 in 5 older adult men and women are up to date on preventive services**, **a lower proportion than the state and nation overall.** Consistent with having fewer SDoH barriers, including health care access, Craighead County older adults are the most likely to receive preventive services, although percentages are half of national averages.

2018 Age-Adjusted Older Adult (65+) Clinical Preventive Services*

	Older Adult Men Who Are Up To Date On Clinical Preventive Services	Older Adult Women Who Are Up To Date On Clinical Preventive Services
Craighead County	21.9%	20.6%
Crittenden County	19.1%	17.7%
Poinsett County	18.8%	17.1%
Arkansas	36.3%	34.1%
United States	42.4%	41.6%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS

*Includes a flu vaccine in the past year, pneumococcal pneumonia vaccine ever, colorectal cancer screening and mammogram in the past two years (women).

Older adult health care utilization and costs increase significantly with a higher number of reported chronic diseases. Tracking these indicators helps plan allocation of resources to best anticipate and serve need in the community. When compared with the nation, Arkansas overall has lower per capita spending among older adult Medicare beneficiaries with fewer than four chronic conditions, but higher spending for beneficiaries with four or more chronic conditions. Related to this finding, Arkansas reports higher emergency department (ED) utilization for beneficiaries with four or more chronic conditions.

Within the Northeast Arkansas service area, all counties report higher spending than the state and nation for beneficiaries with six or more chronic conditions, with the highest spending in Craighead and Poinsett counties. Craighead and Poinsett counties also report more ED visits among beneficiaries with six or more conditions.

2018 Per Capita Standardized Spending* for Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Craighead County	$2,023	$5,087	$11,189	$32,927
Crittenden County	$1,402	$5,019	$9,803	$30,395
Poinsett County	$2,043	$5,135	$11,331	$33,118
Arkansas	$1,845	$5,460	$11,076	$29,664
United States	$1,944	$5,502	$10,509	$29,045

Source: Centers for Medicare & Medicaid Services

*Standardized spending takes into account payment factors that are unrelated to the care provided (e.g., geographic variation in Medicare payment amounts).

2018 ED Visits per 1,000 Medicare Beneficiaries Age 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Craighead County	127.6	316.6	672.1	1,977.4
Crittenden County	73.6	240.6	510.6	1,692.6
Poinsett County	115.0	261.4	670.1	2,003.2
Arkansas	123.2	324.7	659.5	1,765.7
United States	122.6	318.4	621.1	1,719.1

Source: Centers for Medicare & Medicaid Services

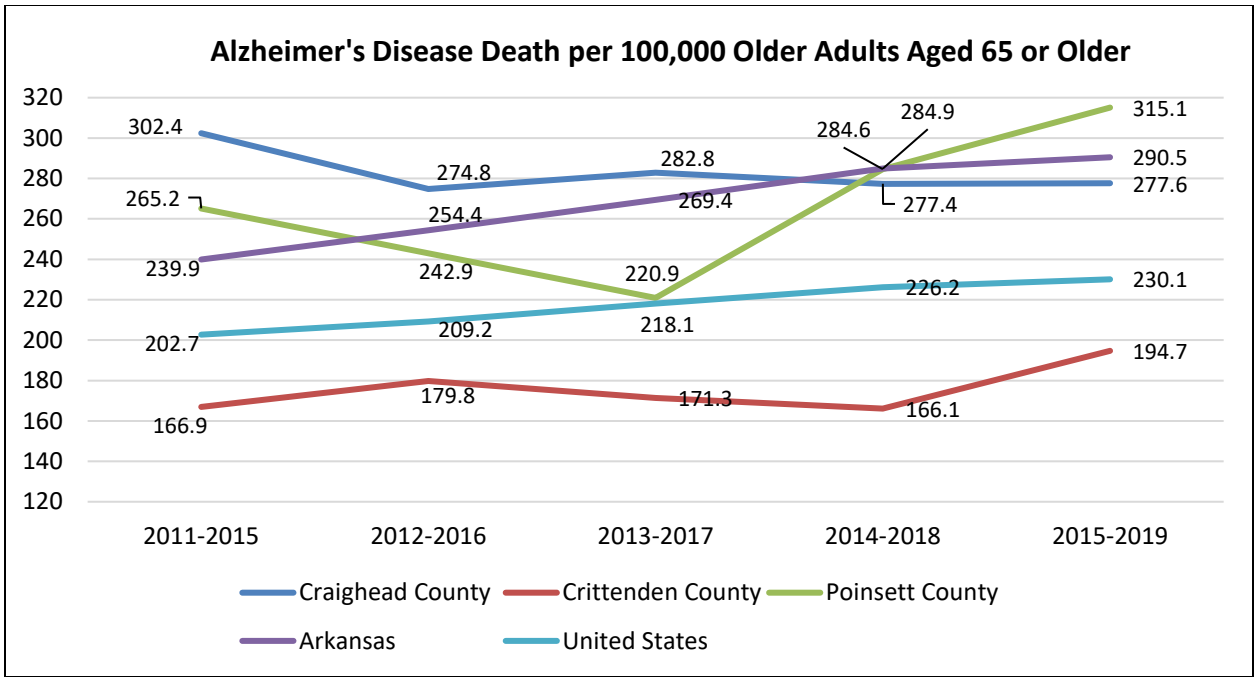
Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol and arthritis. This finding is consistent across Arkansas. In comparison with the nation, Arkansas older adult Medicare beneficiaries generally report a similar or lower prevalence of chronic conditions, with the exception of Alzheimer's disease, COPD, heart failure, hypertension and ischemic heart disease.

Within the Northeast Arkansas service area, all three counties report a higher prevalence of arthritis and hypertension than the state and nation. **Within Craighead and Poinsett counties, it is worth noting that a higher proportion of older adult Medicare beneficiaries have been diagnosed with Alzheimer's disease and both counties have a high rate of death from Alzheimer's disease.** The Poinsett County Alzheimer's disease death rate increased sharply in recent years. Craighead and Poinsett counties also report a higher proportion of beneficiaries with diagnosed depression. In Crittenden County, a higher proportion of older adults have been diagnosed with diabetes, a finding that is consistent with higher prevalence among county adults overall.

2018 Chronic Condition Prevalence among Medicare Beneficiaries Age 65 Years or Older

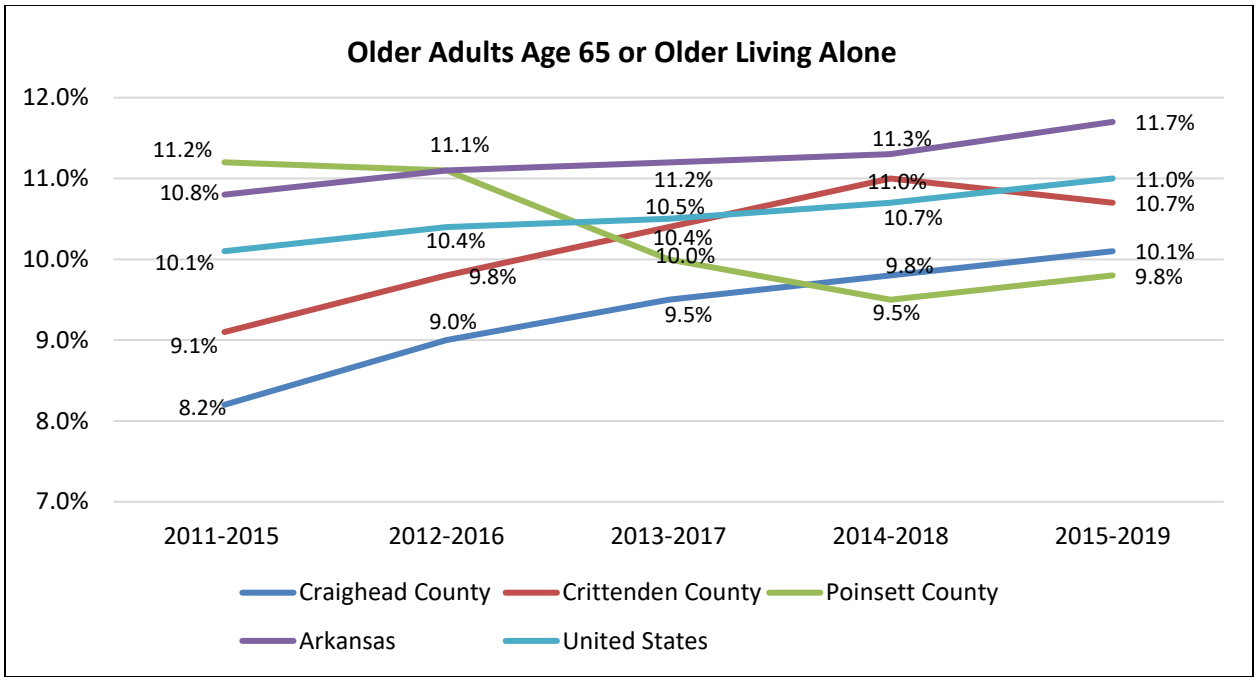
	Craighead County	Crittenden County	Poinsett County	Arkansas	United States
Alzheimer's Disease	14.6%	12.8%	16.5%	13.3%	11.9%
Arthritis	38.6%	35.0%	40.7%	34.7%	34.6%
Asthma	2.7%	2.8%	2.7%	3.5%	4.5%
Cancer	7.6%	7.9%	8.1%	8.9%	9.3%
Chronic Kidney Disease	19.5%	28.1%	23.1%	22.4%	24.9%
COPD	12.4%	11.5%	17.1%	12.4%	11.4%
Depression	18.6%	12.4%	18.0%	16.2%	16.0%
Diabetes	26.3%	31.1%	30.1%	25.9%	27.1%
Heart Failure	13.7%	20.2%	15.3%	15.8%	14.6%
High Cholesterol	47.7%	48.5%	51.2%	45.4%	50.5%
Hypertension	63.2%	69.2%	67.8%	62.7%	59.8%
Ischemic Heart Disease	28.7%	31.5%	32.3%	33.6%	28.6%
Stroke	4.2%	4.6%	5.1%	4.1%	3.9%

Source: Centers for Medicare & Medicaid Services



Source: Centers for Disease Control and Prevention

In older adults, chronic illness often leads to diminished quality of life and increased social isolation. Social isolation may also impede effective chronic illness management and accelerate the negative impact of chronic diseases. One indicator of social isolation among older adults is the percentage of adults age 65 years or older who live alone. **Consistent with the nation, the proportion of older adults living alone increased across Arkansas and in Craighead and Crittenden counties.** Arkansas older adults are more likely to live alone when compared to their peers across the U.S.; Northeast Arkansas service area counties largely mirror the nation at 10% to 11% of older adults living alone.



Source: U.S. Census Bureau, American Community Survey

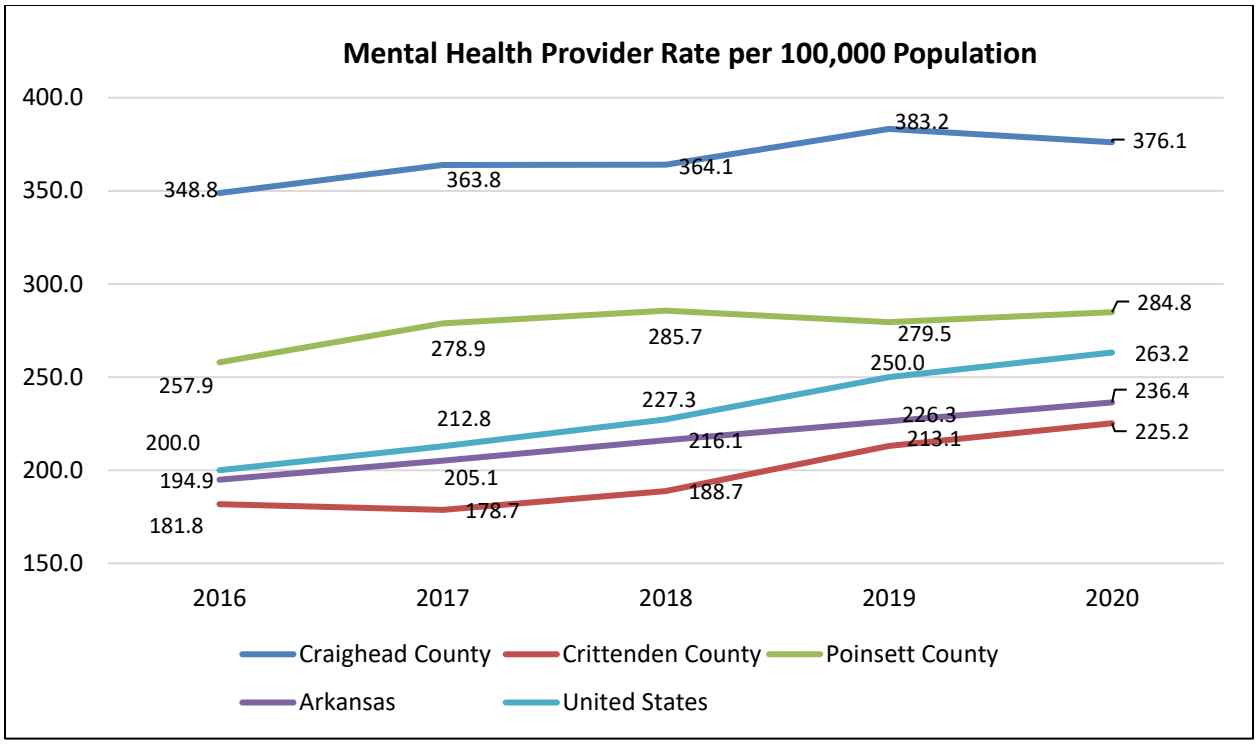
Behavioral Health and Substance Use Disorder

Arkansas overall has comparable access to mental health providers as the nation, as indicated by a similar rate of providers per 100,000 population. Consistent with the 2019 CHNA, both Craighead and Poinsett counties exceed national and statewide mental health provider rates. While Crittenden County has a lower provider rate than other service area counties, it is generally on par with the state.

Access to mental health providers is improving nationally and statewide. Within the Northeast Arkansas service area, Crittenden County saw the largest increase in the rate of mental health providers from 2016 to 2020 (+43.4). Craighead and Poinsett counties both saw rate increases of approximately +27.

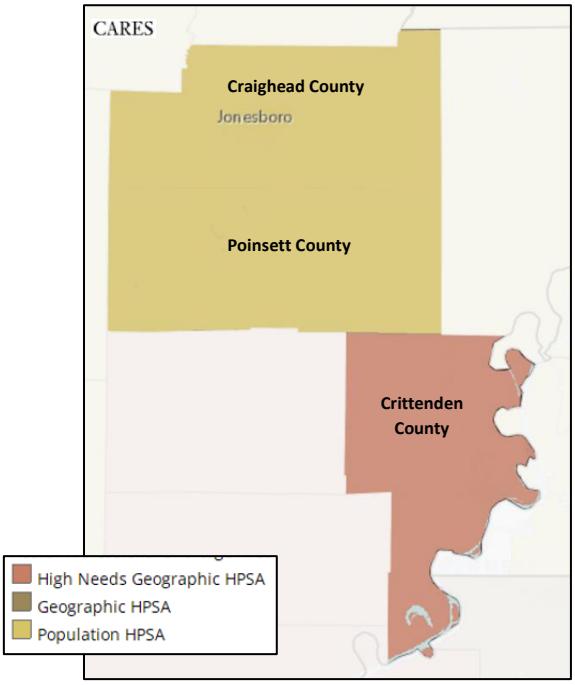
Note: The mental health provider rate includes psychiatrists, psychologists, licensed clinical social workers, counselors and mental health providers that treat alcohol and other drug abuse, among others. It does not account for potential shortages in specific provider types.

Despite increasing mental health provider availability, all of the Northeast Arkansas service area is a mental health care HPSA. **Craighead and Poinsett counties are HPSAs for low-income individuals, despite having mental health provider rates that exceed state and national rates. Crittenden County is a high needs geographic HPSA** based on a combination of low provider availability, socio-economic barriers like poverty and a higher prevalence of vulnerable populations like youth and older adults.



Source: Centers for Medicare and Medicaid Services

Mental Health Care HPSAs



Source: Health Resources and Services Administration, 2021

Nearly 1 in 5 adults across Arkansas and the Northeast Arkansas service area report having poor mental health on 14 or more days during a 30-day period, a higher proportion than the nation overall. This measure is an indicator of persistent, and likely severe, mental health issues, which may impact quality of life and overall wellness.

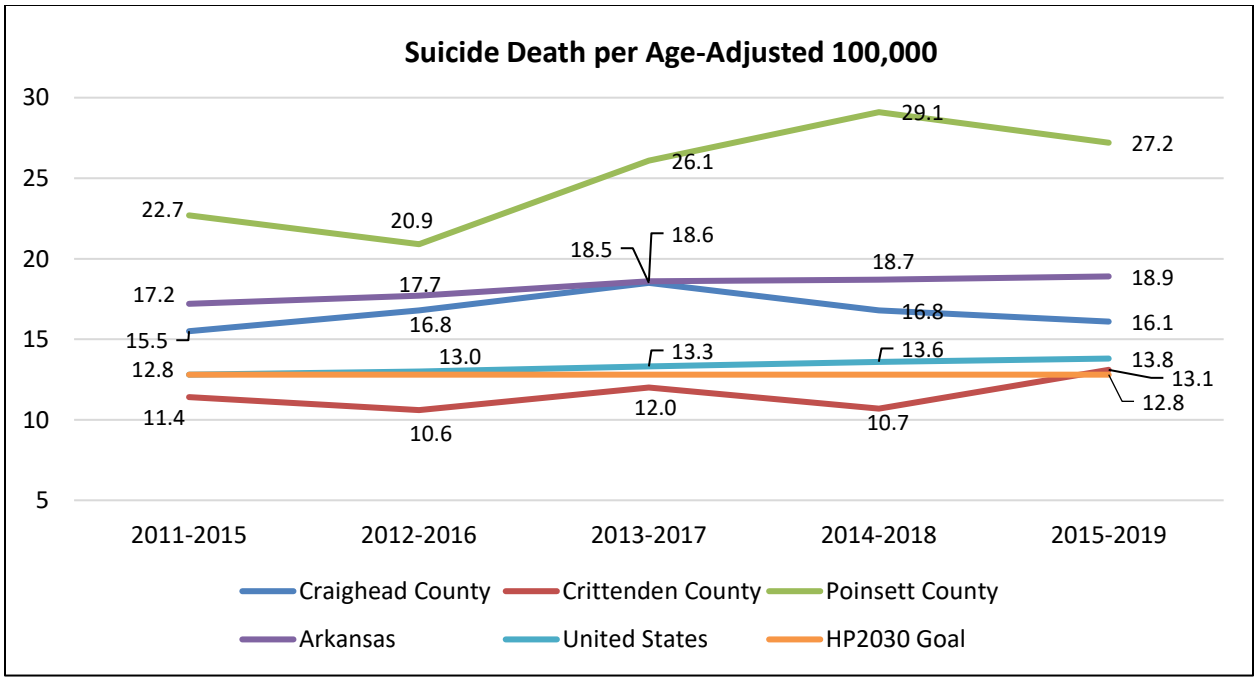
2018 Age-Adjusted Adult (Age 18+) Poor Mental Health Days

	Average Mentally Unhealthy Days per Month	Frequent Mental Distress: 14 or More Poor Mental Health Days per Month
Craighead County	5.2	15.8%
Crittenden County	5.6	17.2%
Poinsett County	5.9	18.5%
Arkansas	5.3	16.7%
United States	4.1	12.9%

Source: Centers for Disease Control and Prevention, BRFSS

Frequent mental distress is a risk factor for suicide. Suicide deaths steadily increased across the U.S. and Arkansas over the past decade, and Arkansas has a higher rate of suicide death than the nation. Within the Northeast Arkansas service area, **Poinsett County has a higher prevalence of frequent mental distress and a suicide death rate that is double the national rate.** The Craighead County suicide death rate declined in recent years and Crittenden County has historically met the HP2030 goal for suicide deaths.

Suicide death rates should continue to be monitored as deaths reflect pre-COVID-19 pandemic rates. An analysis of demographic characteristics for suicide deaths occurring from 2015 to 2019 suggests that deaths are more prominent among males, middle-aged adults and white residents.



Source: Centers for Disease Control and Prevention

2015-2019 Arkansas Suicide Deaths, Demographic Characteristics

	Suicide Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	640	8.4
Male	2,225	30.0
Age*		
5-14	29	1.5
15-24	363	18.1
25-34	507	25.7
35-44	481	26.2
45-54	494	26.5
55-64	471	24.7
65-74	283	19.5
75-84	175	23.1
85+	62	21.4
Race and Ethnicity		
White, Non-Hispanic	2,601	22.9
Black/African American, Non-Hispanic	156	6.8
Latinx origin (any race)	55	4.9

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

Substance use disorder affects a person's brain and behaviors and leads to an inability to control the use of substances which include alcohol, marijuana and opioids, among others. Alcohol is the most prevalent addictive substance used among adults.

Across the U.S. and Arkansas, nearly 1 in 5 adults report excessive drinking. Excessive drinking includes heavy and/or binge drinking. **Northeast Arkansas service area counties report a lower prevalence of excessive drinking compared to the state and nation. Craighead and Crittenden counties also report fewer driving deaths due to alcohol impairment than the state and nation.** Poinsett County exceeds both the state and nation for driving deaths due to alcohol impairment; related deaths totaled 34 from 2015 to 2019.

Alcohol Use Disorder Indicators

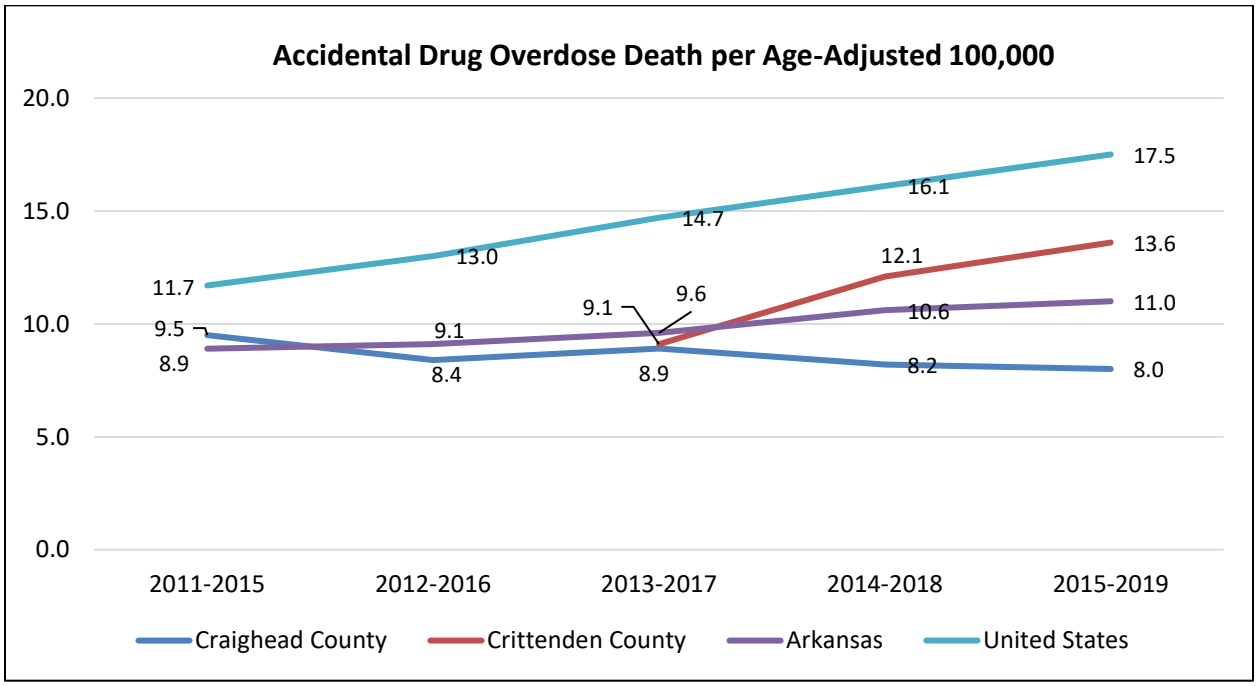
	2018 Adults Reporting Excessive Drinking (age-adjusted)	2015-2019 Driving Deaths due to Alcohol Impairment (%, count)
Craighead County	15.0%	19.3%, n=88
Crittenden County	13.4%	21.2%, n=66
Poinsett County	15.5%	29.4%, n=34
Arkansas	17.3%	26.2%
United States	19.0%	27.0%

Source: Centers for Disease Control and Prevention, BRFSS

The CDC reports that the number of accidental drug overdose deaths nationwide increased by nearly 5% from 2018 to 2019 and has quadrupled since 1999. Over 70% of the 70,630 overdose deaths in 2019 involved an opioid. Nationally, heroin- and prescription opioid-involved deaths are declining, while synthetic opioid-involved deaths are increasing. Synthetic opioids such as fentanyl are laboratory produced and have similar effects as natural opioids but can have far greater potency, increasing the risk for overdose and death.

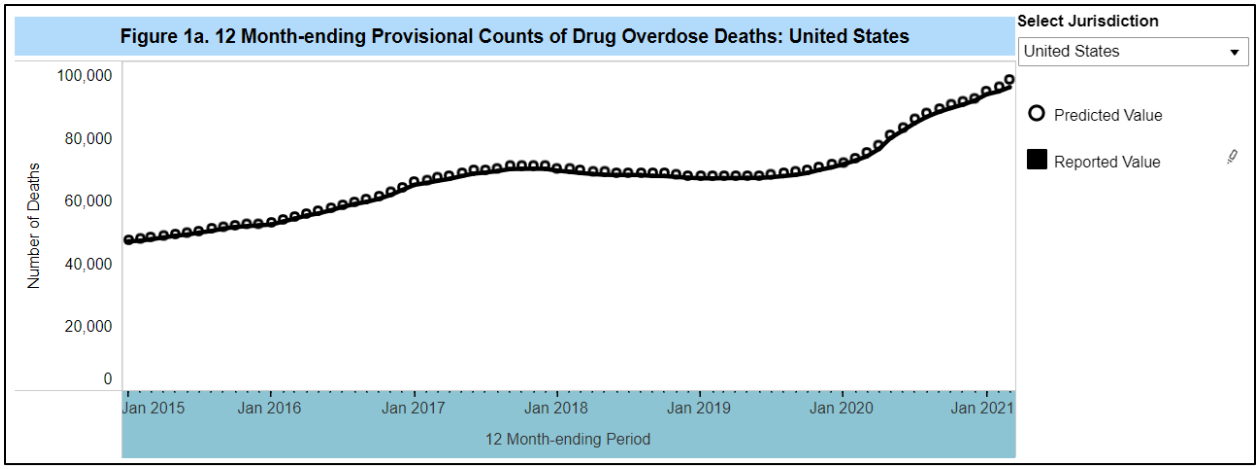
Arkansas overall has had fewer accidental drug overdose deaths than the nation, as indicated by the rate of deaths per 100,000 population. Within the Northeast Arkansas service area, Craighead County has a declining rate of death that is lower than the state and nation. The Crittenden County death rate should continue to be monitored as it increased in recent years and exceeds the statewide rate. Death rates are not reported for Poinsett County due to low death counts.

While Arkansas overall reports fewer accidental drug overdose deaths than the nation, these data reflect pre-pandemic findings. Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the U.S. **Based on a rolling 12-month count, the number of drug overdose deaths in Arkansas is predicted to have increased 39% from March 2020 to March 2021, compared to a national increase of 30.8%.**



Source: Centers for Disease Control and Prevention

*Data are not reportable for Poinsett County due to low death counts. Poinsett County had 17 accidental drug overdose deaths from 2015 to 2019. Data prior to 2013 to 2017 are also not reportable for Crittenden County due to low death counts.



Source: Centers for Disease Control and Prevention

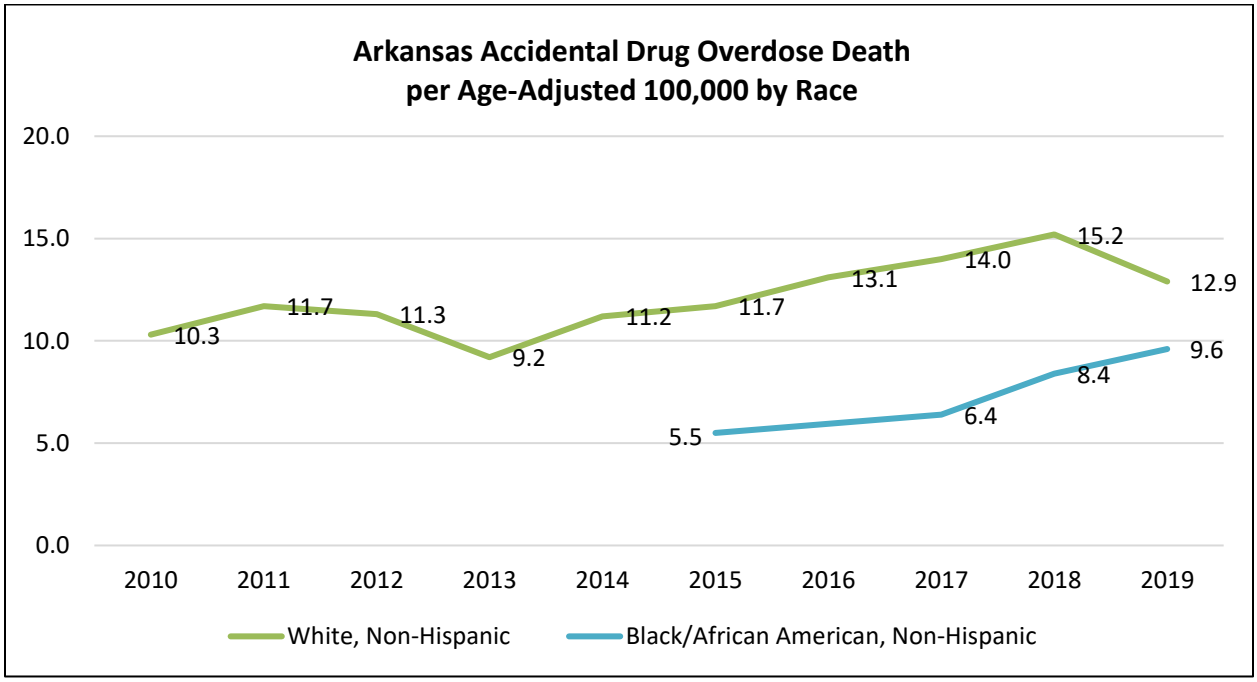
While the opioid epidemic has affected all genders and age groups, the largest proportion of accidental overdose deaths has historically been among males and young to middle-aged adults. From 2015 to 2019 across Arkansas, males accounted for 61% of overdose deaths. When considered by age, adults age 35 to 44 accounted for the largest proportion of overdose deaths (26%), followed by adults aged 25 to 34 and 45 to 54 (23% each).

2015-2019 Arkansas Accidental Overdose Deaths, Demographic Characteristics

	Accidental Overdose Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	612	8.4
Male	956	13.7
Age*		
15-24	130	6.5
25-34	358	18.2
35-44	408	22.2
45-54	353	18.9
55-64	241	12.6
65-74	42	2.9
75-84	25	3.3
85+	10	NA
Race and Ethnicity		
White, Non-Hispanic	1,388	13.4
Black/African American, Non-Hispanic	147	6.6
Latinx origin (any race)	23	2.5

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

From 2015 to 2019, Arkansas saw a sharp increase in accidental overdose deaths among Black/African American people. This trend is occurring nationally and is rooted in racial inequities in addiction treatment and prevention efforts. Studies conducted by the National Institutes of Health have found that Black/African American people are less likely to be prescribed medications for opioid use disorder or to have access to life saving antidote drugs like naloxone. As of 2019, the death rate declined among white residents but continues to be higher relative to Black/African American residents.

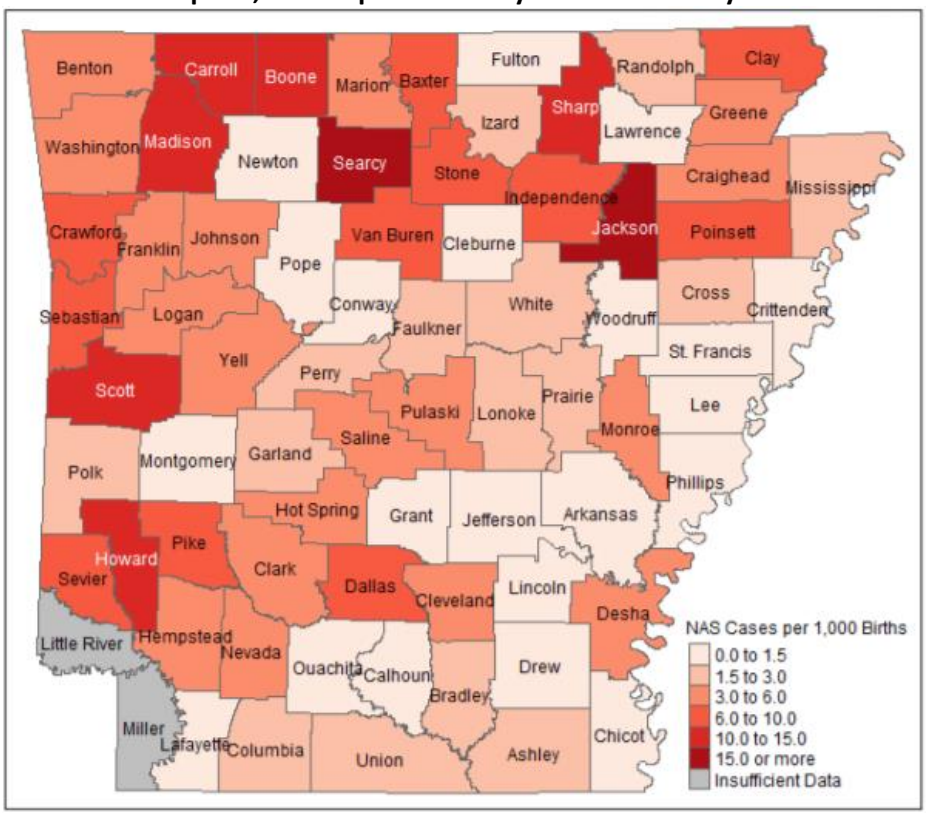


Source: Centers for Disease Control and Prevention
*Latinx death rate data are not trended due to low death counts. Data are not reportable for Black/African American residents prior to 2015 due to low death counts; 2016 data are also suppressed.

Neonatal abstinence syndrome (NAS) is defined as an array of withdrawal symptoms that develop soon after birth in newborns exposed to addictive drugs while in the mother's womb. Although most commonly associated with opioid exposure, other substances, including antidepressants and benzodiazepines, can also cause NAS. In addition to difficulties of withdrawal after birth, problems in the baby may include premature birth, seizures, respiratory distress, birth defects, poor growth and other developmental problems.

According to the most recent report on NAS by the Arkansas Department of Health, **the rate of NAS diagnosis per 1,000 births in Arkansas increased nearly fifteen-fold between 2000 and 2017, from 0.3 to 4.8.** In 2017, the rate of NAS diagnosis was higher among white residents than non-white residents, and the median medical care cost for babies diagnosed with NAS was $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, including Poinsett County.

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



Source: Arkansas Department of Health, 2014–2017

Youth Health

Overweight and Obesity

Childhood obesity is a persistent and significant threat to the long-term health of today's youth. The CDC reports that children who have obesity are more likely to have high blood pressure and high cholesterol; glucose intolerance, insulin resistance and Type 2 diabetes; breathing problems like asthma and sleep apnea; joint and musculoskeletal problems; psychological and social problems, such as anxiety, depression, low self-esteem and bullying; among other concerns.

A higher proportion of Arkansas high school students have obesity compared to the nation overall, and the proportion is increasing at a faster rate. The proportion of Arkansas high school students with obesity increased 4.3 percentage points from 2013 to 2019, compared to a national average increase of 1.8 points. Consistent with the nation, the most at-risk populations for youth obesity in Arkansas are males (25.2%), Black/African Americans (25.0%) and Latinx (23.0%). Contrary to the nation, a similar proportion of Arkansas high school students identifying as straight or lesbian, gay or bisexual (LGB) have obesity.

High School Students with Obesity

	2013	2015	2017	2019
Arkansas	17.8%	18.0%	21.7%	22.1%
United States	13.7%	13.9%	14.8%	15.5%

Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students with Obesity

	Arkansas	United States
Gender		
Female	19.0%	11.9%
Male	25.2%	18.9%
Race and Ethnicity		
White	21.0%	13.1%
Black or African American	25.0%	21.1%
Latinx origin (any race)	23.0%	19.2%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	19.5%	21.0%
Straight	21.4%	14.4%

Source: Centers for Disease Control and Prevention, YRBS

Behavioral Health and Substance Use Disorder

Arkansas has historically reported a higher percentage of youth attempting suicide than the nation. **Excluding 2017, approximately 11% to 12% of Arkansas high school students reported an attempted suicide compared to 8% to 9% of students across the nation.** Arkansas saw an increase in the proportion of students reporting an attempted suicide in 2017 that should continue to be monitored. When considered by subgroup, attempted suicides were highest among students identifying as LGB, followed by Black/African American people and females.

Contributing to acute psychiatric distress among Arkansas youth is an overall increasing percentage of school students who report feeling consistently sad or hopeless. Incidence of violence, including fighting, bullying and dating violence, has generally been stagnant or declining.

High School Students Reporting an Attempted Suicide

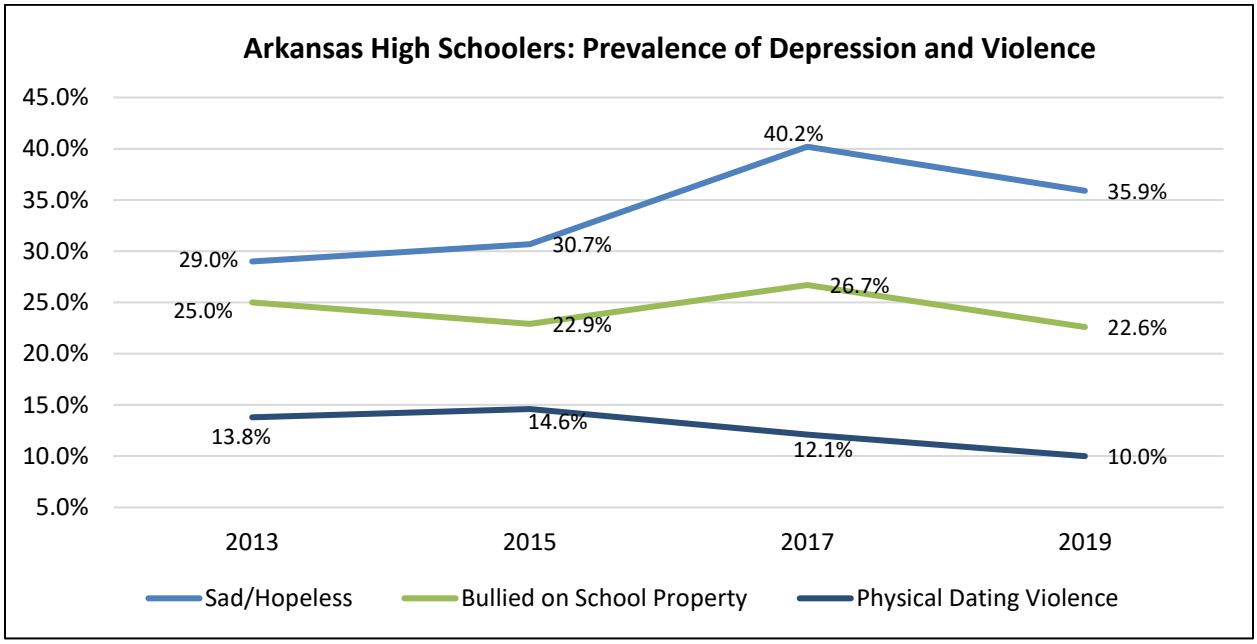
	2013	2015	2017	2019
Arkansas	10.8%	12.1%	15.8%	11.5%
United States	8.0%	8.6%	7.4%	8.9%

Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students Reporting an Attempted Suicide

	Arkansas	United States
Gender		
Female	14.7%	11.0%
Male	8.0%	6.6%
Race and Ethnicity		
White	9.5%	7.9%
Black or African American	16.5%	11.8%
Latinx origin (any race)	11.0%	8.9%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	29.7%	23.4%
Straight	8.7%	6.4%

Source: Centers for Disease Control and Prevention, YRBS



Source: Centers for Disease Control and Prevention, YRBS

The use of e-cigarettes among high school students continues to rise nationally, while the use of traditional cigarettes is declining. Within Arkansas, the use of traditional cigarettes is also declining, although the percentage remains higher than the nation (9.7% vs. 6%). **Arkansas has a lower proportion of students using e-cigarettes as of 2019, but an estimated 1 in 4 students still report current use.** Arkansas students who report current e-cigarette use are more likely to be male, white and/or LGB.

High School Students Reporting Current (within past 30 days) E-Cigarette Use

	2015	2017	2019
Arkansas	26.4%	13.9%	24.3%
United States	24.1%	13.2%	32.7%

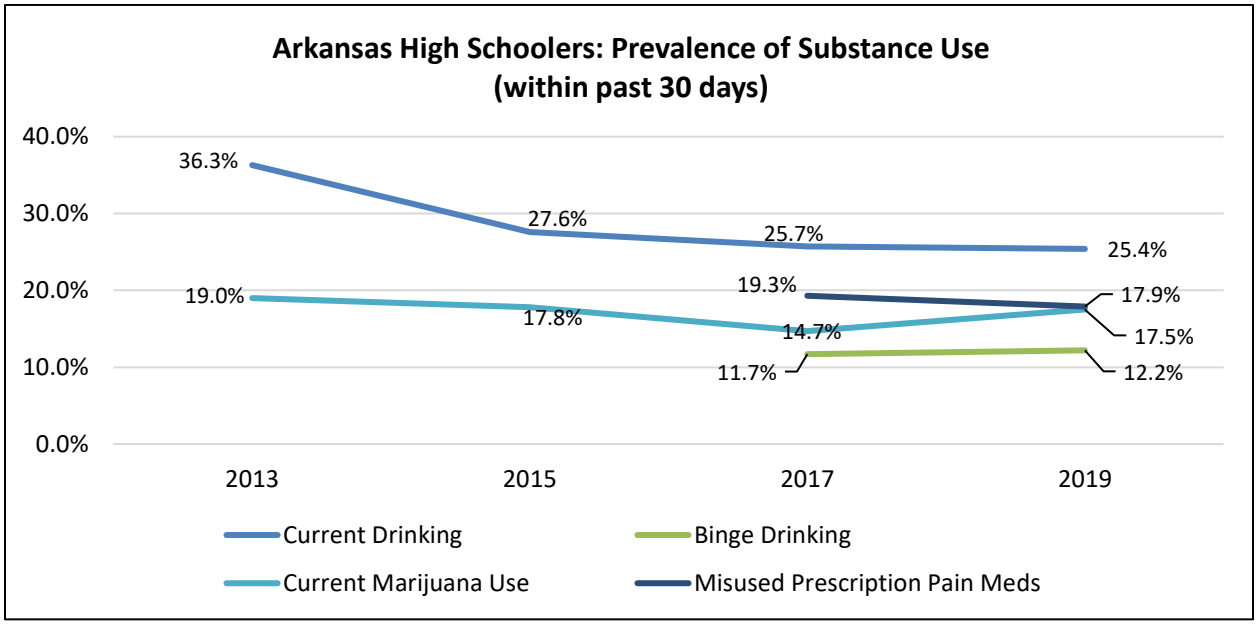
Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students Reporting Current (within past 30 days) E-Cigarette Use

	Arkansas	United States
Gender		
Female	20.6%	33.5%
Male	27.8%	32.0%
Race and Ethnicity		
White	28.9%	38.3%
Black or African American	12.6%	19.7%
Latinx origin (any race)	19.4%	31.2%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	29.9%	34.1%
Straight	24.0%	32.8%

Source: Centers for Disease Control and Prevention, YRBS

Consistent with the nation, substance use among Arkansas high school students is generally declining, however, approximately 1 in 4 students report current alcohol use and 1 in 5 students report current marijuana use and/or misuse of prescription pain medications.



Source: Centers for Disease Control and Prevention, YRBS

High School Students Reporting Current (within past 30 days) Alcohol Use

	2013	2015	2017	2019
Arkansas	36.3%	27.6%	25.7%	25.4%
United States	34.9%	32.8%	29.8%	29.1%

Source: Centers for Disease Control and Prevention, YRBS

2019 High School Students Reporting Current (within past 30 days) Alcohol Use

	Arkansas	United States
Gender		
Female	24.0%	31.9%
Male	26.6%	26.4%
Race and Ethnicity		
White	28.0%	34.2%
Black or African American	14.9%	16.8%
Latinx origin (any race)	28.6%	28.4%
Sexual Identity		
Lesbian, Gay, Bisexual (LGB)	34.9%	33.9%
Straight	24.4%	28.8%

Source: Centers for Disease Control and Prevention, YRBS

Maternal and Infant Health

Consistent with the 2019 CHNA, all Northeast Arkansas service area counties have a higher rate of birth than the state and nation, although the birth rate declined from the prior assessment. Consistent with racial and ethnic population trends, Black/African American and Latinx residents have a higher rate of birth than white residents across Arkansas, the nation and Craighead and Crittenden counties. Poinsett County has a similar rate of birth among all reported racial and ethnic groups.

2019 Births and Birth Rate per 1,000 Population by Race and Ethnicity

	Total Births	Birth Rate per 1,000	White, Non-Hispanic Birth Rate	Black/African American, Non-Hispanic Birth Rate	Latinx Birth Rate
Craighead County	1,399	12.7	10.9	20.1	15.5
Crittenden County	705	14.7	13.5	16.3	NA
Poinsett County	298	12.7	12.8	10.8	12.8
Arkansas	36,411	12.1	10.8	14.9	16.8
United States	3,747,540	11.4	9.8	13.4	14.6

Source: Arkansas Department of Health & Centers for Disease Control and Prevention

Arkansas overall reports poorer birth outcomes than the nation, including fewer pregnant people receiving early prenatal care, a higher proportion of low birth weight and premature births and higher infant and maternal death rates. These findings are more pronounced in the Northeast Arkansas service area, particularly in Crittenden County, where fewer than 57% of pregnant people receive first trimester prenatal care, more than 15% of babies are born premature and/or with low birth weight and the infant mortality rate exceeds state and national rates. Crittenden County also reports the highest teen birth rate in the region, and contrary to state and nation trends, the rate increased in recent years.

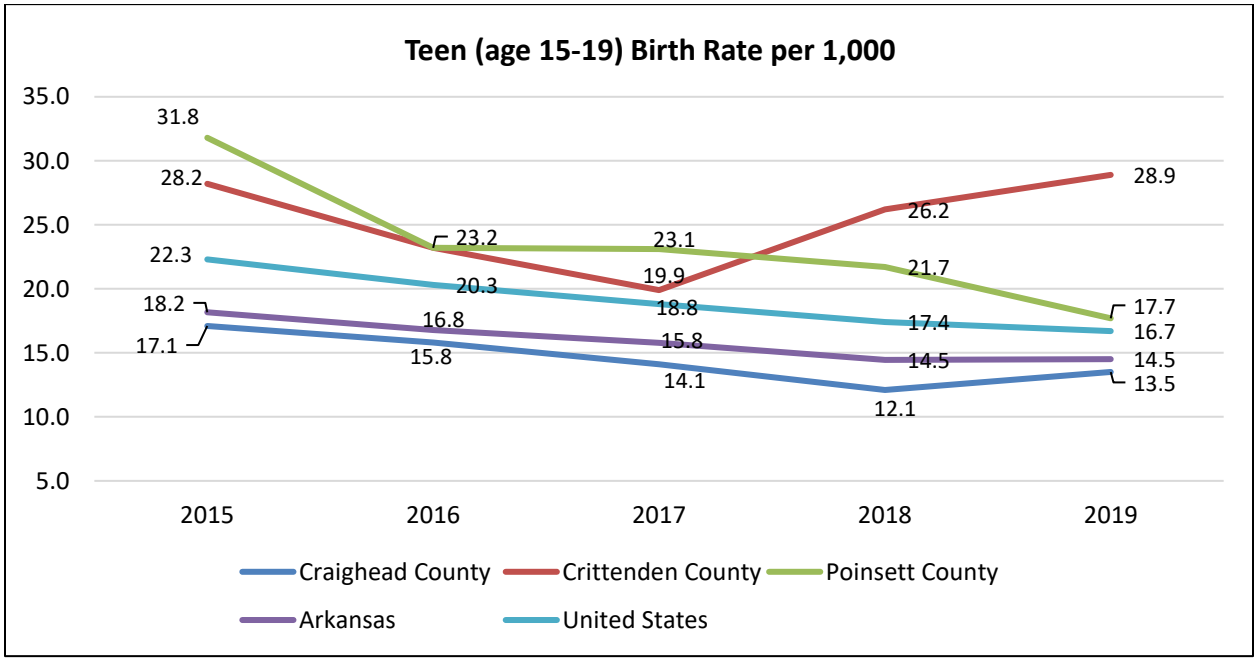
While both white and Black/African American residents residing in Arkansas report poorer birth outcomes compared to the nation overall, these disparities disproportionately impact Black/African American residents. Fewer than 65% of Black/African American pregnant people receive first trimester prenatal care compared to 75% of white pregnant people. Nearly 18% of Black/African American babies are born premature compared with 11.4% of white babies and 14.9% of Black/African American babies have low birth weight compared to 7.8% of white babies. **The statewide infant mortality rate for Black/African American people is 70% higher than the white infant mortality rate; the maternal mortality rate is more than 80% higher.** Latinx birth outcomes are generally consistent with or better than white birth outcomes.

Positive birth outcomes for Arkansas include a lower, declining rate of teen births and increasing prenatal care access. The Arkansas teen birth rate declined nearly four points from 2015 to 2019 and is lower than the national rate. The teen birth rate also declined in Craighead and Poinsett counties and is similar to state or national rates. **Arkansas saw a significant increase (+12.6 percentage points) in the proportion of pregnant people receiving first trimester prenatal care from 2015 to 2019. Poinsett County saw a similar increase as the state, particularly among Black/African American residents.** From 2015 to 2019, the proportion of Black/African American residents in Poinsett County receiving first trimester prenatal care increased from 41.7% to 77.3%.

2019 Maternal and Infant Health Indicators by Race and Ethnicity*

	Teen (15-19) Birth Rate per 1,000	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Non-Smoking during Pregnancy
Craighead County	13.5	71.2%	15.1%	10.6%	87.8%
White, Non-Hispanic	12.1	77.6%	14.4%	9.8%	86.3%
Black/African American, Non-Hispanic	18.1	56.1%	17.6%	14.0%	89.5%
Crittenden County	28.9	56.7%	17.3%	15.6%	89.1%
White, Non-Hispanic	31.7	57.7%	15.0%	11.2%	87.6%
Black/African American, Non-Hispanic	28.7	55.8%	19.2%	18.5%	90.2%
Poinsett County	17.7	71.5%	18.1%	10.4%	72.1%
White, Non-Hispanic	15.6	71.5%	17.9%	9.9%	70.3%
Black/African American, Non-Hispanic	NA	77.3%	NA	NA	81.8%
Arkansas	14.5	70.4%	11.9%	9.3%	86.9%
White, Non-Hispanic	12.7	74.6%	11.4%	7.8%	84.0%
Black/African American, Non-Hispanic	20.4	64.7%	17.6%	14.9%	89.5%
Latinx (any origin)	15.9	61.2%	12.0%	8.2%	96.0%
United States	16.7	77.6%	10.2%	8.3%	94.0%
HP2030 Goal	NA	80.5%	9.4%	NA	95.7%

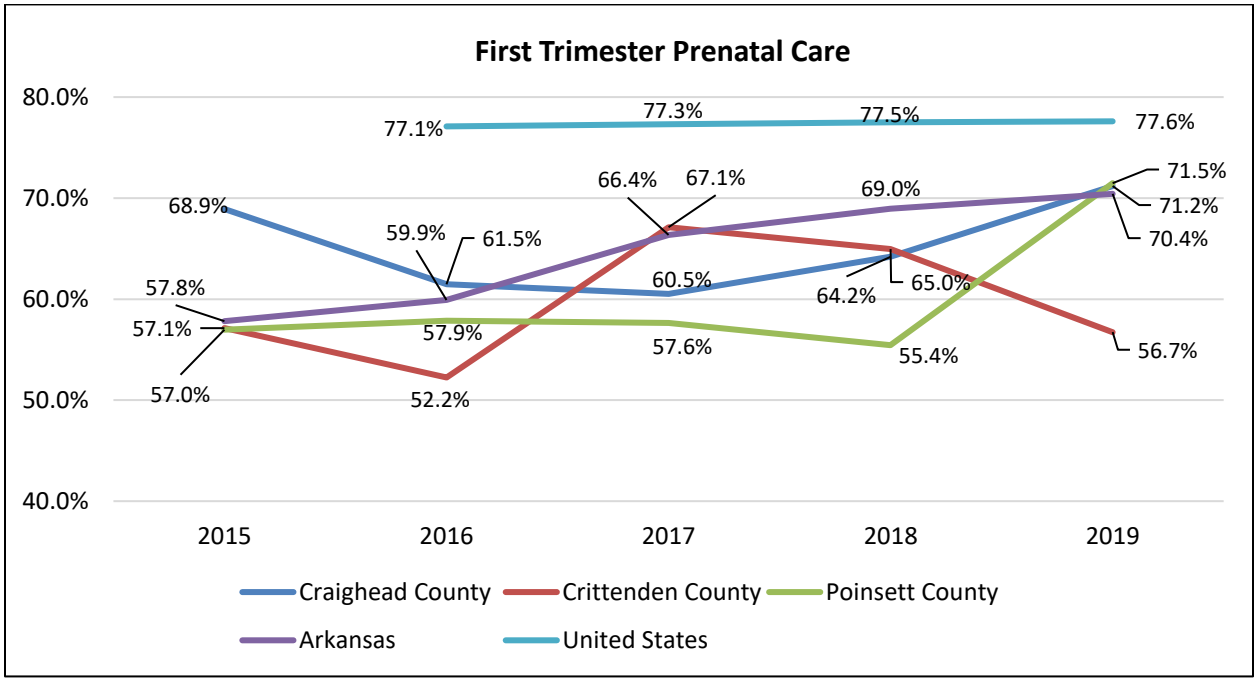
Source: Arkansas Department of Health & Centers for Disease Control and Prevention
*Latinx data by county are not reported due to low birth counts.



Source: Arkansas Department of Health & Centers for Disease Control and Prevention

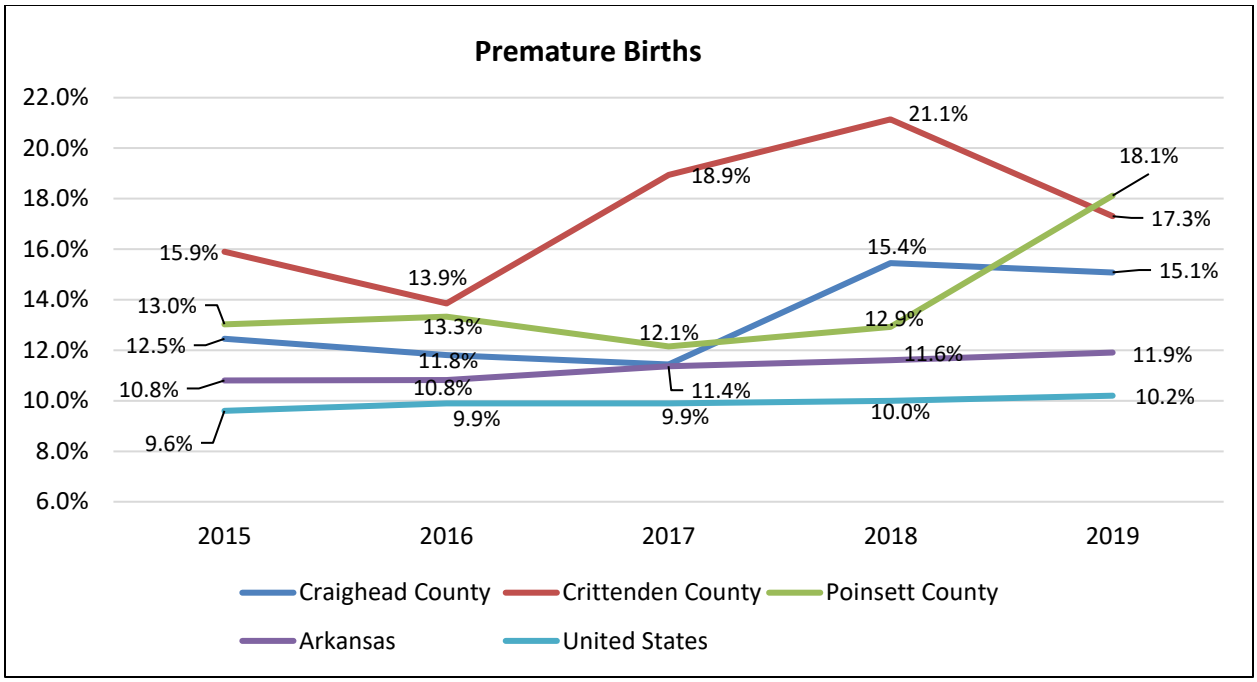
The following graphs depict trends in prenatal care and birth outcomes from 2015 to 2019. **Of note, the percentage of premature and low birth weight births increased statewide and nationally and within the Northeast Arkansas service area.** All service area counties report a higher percentage of premature and low birth weight births than the state and nation.

The percentage of pregnant people abstaining from tobacco use increased statewide and nationally, and in all Northeast Arkansas service area counties except Poinsett. Approximately 28% of pregnant people in Poinsett County report smoking compared to 13.1% statewide and 6% nationally. Consistent with the 2019 CHNA, smoking prevalence is highest among white pregnant people.

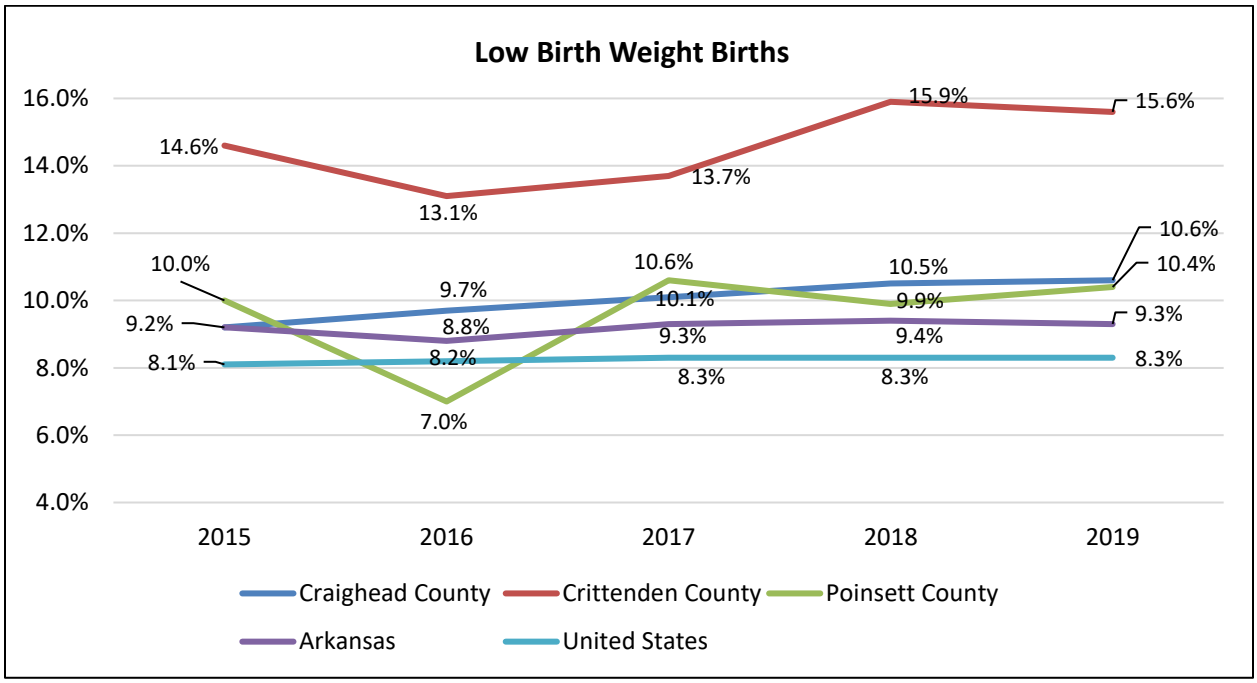


Source: Arkansas Department of Health & Centers for Disease Control and Prevention

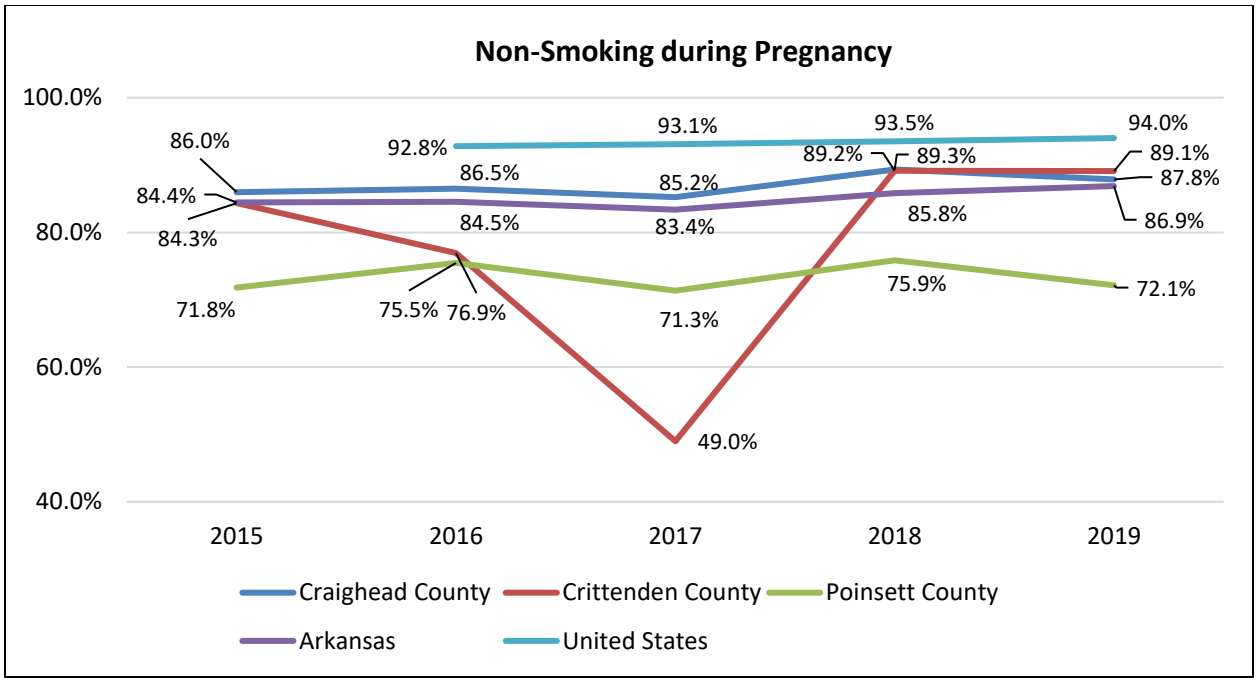
*In 2016, the U.S. universally adopted the 2003 U.S. Certificate of Live Birth, providing national indicators.



Source: Arkansas Department of Health & Centers for Disease Control and Prevention



Source: Arkansas Department of Health & Centers for Disease Control and Prevention



Source: Arkansas Department of Health & Centers for Disease Control and Prevention
*In 2016, the U.S. universally adopted the 2003 U.S. Certificate of Live Birth, providing national indicators.

From 2015 to 2019, Arkansas had a total of 1,439 infant deaths for a rate of 7.7 per 1,000 live births, a higher rate of death than the nation overall. **The infant rate death rate among Black/African American infants was approximately 70% higher than for white infants.** Similar disparities are seen in the maternal death rate. From 2013 to 2017, Arkansas reported a higher maternal death rate than the nation; the death rate for **Black/African American mothers was more than 80% higher than for white mothers.**

2015-2019 Infant Deaths per 1,000 Live Births

	Infant Deaths per 1,000 Live Births
Craighead County	8.3
Crittenden County	9.4
Poinsett County	NA (n=11)
Arkansas	7.7
White, Non-Hispanic	6.9
Black/African American, Non-Hispanic	11.8
Latinx (any origin)	4.8
United States	5.7
White, Non-Hispanic	4.8
Black/African American, Non-Hispanic	10.5
Latinx (any origin)	4.6
HP2030 Goal	5.0

Source: Arkansas Department of Health & Centers for Disease Control and Prevention

2013-2017 Maternal Deaths* per 100,000 Live Births

	Total Death Rate	Black/African American Death Rate	White Death Rate	Latinx Death Rate
Arkansas	44.5	76.3	41.8	NA
United States	29.6	63.8	26.1	19.6
HP2030 Goal	15.7	--	--	--

Source: Arkansas Department of Health & Centers for Disease Control and Prevention

*Maternal deaths include deaths of pregnant people or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Research findings from secondary data analysis were compared to qualitative research findings to compare perceptions to statistical data, identify root causes and contextualize data trends and contributing factors for identified health needs.

Key Informant Survey

An online Key Informant Survey was conducted with community representatives within Baptist's Northeast Arkansas service area to solicit information about local health needs and opportunities for improvement. Community representatives included health care and social service providers; public health experts; civic, social and faith-based organizations; policy makers and elected officials; and others representing diverse community populations.

A total of 23 individuals responded to the survey. A list of the represented community organizations and the participants' respective titles, as provided, is included in Appendix B. Key informant's names are withheld for confidentiality.

More than three-quarters of key informants served all populations across the Northeast Arkansas service area. A breakdown of other specific populations served by informants is provided below.

Primary Populations Served by Key Informant Survey Participants

	Number of Participants	Percent of Total
No specific focus/serve all people	18	78.3%
Children (age 0-11)	4	17.4%
Adolescents (age 12-18)	4	17.4%
Other*	3	13.0%
African American/Black	2	8.7%
Older adults/elderly	2	8.7%
People with disabilities	2	8.7%
Low Income/poor individuals or families	2	8.7%
Uninsured/underinsured individuals or families	2	8.7%
Hispanic/Latinx	1	4.4%

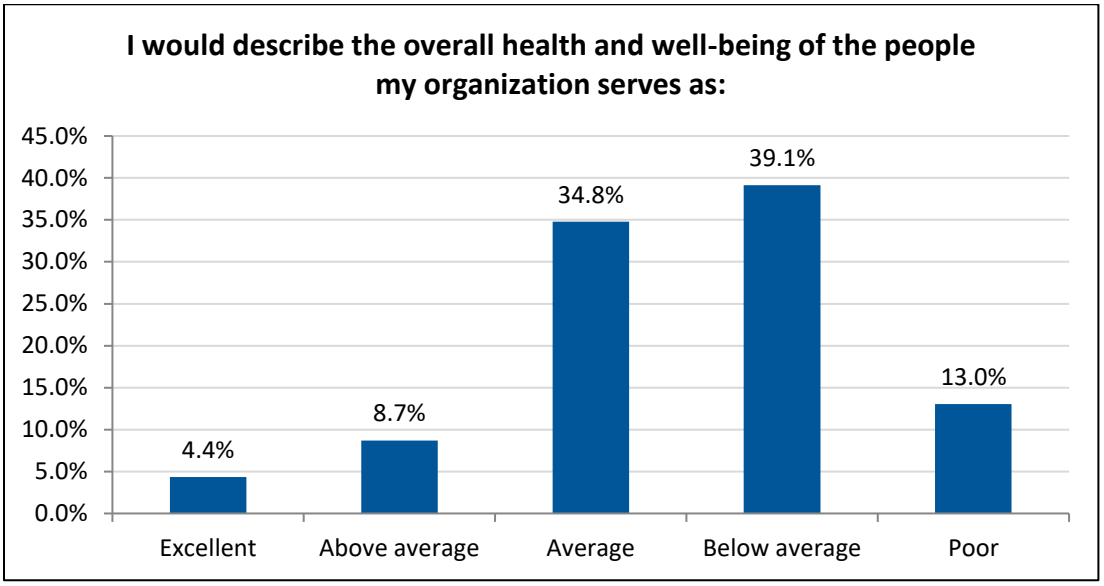
*Responses included veterans or not applicable (retired).

Key informants were asked a series of questions about perceived health priorities, perspectives on emerging health trends, including COVID-19, and recommendations to advance community and population health management strategies. A summary of their responses follows.

Health and Well-being

Thinking about the people their organization serves, key informants were asked to describe the overall health and well-being of individuals and the most pressing concerns affecting them. Key informants were instructed to select up to five pressing concerns from a wide-ranging list of health and social issues. Respondents were also given an option to "write in" a custom response.

Approximately three-quarters of key informants described overall health and well-being as "average" or "below average."



More than 60% of key informants selected the "ability to afford health care" among the top five concerns for the people their organization serves. "Overweight and obesity" (39.1%) and other chronic conditions including "heart disease and stroke" (30.4%), "cancers" (26.1%) and "diabetes" (26.1%) were also selected within the top five concerns. Thirty percent of respondents acknowledged "economic stability" as a key barrier to health and well-being.

Collectively, survey responses indicated a strong awareness of underlying SDoH as drivers for optimal health and well-being. In addition to "economic stability," informants identified "education attainment" and "health literacy" among the top concerns for the people their organization serves.

In your opinion, what are the top five most pressing concerns affecting the population(s) that your organization serves? Top Key Informant Selections

	Number of Participants	Percent of Total
Ability to afford health care (doctor visits, prescriptions, etc.)	14	60.9%
Overweight/obesity	9	39.1%
Economic stability (employment, poverty, cost of living)	7	30.4%
Heart disease and stroke	7	30.4%
Cancers	6	26.1%
Diabetes	6	26.1%
Education attainment (highest level achieved, graduation rate)	6	26.1%
Health literacy (ability to understand health information)	6	26.1%
Mental health conditions	6	26.1%
Community crime/violence (including gun violence)	5	21.7%

Social Determinants of Health

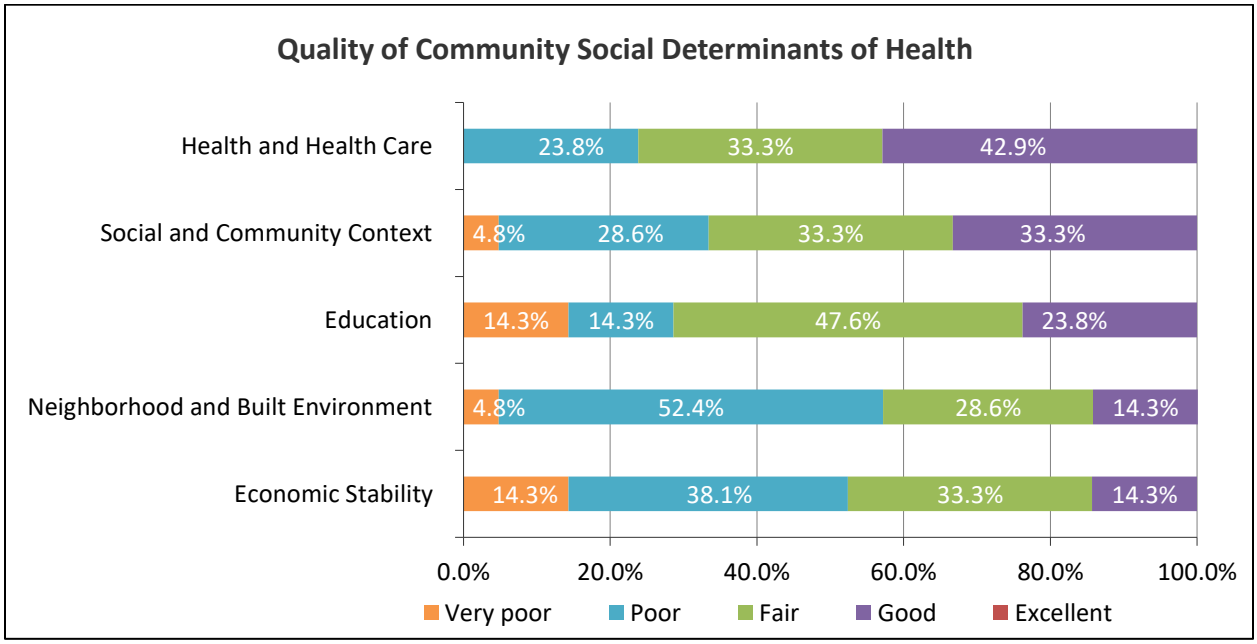
Social determinants of health are the conditions in the environments where people are born, live, learn, work, play, worship and age that affect a wide range of health risks and outcomes. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, health care access and quality, neighborhood and built environment and social and community context. Approximately 47.6% (n=10) of informants stated that their organization currently screens clients, patients, constituents, etc. for the needs related to SDoH.

Survey respondents were asked to rate the quality of SDoH in the community their organization serves using a scale of (1) “very poor” to (5) “excellent.” The mean score for each key SDoH area is listed in the table below in rank order, followed by a graph showing the scoring frequency. Mean scores were between 2.48 and 3.19, with most respondents rating the listed areas as “fair” or “poor.” Health and health care was seen as the strongest community SDoH factors.

Results from the prior CHNAs in 2016 and 2019 are compared to 2022 results in the table below. While rankings based on mean score did not change, mean scores fluctuated across survey years and are lower in 2022 than 2016, potentially indicating more negative perception of these areas. Given these results are not statistically representative, these data should be further explored through qualitative research.

Ranking of Social Determinants of Health in Descending Order by Mean Score

	2022 CHNA Results	2019 CHNA Results	2016 CHNA Results
Health and health care (e.g., access to health care, access to primary care, health literacy)	3.19	2.94	3.41
Social and community context (e.g., sense of community, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	2.95	2.81	3.35
Education (e.g., high school graduation, enrollment in higher education, language and literacy, early childhood education and development)	2.81	2.90	3.29
Neighborhood and built environment (e.g., access to healthy foods, quality of housing, crime and violence, environmental conditions, transportation)	2.52	2.65	3.12
Economic stability (e.g., poverty, employment, food security, housing stability)	2.48	2.71	3.06



COVID-19 Insights and Perspectives

Key informants were asked to identify the most likely sources of COVID-19 information for the people their organization serves. Key informants were instructed to select up to three sources from a wide-ranging list of options. An option was provided to choose "other" and add a source not included on the list.

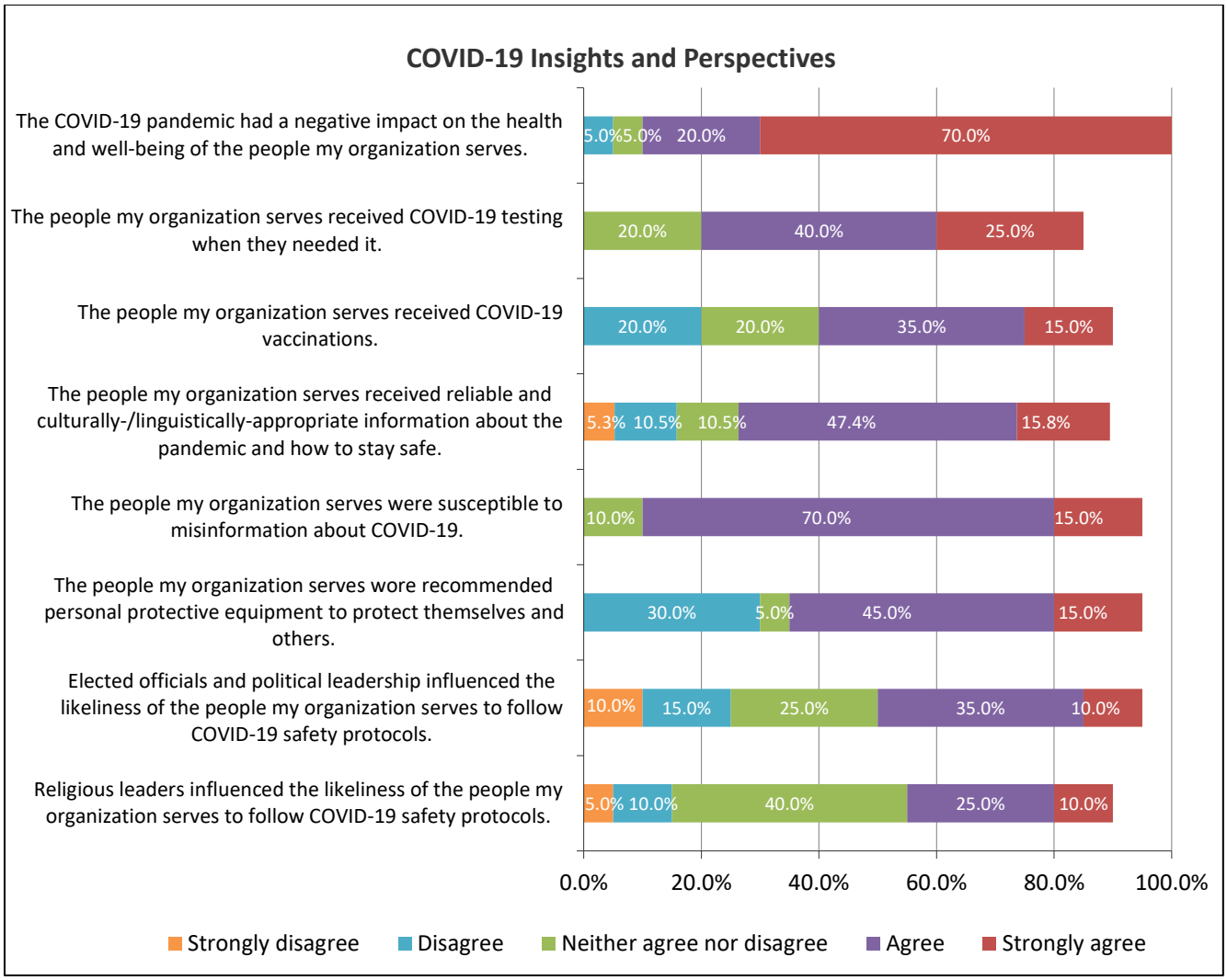
Where were the people your organization serves most likely to get information about COVID-19?

	Number of Participants	Percent of Total
Social media	12	60.0%
Friends/family	11	55.0%
Local news source/media	8	40.0%
Church/religious leaders	5	25.0%
Centers for Disease Control and Prevention (CDC)	3	15.0%
Health care providers	3	15.0%
National news source/media	3	15.0%
Political leadership	2	10.0%
Health insurance providers	1	5.0%
Local or state health department	1	5.0%

Thinking about the people their organization serves, survey respondents were asked to rate the following statements about COVID-19 impact, availability of testing and vaccination, availability of reliable information, susceptibility to misinformation and likeliness to follow recommended safety protocols.

Ninety percent of respondents agreed or strongly agreed that COVID-19 had a negative impact on the health and well-being of the people their organization served. About 65% of respondents agreed that people were mostly able to receive COVID-19 testing when they needed it and 60% agreed that the people they served wore recommended Personal Protective Equipment (PPE); another 30% disagreed that people wore PPE. Fifty percent of respondents believed their constituents were vaccinated; about 20% were not sure; and 20% did not think their populations were vaccinated.

About 63% of respondents agreed that people received reliable, culturally and linguistically appropriate information, and 85% agreed that they were also susceptible to misinformation. Less than half of respondents thought that their constituents were influenced by political leaders (45%) and religious leaders (35%).

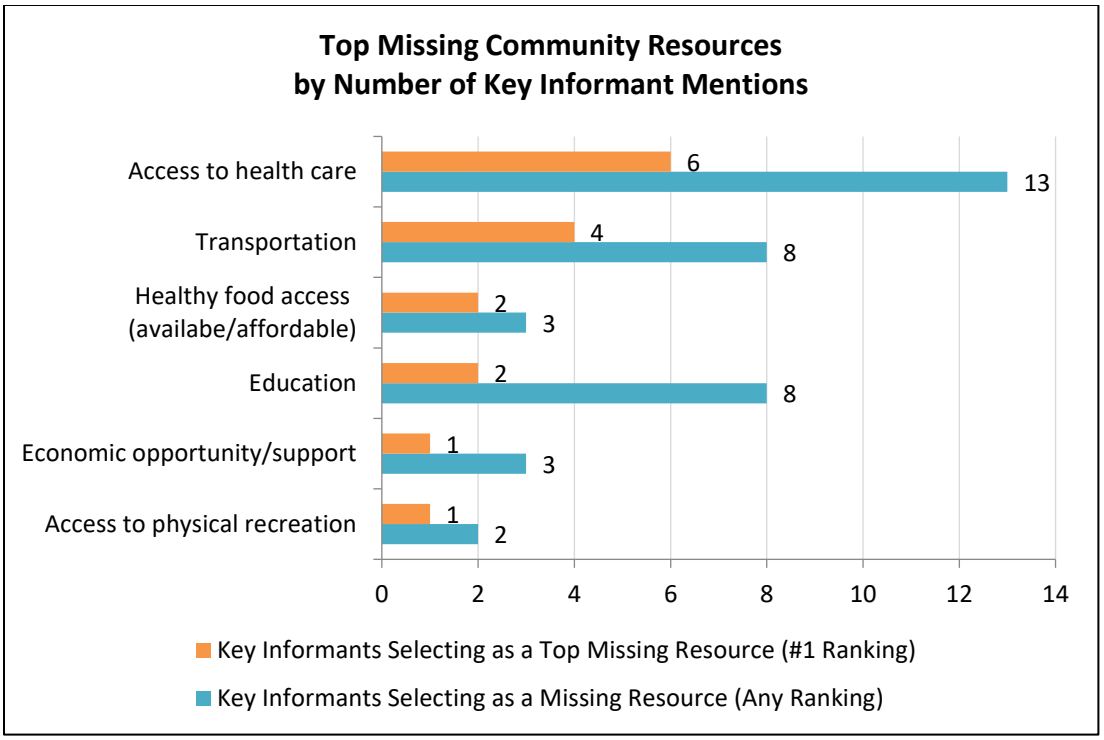


Community Resources That Impact Health

Key informants were asked to identify missing resources in the community that would help residents optimize their health. Informants were instructed to rank up to three write-in responses with No. 1 as the perceived top missing resource. The following graph summarizes identified missing resources by category and number of mentions by key informants.

Key informant responses reflected the theme of *access to health care* as the top missing resource. Specific concerns were affordability of health care; availability of primary care providers; the need for mobile health units, community health navigators, access to trusted sources of medical information and access to medications.

Transportation and education were among the top three most commonly mentioned missing resources, followed by *availability and affordability of healthy foods* and *economic opportunity and support,* including reducing poverty and promoting career opportunities that provide health insurance and higher incomes.



Health Equity

Key informants were asked how community organizations, including Baptist, could better serve minority populations including Black, African American, Indigenous, immigrant, people of color, LGBTQ+ and others, to achieve health and social equity. Informants were invited to provide free-form comments about the topics. Verbatim comments are included below.

- *"An active movement of local clinics into these neighborhoods might be a good start. These may be available in some areas, but they are not here. It would also be valuable to offer some degree of counseling and social service as part of a total health care in more distressed areas."*
- *"Developing liaisons for these communities that also work to promote cultural competency within Baptist's frontline staff."*
- *"Help with better coordination of care, access to pharmaceuticals, good housing, better transportation, reliable internet access, mental health services."*
- *"Local presence is paramount in these communities."*
- *"Meet them where they are struggling. Go to the communities."*
- *"More providers in poor areas of town."*
- *"Offering physical health screenings, resources and education to those with mental health challenges and/or diagnosis. A strong partnership with local community mental health provider to inform their clients of your services."*
- *"Partner with CBOs to create a coalition to influence behaviors and health trends. Advocate for the elimination of food insecure zones."*

- *"Put more funding in the community for education about COVID."*
- *"They just need to START and PRIORITIZE these issues. Remove all barriers or reasons/excuses why we can't and figure out how we MUST."*
- *"Treat all as one of God's creation."*

Community Collaboration

Approximately 70.6% of the organizations represented by survey respondents currently collaborate with Baptist on local efforts to improve health. Respondents were asked for recommendations on how Baptist can better collaborate in the community to improve the health and well-being of residents. Verbatim comments are included below by overarching theme.

Access to Health Care

- *"Baptist in our community has a program to help cover drug costs for the needy. An expansion of the service (through clinics in needy areas) would be helpful—along with education of the importance of taking medications correctly."*
- *"Be open to serving all groups; making access to care attainable to everyone regardless of income/insurance/ESL/preferences."*
- *"Decrease ER wait time."*
- *"Get out into the community with mobile units."*
- *"HPV vaccination program and education."*
- *"More primary care providers."*
- *"Partner to reduce the health impact of COVID-19."*
- *"Partner with community mental health providers to provide education for their clients."*
- *"Transitions of care from pediatric to adult services."*

Community Screenings and Education

- *"Partner with local churches to provide education."*
- *"Partner with groups that provide free lunches, etc. and offering free health screenings."*
- *"Pop-up screening locations in underserved communities."*

Youth Health

- *"Allow our staff to provide prevention/education training on child abuse to your staff."*
- *"Health education programs for kids."*
- *"Provide prevention/education training on safe sleep/car seat safety for parents."*

Other

- *"Be more visible in the community."*
- *"Continue to fund and support organizations that align with your health care mission."*
- *"More diverse leadership."*
- *"Partner with city for transportation."*

Patient Access to Care and Services Survey

An online Patient Access to Care & Services Survey was conducted with health care providers, leadership and staff employed by Baptist and representatives of community partner agencies. The survey was conducted to support Baptist's ongoing efforts to improve access to care, reduce health disparities and address the underlying inequities and SDoH that perpetuate disparate health outcomes.

A total of 436 individuals responded to the survey, representing communities across Baptist's tri-state service area. *Survey results are reported in aggregate to support systemwide planning efforts. Unique findings and trends are presented for each of the five Baptist CHNA service areas, as applicable.*

More than 40% of all survey participants worked in a hospital setting and 27.3% worked in a primary care office or clinic. The largest proportion of survey participants identified as physicians (57.9%), followed by nurse practitioners (20.3%). The most represented age groups were 55 to 64 (26.9%) and 45 to 54 (26.6%). Nearly 47% of participants identified as female, 43% as male and 0.9% as non-binary.

Geographic Areas Served by Survey Participants (as provided)

	Number of Participants	Percent
All Baptist service counties	46	10.6%
Central Mississippi (Attala, Hinds, Leake, Madison, Rankin, Yazoo counties)	59	17.9%
Memphis Metro (DeSoto County, MS; Fayette, Shelby, Tipton counties, TN)	115	34.8%
North Mississippi (Benton, Calhoun, Lafayette, Lowndes, Panola, Prentiss, Union)	85	25.8%
Northeast Arkansas (Craighead, Crittenden, Poinsett counties)	37	11.2%
West Tennessee (Carroll, Obion counties)	25	7.6%
Other*	26	7.9%

*Responses included surrounding counties in Arkansas, Mississippi and Tennessee, all patients regardless of location and select cities, such as Memphis and Columbus.

Primary Work Setting of Participants Across the Tri-State Region (as provided)

	Number of Participants	Percent
Hospital	143	43.3%
Primary care office or clinic	90	27.3%
Other outpatient care setting (urgent care, specialty practice, surgery, imaging)	51	15.5%
Other*	36	10.9%
Federally qualified health center/community health center	6	1.8%
Academic institution	4	1.2%

*Responses included behavioral health, cancer center, administration, private practice, dental office, emergency department, hospice, non-profit clinic, OB/GYN, multiple location, remote/virtual and state facility settings.

Role of Survey Participants Across the Tri-State Region (as provided)

	Number of Participants	Percent
Physician	191	57.9%
Nurse practitioner	67	20.3%
Other*	32	9.7%
Nurse	11	3.3%
Physician associate (physician assistant)	9	2.7%
Nurse navigator	5	1.5%
Behavioral health provider	2	0.6%
Chaplain	2	0.6%
Community health worker	2	0.6%
Site or shift manager	2	0.6%
Social worker	2	0.6%
Case manager	1	0.3%
Patient navigator/outreach specialist	1	0.3%
Doula/other birthing assistant	1	0.3%
Medical educator/preceptor	1	0.3%
Medical or nursing resident	1	0.3%

*Responses included administration, advocate, certified nurse anesthetist, CEO, dentist, health educator, HR, marketing, non-profit and therapist participants.

Age Group of Survey Participants Across the Tri-State Region (as provided)

	Number of Participants	Percent
25-34 years	31	10.4%
35-44 years	59	19.9%
45-54 years	79	26.6%
55-64 years	80	26.9%
65 years or more	48	16.2%

Survey participants were asked a series of questions about access to care and social services, perspectives on the impact of COVID-19 and SDoH on patient outcomes and opportunities to promote health and well-being and inclusive care environments. A summary of their responses follows.

Access to Care & Services

Thinking about the people their care site serves, survey participants were asked to rate access to the full continuum of care, the impact of SDoH and COVID-19 on health outcomes and perceptions of SDoH training needs. Ratings were provided using a scale of (1) "strongly disagree" to (5) "strongly agree," with an option for "don't know" or "not applicable (NA)."

Nearly 57% of all survey participants "agreed" or "strongly agreed" that their patients had access to the full continuum of care from conception to death. This finding varied by Baptist service area with higher perceived access in the Central Mississippi, North Mississippi and Northeast Arkansas service areas. Of note, 24% of participants serving the West Tennessee Service Area "agreed" or "strongly agreed" that patients had access to the full continuum of care.

More than half of all survey participants "agreed" or "strongly agreed" that SDoH negatively impacted the health of patients and their families, and nearly 70% "agreed" or "strongly agreed" that the COVID-19 pandemic negatively impacted health due to delayed preventive or maintenance care. Similarly, approximately 61% of participants "agreed" or "strongly agreed" that the pandemic exacerbated the negative impact of SDoH.

When viewed by service area, participants serving the North Mississippi service area were slightly less likely to perceive negative impact of SDoH and the pandemic on health relative to other service areas. It is worth noting that the North Mississippi service area had the highest proportion of participants who "agreed" or "strongly agreed" (54.1%) that their care site had the right amount of training and resources to address patient/family needs related to SDoH.

Please rate the following statements (Includes Participants Across the Tri-State Region):

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Don't Know/ NA
The patients my care site serves have access to the full continuum of care from conception to death.	7.1%	18.1%	8.0%	31.7%	25.2%	9.9%
The SDoH negatively impact the health of the patients and families my care site serves.	6.4%	10.3%	17.2%	34.7%	21.4%	9.9%
My care site has the right amount of training and resources to address patient/family needs related to SDoH.	5.7%	16.3%	22.5%	32.8%	12.6%	10.1%
The COVID-19 pandemic negatively impacted the health of the patients my care site serves due to delayed preventive or maintenance care.	3.9%	8.0%	10.6%	32.3%	37.2%	8.0%
The COVID-19 pandemic has had a negative impact on my care site's patients because it exacerbated various SDoH.	4.4%	8.3%	16.6%	34.3%	26.3%	10.1%

Please rate the following statements:
Percent Agree/Strongly Agree by Baptist Service Area

	Central Mississippi	Memphis Metro	North Mississippi	Northeast Arkansas	West Tennessee
The patients my care site serves have access to the full continuum of care from conception to death.	55.9%	48.7%	61.2%	56.8%	24.0%
The SDoH negatively impact the health of the patients and families my care site serves.	57.6%	63.2%	52.9%	64.9%	64.0%
My care site has the right amount of training and resources to address patient/family needs related to SDoH.	44.1%	37.4%	54.1%	37.8%	36.0%
The COVID-19 pandemic negatively impacted the health of the patients my care site serves due to delayed preventive or maintenance care.	74.6%	74.8%	62.4%	73.0%	68.0%
The COVID-19 pandemic has had a negative impact on my care site's patients because it exacerbated various SDoH.	62.7%	61.7%	58.3%	56.8%	60.0%

Thinking about the continuum of care and SDoH, survey participants were asked to identify the top three clinical service gaps and top three needed social services for patients. Participants rank ordered up to three free-form responses with No. 1 as the top clinical service gap or needed social service. The following tables summarize identified needs by category and number of mentions by participants.

Participant responses to the top clinical service gaps indicated strong awareness of the impact of SDoH on health and well-being. Collectively, SDoH were the top identified clinical service gap, identified by 51 participants as the No. 1 service gap and by 140 participants as a top three service gap. Among the top identified SDoH needs was transportation, followed by insurance coverage and economic security. Insurance coverage included both access or insured status and affordable coverage (e.g., copays). Economic security included income or financial support and job opportunities.

Other top identified clinical service gaps were mental health services, with a focus on psychiatry and psychology and services that are covered by insurance; primary and preventive care, with a focus on access to timely appointments and providers accepting new patients and/or patients with Medicaid; adequate medical staffing, particularly in light of COVID-19 and primarily affecting nursing availability and emergency department capacity; and health education services, with a focus on chronic diseases like diabetes and preventive care practices.

The top identified social service gaps closely aligned with the top identified clinical service gaps. Transportation was the top identified service gap, with a focus on accessible and reliable public transportation and assistance for patients to get to their medical appointments. Other top identified service gaps were health education and programs, with a focus on chronic disease, preventive care and parenting/infant care and staff support to identify patients with SDoH barriers, help patients navigate the health care and social service systems and coordinate hospital discharge and follow-up care.

What are the top three clinical service gaps experienced by the patients you serve?
Top Service Gaps Based on Number of Participant Mentions
(Includes Participants Across the Tri-State Region)

	No. 1 Clinical Service Gap	Top 3 Clinical Service Gap
	Number of Mentions	Number of Mentions
Social Determinants of Health (top needs listed below)	51	140
Transportation	18	52
Insurance coverage	13	25
Economic security	11	27
Mental health services (e.g., psychiatry/psychology, insurance covered services)	30	53
Primary/preventive care (e.g., timely appointments, accepting new patients, accepting Medicaid)	21	35
Adequate medical staffing (e.g., nursing staff, emergency department capacity)	15	36
Health education (e.g., chronic disease, preventative care/screenings)	15	35
Medication cost assistance	13	29
Continuity of care (e.g., communication and coordination between providers, integrated HER, coordination of follow-up visits and patient placement)	11	26
Specialty care (e.g., timely appointments)	10	25
Women's health (e.g., OB/GYN, high risk OB, doula services, screenings, particularly mammograms)	7	24

What are the top three social services or external community factors that would help improve SDoH for patients and residents? Top Services Based on Number of Participant Mentions
(Includes Participants Across the Tri-State Region)

	No. 1 Social Service Gap	Top 3 Social Service Gap
	Number of Mentions	Number of Mentions
Transportation	29	91
Health education/programs (e.g., diabetes, asthma, preventive care, parenting/infant care)	26	59
Social workers/case managers (e.g., assistance with health care navigation, discharge support, social service awareness)	24	45
Mental health services	20	36
Insurance coverage (e.g., access, Medicaid expansion, universal coverage)	13	29
Affordable medications	12	24
Financial support and/or expanded health care options for un-/under-insured and individuals with low-income	11	17
Primary care (e.g., accepting Medicaid, rural availability)	10	14
Health foods (e.g., accessible, affordable)	9	37
Affordable, safe housing	8	18

Social Determinants of Health Impact

Survey participants were asked to rate their level of comfort in performing tasks related to SDoH, including identifying and discussing SDoH with patients and referring patients to available resources to address needs. Overall, 61% to 67% of participants were "comfortable" or "very comfortable" identifying and discussing SDoH that impact optimal health care for patients. Participants were slightly less "comfortable" or "very comfortable" referring patients to available community resources to address identified SDoH needs (58.5%).

Survey participants that served Northeast Arkansas and West Tennessee were less likely than other participants to report being "comfortable" or "very comfortable" identifying and discussing SDoH and/or referring patients to available SDoH resources. Of note, approximately 44% of participants serving West Tennessee reported being "comfortable" or "very comfortable" discussing SDoH with patients and 36% reported being "comfortable" or "very comfortable" referring patients for services.

Please rate your level of comfort in performing the following tasks related to SDoH (Includes Participants Across the Tri-State Region)

	Very Uncomfortable	Uncomfortable	Neither Uncomfortable nor Comfortable	Comfortable	Very Comfortable	NA
Identifying SDoH that impact optimal health care for patients	1.8%	2.9%	19.9%	40.8%	26.1%	8.5%
Discussing SDoH that impact health during your patients' office visits	1.8%	2.7%	18.5%	37.4%	24.1%	15.6%
Referring patients to available community/ external resources to address the SDoH that are affecting their health	2.1%	7.9%	22.4%	32.9%	25.6%	9.1%

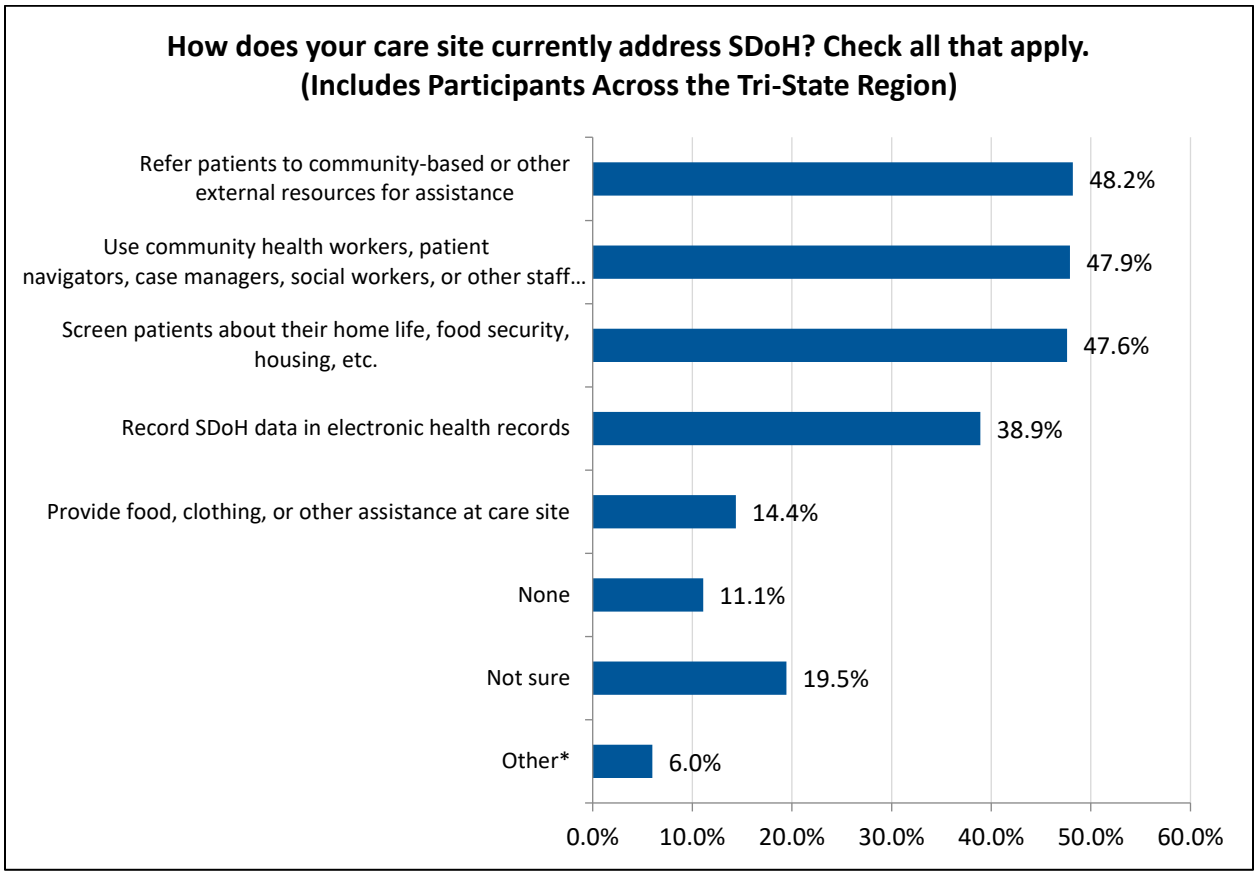
Please rate your level of comfort in performing the following tasks related to SDoH
Percent Comfortable/Very Comfortable by Baptist Service Area

	Central Mississippi	Memphis Metro	North Mississippi	Northeast Arkansas	West Tennessee
Identifying SDoH that impact optimal health care for patients	69.0%	67.0%	66.3%	58.3%	52.0%
Discussing SDoH that impact health during your patients' office visits	58.6%	67.8%	57.8%	54.3%	44.0%
Referring patients to available community/external resources to address the SDoH that are affecting their health	62.1%	54.8%	60.2%	47.2%	36.0%

Approximately 48% of survey participants indicated that their care site actively screens patients for SDoH, including home life, food security, housing, etc. When SDoH needs are identified among patient

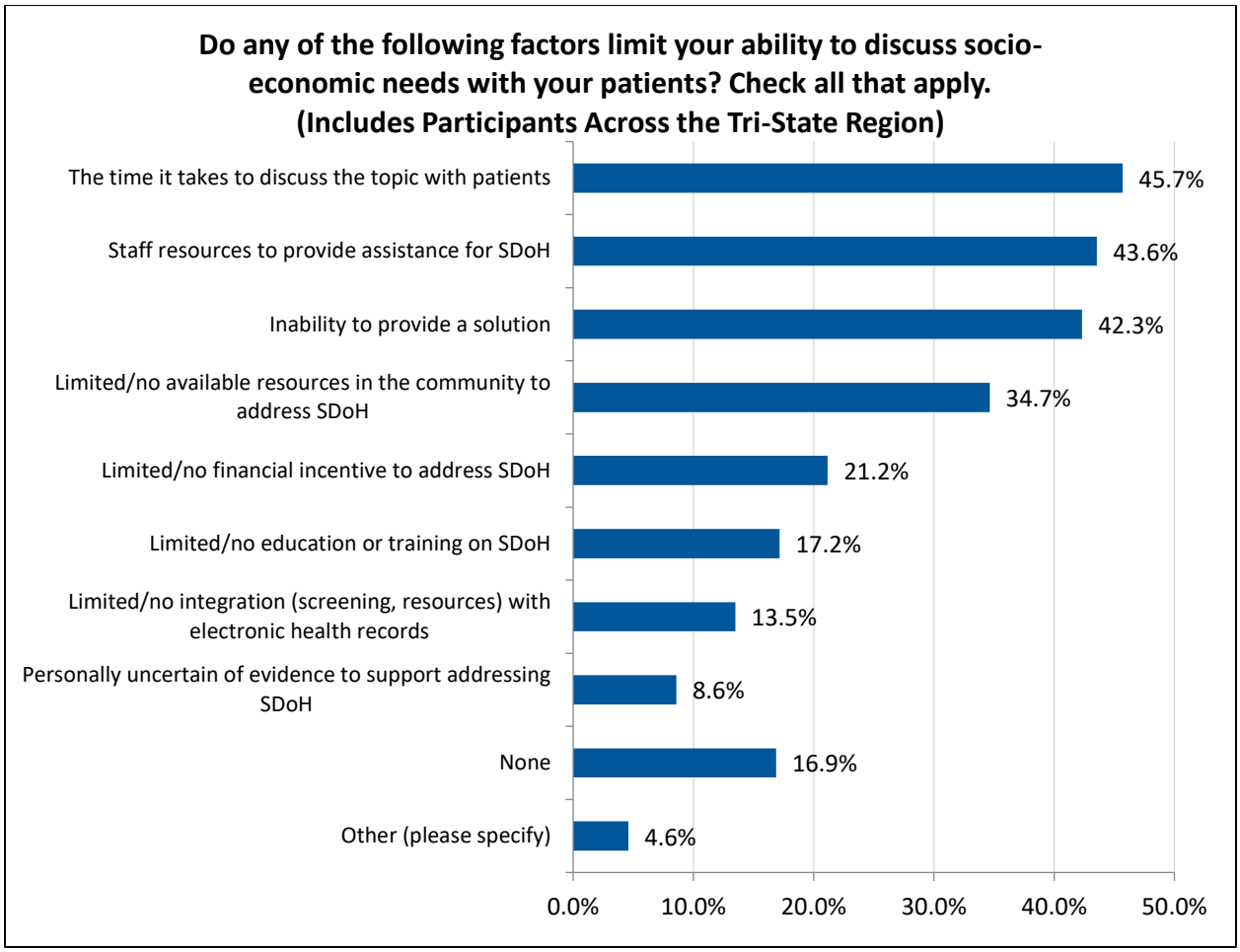
populations, a similar proportion of survey participants (48%) indicated that their care site refers them to community-based or other external resources for assistance and/or uses community health workers or other staff to assist them. Approximately 1 in 10 survey participants indicated that their care site does not address SDoH needs, and 1 in 5 participants were unsure of their care site's response.

The top barriers to discussing SDoH needs with patients, as identified by survey participants, were lack of care site resources (e.g., time and staffing to provide assistance) and inability to provide a solution to identified needs.



*Other responses by survey participants:

- *"An effort is made to enlist help for patient needs post D/C. But little follow up due to lack of staff."*
- *"Could use additional assistance in the specialty area--not just internal medicine."*
- *"Not aware of the community resources."*
- *"Provide samples of meds."*
- *"Provide upstream health education."*
- *"The questions are in the EMR with no follow through."*
- *"We do not screen because we do not currently have resources to refer and follow up with patients. However, we GREATLY need to implement screening and referral practices in our specialty clinic. SDoH impacts our patients in all aspects of life and chronic illness management."*
- *"We have very scarce resources to help our very underserved patients."*



*Other responses by survey participants:

- *"Case management and availability of resources."*
- *"I discuss health care issues with my patient. I'm not a social worker with 2 hours to spend with any patient. Whether they live in a tent or a 30,000 sq ft mansion, my care is the same."*
- *"Need a dedicated social service staff to come in to discuss patient's needs."*
- *"No nurses, so other life-saving tasks rank higher on the "to do" list."*
- *"Rural site, very limited resources."*
- *"We cannot impact the patients' socio-economic status, nor provide transportation when they have none. All we can do is treat them with respect and dignity while we have them here."*

Survey participants were asked to share a specific incident or common experience of how SDoH affect their patients' health. Select verbatim comments from participants serving the Northeast Arkansas service area are included below. Across the service areas, participant comments spoke to diverse SDoH needs, including social isolation, illiteracy, unsafe living conditions, discrimination and financial barriers, among others.

Survey Participant Stories: Northeast Arkansas Service Area
Please share a specific incident or common experience of how SDoH affect your patients' health.

- *"Homeless populations often checks-in to the hospital facility for various nonurgent complaints. But usually are seeking shelter, food and temporary relief from outside elements." (Participant also served Memphis Metro service area)*
- *"I have several patients that live in rural areas/out of town that have difficulty getting transportation to appointments. I recently had a patient who has a government issued phone and the minutes run out before the end of the month. Therefore, he frequently gets calls about scheduling appointments that do not go through. Pt reports he typically has to go the last 7-10 days of every month with essentially no phone service other than texts."*
- *"In our community we serve a wide number of Spanish speaking patients. Most have trouble understanding paperwork or what is being told to them, and others cannot communicate their needs. There is also a scarcity of translators. A large percentage of our community struggle with reading and comprehension (adults and children). If people can't read or don't feel comfortable asking for help, they will not use the resources provided." (Participant also served Memphis Metro service area)*
- *"Multiple cases of homelessness and nowhere to discharge the patient to after ED visit. No transportation to facilitate patient in returning home after visit. No resources for adult dental care other than ED visit."*
- *"Patients always appreciate care summaries printed in native language; I appreciate as well." (Participant also served Memphis Metro service area)*

Survey participants were asked to imagine that their care site is successful in doing everything possible to address SDoH and to describe what that looks like. Select verbatim comments from participants serving the Northeast Arkansas service area are included below. Across the service areas, participant comments overwhelmingly spoke to the need for onsite social worker or case management services, robust community services that are connected with the clinical setting, comprehensive health and care management education and inclusive care practices.

Survey Participant Recommendations: Northeast Arkansas Service Area
Imagine that your care site is successful in doing everything possible to address SDoH. What would that look like?

- *"Appropriately addressing the patient's individual needs. And appropriate interaction and referral sources available with the local hospital if needed." (Participant also served Memphis Metro service area)*
- *"Identifying barriers to regular health maintenance, following up with each patient after an ED visit or hospital stay and helping to coordinate follow up with their primary care physician. Providing transportation to/from if necessary or overcoming access barriers if telehealth visits are an option." (Participant also served Memphis Metro service area)*
- *"It would be nice to have a person or nurse to do follow up calls. Above and beyond what our nurses have time to do."*
- *"One example is to provide mental health and social work personnel on site at the facility." (Participant also served Memphis Metro service area)*
- *"Our care site would have translators and staff that is welcoming and inviting ready to assist with paperwork and answering any questions the patient may have. Patients that we interact with are more likely to be consistent in their checkups when they have had a pleasurable experience from ALL staff members including receptionist." (Participant also served Memphis Metro service area)*
- *"Our social workers/behavioral health department is wonderful but understaffed. Having counselors and even a psychiatrist to make mental health treatment more accessible would be especially helpful. Working with community partners to help provide transportation to appointments. We technically do offer help with transportation but the last time I referred a patient for this, I was basically told there are not enough funds in the account to continue this program."*

Survey participants were asked to share any suggestions to address SDoH affecting their patients. Select verbatim comments from participants serving the Northeast Arkansas service area are included below. Across the service areas, participant comments included addressing patient financial barriers (e.g., free or reduced cost health care and medications, health insurance enrollment and expansion of benefits), expanding health care access (e.g., satellite clinics, telehealth, mental health services) and increasing awareness and connectivity to available community resources for both patients and providers.

Survey Participant Recommendations: Northeast Arkansas Service Area
What suggestions would you like to share with Baptist that will address SDoH that affect your patients?

- *"Feedback I have heard from patients: It is hard to get in contact with the correct person/department. A lot of paperwork and billing has been moved online and people do not always have access to a phone with internet or a computer at home. It is important to be able to serve everyone regardless of their resources. Staff should be trained and highly aware of SDoH and how it is affecting that patient." (Participant also served Memphis Metro service area)*
- *"Get social services/sociology/psychology experts involved. They have more training in these areas than physicians and nurses." (Participant also served Memphis Metro, West Tennessee service areas)*
- *"It would be great if Baptist had the ability to offer small shuttle services for patients in areas where public transportation is not accessible to enable them to make regular visits to a Baptist physician. Gynecology services would be beneficial in the West Memphis area." (Participant also served Memphis Metro service area)*
- *"Make known available community or hospital resources for SDoH to practicing providers and customers/patients."*
- *"We have an excellent pharmacist/team working to assist with medication assistance, and they are always available to help, but some trained assistance on the clinical side could possibly reduce the workload on this team. Our nursing team works hard to alleviate all avenues before we refer to the medication assistance team, but there are times we just do not have the time/skills needed."*

Diversity, Equity and Inclusion

Lastly, survey participants were asked to share policies and practices that would help create an organizational culture that reflects diversity, equity and inclusion (DEI) and initiatives and programs that would help in the delivery of more culturally competent care at their site. Participants rank ordered up to three responses with No. 1 as the top need. An option to "write in" any need not included on the list was provided.

The top policy or practice recommended by survey participants to help create an organizational culture that reflects DEI was cultural competence training (e.g., intracultural or cross-cultural education), followed by diverse workforce development and retention. Approximately 1 in 5 survey participants selected these items as the top need and more than 40% selected them as top three needs. Approximately 30% of participants also recommended DEI training for all staff as a top three need, and 25% recommended regular employee forums to discuss DEI practices and initiatives.

It is worth noting that 12% of participants indicated there is no need for policies and practices to promote DEI. This finding will be further explored in small group discussions with providers and community partner agencies to better understand perceptions of DEI and existing policies and practices already in place at care sites.

Please select the policies and practices you think would help create an organizational culture that reflects Diversity, Equity and Inclusion. Rank up to three items, with No. 1 as the most important. (Includes Participants Across the Tri-State Region)

	No. 1 Policy/Practice		Top 3 Policy/Practice	
	Number of Participants	Percent	Number of Participants	Percent
Cultural competence training (e.g., intracultural or cross-cultural education)	55	22.7%	100	41.3%
Diverse workforce development and retention	47	19.4%	105	43.4%
None	29	12.0%	53	21.9%
DEI training for all staff	28	11.6%	73	30.2%
Other*	22	9.1%	38	15.7%
Regular employee forums to discuss DEI practices and initiatives	20	8.3%	60	24.8%
Formal system for tracking and measuring DEI improvements	9	3.7%	47	19.4%
Systemwide policy for DEI practices that you can implement at your care site	9	3.7%	42	17.4%
DEI skills for managers and leaders	9	3.7%	39	16.1%
DEI training for new employees	8	3.3%	30	12.4%
DEI staff leaders as resources at each care site	6	2.5%	30	12.4%

*Select other responses by survey participants:

- *"A discussion of how race relations in Memphis have improved over the last 60 years."*
- *"Day care and after school care for staff and providers. Shift flexibility and job-sharing options when possible. Fewer white men at the top."*

- *"I do not think there is a pervasive problem or lack of DEI principles of behavior in organization."*
- *"In my experience, we are a very diverse workplace with respect for all individuals. Baptist should support initiatives at the high school and college level to encourage minorities to pursue health care professions."*
- *"It is necessary to involve the people who are being served. It would help to have community input, and to give a platform to those who have a testimony regarding their experiences."*
- *"Leadership comprised of ethnically, socially diverse group of individuals."*
- *"Study the Date of the Medicos group proving bilingual family medicine obstetrics 24/7/365 since 1999. The model has incorporated team care involving OB, MFM, VFOC, nursing and administration without external funding."*

The top initiative or program recommended by survey participants to enhance delivery of culturally competent care was a website or other central place with an inventory of community-based social services for patient referral, followed by training on SDoH. Approximately 1 in 10 survey participants selected these items as the top need and 35% selected them as top three needs. Approximately one-quarter of participants also recommended electronic medical record optimization for collecting patient information, networking events to share best practices for addressing SDoH in care sites and/or language translation for patient signage and promotional and educational materials.

Please select the initiatives and programs that would help you deliver more culturally competent care at your site. Rank up to three items, with No. 1 as the most important.
(Includes Participants Across the Tri-State Region)

	No. 1 Initiative/Program		Top 3 Initiative/Program	
	Number of Participants	Percent	Number of Participants	Percent
Website or other central place with inventory of community-based social services for patient referral	35	15.8%	77	34.7%
Training on SDoH	30	13.5%	79	35.6%
Electronic medical record optimization for collecting patient information (e.g., identity, pronouns, race, ethnicity)	28	12.6%	58	26.1%
Networking events to share best practices for addressing SDoH in care sites	23	10.4%	66	29.7%
Language translation for patient signage and promotional and educational materials	21	9.5%	52	23.4%
None	21	9.5%	36	16.2%
Training on unconscious bias	17	7.7%	68	30.6%
Training on antiracism	14	6.3%	31	14.0%
Other*	11	5.0%	25	11.3%
Increased diversity in patient signage and promotional and educational materials	9	4.1%	33	14.9%
Training on trauma informed care	7	3.2%	29	13.1%
Training on LGBTQ+ gender identity and affirming	6	2.7%	20	9.0%

*Select other responses by survey participants:

- *"Collaboration with local doulas and lactation counselors to establish allyship."*
- *"Implementation of routine SDoH screening with concrete referral/follow up avenues if positive (i.e., we can immediately refer patients if the screen is positive)."*
- *"More languages available for Epic discharge instructions."*
- *"Open access to family physicians with hospital privileges 24/7/365. A community based medical facility providing point of care services which deflect patient from automatic ER referral. Services are bilingual and incorporate services for the uninsured and the poorly insured patients of a low resource community."*
- *"Time to provide adequate care. Don't rush quality care."*
- *"Training on social determinants of health, LBGTQ+, & social bias (all)."*
- *"Training on who we are at Baptist, and who we treat, from an intersectional point of view."*
- *"Translator services, especially for ASL (American Sign Language)."*

The results of the Patient Access to Care & Services Survey were compared to secondary data research findings to compare perceptions to socio-economic and access to care statistical data. Interviews with Baptist health care providers, community agency partners and other key stakeholders were conducted as follow up to the survey to further illuminate opportunities for improving health and the health care experience.

Evaluation of Health Impact: 2019-2022 Community Health Improvement Plan Progress

In 2019, Baptist completed a CHNA and developed a supporting three-year implementation plan for community health improvement for each of its hospitals. The implementation plan outlined our strategies for measurable impact on identified priority health needs, including behavioral health, cancer, chronic disease and maternal and child health. Within six months of the release of the 2019 implementation plan, the COVID-19 pandemic shifted the priorities of our community and Baptist adapted our work to respond to the emergent needs of residents.

The following sections outline our work to impact the priority health needs and respond to COVID-19 in our communities. Specific hospital initiatives are highlighted as applicable.

Priority – Behavioral Health

Behavioral health strategies implemented by Baptist addressed the overarching goal to increase behavioral health screenings to initiate early treatment and improved outcomes for residents at all stages of life. As part of the 2019-2022 implementation plan, Baptist conducted the following programs and initiatives within the Northeast Arkansas service area:

- Conducted Patient Health Questionnaire (PHQ)-9 depression screenings during annual wellness visits, among all patients receiving a behavioral health social work assessment and by all hospital providers as needed (NEA Baptist)
- Coordinated with the local behavioral health clinic to identify their patients seen in the Baptist Crittenden Emergency Department and get them screened and scheduled for appropriate follow-up appointments
- In partnership with NEA Baptist Charitable Foundation and the Center for Good Grief*, provided free grief counseling, seminars and support for those who have lost a loved one
- Partnered with local behavioral health providers to increase awareness of available services and accepted insurances and facilitate referrals for patients (NEA Baptist)
- Partnered with community agencies to conduct resident and employee behavioral health educational videos and presentations; sessions were hosted for human resource leaders and advanced care planning, during community heart day and food drive events (NEA Baptist)
- Provided educational information about Alzheimer's disease to patients and families, as well as resource availability to support care at home (NEA Baptist)
- Provided tele-psych consults for patients at Baptist Crittenden to help them get back on medications and access the next level of behavioral health care as needed

***NEA Baptist Center for Good Grief**

As the first comprehensive bereavement center for children, adolescents and adults in the region, the Center for Good Grief provides support for individuals who are grieving the death of a loved one.

Participants are allowed to share their experiences with others as they move through the healing process in a therapeutic environment. All services, as listed below are provided free of charge.

- Individual support: Individual grief counseling sessions offer patients the opportunity to explore their grief through art, play, therapy, journaling and other expressive therapies. One-on-one support sessions focus on understanding grief and its impact, while learning healthy ways to cope and mourn loss.
- Specialized grief groups: We offer support groups throughout the year for children, teens and adults.
- Camps: Camp Good Grief is offered to children ages 6 to 12 who have lost a loved one in the past two years. Teen Camp Good Grief is available for teens ages 13 to 17.
- Kaleidoscope Series: The Kaleidoscope Series is a series of workshops that focus on different types of loss and their associated grief. Topics range from coping with the death of a child, parenting while grieving and coping with grief during the holidays.

Priority – Cancer

Cancer strategies implemented by Baptist addressed the overarching goal to provide early detection and treatment to reduce death from breast, colorectal and lung cancers, and improve quality of life for patients. As part of the 2019-2022 implementation plan, Baptist conducted the following programs and initiatives within the Northeast Arkansas service area:

- As part of the Baptist Cancer Center, provided Thrivership*, a free comprehensive program to support patients from the moment of diagnosis through treatment and beyond
- Deployed primary care physician protocols and automatic screening reminders for improved lung cancer detection and care
- Developed the Mid-South Miracle**, a multifaceted approach to preventing and treating lung cancer, with the goal of reducing lung cancer deaths by 25% by 2030
- Expanded cancer services to Crittenden County, offering weekly appointments
- Explored partnership with Susan G. Komen to provide free mammograms for Crittenden County residents
- In partnership with NEA Baptist Charitable Foundation, provided HopeCircle***, a community of hope and support, free of charge, for families living with a life changing illness
- Launched breast and lung cancer screening campaigns (e.g., social media, in-person events, mailers) in all Baptist service areas
- Offered low-dose CT scan to detect lung cancer (Baptist Crittenden)
- Provided cancer education and awareness information via social media (Baptist Crittenden)
- Provided free or reduced-cost cancer screenings targeting at-risk and uninsured residents through the Auxiliary Mammogram Assistance Fund at NEA Baptist Charitable Foundation

- Provided gas cards to patients who travel to the cancer center and struggle with transportation costs (Baptist Crittenden)
- Provided smoking cessation programs by a nurse practitioner, and information to local providers on how to register patients (Baptist Crittenden)

***Thrivership**
The Baptist Cancer Center *Thrivership* program exists to support patients and their families – physically, emotionally and spiritually. It is a comprehensive program that includes free classes, seminars and support groups that address nutrition, fitness, mental well-being and spirituality, as well as seminars to increase understanding of cancer genetics and help patients manage the financial aspects of care.

****Mid-South Miracle**
Lung cancer is one of the leading causes of death in the Mid-South. In fact, the rate of lung cancer deaths in Tennessee, Arkansas and Mississippi is nearly double that of the rest of the United States. To change the trajectory of this disease in the region, Baptist Cancer Center has developed the Mid-South Miracle, a multifaceted approach to preventing and treating lung cancer. This initiative leverages the extensive resources of Baptist Cancer Center along with the collective knowledge and expertise of our oncologists, surgeons, radiologists and pathologists to achieve prevention, early detection and faster treatments.

By mobilizing the Mid-South Miracle initiative and extending its reach to rural communities of the Mid-South, Baptist Cancer Center aims to increase lung cancer survival rates in the region and redefine lung cancer as a preventable, curable form of cancer. Through seven program components, Baptist Cancer Center physicians believe they can achieve a Mid-South Miracle and reduce lung cancer deaths in the region by 25% by 2030. The seven program components include effective and accessible smoking cessation programs, regular low-dose CT scans, incidental lung nodule screening, multidisciplinary care, high-quality surgical care, accessible clinical trials and coordinated clinical and community efforts.

****HopeCircle**
HopeCircle programs are designed to meet the needs of the patient and families, their caregivers and support system. HopeCircle offers: Free wigs, hats, caps and other items for patients who lose their hair because of treatment or disease; a Resource Center whose healing environment welcomes patients and families; family support; educational programs and resources; a lending library of books designed to inform, enlighten and inspire and services that support mind, body, heart and spirit through a community of compassion.

Priority – Chronic Disease
Chronic disease strategies implemented by Baptist addressed the overarching goal to promote health as a community priority and increase healthy lifestyle choices. As part of the 2019-2022 implementation plan, Baptist conducted the following programs and initiatives within the Northeast Arkansas service area:

- Hosted support groups for individuals with diabetes and their families (NEA Baptist)

- In partnership with NEA Baptist Charitable Foundation Medicine Assistance Program, worked with insurance companies to help patients access life-saving medications, free of charge
- In partnership with NEA Baptist Charitable Foundation Wellness Works* and Center for Healthy Children, provided education on the benefits of diet and exercise in youth and adults at risk for chronic disease
- Maintained a diabetes program recognized by the American Diabetes Association; programs are renewed annually based on standards of care
- Maintained Chest Pain Center accreditation at NEA Baptist
- Offered the free Choose to Be** women's mobile health app to foster healthy lifestyles
- Participated in health fairs and community events to provide education for healthy lifestyles and prevention of chronic disease; events were conducted virtually during the pandemic (NEA Baptist)
- Partnered with the NEA Baptist Charitable Foundation to provide services and supports to address SDoH barriers, such as transportation, housing and food
- Provided free screenings for health risk factors related to chronic disease (NEA Baptist)
- Sponsored community agencies and programs that encourage healthy, active lifestyles (NEA Baptist)
- Worked with the Baptist Cancer Center to establish blood sugar monitoring and treatment protocols for dually diagnosed diabetic and cancer patients

***Wellness Works!**
Wellness Works! is a free 12-week program for individuals living with chronic conditions such as diabetes, obesity, hypertension, cancer and COPD. The goal of Wellness Works! is to empower each participant with the knowledge and tools to effectively manage their conditions and improve their quality of life.

Each participant receives a 12-week membership to the wellness center complete with a full fitness assessment and prescribed exercise program with weekly follow ups to assess progress. The program also provides a variety of lectures covering the basics of nutrition, sleep and stress management to help provide a coordinated effort on disease management. Those who successfully complete the program receive a discounted membership to the NEA Baptist Clinic Wellness Center, as well as other great rewards.

****Choose to Be Mobile App**
The Baptist Choose to Be mobile app gives women the knowledge and power to make the right choices for a healthy, active and productive lifestyle for every stage of life. The stresses women face from school, work, family responsibilities and physical and mental health issues are unique to women, and their remedies must be as well. The information in this app comes directly from the experienced team of obstetricians and gynecologists at Baptist Women's Hospital.

Using plain language and helpful graphics, the app is a definitive source of accurate information to help women navigate health issues and learn about their bodies from pre-adolescence through menopause, and beyond. From helping young girls learn what is happening in their first menstruation to understanding the relationships between lifelong women's health and heart disease (the silent killer among women), breast cancer and osteoporosis.

The app also provides fun insight on what women can do to feel healthier, more energetic and mentally sharper. Women receive dietary tips, stress management tools and ideas, self-breast care examination education, preventative care ideas including vaccines and screenings and fertility guidance and enhancement techniques. The information is arranged intuitively so finding topics of concern is as easy as a couple of taps.

Priority – Maternal and Child Health

Maternal and child health strategies implemented by Baptist addressed the overarching goal to improve birth outcomes for women and infants. As part of the 2019-2022 implementation plan, Baptist conducted the following programs and initiatives within the Northeast Arkansas service area:

- In partnership with NEA Baptist Charitable Foundation, provided ShareHope*, a support service for anyone who has suffered the loss of a baby through miscarriage, stillbirth or early infant death
- Offered the free Beautiful Beginnings** maternity mobile app
- Planned community events and classes for childbirth, prenatal care, breastfeeding and newborn education were postponed due to COVID-19

***ShareHope**

ShareHope is a support service for anyone who has suffered the loss of a baby through miscarriage, stillbirth, or early infant death. The program serves parents, grandparents, siblings and others in the family unit, as well as the professionals who care for grieving families. Services include bed-side companions, phone support, face-to-face support group meetings, resource packets, private online communities, memorial events, training for caregivers and so much more. ShareHope is affiliated with the Share Pregnancy and Infant Loss Support, Inc., a national organization with over 75 chapters in 29 states.

ShareHope has multiple events every year to support families in our community, and hosts support groups periodically. Through the NEA Baptist Charitable Foundation, ShareHope is able to offer all services free of charge to families in need.

****Beautiful Beginnings Mobile App**

Beautiful Beginnings - the free pregnancy app from Baptist Memorial Hospital for Women - is a wonderful tool to help achieve a healthier pregnancy. Users enter their due date to receive week-by-week alerts about their baby's growth. The app keeps track of important events leading up to birth, such as how many times the baby kicks, appointments, contractions and information on maintaining personal health. Users can also access important resources at Baptist Women's Hospital, pregnancy support groups and information about infant health and safety.

COVID-19 Response

Baptist has supported the community throughout the pandemic, providing financial assistance, education and social and emotional support, among other items. The following is a list of services provided by the hospital in response to COVID-19:

- Provided oversight of community personal protective equipment (PPE), temporal thermometers, face shields and orders for community partners
- Supported COVID-19 community-wide testing and vaccination efforts
- Supported COVID-19 disease and vaccination education in partnership with community agencies

Baptist welcomes your partnership to meet the health and medical needs of our community. We know we cannot do this work alone and that sustained, meaningful health improvement will require collaboration to bring the best that each of community organizations has to offer. To learn more about Baptist's community health improvement work or to discuss partnership opportunities, please visit our website at baptistonline.org/about/chna.

Appendix A: Public Health Secondary Data References

Arkansas Department of Education. (2021). *Data Center*. Retrieved from https://adedata.arkansas.gov/statewide/ReportList/Counties/FreeReducedPaidLunch.aspx

Arkansas Department of Health. (2021). *Arkansas cancer registry*. Retrieved from https://www.healthy.arkansas.gov/programs-services/topics/arkansas-cancer-registry

Arkansas Department of Health. (2021). *COVID-19*. Retrieved from https://www.healthy.arkansas.gov/programs-services/topics/novel-coronavirus

Arkansas Department of Health. (2021). *Vital statistics*. Retrieved from https://www.healthy.arkansas.gov/programs-services/topics/vital-statistics

Center for Applied Research and Engagement Systems. (2021). *Map room*. Retrieved from https://careshq.org/map-rooms/

Centers for Disease Control and Prevention. (n.d.). *BRFSS prevalence & trends data*. Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html

Centers for Disease Control and Prevention. (2019). *Diabetes data and statistics*. Retrieved from https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html

Centers for Disease Control and Prevention. (2020). *CDC wonder*. Retrieved from http://wonder.cdc.gov/

Centers for Disease Control and Prevention. (2020). *Youth risk behavior surveillance system*. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Centers for Disease Control and Prevention. (2021). *National vital statistics system*. Retrieved from https://www.cdc.gov/nchs/nvss/index.htm

Centers for Disease Control and Prevention. (2021). *PLACES: Local data for better health*. Retrieved from https://www.cdc.gov/places/

Centers for Disease Control and Prevention. (2021). *Provisional drug overdose death counts*. Retrieved from https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Centers for Disease Control and Prevention. (2021). *United States cancer statistics: data visualizations*. Retrieved from https://gis.cdc.gov/Cancer/USCS/#/StateCounty/

Centers for Medicare & Medicaid Services. (2021). *Chronic conditions*. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and Reports/Chronic-Conditions/CC_Main.html

Corporation for Supportive Housing. (2020). *Racial disparities and disproportionality index*. Retrieved from https://www.csh.org/supportive-housing-101/data/#RDDI

County Health Rankings & Roadmaps. (2021). *Rankings data.* Retrieved from http://www.countyhealthrankings.org/

Covid Act Now. (2021). *US covid risk & vaccine tracker*. Retrieved from https://covidactnow.org

Dignity Health. (2021). *Community need index*. Retrieved from http://cni.dignityhealth.org/

Feeding America. (2021). *Food insecurity in the United States*. Retrieved from https://map.feedingamerica.org/

Health Resources and Service Administration. (2021). *HPSA find*. Retrieved from https://data.hrsa.gov/tools/shortage-area/hpsa-find

United States Bureau of Labor Statistics. (2021). *Local area unemployment statistics*. Retrieved from https://www.bls.gov/lau/

United States Census Bureau. (n.d.). *American Community Survey*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Department of Health and Human Services. (2010). *Healthy people 2030.* Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives

United States Department of Housing and Urban Development. (2021). *HUD exchange*. Retrieved from https://www.hudexchange.info/

Appendix B: Key Informant Survey Participants

- American Cancer Society, Executive Director
- Baptist Memorial Health Care Corporation, EVP & Chief Security Officer
- Boys & Girls Club of Crittenden County, Executive Director
- Children's Advocacy Center of Eastern Arkansas, Director
- Coast to Coast Medical, APN
- Leadership Memphis and Volunteer Memphis, President and CEO
- MidSouth Health Systems, Mental Health and Veterans Court Coordinator
- NEA Baptist Memorial Hospital, CMO
- St. Jude Children's Research Hospital, Director of Managed Care
- State Farm Insurance, Owner
- West Memphis Chamber, Executive Director