

# Community Health Needs Assessment

Statewide Report for Arkansas Children's Hospital





### **LETTER TO THE COMMUNITY**

Let's take a minute to think about three children in Arkansas on a typical school day.

The school bell rings to start the day, and the first child feels an ever-familiar pang in his stomach-he's hungry and unsure if he will have dinner tonight. Another child turns 4 today and is due for her immunizations, but her mom can't afford to take off work to get her to the doctor. And the last-he moves from classroom to classroom with an overwhelming feeling of sadness but doesn't know who to turn to for help.

Unfortunately, this is the reality for far more than three children in Arkansas.



The 2022 CHNA identified three primary priorities, all of which were exacerbated by the COVID-19 pandemic:
Behavioral & Mental Health
Immunizations
Food Insecurity

In addition to these primary priorities, CHNA participants shared recurring concerns about poverty and finances as a barrier to accessing care, which have been identified as intersecting needs in the community.

The enclosed report documents the CHNA process, findings and primary priorities. It provides helpful insights into some of the most prevalent health issues facing Arkansas families. Arkansas Children's Hospital uses these findings to inform programs and outreach efforts across the state, and I encourage you to do so as well.

Together, we can make Arkansas a safer and healthier place to be a child.

Marcy Doderer, FACHE President and CEO

raicy

Arkansas Children's



# We champion children by making them better today and healthier tomorrow.

Arkansas Children's Mission



### **EXECUTIVE SUMMARY**

For Arkansas Children's to achieve its mission, it is critical to have a deep understanding of the ongoing health needs of children in communities statewide. The process of primary and secondary data collection, analysis, and prioritization, allowed us to engage in robust community listening to inform the 2022 Community Health Needs Assessment (CHNA) for Arkansas Children's Hospital (ACH). ACH defined its community as all children age 18 and under who live in Arkansas. In 2021, this included 724,312 children in 75 counties.

From June 2021 through April 2022, Arkansas Children's Community Engagement staff worked with Boyette Strategic Advisors on a multi-faceted approach to engage stakeholders and communities, in addition to reviewing secondary data sources for both the Arkansas Children's Hospital (ACH) and Arkansas Children's Northwest (ACNW) Community Health Needs Assessments. This team also consulted members of the Natural Wonders Partnership Council, and other child health subject matters experts, as reviewers.

The four major assessment components included:

- Twenty-two focus groups with: parents/caregivers of children, educators, community leaders, and medical providers.
- Forty-one key informant interviews with child health thought leaders and subject matter experts.
- A digital survey of 602 parents in Arkansas, representative of Arkansas parents.
- Comprehensive review of child-specific data from local, state, and national sources.

The identified child health needs were prioritized using a scoring process developed for this assessment. Each health need identified through research and stakeholder input was analyzed based on quantitative factors of scope, severity, community priorities, and health disparities. In addition, qualitative factors included: how health issues connected to the Arkansas Children's Strategic Plan, ACH's ability to impact the need, and the ability to measure success. This report provides a detailed examination of the methodology used to complete this assessment as well as both primary and secondary data that were reviewed to identify current children's health needs in Arkansas.

### Prioritized Health Needs for the 2022 ACH Community Health Needs Assessment

<b>Primary Priorities:</b>	Secondary Priorities:	Sustaining Activities:		
Behavioral & Mental Health	Infant Health	Access to Care		
Immunizations	Child Abuse & Neglect	Obesity		
Food Insecurity		Injury Prevention		
Intersecting Need: Poverty & Finances				

This report summarizes and frames each of the identified health needs, in each of the categories, starting with Primary Priorities. This CHNA will be used to inform ACH's plans to improve children's health, including the 2023–2025 Implementation Strategy. This will guide efforts and commitment of resources over the next three years to make measurable improvements in the health of children in Arkansas. This assessment also fulfills the triennial IRS requirement of nonprofit hospitals.

### **TABLE OF CONTENTS**

ASSESSMENT	6
A. Purpose & Scope	6
B. Community Definition	7
C. Community Health Needs Assessment Process Overview	8
METHODS	10
A. Secondary Quantitative Data Collection	10
B. Primary Qualitative Data Collection	10
i. Parent & Caregiver Digital Survey	10
ii. Key Informant Interviews	12
iii. Focus Groups	12
FINDINGS	15
A. Introduction to Findings	15
B. Prioritizing Findings	16
C. Prioritized Health Needs	17
i. Primary Priorities:	19
<ul> <li>Behavioral &amp; Mental Health</li> </ul>	20
<ul> <li>Immunizations</li> </ul>	26
<ul> <li>Food Insecurity</li> </ul>	34
ii. Secondary Priorities:	41
<ul> <li>Infant Health</li> </ul>	42
<ul> <li>Child Abuse &amp; Neglect</li> </ul>	48
iii. Sustaining Activities:	59
<ul> <li>Access to Care</li> </ul>	60
<ul> <li>Obesity</li> </ul>	68
<ul> <li>Injury Prevention</li> </ul>	74
iv. Intersecting Need:	83
<ul> <li>Poverty &amp; Finances</li> </ul>	84
LOOKING FORWARD	90
A. Review of 2020–2022 ACH Implementation Strategy	91
B. Engagement Of Community Stakeholders	93
C. Big Ideas from Community Stakeholders	94
D. Authors & Acknowledgements	97
APPENDICES	98
SOURCES (ENDNOTES)	101

### **ASSESSMENT**

This report is the 2022 Community Health Needs Assessment for Arkansas Children's Hospital (ACH). It includes prioritized health needs and findings relevant to all children from birth to 18 years old, living in all 75 counties in the state, which is the community ACH serves.

Arkansas Children's Community Engagement, Advocacy, and Health Division, with Boyette Strategic Advisors, conducted the 2022 statewide assessment. A wide variety of public health and child health stakeholders reviewed and vetted the methods, data, prioritization process, and findings of the assessment.

#### **PURPOSE & SCOPE**

The 2022 ACH Community Health Needs Assessment is the fourth report in a series of statewide needs assessments to identify the priority health issues for children. The 2013 report was the first ACH Community Health Needs Assessment completed.

In addition to satisfying the federal tax-exemption requirements as laid out in the Affordable Care Act (ACA), the purpose is to provide a snapshot of child health in the state. The goals of the Community Health Needs Assessment (CHNA) are to:

- Identify and prioritize the top health needs for children in Arkansas (the community served by ACH).
- 2) Inform the Arkansas Children's strategic initiatives that improve child health by using a social-determinants-of-health framework.
- 3) Inform the impact efforts of a number of agencies that serve children statewide, including the Natural Wonders Partnership Council (NWPC).

#### **COMMENTS**

- Comments on the 2022 Community Health Needs Assessment may be emailed to <u>CHNA@archildrens.org</u>.
- The 2019 ACH Community Health Needs
   Assessment was available as a printed document and widely available to the public on the Arkansas Children's website: (https://www.archildrens.org/resources/community-needs-assessment). There were no written comments received for the 2019 needs assessment.

Food insecurity, access to care, transportation, poverty, parental education-all those contribute to the health of a child. Arkansas Children's can't be the solution for all of them, but they can take a lead in some areas and be supportive in others. Collaboration with other organizations will be important.

Healthcare Community Leader Key Informant

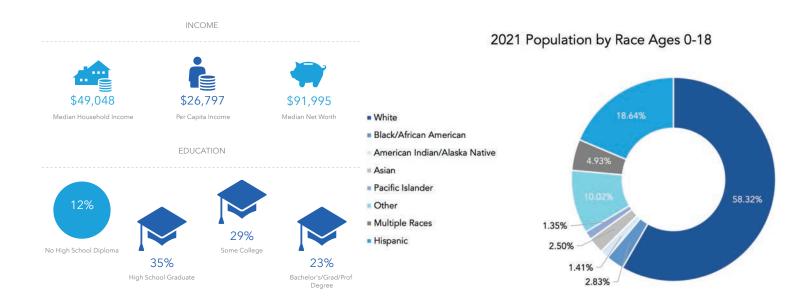
#### **COMMUNITY DEFINITION**

Arkansas Children's Hospital serves Arkansas's pediatric population—all children from birth to age 18 in all 75 counties in the state. This private, nonprofit hospital has worked to not only meet the health needs of all Arkansas children, but to also support efforts to improve the overall health and well-being of our youngest residents.

Arkansas Children's is the state's only pediatric health system. The system treats children from across the state and surrounding areas. The total population of Arkansas children from birth to age 18 is 724,312, which is an increase from the 2018 population of 705,718. The state's total population has increased from 2,915,918 in 2010 to 3,116,869 in 2021.

Arkansas's median household income of \$49,048 is below the US median of \$64,730, while per capita income in Arkansas is \$26,797. The state reports 12% of its population ages 25+ does not have a high school diploma, while 23% of residents have earned a bachelor's degree or higher. The infographic below provides additional key facts about the state.





#### COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS OVERVIEW

Arkansas Children's Community Engagement team worked with Boyette Strategic Advisors on the CHNA. The stakeholder engagement process, and primary and secondary data review occurred from June 2021 through April 2022. In addition to quantitative secondary data collection, a total of 808 participants in Arkansas provided their perspectives on the most important child health issues.

The following details the stakeholder participation in this process:

- Parents/caregivers, medical providers, educators, and community leaders participated in virtual focus groups with fellow participants from across the state, including four groups that were conducted in Spanish.
- Forty-one Key Informant interviews were conducted to gather critical input from subject matter experts and thought leaders across the state. Key informants were inclusive of leaders who represented minority and immigrant communities.
- An online survey was conducted with a panel of 606 Arkansas parents and caregivers who are the healthcare decision-makers for their children and who do not work in healthcare.
  - The survey for the 2019 CHNA was conducted by telephone, but the
    - survey partner recommended an online survey as the preferred method for the 2022 report given growing issues with telephone methodology.
- Child health stakeholders reviewed each component of the CHNA, such as the parent survey questions and focus group guide. Many of these stakeholders supplied input through their work as part of the Natural Wonders Partnership Council.

Following completion of all data collection and analysis, themes emerged for further discussion. These themes, along with key data points to support each, were shared with the CHNA Advisory Group, composed of senior leadership at the hospital. A custom scoring algorithm was developed based on weighted scoring of all factors to determine priority ranking of the issues.

The initial themes shared with the advisory group included the following:

- Access to Care: Oral Health & Immunizations
- Behavioral & Mental Health
- Child Abuse & Neglect
- First 2,100 Days of Life
- Food Insecurity & Obesity
- Immunizations & Vaccine Confidence
- Parent Support & Education
- Poverty & Finances

Stakeholder Participation				
Group	<b>Engagement Type</b>	Participants		
One-on-One Interviews	Key Informants	41		
Focus Groups	Community Leaders (3 groups)	10		
	Educators (4 groups)	18		
	Medical Providers (3 groups)	14		
	Parents/Caregivers (5 groups)	58		
	Spanish-language Parents/Caregivers (4 groups)	61		
Online Survey	Parents/Caregivers	606		

- Safety & Injury Prevention
- Telehealth

After discussion with the advisory group, early themes were refined and further explored to confirm that critical needs had been identified. At that point, profiles of each of the revised needs were shared with the advisory group, who then implemented the scoring algorithm to prioritize the needs. Following is the resulting list of priorities:

- Behavioral & Mental Health
  - o Suicide Prevention
- Immunizations
- Food Insecurity
- Infant Health
  - Infant Mortality
  - o Teen Pregnancy
- Child Abuse & Neglect
- Access to Care
  - o Telehealth
  - o Oral Health
- Childhood Obesity
- Injury Prevention: Motor Vehicle Safety

During this process, the advisory group and the CHNA team identified Poverty & Finances as an intersecting need. Arkansas has long been near the bottom of poverty and income rankings despite concerted efforts to positively impact income and reduce poverty. This, in addition to the clear intersection of poverty with every other children's health issue, is why the group identified it as an intersecting need.



### **METHODS**

The Arkansas Children's Hospital team reviewed all IRS requirements for this CHNA and developed a revised and thorough process for collecting and analyzing all primary and secondary data needed to make informed decisions about the current children's health needs in Arkansas. Quantitative data were used to help validate and frame health needs that were mentioned during the qualitative data collection process. More than 800 stakeholders, including parents/caregivers, subject matter experts, and community leaders, provided qualitative input for this report.

#### SECONDARY QUANTITATIVE DATA COLLECTION

Boyette Strategic Advisors uses several subscription databases, which provide access to more current demographic estimates than are available through public data sources, such as the U.S. Census Bureau. For this report, Boyette used demographic, income, and employment data from Esri Business Analytics Online, which enhances publicly available data and provides estimates for the current year, along with

projections for many data points for five years forward.

In addition to the demographic and economic data accessed through Esri, this report includes analytics from local, state, and national data reviewed as part of this process. This includes local data from Arkansas Children's Hospital and research studies focused on specific diseases or groups. State-level data were examined from the Arkansas Department of Health, the Arkansas Department of Human Services, Arkansas Advocates for Children and Families, and Aspire Arkansas/Arkansas Community Foundation, as well as other state agency and nonprofit organization sources. Some of these data also include detail at the county level.

The CHNA team accessed national data sets that included the Annie E. Casey Foundation's *Kids Count Data Center*; the Centers for Disease Control and Prevention; the Youth Risk Behavior Survey; United Health Foundation's *America's Health Rankings Annual Report* and *Health of Women and Children Report*; National Survey of Children's Health; and University of Wisconsin and Robert Wood Johnson Foundation *County Health Rankings*. Every effort was also made to access data specific to children's health needs; however, in limited cases, adult data were accessed to assist in developing a clear picture of particular issues.

### PRIMARY QUALITATIVE DATA COLLECTION

#### PARENT & CAREGIVER DIGITAL SURVEY

ACH contracted Klein & Partners, a healthcare-focused market research firm, to design and field a digital parent survey to collect comprehensive data from parents and

Parent Survey Demographic Profile		
Demographic Profile	Total for Arkansas	
2+ Children	55%	
Average age of oldest child	10	
Moms	78%	
College degree	22%	
Average parent age	37	
Average # of household members	3.7	
Marital Status		
Married	55%	
Single	15%	
Separated/Divorced	15%	
Living Together	13%	
Widowed	2%	
Race/Ethnicity		
Caucasian	77%	
African American	17%	
Hispanic	6%	
Median Income	\$39,197	
<u>Health Insurance</u>		
Medicaid (AR Kids First)	53%	
Group	29%	
Individual	9%	
Exchange	4%	
No insurance for children	2%	
Employment Status		
Employed full-time	44%	
Homemaker	19%	
Out of work but looking	8%	
Employed part-time	8%	
Self-employed	7%	
Out of work and not looking	4%	
Retired	3%	
Student	2%	

caregivers in the state. While the 2019 parent/caregiver survey was conducted by telephone, the survey was fielded digitally for this report in order to avoid emerging limitations with telephone methodology. The survey was designed to gather parent/caregiver perspectives on a variety of issues that potentially impact children's health and well-being.

**Methodology:** The online survey was fielded between August 26 and September 16, 2021, to a total of 606 respondents across Arkansas. To ensure a valid and representative sample, data were weighted by county, income, education, and ethnicity. The sample included parents or caregivers who are the healthcare decision-makers for their children and do not work in healthcare. The table shows the demographic profile of respondents.

**Key Findings:** One overarching concern surfaced through the parent survey—the need for more mental health services for children. Parents said COVID-19 has negatively impacted children's mental health much more than their physical health.

The top five concerns parents have for their children include: bullying, poverty & finances, poor parenting, mental health issues, and child abuse. Analysis of the data also indicated that mental health and financial challenges seem to go hand-in-hand and impact children's health. Additionally, there appears to be a correlation between households with children with chronic and/or serious acute situations and domestic violence/abuse, possibly the result of emotional and financial stress of these serious and/or ongoing medical situations contributing to parent stress.

Following are additional findings:

Top Problems Related to Children	's Health & We	l-Being				
Problem	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Top 5 Ranking
Bullying	12%	9%	6%	10%	10%	47%^
Poverty & Finances	8%	7%	10%	10%	6%	41%^
Poor Parenting	8%	9%	7%	4%	10%	38%
Mental Health Issues	7%	10%	7%	6%	7%	37%
Child Abuse	6%	6%	5%	7%	7%	31%^
Affordable Health Insurance	10%	3%	6%	5%	4%	28%
Obesity/Lack of Exercise	5%	5%	7%	6%	5%	28%
Poor Nutrition	4%	6%	5%	6%	6%	27%^
Drugs	6%	5%	6%	5%	4%	26%
Food Insecurity	3%	5%	7%	3%	4%	22%
Lack of Affordable Housing	3%	5%	4%	5%	4%	21%
Violence/Guns	3%	3%	5%	4%	5%	20%
Lack of Regular Health Visits	3%	3%	6%	4%	4%	20%
Access to Quality Healthcare	5%	4%	3%	3%	3%	18%
Contagions/Cold/Flu	4%	6%	2%	4%	2%	18%
Poor Educational Opportunities	2%	3%	3%	4%	4%	16%
Vaccination Issues	5%	2%	2%	3%	3%	15%
Systemic Racism	2%	2%	4%	3%	4%	15%
Suicide	2%	3%	2%	3%	5%	15%
Lack of Healthcare Services	1%	3%	4%	3%	3%	14%

- Moms have the highest level of concern about their children's safety, whether it is preventable injuries or threats such as bullying or school violence.
- Half of parents surveyed must take unpaid time-off of work to take their children in for healthcare services.

Arkansas parents surveyed were confident about childhood vaccinations (64%), but fewer parents had
confidence in the COVID-19 vaccine. Only 28% of parents were "not at all hesitant" about the COVID19 vaccine, while 34% were "very hesitant" about the COVID-19 vaccine. For comparison, almost half
(46%) of parents surveyed were not at all hesitant about the yearly flu vaccine.

### KEY INFORMANT INTERVIEWS

Subject matter experts and other key stakeholders participated in interviews conducted via Zoom by Boyette Strategic Advisors in July and August 2021. A total of 41 key informants, who included medical providers, educators, policy officials, ACH senior leadership, and community leaders were interviewed. Questions used for the interviews were centered on the conditions that impact health or social- determinants-of-health, but also provided opportunities for the interviewees to share their thoughts about a variety of potential needs and concerns. Interviews also included an opportunity for key informants to share their thoughts on any COVID-19 impacts to children's health that may surface over the next three to five years. The questions that guided these conversations are included in the appendices.

**Methodology:** Boyette completed an initial analysis of the interviews by identifying key themes that emerged over the course of all conversations. All interview notes were organized in a spreadsheet format that allowed for quantifying the frequency and depth of concerns about each of the needs. A series of intersecting factors also surfaced as the themes were analyzed. Boyette provided a summary of findings from the interviews to the ACH team, including quotes from key informants that illustrated the perspectives that were common across most of the interviews.

**Key Findings:** Poverty & Finances was an intersecting issue that surfaced as a concern related to a variety of children's health needs, including Behavioral & Mental Health, Food Insecurity, Parental Support, and Access to Care. Additionally, many of those interviewed also expressed concern about public policy issues and whether elected officials and policymakers were appropriately focused on children's health.

Many did express concerns about mental health impacts of the precautions taken because of the pandemic; developmental delays resulting from virtual education; and missed immunizations, as parents were hesitant to visit doctors' offices at the height of the pandemic and were uncomfortable about vaccines in general because of media coverage about COVID-19 vaccine hesitancy.

#### **FOCUS GROUPS**

A series of focus group virtual conversations were held via Zoom to seek input from parents/caregivers, educators, medical providers, and community leaders. A total of 19 focus groups engaged 161 stakeholders, including four groups that were conducted in Spanish. Each 60-minute conversation was recorded to ensure that all comments were captured for analysis. Two team members led the focus groups—one who facilitated the discussion and one who captured comments and identified themes. In addition, four Spanish-language focus groups were offered to parents and caregivers. Those in-person discussions were held intentionally in four different regions of the state: DeQueen (Southwest Arkansas), Warren (Southeast Arkansas), Little Rock (Central Arkansas), and Springdale (Northwest Arkansas).

**Participant Recruitment:** In an effort to ensure broad participation from diverse stakeholders across the state, a participant recruitment strategy was employed. This strategy involved contacting a list of potential partner organizations requesting that they contact their members or stakeholders and invite them to participate in the appropriate focus groups. These partners were given a draft email with an embedded

QR code and the flyer found at right to facilitate their outreach. Both the Alchemer online survey tool and Calendly were utilized to capture participant registration.

Focus Group Guide: A focus group guide was developed that provided structure to the discussions. It included a full script of the introductory information to be provided to each group about why they had been invited to join the conversation and how the information would be used to help identify and address children's health needs in Arkansas. It also included the instant poll questions that were inserted in the conversation intermittently. Conversations opened with some

general questions about their thoughts about the status of children in Arkansas, followed by more specific exploration around the social-determinants-of-health, access to and quality of clinical care, physical environment, social and economic factors impacting health, and healthy behaviors. Each topic provided opportunities for the facilitator to probe deeper to get full perspectives from participants. Each focus group closed with participants being

PARENTS & CAREGIVERS
EDUCATORS
MEDICAL PROVIDERS
COMMUNITY LEADERS

Arkansas Children's invites community members to share their opinions on the health needs of children in Arkansas. Results will inform our hospitals' community health needs assessments, so we can better understand children's health in our state.

Focus groups will be held by a Zoom virtual call and last 1 hour. Times are available in the morning and evening in late September and early October.

Use the QR Code to register.

given the opportunity to share ideas of how they would improve children's health if unlimited resources were available. The focus group guide is found in the appendices.

**Methodology:** A combination of inductive and deductive analysis for the focus group discussions was used. During the focus groups, verbatim notes were captured, with a recording of the conversation as a backup. Additionally, themes that emerged across multiple groups as well as any group dynamics that may have influenced comments were noted.

Using those initial themes, comments and responses were coded into preliminary categories. Additional themes or "sub-themes" that surfaced were then added to the categories. The themes and comments were organized in a spreadsheet format with multiple tabs for themes related to the particular audience in the focus group. A summary of high-level findings was developed, along with a complete narrative report of the focus groups' data.

Four quantitative questions that were used during the focus groups through Zoom polling allowed focus group participants to respond and see immediate results. The quantitative questions aligned with similar questions from the parent/caregiver survey and were placed throughout the focus groups to introduce new discussion topics.

**Key Findings:** The instant poll questions provided a limited amount of quantitative data from the focus groups. From those poll questions, the top five children's health concerns across all audiences included abuse (child and/or domestic), access to quality healthcare, poverty and finances, food insecurity/poor nutrition, and bullying. Those topics align well with themes that were identified through key informant interviews and findings from the digital parent survey. In response to general questions about children's health, the most common responses involved access to care, mental health, food insecurity and nutrition, and parent education and support.

As with other stakeholder input, poverty and finances was identified as an underlying contributor to many of the concerns expressed by focus group participants. Many discussed barriers to accessing care that were driven by poverty. For example, a lack of transportation, working parents without the ability to miss work, a lack of understanding of available resources, and providers that do not accept Medicaid were all mentioned. Rurality as an access issue was mentioned in relationship to poverty, because length of time to travel and the associated costs to travel were perceived as a barrier to care for some families.

Medical providers expressed strong concerns about behavioral and mental health. Virtually all medical providers mentioned a lack of mental health providers, saying it is difficult to get a timely appointment as a result. The providers who are primary care providers also said that they often have to provide some level of mental health care because patients come in with mental health issues, and a timely appointment with a mental health provider is not available. Some suggested that additional training for primary care physicians related to mental health treatment options might be important.

While the Spanish-language focus group participants discussed many of the same concerns as those that emerged in other groups, there was a much greater focus on language barriers with medical professionals and concerns about immigration status that can interfere with access to care. Poverty and lack of available employment were also mentioned in all four Spanish-language groups. Participants also said that there is an overall lack of information and resources, particularly in more rural areas.



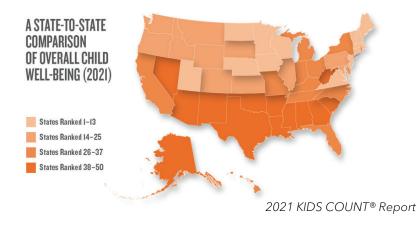
#### **FINDINGS**

All qualitative and quantitative data were reviewed and analyzed individually, as well as across all results to determine any differences or outliers. This analysis led initially to early themes related to children's health needs in Arkansas. Some additional review and deeper data analysis, combined with conversations with the CHNA Advisory Group, resulted in a list of needs that were then prioritized using a process of both qualitative and quantitative measures. Below is a summary of broad measures of health that were identified early in the process, followed by details about the scoring process used to determine priorities.

#### INTRODUCTION TO FINDINGS

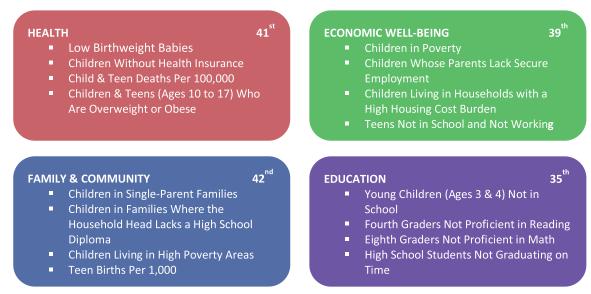
While the 2022 Arkansas Children's Hospital CHNA will identify specific community health needs, there was also analysis and review of the measures of overall health of Arkansas children. Various health and other nonprofit organizations track a multitude of data points that contribute to children's health. Some of these take a broad look at the overall status of children and the different contributing factors that result in positive or negative impacts on health. This document provides an overview of those broad measures of children's health in Arkansas.

- The 2021 KIDS COUNT® Report ranks
   Arkansas 50<sup>th</sup> for the number of children
   who have encountered two or more
   adverse childhood experiences (ACEs).
   Arkansas is 11% above the US average,
   with nearly 1/3 of children included in this
   category.
- According to the 2020 National Survey of Children's Health, Arkansas ranks 43<sup>rd</sup> for the percentage of children with special healthcare needs. The state rate of 22.3% is about 3.5% greater than the US.



• The same survey ranks the state's children's health status at 44<sup>th</sup>, with 88.5% of children ages 0–17 in excellent or very good health.

Arkansas ranks in the bottom third of overall child well-being, according to the 2021 KIDS COUNT® Report. This ranking includes 16 individual measures of children's well-being in four categories: Health, Economic Well-Being, Family & Community, and Education.



#### PRIORITIZING FINDINGS

ACH used a rating and weighting index to prioritize the community health needs that were identified. This unique index tool was developed by the Arkansas Children's Community Engagement team and Boyette Strategic Advisors. The CHNA Working Group, whose membership included a range of knowledge and experience from across the Arkansas Children's system, provided input and conducted testing of the scoring methodology to ensure its accuracy and effectiveness.

Each health need identified through research and stakeholder input was further analyzed based on the following factors:

- Scope (12%) consideration of how widespread the need may be among Arkansas children.
- Severity (20%) addresses the types of outcomes resulting from this need if nothing is done to further address the need.
- Community Priority (20%) focuses on findings from stakeholder input and which needs were identified by a majority of stakeholder groups.
- Health Disparities (3%) consideration of the need and its effect by race, community size, and economic factors.
- Connection to Arkansas Children's (AC) Strategic Plan (10%) focuses on how a given need aligns with the AC Strategic Plan.
- Critical Leadership and Other Considerations (10%) provides for key AC staff and medical providers to apply their expertise to the topic.
- Ability to Impact (15%) considers whether the need is currently being addressed by Arkansas
   Children's or another entity and the likelihood of success if Arkansas Children's chooses to become
   involved or increase their efforts.
- Ability to Measure Success (10%) determines how effective a program or service is in addressing a particular need using existing metrics or available data to create a meaningful metric.



The first four factors in the rating index have significant data to inform the scores. All of these data were collected for the CHNA and utilized to arrive at the scoring of the Scope, Severity, Community Priority, and Health Disparities factors. Given the need for data analysis and the more objective considerations, these four factors were scored by the Community Engagement team and the consultant team.

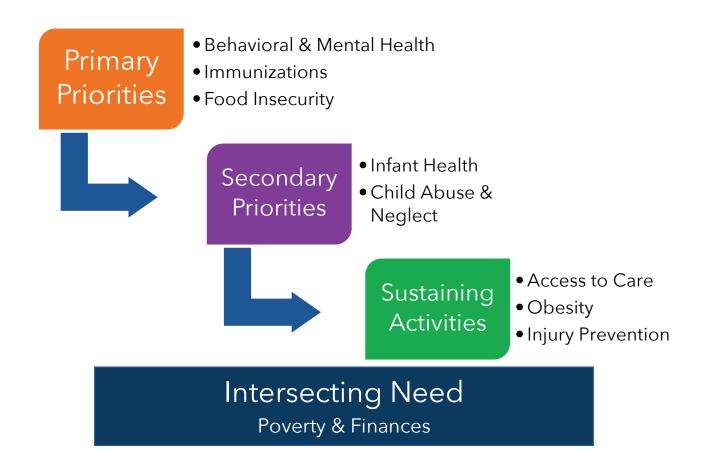
The final four factors required expertise and historic knowledge of the various issues. For that reason, the CHNA Advisory Group scored the Connection to the Strategic Plan, Critical Leadership and Other Considerations, Ability to Impact, and Ability to Measure Success factors.

Prior to scoring, advisory group members had the opportunity to participate in three information sessions about CHNA findings. The third of those meetings included a thorough overview of the rating process. Additionally, a two-page summary of each identified need was provided and included a description of the need, any pertinent data used to identify the need, and current or potential options to address the need.

#### PRIORITIZED HEALTH NEEDS

Using the rating methodology described previously, the identified health needs were scored. The scoring resulted in identification of three tiers of priorities. In addition, the determination that Poverty & Finances is an intersecting need.

Using the scoring results, ACH will work to address the following prioritized health needs over the next three years:







Primary Priorities
for the 2022
Arkansas Children's Hospital
Community Health Needs
Assessment

**Primary Priorities** 

- Behavioral & Mental Health
- Immunizations
- Food Insecurity

#### **OVERVIEW**

The mental and behavioral health of Arkansas children was one of the most significant topics identified in the Community Health Needs Assessment. The serious impacts of children's poor behavioral and mental health result from risky behaviors, family dynamics, missed developmental milestones, and learning and developmental disabilities. In a September 2021 article, Marcy Doderer, CEO of Arkansas Children's, was quoted as saying, "Trying to understand how, as an industry and as a society, we can best address the mental, emotional and behavioral health needs of kids is becoming an urgent topic for solutions."

Arkansas ranks very poorly in child mental health national rankings. The most common mental disorders diagnosed in childhood include attention-deficit/hyperactivity disorder (ADHD), anxiety, and behavior disorders. Additionally, Arkansas children are more likely to encounter adverse childhood experiences (ACEs) than children in other states. ACEs include all types of abuse, neglect, and other traumatic experiences.

According to American's Health Rankings 2021 Annual Report from the United Health Foundation, Arkansas ranks 48<sup>th</sup> for ACEs, with 22.5% of children under age 18 experiencing two or more stressful or traumatic events that may have a long-term impact on their health and well-being.<sup>3</sup> Additionally, death by suicide among Arkansans ages 15 to 24 is high and ranked 37<sup>th</sup> nationally while continuing to increase in recent years.<sup>4</sup>

The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Behavioral & Mental Health can be found in the Appendix.

#### **BEHAVIORAL & MENTAL HEALTH**

AT A GLANCE

### 29%

ARKANSAS CHILDREN WITH EMOTIONAL, BEHAVIORAL, OR DEVELOPMENTAL CONDITIONS

### **50**<sup>th</sup>

CHILDREN RECEIVING DEVELOPMENTAL SCREENINGS

### 22.5%

OF CHILDREN IN ARKANSAS EXPERIENCE TWO OR MORE STRESSFUL TRAUMATIC EVENTS (THAT MAY HAVE A LONG-TERM IMPACT ON THEIR HEALTH)

### 22.6%

ARKANSAS TEENS WERE BULLIED ON SCHOOL PROPERTY

### 36.7%

ARKANSAS TEENS WHO FELT SAD OR HOPELESS ALMOST EVERY DAY FOR TWO OR MORE WEEKS IN A ROW

### 21.9/100,000

ARKANSAS SUICIDE DEATHS AGES 15-24

### 1 in 3

ARKANSAS CHILDREN SERIOUSLY CONSIDERED ATTEMPTING OR MADE A PLAN TO ATTEMPT SUICIDE

#### **INTERSECTING NEEDS**

The Centers for Disease Control and Prevention (CDC) describes children's mental health disorders as "serious changes in the way children typically learn, behave, or handle their emotions, which cause distress and problems getting through the day." <sup>5</sup> Children with ADHD, anxiety, autism, substance use, and self-harm are among the childhood disorders that require behavioral and/or mental health treatment. Many of these disorders are chronic conditions that last a long time. Without treatment, these disorders will lead to problems at home, in school, and in forming healthy relationships. <sup>6</sup>

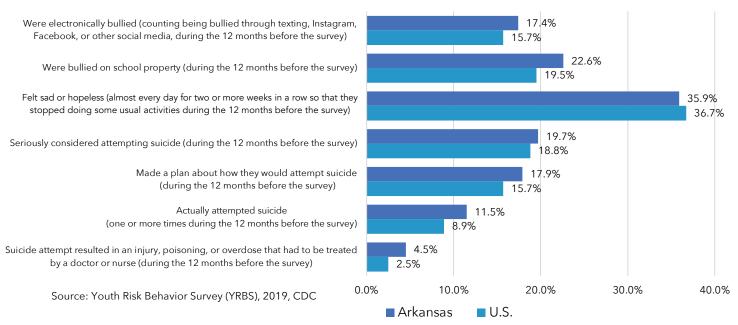
A variety of incidents, behaviors, and experiences contribute to mental health disorders in children and teens. A remarkable number of children in Arkansas experience risky behaviors related to mental health. According to the CDC's Youth Risk Behavior Survey 2019, Arkansas children are more likely to experience or participate in the following risky behaviors that may impact mental health:

- Subject of bullying
- Experienced sexual violence
- Took prescription pain medicine without a doctor's prescription; used inhalants, heroin, methamphetamines, or ecstasy
- Had first drink of alcohol before age 13

The number of children and teens who plan, attempt, or die by suicide as a result of their mental illness is staggering. Nearly one in five Arkansas teens have seriously considered attempting suicide in the last 12 months, according to the CDC 2019 Youth Risk Behavior Survey. A suicide rate of 21.9 per 100,000 Arkansans ages 15 to 24 equates to more than 650 deaths per year.

According to the Annie E. Casey Foundation's 2021 KIDS COUNT® Report, a study examining the validity of healthy days as a summary measure for county health status found that counties with more unhealthy days were likely to have higher unemployment, poverty, percentage of adults who did not complete high school, mortality rates, and prevalence of disability than counties with fewer unhealthy days. Each of these impacts also lead to poorer mental health, creating a difficult-to-break cycle.

### Teen Mental Health Risk Behaviors



#### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Behavioral & Mental Health should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- Arkansas has a severe shortage of mental health professionals. Only three Arkansas counties— Faulkner, Pulaski, and Saline—are not designated as Health Professional Shortage Areas (HPSA) for mental health professionals. Health Resources and Services Administration determines a HPSA with three scoring criteria:
  - 1) Population-toprovider ratio.
  - 2) Percent of population below 100% of the federal poverty level.
  - 3) Travel time to the nearest source of care outside of the HPSA.
- Benton

  Washington

  Washington

Mental Health Professional Shortage Areas (HPSA)

- The state ranks 47<sup>th</sup> in percentage of children with emotional, behavioral, or developmental conditions, according to the 2021 KIDS COUNT® Report, with about 7% more Arkansas children identified as experiencing emotional, behavioral, or developmental conditions than the national average. The 2020 National Survey of Children's Health ranks Arkansas at 50<sup>th</sup> for children receiving developmental screenings, with the state percentage approximately 16% lower than the national average.
- A common underlying condition and/or symptom of mental health disparities is attention deficit disorder (ADD)/ADHD, and the 2021 KIDS COUNT® Report ranks Arkansas at 42<sup>nd</sup> for the percentage of children with ADD/ADHD, almost 3% higher than the national average.
- According to the 2021 United Health Foundation America's Health Rankings, the number of Arkansas children that die by suicide is 21.9 per 100,000, which is significantly more than

#### Deaths by Suicide Ages 15-24 25.0 21.9 22.4 Deaths Per 100,000 Population 20.0 16.7 14.9 14.6 13.7 15.0 16.3 15.1 14.5 15.4 13.6 10.0 5.0 0.0 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: United Health Foundation America's Health Rankings 2021

the national rate of 13.9 per 100,000, and places Arkansas's national ranking at 37th.

 Approximately 35% of adults report living in households with children who felt nervous, anxious, or on edge more than half the days in the past two weeks in Arkansas.

#### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Behavioral & Mental Health.

Children's mental and behavioral health was one of the most significant topics identified with all stakeholders (surveys, focus groups, key informants), and it was mentioned more than 50 times.

#### KEY INFORMANT FEEDBACK

- Several key informants discussed the high incidence of adverse childhood experiences (ACEs) in Arkansas and the potential longterm impact they may have on children's mental health.
- A number of those interviewed as key informants expressed concern that the COVID-19 pandemic may result in the need for even more resources to address mental health issues in children.
- As one key informant put it, "I think the mental health components need to be addressed more than they have been with more resources added to them, especially once this pandemic is behind us."
- Concern about access to mental health care
  was also voiced by many key informants,
  who pointed out that early access and intervention could result in prevention or mitigation of factors
  impacting children's mental health.
- Some suggested school-based mental health services could be very effective in addressing children's needs, saying that the current system is fractured for addressing behavioral and mental health.

I've seen a lack of partnership between primary care and mental health providers. They just haven't integrated in a way that I think needs to happen.

State Government Key Informant

#### FOCUS GROUP FEEDBACK

- An educator who participated in a focus group said they believe that educators should have more training to help them understand and identify mental health needs of their students.
- Other educators mentioned the importance of school-based mental health programs, with some districts adding social workers to help address the issue. Educators emphasized the difficulty in finding mental health professionals, particularly in rural areas.
- Several parent focus group participants discussed the fact that many mental health providers do not accept Medicaid patients.

There is a stigma around mental health help, and even when resources are there, many parents don't know how to access them.

Community Leader Focus Group Participant



Medical providers participating in focus groups discussed their concerns about how frequently they
find themselves assessing and treating a child's mental health issues without appropriate training. One
said they would like to see a program where primary care physicians could reach out to mental health
providers for quick answers without having to wait for a return call. Others suggested investing in
training primary care providers to assess mental health needs and provide preliminary care.

### PARENT SURVEY RESULTS

- The statewide parent survey of the 2022 CHNA process illustrates the importance of child mental health. Parent respondents ranked mental health as the second most important issue in children's health, with 40% of respondents including mental health as a top five issue.
- Additionally, 50% of parents identified the number of children who have mental health issues as a serious problem.

#### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to the National Survey of Children's Health, Black non-Hispanic children have the highest rate of having one or more mental, emotional, developmental, or behavioral (MEDB) problems at 33.6%, followed by White non-Hispanic children at 31.1%. Only 15% of Hispanic children are reported to have one or more MEDBs.

Disparities exist related to all three areas of concern: rural, racial, and economic. Seven of the eight counties defined as rural for which data are available have a higher ratio of population to mental health providers than the state. Six of the 10 counties with the highest non-White population have a higher rate of race disparity than the state average. Eight of 10 counties with the greatest poverty rates also have higher ratios than the state rate of 420:1.

The data for ratio of population to mental health professionals at the county and state levels were sourced from 2021 County Health Rankings.

### Disparities in Behavioral & Mental Health

Source: Arkansas Department of Health

RURAL DISPARITY		
County	<b>County Ratio</b>	AR Ratio
Calhoun	N/A	420:1
Woodruff	1,580:1	420:1
Lafayette	1,660:1	420:1
Dallas	350:1	420:1
Monroe	6,700:1	420:1
Searcy	460:1	420:1
Newton	3,880:1	420:1
Prairie	4,030:1	420:1
Cleveland	N/A	420:1
Nevada	1,180:1	420:1
RACIAL DISPARITY		
Phillips	1,620:1	420:1
Jefferson	440:1	420:1
Chicot	170:1	420:1
Crittenden	440:1	420:1
St. Francis	300:1	420:1
Lee	8,860:1	420:1
Desha	1,620:1	420:1
Pulaski	220:1	420:1
Monroe	6,700:1	420:1
Dallas	350:1	420:1
ECONOMIC DISPAR		
Phillips	1,620:1	420:1
Chicot	170:1	420:1
Woodruff	1,580:1	420:1
Lee	8,860:1	420:1
Desha	1,620:1	420:1
St. Francis	300:1	420:1
Searcy	460:1	420:1
Monroe	6,700:1	420:1
Columbia	530:1	420:1
Lafayette	1,660:1	420:1

### **OVERVIEW**

There is a clear link between immunization rates and the decrease of certain diseases. According to the Healthy People initiative, vaccines are among the most cost-effective clinical preventive services and are a core component of any preventive-services package.

Arkansas has made great strides in recent years in advancing childhood immunizations. In 2010, just 58.9% of 2-year-old children were vaccinated, but the percentage has steadily increased since that time. In 2019, for the first time, immunized Arkansas children exceeded the national average percentage of vaccinated children. The state currently ranks 23rd nationally, with 76.3% of 2-year-olds in Arkansas fully immunized for all doses of the recommended combined 7-vaccine series. Immunization rates for 2-year-olds is the national standard metric for comparing rates. There is a shift toward use of this standard metric, although in some cases, immunization rates for 19-35 month children are the data available. Even with these recent strides in fully immunized children, Arkansas still has ground to cover, when compared to the healthiest state (Massachusetts, 92.7% fully immunized). Additional work to provide vaccines to areas with limited access, to ensure providers offer vaccines, and to address misinformation about vaccines can help Arkansas continue to improve our rates.

The COVID-19 pandemic negatively affected immunization coverage. Health officials and medical providers observed a

delay in some families seeking well-child care, which likely played a part in the lag for recommended vaccines administered in early 2020-21. Through partnerships between healthcare providers, insurance companies, pharmacists, public interest groups, and others, work was done in the fall of 2020 to focus on ensuring children could catch up on their vaccine series. The graph below shows the increase in the vaccines administered from September through November of 2021.

There are a growing number of philosophical exemptions filed annually. This may result in more cases of measles, mumps, chicken pox, and whooping cough. 7 In addition, hesitancy and mistrust of vaccinations play an important role in informing the complex issue of Immunizations. It is still unclear how the hesitancy around the COVID-19 vaccine, a critical component of ending the pandemic, may play a role in affecting attitudes about other vaccines.

### **IMMUNIZATIONS**

AT A GLANCE

### **23rd**

ARKANSAS RANK OF 2-YEAR-OLDS WHO ARE IMMUNIZED

### 62.2%

PERCENTAGE OF ARKANSAS CHILDREN 19-35 MONTHS OF AGE WHO RECEIVED ALL RECOMMENDED DOSES OF CHILDHOOD VACCINES

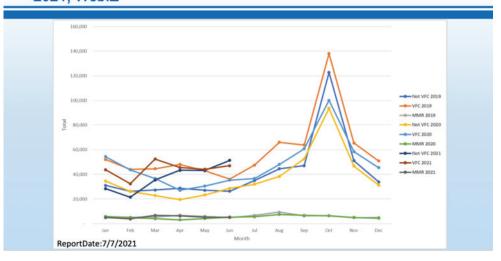
### 13 Counties

ARKANSAS COUNTIES WITH ONLY ONE VACCINE FOR CHILDREN (VFC) **PROVIDER** 

### 17 Counties

IN ARKANSAS WITH IMMUNIZATION **EXEMPTION RATES OF MORE THAN 20%** 

Total Vaccines Administered to Children <19 Years of Age in Arkansas by Eligibility, a 12 Month Comparison 2019-2020, and Year to Date 2021, WeblZ



According to the National Immunization Surveys conducted by the CDC, Black non-Hispanic children had the lowest immunization rate at 58.1%. However, Hispanic children in Arkansas had the highest rate at 72.6%, followed by children of other or multiple races at 72.2%. Children living at less than 133% of the federal poverty line have the lowest immunization rate based on poverty rates at 62.7%, while 86.2% of children who are living at greater than 400% of the federal poverty line are immunized. <sup>8</sup>

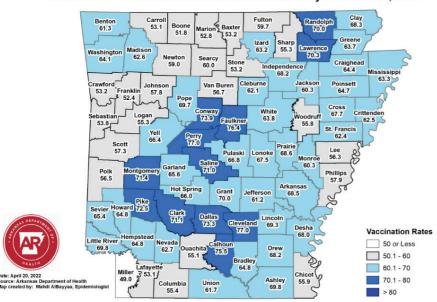
The scoring process described in the Findings section of this document utilized certain key data points to determine priority order for each of the identified needs. The metrics utilized to prioritize Immunizations can be found in the Appendix.

#### **INTERSECTING NEEDS**

There is a clear link between immunization rates and the presence of certain diseases. Unvaccinated children may spread disease to other children, but immunizations have decreased most childhood diseases by more than 95%. It has been estimated that childhood vaccinations of children born between 1994 and 2013 would prevent 322 million cases of disease, with 732,000 premature deaths due to vaccinepreventable diseases. 9 The following diseases have been reduced by >99% to 100% through the use of vaccines: 10

- Diphtheria
- Measles
- Polio
- Rubella
- Congenital rubella syndrome
- Smallpox

Immunization Rates by County for Children Age 19-35 Months of Age by Full Series: 4:3:1:3:3:1:4\* Arkansas Immunization Information System - WeblZ, 2022



\*The full series includes : 4+DTap, 3+IPV, 1+MMR, 3+Hib, 3+HepB, 1+Varicella, 4+PCV

Childhood immunization programs result in a high return on investment. For example, each birth cohort vaccinated with the routine immunization schedule (this includes DTaP, Td, Hib, Polio, MMR, Hep B, and varicella vaccines) results in the following outcomes:

- Saves 33,000 lives
- Prevents 14 million cases of disease
- Reduces direct healthcare costs by \$9.9 billion
- Saves \$33.4 billion in indirect costs <sup>11</sup>

Adherence to immunization schedules for children help prevent the following 14 illnesses or diseases:

- Chickenpox
- Hepatitis A
- Measles
- Polio
- Rubella

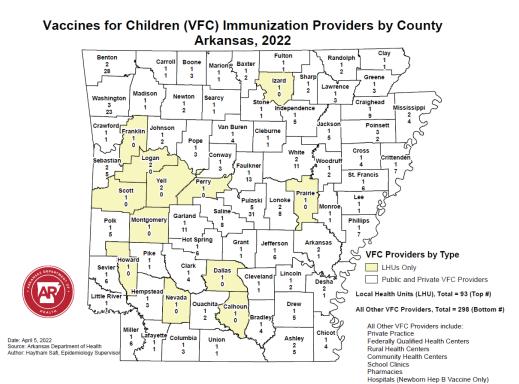
- Diphtheria
- Hepatitis B
- Mumps
- Pneumococcal
- Tetanus

- Haemophilus influenzae type b
- Influenza
- Pertussis
- Rotavirus

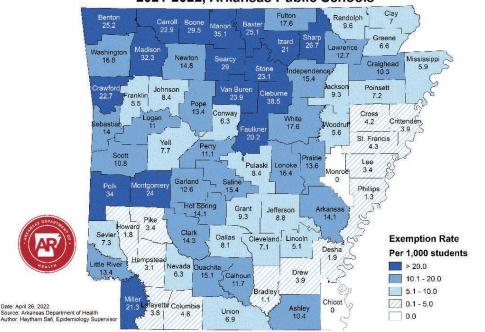
#### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Immunizations should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- The state immunization rate for children ages 19–35 months is 62.22%. This is one of the most important immunization metrics since it captures the important series of vaccinations that children should receive early in life.
- For children ages 19–35
  months, there is one county in
  Arkansas with a rate below 50%
  (Miller County). Twenty-three
  counties have a rate below
  60%.
- · For families with inability to pay, the Vaccines for Children (VFC) program provides childhood vaccines at no cost. Children under 19 years of age qualify if they are Medicaideligible, uninsured, underinsured, or an American Indian or Alaska Native. The 2022 VFC map shows the number of providers in each county. An eligible child can receive VFC vaccines through a participating healthcare provider or their local health unit. 12
- Twenty-nine Arkansas counties have two or fewer vaccine providers who participate in the VFC program, limiting the availability of this important access program.



Medical, Religious and Philosophical Exemptions per 1,000 (K-12) Students 2021-2022, Arkansas Public Schools



Total K-12 Exemptions in Public Schools: 6,865 Total Exemptions: 10,064

- Arkansas has three types of exemptions for required vaccines: medical, religious, and philosophical. Only a
  few other states in the US allow for philosophical exemption-most states only have medical and religious
  exemptions.
- The map titled "Medical, Religious and Philosophical Exemptions..." shows the exemption rates in each county.

### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Immunizations.

Immunizations was one of the most significant topics identified with all stakeholders (surveys, focus groups, key informants), having been mentioned more than 50 times.

#### KEY INFORMANT FEEDBACK

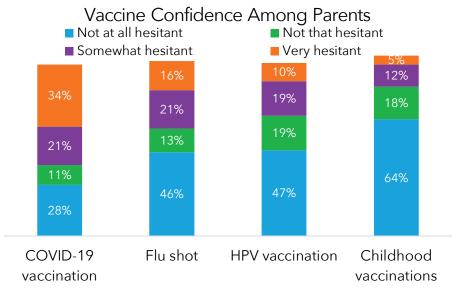
- Several key informants expressed concern that the COVID-19 pandemic has likely had a negative impact
  on the rate of childhood vaccinations in the state. They cite two reasons for their concerns: first, children
  missed well-care visits during the pandemic; and second, the national conversation around the safety of
  the COVID-19 vaccine may also cause families to question the safety of other vaccines.
- One person interviewed suggested that Arkansas might see a measles outbreak as a result of children missing immunization milestones during the COVID-19 pandemic.
- Some schools have hosted "catch-up" immunization clinics since schools re-opened following the COVID-19 closings. Some have used school resource officers to go to students' homes to get permission forms signed.

#### FOCUS GROUP FEEDBACK

- Some focus group participants believe that parents are often burdened with so many challenges—from food insecurity to paying the electric bill. This may cause them to not have a focus on well-care and, specifically, on immunizations.
- Parent participants in focus groups said that vaccine clinics in schools will help ensure that more children are immunized. Some said that they don't have transportation to get their children to the doctor or an immunization clinic.

#### PARENT SURVEY RESULTS

 Parents surveyed as part of the CHNA process have confidence in childhood vaccinations, with 82%



saying they were not hesitant to give their children the typical childhood vaccines. However, hesitancy increases for the HPV and flu vaccines, with the COVID-19 vaccine reflecting the highest hesitancy rate at 55%.

#### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to the National Immunization Survey conducted by the CDC, Black non-Hispanic children have the lowest immunization rate at 58.1%. However, Hispanic children in Arkansas had the highest rate at 72.6%, followed by children of other or multiple races at 72.2%. Additionally, children living at less than 133% of the federal poverty line have the lowest immunization rate based on poverty rates at 62.7%, while 86.2% of children who are living at greater than 400% of the federal poverty line are immunized. <sup>13</sup>

In examining 2022 immunization rates for children ages 19–35 months, disparities exist in counties with the highest non-White population and the highest poverty rate. Four of the 10 counties defined as rural have a lower rate of childhood immunization than the state rate of 62.22%. Five of the 10 counties with the highest non-White population have a lower rate than the state average. Eight of the counties with the greatest poverty rates also have lower rates of immunization than the state rate of 62.2%.

The data for immunization rates at the county and state levels are provided by the Arkansas Department of Health.

### **Immunization Rates by County**

Children Age 19–35 months, 7 Series Vaccination Rate

Source: Arkansas Department of Health

Source: 7 (rkarisas Bepartir	Terre or Fredreit	
RURAL DISPARITY		
County	County	AR
Calhoun	75.53%	62.22%
Cleveland	77.00%	62.22%
Dallas	73.26%	62.22%
Lafayette	53.06%	62.22%
Monroe	60.34%	62.22%
Nevada	62.50%	62.22%
Newton	58.97%	62.22%
Prairie	68.63%	62.22%
Searcy	60.00%	62.22%
Woodruff	55.81%	62.22%
RACIAL DISPARITY		
Chicot	55.94%	62.22%
Crittenden	62.45%	62.22%
Dallas	73.26%	62.22%
Desha	67.98%	62.22%
Jefferson	61.19%	62.22%
Lee	56.25%	62.22%
Monroe	60.34%	62.22%
Phillips	57.88%	62.22%
Pulaski	66.79%	62.22%
St. Francis	62.44%	62.22%
<b>ECONOMIC DISPARITY</b>	<u> </u>	
Chicot	55.94%	62.22%
Columbia	55.38%	62.22%
Desha	67.98%	62.22%
Lafayette	53.06%	62.22%
Lee	56.25%	62.22%
Monroe	60.34%	62.22%
Phillips	57.88%	62.22%
Searcy	60.00%	62.22%
St. Francis	62.44%	62.22%
Woodruff	55.81%	62.22%



### **Primary Priorities: Food Insecurity**

### **OVERVIEW**

Feeding America, the largest hunger-relief organization in the United States, defines food insecurity as a lack of consistent access to enough food for every person in a household to live an active, healthy life. <sup>14</sup> In many Arkansas families, food insecurity is multi-faceted and can encompass lack of resources, including access to fresh and healthy foods, or to a grocery store. While there are organizations all across Arkansas working to address food insecurity, the challenge often goes beyond just availability of food. Almost 18% of the population of Arkansas is facing food insecurity.

Food insecurity and hunger are not the same. For many families, food is available, but it may be processed, high in fats and carbohydrates, and lacking in nutritional value. <sup>15</sup> The healthier food choices are often more expensive, and require additional time to prepare and, have a limited shelf life, and are very difficult to source. SNAP, Supplemental Nutrition Assistance Program (formerly known as food stamps), is a federal program providing low-income Americans with assistance to feed themselves and their families. SNAP benefits are not intended to cover families' full monthly food cost. To ensure their families have enough food, many low-income families depend on local food pantries in addition to SNAP benefits.

Many families struggle not just with food insecurity, but also issues like affordable housing, medical costs, and poverty. Children in these families are faced with both the mental and physical impacts to their brains and bodies, which are still developing. Food insecurity in children is associated with anemia, asthma, depression and anxiety, cognitive and behavioral problems, and a higher risk of hospitalization. <sup>16</sup>

There is also an educational component to the issue of food insecurity that introduces families to key concepts such as how to shop and prepare nutritious meals, even when on a budget. Programs that address these components of hunger and food insecurity may positively impact the diet of food-insecure families who are receiving assistance but may not be maximizing healthier food options.

### **FOOD INSECURITY**

AT A GLANCE

### 22.9%

PERCENTAGE OF FOOD-INSECURE CHILDREN IN ARKANSAS, 2021

### 160,020

FOOD-INSECURE CHILDREN IN ARKANSAS

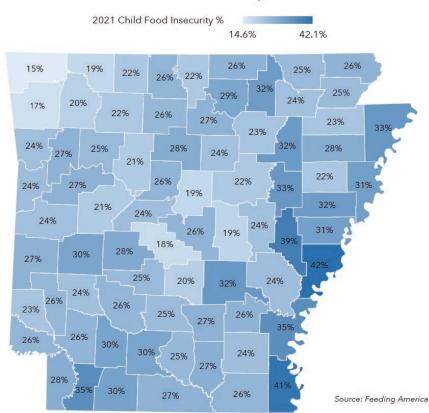
### **50**<sup>th</sup>

ARKANSAS'S NATIONAL RANK FOR POPULATION THAT IS FOOD INSECURE

### 33%

ARKANSAS HOUSEHOLDS WITH CHILDREN WHO DO NOT GET ENOUGH TO EAT

### Child Food Insecurity Rates



### **Primary Priorities: Food Insecurity**

The scoring process described in the Findings section of this report utilized key data points to determine priority order for each of the identified needs. The metrics utilized to prioritize Food Insecurity can be found in the Appendix.

#### INTERSECTING NEEDS

The issue of food insecurity is closely related to a variety of health needs and concerns, particularly when families have difficulty accessing fresh, healthy foods. Families may opt for unhealthy, processed foods because they are less expensive and more readily available. This has resulted in a clear link between food insecurity and obesity, which is explored in depth in another section of this report. According to the National Institute of Diabetes and Digestive and Kidney Diseases, "access to and ability to afford healthy

foods and safe places to be active" are among the factors that contribute to excess weight gain in both children and adults. <sup>17</sup>

Additionally, families with low income or those living in poverty are much more likely to face food insecurity. That connection goes beyond a family's ability to afford food. It is also impacted by where they live, with many low-income neighborhoods, even in urban areas, not having a nearby full-service grocery store. These food deserts result in families purchasing what they can find in a convenience store or market. Those same neighborhoods may not have parks or playgrounds for children to be more active, which can also contribute to obesity. Even when a space is available for physical activity, it may not be considered safe for children.

SNAP, Supplemental Nutrition Assistance Program (formerly known as food stamps), provides assistance to low-income families. SNAP is a temporary, short-term solution for individuals and families, in most cases. According to the Arkansas Hunger Relief Alliance, on average, SNAP participants stay on the program less than a year. SNAP benefits are delivered

by Year 2020 393,091 2019 354,917 2018 372,451 2017 388,362 2016 426,069 2015 468,904 491,965 2014 2013 504,621 2012 502,125

**Arkansas SNAP Recipients** 

monthly to eligible participants through electronic debit (EBT) cards that can be used to purchase groceries. Most grocery stores in Arkansas accept SNAP. The SNAP program is funded through the United States Department of Agriculture and is administered in Arkansas through the Arkansas Department of Human Services.

2011

486,451

600,000

400,000

200,000

### **Primary Priorities: Food Insecurity**

#### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether food-insecurity should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- Twenty-two Arkansas counties have a food-insecurity rate lower than the state average at 17.6%. That equates to 531,110 Arkansans who are food insecure in those counties.
- A total of 220,691 children in Arkansas received SNAP benefits in 2021, according to the Arkansas
  Department of Human Services 2021 Statistical Report. That represents almost 52% of the total 18-andunder population in the state.
- According to the State of WIC 2022 Report, 60% of infants born in Arkansas participate in WIC-Women, Infants, and Children-federal supplemental nutrition program which provides supplemental foods, breastfeeding promotion and support, education on healthy eating, and referrals to healthcare and critical social services.
- Arkansas ranks 21<sup>st</sup> for households with children who did not eat enough because food was unaffordable, according to the 2021 KIDS COUNT® Report.
- Arkansas ranks 49<sup>th</sup> for food sufficiency among children, with 59.3% of children having access to sufficient food, compared to the national average of 69.8%, according to the United Health Foundation Health of Women and Children Report 2021.
- Feeding America reports that in 2021, 6.6% of Arkansas children experienced very low food security, which is a decrease from 7% in 2020.

## **Primary Priorities: Food Insecurity**

### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Food Insecurity.

Food Insecurity was a major topic of discussion in both focus groups and one-on-one interviews. Additionally, parents, both in focus groups and those who participated in the parent survey, indicated that food insecurity is a significant problem when addressing children's health in Arkansas.

#### KEY INFORMANT FEEDBACK

- More than 53% of key informants interviewed for the CHNA mentioned food and nutrition among the issues negatively impacting children's health in Arkansas.
   There were nearly 100 mentions of food and nutrition among focus group participants.
- One Key Informant said there are problems with access to healthy foods both in rural and in urban areas. Several stakeholders said many urban areas don't have a nearby full-service grocery.

Healthy food access and lack of nutrition are the greatest challenges in improving children's health.

Public Health Key Informant



- Key informants also discussed how poverty
  prevents families from having access to basic needs like food and housing, both of which impact health
  outcomes.
- Another Key Informant talked about how poor nutrition impacts the brain development of a child, saying, "Understanding the impact that limited nutrition can have on brain development is so important in the first years of life in making sure the child is successful."

### FOCUS GROUP FEEDBACK

• A medical provider in one of the focus groups pointed out two of the major barriers to healthier eating—the first being a need to teach parents more about nutrition as well as how to prepare fresh foods. The second is that many people know how to eat better, but they can't afford the fresh ingredients to prepare healthy meals. The need is great for nutrition, nutrition education, and additional resources to get food to kids.

What are kids eating is it nutritional?

Parent Focus Group Participant



## **Primary Priorities: Food Insecurity**

- Participants in Spanish-language focus groups expressed concern about a lack of places to shop for
  groceries as well as limited access to safe areas for outdoor activities. Some also believe that children
  need to be better educated about nutrition and that more food pantries aimed at providing culturally
  appropriate food choices for immigrants and diverse communities would be helpful.
- A medical provider who participated in a focus group said that it's a struggle to help feed a family and set them up for success, because they know what the healthy foods are, but they can't afford them. Instead, they purchase frozen foods and fast food because it is less expensive.
- In a community leader focus group, participants discussed the cost of eating healthy and accessing food. They said access to quality nutrition is an on-going issue, which is impacted by food deserts with nothing but small general merchandise stores, liquor stores, and convenience stores for grocery shopping in a neighborhood. To make matters worse, transportation is often an issue for families, so traveling further to get to a better food source is likely also a challenge.

#### PARENT SURVEY RESULTS

- Almost a quarter of Arkansas parents who responded to the statewide parent survey of the 2022 CHNA
  process said that food insecurity is one of the top five problems impacting children's health in their
  community.
- Forty-five percent of surveyed parents said the nutritional quality and healthiness of food served in their children's school cafeteria is excellent or very good. This is particularly important for those children who are eligible for free and reduced lunch benefits.

## **Primary Priorities: Food Insecurity**

### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to *America's Health Rankings*, funded by United Healthcare, the prevalence of food insecurity is more than two times greater in non-Hispanic Black and Hispanic households than in non-Hispanic White households. Additionally, the same data shows that lower-income households (those below 185% of the poverty threshold) have a higher rate of food insecurity than higher-income households experience. <sup>18</sup>

In examining data specific to Arkansas, disparities exist related to all three areas of concern: rural, racial, and economic. Six of 10 counties defined as rural have a higher rate of food insecurity than the state. Eight of the 10 counties with the highest non-White population have a higher rate than the state average. All 10 counties with the greatest poverty rates also have higher food insecurity rates than the state rate of 17.6%.

The data for county and regional food insecurity rates is from *Map the Meal Gap 2021*, by Feeding America.

### **Disparities in Food Insecurity in Arkansas**

Source: Map the Meal Gap 2021, Feeding America

RURAL DISPARITY	ap 2021, I ccamg / iiii	
County	County Rate	AR Rate
Calhoun	14.8%	17.6%
Woodruff	21.5%	17.6%
Lafayette	21.4%	17.6%
Dallas	16.7%	17.6%
Monroe	22.1%	17.6%
Searcy	20.7%	17.6%
Newton	17.5%	17.6%
Prairie	17.5%	17.6%
Cleveland	18.7%	17.6%
Nevada	19.2%	17.6%
RACIAL DISPARITY		
Phillips	24.8%	17.6%
Jefferson	18.7%	17.6%
Chicot	23.9%	17.6%
Crittenden	18.8%	17.6%
St. Francis	19.9%	17.6%
Lee	19.5%	17.6%
Desha	20.8%	17.6%
Pulaski	17.5%	17.6%
Monroe	22.1%	17.6%
Dallas	16.7%	17.6%
ECONOMIC DISPAR		
Phillips	24.8%	17.6%
Chicot	23.9%	17.6%
Woodruff	21.5%	17.6%
Lee	19.5%	17.6%
Desha	20.8%	17.6%
St. Francis	19.9%	17.6%
Searcy	20.7%	17.6%
Monroe	22.1%	17.6%
Columbia	19.7%	17.6%
Lafayette	21.4%	17.6%





Secondary Priorities for the 2022 Arkansas Children's Hospital Community Health Needs Assessment

Secondary Priorities

- Infant Health
- Child Abuse & Neglect

#### **OVERVIEW**

There are countless ways to assess the overall health needs of children from birth through their teen years. Pediatric providers understand the importance of the first 2,100 days of a child's life —when their brains are rapidly developing and the services provided have maximum impact on the developing child. Getting a healthy start in life is crucial to children having a bright future. This need considers measures of health related to pregnancy and birth to ensure that Arkansas is doing everything possible for children to have a healthy start in life.

Infant mortality is defined as the number of babies who die before they reach their first birthday. Arkansas's infant mortality rate has fluctuated between 6.9/1,000 and 7.9/1,000 since 2008, with the most recent rate at 7.7/1,000. The Northwest Arkansas infant mortality rate is 5.4/1,000. High infant mortality may indicate that other health problems exist in the community. Arkansas's reduction activities include maternity and family planning clinics; newborn screening; home visiting services; and educating families on safe sleep. <sup>19</sup>

Many health disparities exist with infant mortality due to societal factors and social determinants likely beyond the control of the mother. The next graph shows the racial disparity that exists for Black mothers who experience a higher infant mortality rate at 12.5 infant deaths per 1,000 live births. The infant mortality rate for Black mothers in Arkansas also exceeds the national rate for Black mothers (10.9 per 1,000). Additionally, when comparing infant mortality rates by the age of the mother, the highest rate

occurs for mothers ages 15–19 at 10.3 per 1,000. The second highest rate is for mothers ages 35–39 at 8.6 per 1,000. These data show the interconnection of infant mortality and teen births.

Although Arkansas ranks 50<sup>th</sup> in the nation for teen births per 1,000, the state has made significant progress over the last decade. The 2021 KIDS COUNT® Report shows 30 teen births per 1,000, compared to 50 per 1,000 in 2011. Yet, the ranking for Arkansas did not improve during that time because other states decreased at higher rates.

### **INFANT HEALTH**

AT A GLANCE

## 7.7/1,000

ANNUAL INFANT MORTALITY RATE IN ARKANSAS

### **42**nd

ARKANSAS'S RANK FOR LOW-BIRTHWEIGHT BABIES

## **50**th

ARKANSAS'S RANK FOR NUMBER OF TEEN BIRTHS

## 30/1,000

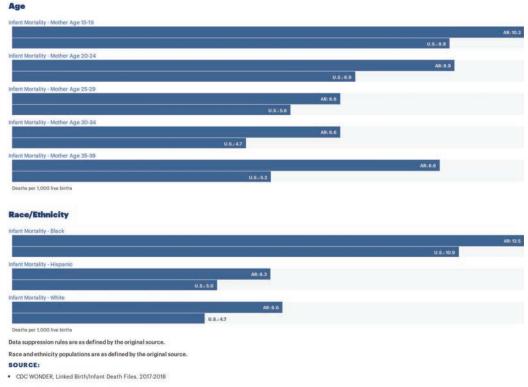
NUMBER OF BIRTHS PER 1,000 TEEN GIRLS IN ARKANSAS ANNUALLY

## 20/1,000

DECREASE IN TEEN BIRTHS IN ARKANSAS SINCE 2011

### 18%

TEEN BIRTHS TO WOMEN WHO ARE ALREADY MOTHERS



The US rate of teen births dropped from 26 per 1,000 to 17 per 1,000 during the same period.

The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Infant Health can be found in the Appendix.

#### INTERSECTING NEEDS

Challenges associated with infant health are often the result of teen births, low birthweight, lack of prenatal care, and maternal health complications. The most critical outcome is infant mortality, or the death of a child before his or her first birthday.

Teen pregnancy also results in children who are more likely to be at risk for low birth weight, in addition to

### Top Five Causes of Infant Deaths 20

- Birth defects
- Pre-term birth & low birthweight
- Sudden unexpected infant death (SUID)
- Maternal complications of pregnancy
- Unintentional injuries

being at risk for less cognitive stimulation and being less prepared for school. This often leads to lower school achievement. They may also have behavioral problems and chronic medical conditions, in addition to becoming a teen mother. <sup>21</sup>

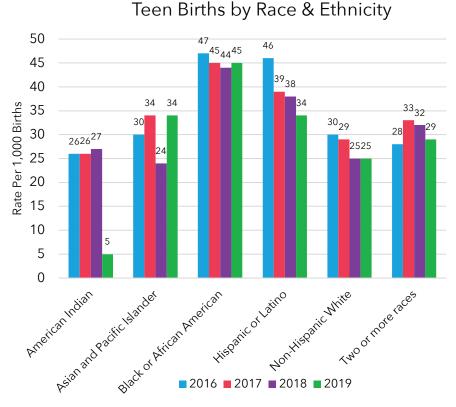
Arkansas also has a higher percentage of repeat teen births, which usually occur among teens aged 18–19 years. Infants born from a repeat teen birth are often born too small or too soon, which can lead to more health problems for the baby. In addition, teen mothers often have pregnancy complications at a much higher rate than older women. Complications include the following: <sup>22</sup>

- Three times more likely to develop anemia and deliver preterm
- Two times more like to develop hypertensive problems
- Infant mortality is higher in infants born to teen mothers
- Greater frequency of low maternal weight gain, anemia, and sexually transmitted diseases

#### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Infant Health should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- The state ranks 50<sup>th</sup> in number of teen births per 1,000, according to the 2021 KIDS COUNT®
   Report, with 30 teen births per 1,000 compared to just 17 per 1,000 nationally.
- Arkansas's infant mortality rank is 38<sup>th</sup> in the country, with a rate of 6.9% compared to 5.6% at the national level.
- 17% of infant deaths result from pre-term birth or low birthweight. <sup>23</sup>
- 63% of teen mothers receive some type of public benefits within the first year after their children are born.



Source: 2021 KIDS COUNT ®

- Only about 50% of teen mothers receive a high school education by age 22, while nearly 90% of women who have not given birth as a teen have received a high school diploma.
- At least one-third of parenting adolescents (both males and females) are themselves the products of adolescent pregnancy.
- Birthweight is also an important indicator of future health. For this metric, Arkansas ranks 42<sup>nd</sup>, with 12.6% of babies born at a birthweight lower than 5.5 pounds. This compares to 11.7% of births in the US.

#### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Infant Health.

Infant health was not discussed significantly by stakeholders (surveys, focus groups, key informants), but data demonstrate the importance of addressing this children's health need.

#### KEY INFORMANT FEEDBACK

- Many of the key informants interviewed believe early intervention is key to addressing care, infant mortality, and a healthy start to a baby's life, with several suggesting expansion of home visit programs.
- One key informant also mentioned the strong link between teen pregnancy and poverty, which also affects access-tocare. Another interviewee expanded on the access to care issue by saying that Arkansas has a very high occurrence of women who receive little or no prenatal care and that health deserts in the state have little or no maternal and child healthcare.
- Other key informants discussed the lack of reproductive health education in Arkansas schools and believe that adding reproductive health education would help decrease the frequency of teen pregnancy in the state.

#### FOCUS GROUP FEEDBACK

 Focus group participants discussed the need for improved prenatal care for teens, believing this would help decrease infant mortality and low birthweights. Teen pregnancy and lack of prenatal care are things that prevent some children from living a healthy life.

Educator
Focus Group Participant



For child/maternal health, 36 counties in Arkansas are considered health deserts. So, you ultimately have populations in our state that are receiving no healthcare.

Arkansas is third in the US for pregnancies that had little to no prenatal care.

Parent Focus Group Participant

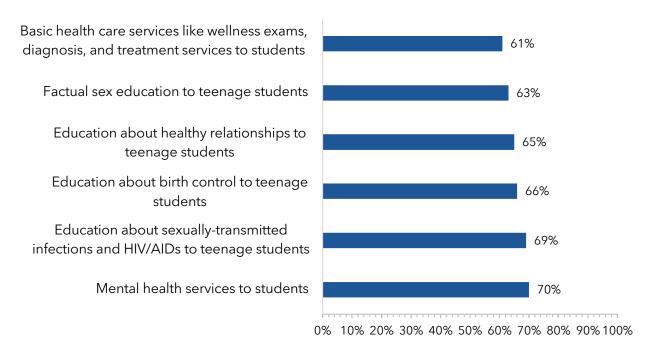


 Some educators pointed to teen pregnancy rates and lack of prenatal care as one thing preventing Arkansas children from living a healthy life.

#### PARENT SURVEY RESULTS

- Parents surveyed as part of the Arkansas Children's 2022 CHNA process indicated that they are very
  interested in schools providing factual sex education, including information about sexually transmitted
  infections, birth control, and healthy relationships, to their children. Parents surveyed also indicated
  their support of mental health services and basic wellness and diagnostic services being offered at
  school.
- Thirty-eight percent of parents participating in the CHNA parent survey viewed the number of infants who dies unexpectedly before their first birthday as a serious children's health problem.

### Very Important That Schools Offer the Following Services and Education



Source: 2022 CHNA Parent Survey

### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to the 2021 KIDS COUNT® Report, Black teens had the highest rate of teen births at 45/1,000 in 2019, while Hispanic or Latino teens had a teen birth rate of 34/1,000 in the same year. Asian/Pacific Islander teens also had a rate of 34/1,000 in 2019. However, in 2016 to 2018, Hispanic or Latino girls had a rate that was significantly higher than the Asian/Pacific Islander rate. Likewise, births to Black mothers have a higher infant mortality rate than any other race, followed by Hispanic or Latino births. However, the rate for Black births (12/1,000) was two times higher than for Hispanic births (6/1,000).

In examining statewide infant mortality data, disparities exist related to two of the three areas of concern: racial and economic. Three of 10 counties defined as rural have a higher rate of infant mortality than the state.

Considering racial disparities, eight of the 10 counties with the highest non-White population have a higher rate than the state average. Six of the 10 counties with the greatest poverty rates also have higher rates of infant mortality than the state rate of 7.6/1,000.

For teen births, disparities exist related to all

#### **Infant Health**

Source: Aspire Arkansas & County Health Rankings 2021

	Infant Mortality		Teen	Births
County	County	AR	County	AR
RURAL DISPAR	RITY			
Calhoun	4.7/1,000	7.6/1,000	30/1,000	36/1,000
Woodruff	5.1/1,000	7.6/1,000	51/1,000	36/1,000
Lafayette	2.7/1,000	7.6/1,000	64/1,000	36/1,000
Dallas	8.3/1,000	7.6/1,000	22/1,000	36/1,000
Monroe	10.3/1,000	7.6/1,000	60/1,000	36/1,000
Searcy	10.3/1,000	7.6/1,000	34/1,000	36/1,000
Newton	5.2/1,000	7.6/1,000	42/1,000	36/1,000
Prairie	4.6/1,000	7.6/1,000	44/1,000	36/1,000
Cleveland	5.1/1,000	7.6/1,000	25/1,000	36/1,000
Nevada	6.2/1,000	7.6/1,000	44/1,000	36/1,000
RACIAL DISPA	RITY			
Phillips	13.1/1,000	7.6/1,000	76/1,000	36/1,000
Jefferson	9.5/1,000	7.6/1,000	45/1,000	36/1,000
Chicot	9.7/1,000	7.6/1,000	48/1,000	36/1,000
Crittenden	6.6/1.000	7.6/1,000	53/1,000	36/1,000
St. Francis	11.5/1,000	7.6/1,000	77/1,000	36/1,000
Lee	2.1/1,000	7.6/1,000	46/1,000	36/1,000
Desha	7.7/1,000	7.6/1,000	45/1,000	36/1,000
Pulaski	8.3/1,000	7.6/1,000	33/1,000	36/1,000
Monroe	10.3/1,000	7.6/1,000	60/1,000	36/1,000
Dallas	8.3/1,000	7.6/1,000	22/1,000	36/1,000
<b>ECONOMIC DI</b>	SPARITY			
Phillips	13.1/1,000	7.6/1,000	76/1,000	36/1,000
Chicot	9.7/1,000	7.6/1,000	48/1,000	36/1,000
Woodruff	5.1/1,000	7.6/1,000	51/1,000	36/1,000
Lee	2.1/1,000	7.6/1,000	46/1,000	36/1,000
Desha	7.7/1,000	7.6/1,000	45/1,000	36/1,000
St. Francis	11.5/1,000	7.6/1,000	77/1,000	36/1,000
Searcy	10.3/1,000	7.6/1,000	34/1,000	36/1,000
Monroe	10.3/1,000	7.6/1,000	60/1,000	36/1,000
Columbia	7.6/1,000	7.6/1,000	25/1,000	36/1,000
Lafayette	2.7/1,000	7.6/1,000	64/1,000	36/1,000

three areas of concern: rural, racial, and economic. Six of 10 counties defined as rural have a higher rate of teen births than the state. Eight of the 10 counties have a higher rate than the state average. Eight of the 10 counties with the greatest poverty rates also have higher rates of teen births than the state rate of 36/1,000.

The data for infant mortality at the county and state levels are sourced from Aspire Arkansas, while county and state teen pregnancy data are from County Health Rankings 2021.

### **OVERVIEW**

Arkansas ranks poorly by most measures of childhood abuse and neglect. The annual Child Maltreatment report series, sourced from the National Child Abuse and Neglect Data System (NCANDS) managed by the Department of Health and Human Services, provides comprehensive reporting on child maltreatment for the nation. Each state has its own definitions of child abuse and neglect based on standards set by federal law. At a minimum, child abuse and neglect is defined as:

"Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act, which presents an imminent risk of serious harm." (Child Maltreatment 2020, ix).

Data about abuse and neglect are limited to what is reported, which affects addressing the problem and prevention efforts. In 2020, the Arkansas Department of Human Services, Division of Children and Family Services (DCFS), received more than 31,000 reports of child maltreatment through the Arkansas Child Abuse Hotline. The map titled "Child Abuse Hotline Calls Per 1,000 Population 0-18" shows the rate of hotline calls compared with child population. The graphic titled "Volume and Description of Child Maltreatment Reports" describes the process to investigate potential child abuse from the initial report to the determination.

Investigations by DCFS determined that 22% of those reports were substantiated, the determination given after the research and review process. There were more than 9,000 children involved in those substantiated reports.

#### **CHILD ABUSE & NEGLECT**

AT A GLANCE

## 31,142

REPORTS OF MALTREATMENT OF ARKANSAS CHILDREN IN 2020

## 12/1,000

ARKANSAS CHILDREN WHO ARE CONFIRMED VICTIMS OF MALTREATMENT

### 47<sup>th</sup>

ARKANSAS'S RANK FOR CHILDREN SUBJECT TO INVESTIGATIVE REPORT

## 4,391

ARKANSAS CHILDREN IN FOSTER CARE IN 2020

## 34<sup>th</sup>

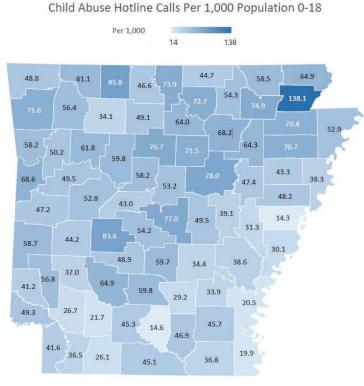
ARKANSAS'S RANK FOR SUBSTANTIATED REPORTS OF CHILD ABUSE AND NEGLECT

## 37

VICTIMS OF CHILD ABUSE WHO DIED IN 2020

Many victims of child abuse and neglect are placed in foster care following a substantiated determination of maltreatment against someone in the home. Neglect is the top reason for Arkansas children to be placed in foster care, and physical abuse the fourth most common reason. Experts in-state and nationwide are concerned about the lack of reporting during the COVID-19 pandemic, when schools and daycares were closed, and children had less time around mandatory reporters.

The information included in this section includes the best available data about Child Abuse & Neglect in Arkansas. According to in-state child abuse-prevention experts, child abuse and neglect goes unreported in areas of the state. This occurs because of many reasons, including cultural perceptions of what qualifies as child abuse, and other concerns that prevent some types of abuse and maltreatment from being reported. This lack of reporting affects the ability to make regional comparisons, as well as decreases the ability to have robust, population-level data about child abuse and neglect in different counties throughout Arkansas.

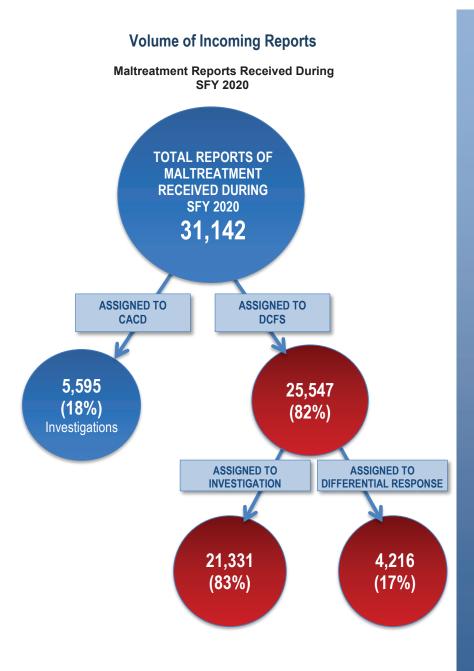


The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Child Abuse & Neglect can be found in the Appendix.



### **Volume and Description of Child Maltreatment Reports**

Arkansas Division of Children and Family Services State Fiscal Year 2020 (July 1, 2019 - June 30, 2020)



Of the 31,142 reports of child maltreatment accepted by the Arkansas Child Abuse Hotline during State Fiscal Year (SFY) 2020, 82 percent were assigned to DCFS and 18 percent were assigned to the Crimes Against Children Division (CACD) of the Arkansas State Police, which is responsible for investigating the most serious allegations of maltreatment.

Of the reports assigned to DCFS, 83 percent were assigned for an investigation and 17 percent were handled through Differential Response (DR).

DR allows the Division to respond to specific, low-risk maltreatment reports through a family assessment and provision of services rather than a traditional investigation.

The following types of allegations can qualify for DR:

- Inadequate Supervision if children are at least five
- Environmental Neglect if children are at least three
- Medical Neglect if children are at least thirteen
- Lock Out if children are at least ten
- Inadequate Food, Inadequate Shelter, Inadequate Clothing, and Educational Neglect with no age restrictions
- Certain allegations of abuse where the incident occurred at least one year prior to the report date

#### **Arkansas Division of Children and Family Services**

Sourced from: "Annual Report Card for Arkansas, State Fiscal Year (SFY) 2020 (July 1, 2019-June 30, 2020)"

 Produced for the Arkansas Department of Health and Human Services by NCCD Children's Research Center

### **INTERSECTING NEEDS**

Child Abuse & Neglect is closely connected to other children's health needs as well as health issues faced by parents and caregivers. Some victims of abuse suffer from immediate physical injuries, but their reactions may have lifelong or intergenerational impacts, including physical, psychological, and behavioral effects.

Abuse or neglect may impact physical development of a child's brain, which later leads to psychological problems, including low self-esteem and high-risk behaviors like substance abuse. A 2019 report by the Child Welfare Information Gateway indicates that children who are victims of child abuse may also be affected by other adverse childhood experiences (ACEs), such as parental substance abuse, domestic violence, and poverty.

Physical abuse also may result in long-term physical health consequences, with victims at a higher risk for future health problems. These problems may range from malnutrition to diabetes and vision and oral health issues. <sup>24</sup>



Some children also suffer psychological consequences that result in educational difficulties, depression, and low self-esteem. They may also have diminished cognitive skills, attachment and social difficulties, and post-traumatic stress. All of these issues put an additional burden on the already inadequate behavioral and mental health system.

Parental drug use and child neglect also are common co-occurring conditions within families. Children who grow up in a home with parents who are addicted to drugs or alcohol are three times more likely to suffer physical, sexual, and emotional abuse. This abuse may come from a parent or from exposure to others who abuse them. <sup>25</sup>

While placement in foster care is necessary at times to protect children who have been neglected or abused, the Arkansas Department of Human Services Division of Children and Family Services is continuing to develop and fund family- and parent- strengthening services such as home visiting and positive parenting instruction. These interventions work with the family and the child(ren) to keep them safe, while helping parents and caregivers learn additional skills for caring for their children.

### **Arkansas Mandatory Reporters**

- Child care or foster care workers
- Coroner
- Daycare center worker
- Dentist
- Dental hygienist
- Domestic abuse advocate
- Domestic violence shelter employee or volunteer
- Department of Human Services employee
- Contract workers for Division of Youth Services of Department of Human Services
- Foster parent
- Judge
- Law enforcement official
- Licensed nurse
- Medical personnel
- Mental health professional
- Osteopath
- · Peace officer
- Physician
- · Prosecuting attorney
- Resident intern
- School counselor
- School officialSocial worker
- Surgeon
- Teacher
- Court-appointed special advocate program staff or volunteer
- Juvenile intake or probation officer
- Clergy member
- Child Advocacy Center or Child Safety Center employee
- Attorney ad litem
- Sexual abuse advocate or volunteer
- Rape crisis advocate or volunteer
- Child abuse advocate or volunteer
- Victim/witness coordinator
- Victim assistance professional or volunteer
- Employee of Crimes Against Children Division of the Arkansas State Police
- Employee or volunteer of reproductive healthcare facility

### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Child Abuse & Neglect should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- The state ranks 34<sup>th</sup> in number of children who are confirmed victims of maltreatment, according to the 2021 KIDS COUNT® Report. Twelve out of every 1,000 Arkansas children experience maltreatment, which is higher than the national rate of nine in every 1,000 children.
- The 2021 KIDS COUNT® Report ranks Arkansas at 47<sup>th</sup> for children subject to investigative reporting, with the state rate being 78 out of every 1,000 children, which is much higher than the US rate of 47 in every 1,000 children.
- According to the 2020 Annual Report Card of the Arkansas Division of Child & Family Services, the number of Arkansas children in foster care is up slightly from 2019, with 4,391 children in foster care in the year 2020, but is down from 5,113 in 2017.

Reasons for Placement Into Foster Care			
Source: Arkansas Department of			
	Number		
Placement Reason	of Entries	Total	
Neglect	1,714	53%	
Substance Abuse	1,629	50%	
Parent Incarceration	663	20%	
Physical Abuse	476	15%	
Inadequate Housing	362	11%	
Sexual Abuse	255	8%	
Caretaker Illness	146	4%	
Child's Behavior	93	3%	
Abandonment	80	2%	
Child's Disability	40	1%	
Truancy	28	1%	
Other	50	2%	

Note: A child may have more than one reason

for entry.

#### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Child Abuse & Neglect.

Child Abuse & Neglect was one of the most significant topics identified with all stakeholders (surveys, focus groups, key informants), having been mentioned more than 50 times.

#### KEY INFORMANT FEEDBACK

- Some key informants expressed concern that prevention programs are needed to break a cycle of abuse. Additionally, some believe that abused children are more likely to grow up to abuse their own children.
- Stress on families resulting from the COVID-19 pandemic may result in a higher rate of child abuse.
  Additionally, some key informants are concerned that child abuse may have occurred but gone
  unreported while schools were closed during the pandemic, with children being isolated with family or
  other caregivers and not around mandated reporters.
- One Key Informant mentioned the high incidence of adverse childhood experiences (ACEs) in Arkansas and the need for intervention with families that have suffered a high level of ACEs to prevent further abuse.

### FOCUS GROUP FEEDBACK

- In an instant poll, almost 30% of focus group participants identified abuse (either child or domestic) as their greatest concern when thinking about children's health in the state of Arkansas (see graph at right).
- Abuse (either child or domestic) tied for the leading concern along with Access to Care.
   There were more than 50 mentions of abuse among focus group participants.

If there is stress in the family, the parents need a coping mechanism to deal with that.

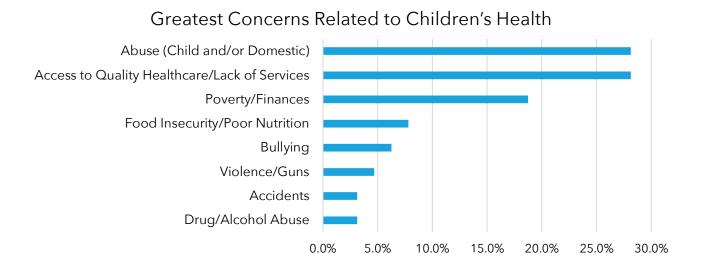
Medical Provider
Focus Group Participant



When asked what resource/service is the
most important to children's health, addressing abuse (either child or domestic) was the second mostidentified important resource/service among focus group participants.

### PARENT SURVEY RESULTS

- Parents surveyed as part of the CHNA process identified child abuse as one of the top five problems related to children's health and well-being. Nearly 30% of respondents indicated that child abuse was a serious problem.
- One in five parent survey respondents said that they personally know someone outside their household who has experienced child abuse or violence inside the home.





### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

Both the effects of race on frequency of abuse or maltreatment, in addition to measuring any disparity related to race, poverty, or rural location, show little to no disparity associated with any of those categories.

According to the Arkansas Department of Human Services, Division of Children and Family Services 2020 Annual Report Card, 65% of children who are involved in substantiated reports of maltreatment are White, while 18% are Black, and 7% are Hispanic. The racial breakout of children in foster care is similar, with 60% White, 20% Black, and 7% Hispanic. <sup>26</sup>

In examining statewide data, no disparities are seen in any of the three areas of concern: rural, racial, and economic. Two of 10 counties defined as rural have a higher rate of child maltreatment than the state. One of the 10 counties with the highest non-White population has a higher rate than the state average. Only one of the 10 counties with the greatest poverty rates also have higher rates of child maltreatment than the state rate of 12.3/1,000.

The data for substantiated reports of child maltreatment at the county and state levels are sourced from Aspire Arkansas.

### **Substantiated Reports of Child Maltreatment**

Source: Aspire Arkansas	

RURAL DISPARITY		
County	County	AR
Calhoun	5.7/1,000	12.3/1,000
Woodruff	13.4/1,000	12.3/1,000
Lafayette	6.2/1,000	12.3/1,000
Dallas	12.4/1,000	12.3/1,000
Monroe	7.8/1,000	12.3/1,000
Searcy	8.1/1,000	12.3/1,000
Newton	9.4/1,000	12.3/1,000
Prairie	6.5/1,000	12.3/1,000
Cleveland	8.6/1,000	12.3/1,000
Nevada	8.0/1,000	12.3/1,000
RACIAL DISPARITY		
Phillips	5.1/1,000	12.3/1,000
Jefferson	5.5/1,000	12.3/1,000
Chicot	6.5/1,000	12.3/1,000
Crittenden	6.3/1,000	12.3/1,000
St. Francis	7.2/1,000	12.3/1,000
Lee	6.4/1,000	12.3/1,000
Desha	5.5/1,000	12.3/1,000
Pulaski	4.8/1,000	12.3/1,000
Monroe	7.8/1,000	12.3/1,000
Dallas	12.4/1,000	12.3/1,000
ECONOMIC DISPARIT		
Phillips	5.1/1,000	12.3/1,000
Chicot	6.5/1,000	12.3/1,000
Woodruff	13.4/1,000	12.3/1,000
Lee	6.4/1,000	12.3/1,000
Desha	5.5/1,000	12.3/1,000
St. Francis	7.2/1,000	12.3/1,000
Searcy	8.1/1,000	12.3/1,000
Monroe	7.8/1,000	12.3/1,000
Columbia	5.1/1,000	12.3/1,000
Lafayette	6.2/1,000	12.3/1,000







Sustaining Activities for the 2022
Arkansas Children's Hospital Community Health Needs
Assessment

**Sustaining Activities** 

- Access to Care
- Obesity
- Injury Prevention

#### **OVERVIEW**

Access to Care was a child health need mentioned by virtually every stakeholder participating in the process. This is a broad category and has been explored from a general perspective, in addition to two specific needs categories: Telehealth and Oral Health.

Telehealth has been in use for a number of years, but this method of delivering medical care has taken on increased significance and exposure during the COVID-19 pandemic. In fact, federal waivers were issues to enhance insurance coverage for telehealth during the pandemic. <sup>27</sup> Despite increased use, availability and affordability of the technologies needed for telehealth delivery are still severely lacking in areas of Arkansas that perhaps have the greatest access challenges due to rural locations and a lower income-population. <sup>28</sup>

Oral health and dental care have been an ongoing need for Arkansas children for several years. While improvements have been made, in conducting research for this CHNA, it is clear that more can be done. Some key informants were concerned that many children have not received preventive dental care in the last two years, in part due to fears related to the COVID-19 pandemic. Additionally, Arkansas continues to face long-term challenges of a lack of dentists in the state, with even fewer providers available to families insured through Medicaid.

### **ACCESS TO CARE**

AT A GLANCE

## 41st

ARKANSAS'S RANK FOR CHILDREN RECEIVING CARE IN A WELL-FUNCTIONING SYSTEM

## 6%

ARKANSAS CHILDREN WITHOUT HEALTH INSURANCE

## **50**<sup>th</sup>

ARKANSAS'S BROADBAND ECOSYSTEM, INCLUDING SPEED & LOW-COST ACCESS

## 83.6%

ARKANSAS CHILDREN WITH NO ORAL HEALTH PROBLEMS IN THE PAST YEAR

## 48<sup>th</sup>

ARKANSAS'S RANK FOR CHILDREN WITH TEETH IN VERY GOOD OR EXCELLENT CONDITION

The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Access to Care topics of Oral Health and Telehealth can be found in the Appendix.

#### **INTERSECTING NEEDS**

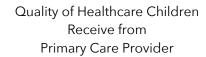
There are many factors that impact access to healthcare services that overlap with other CHNA needs areas, including availability of insurance, poverty, transportation, and access to specialty care when needed. The impacts of a lack of access are broad, with potential impacts on physical health, mental health, oral health, and cognitive development. Many of these issues are explored in greater depth in other identified needs areas of this report.

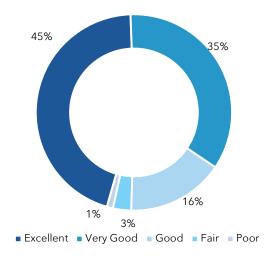
Access to care is a critical component of clinical care, with a focus on access to timely and regular health services. It also includes availability of health insurance and access to specialty healthcare providers. The highest-quality and most efficient way to ensure access to care is through medical home care-patient-centered, accessible care-managed by a primary care physician.

The American Academy of Pediatrics has identified the qualities important in effective medical home relationships:

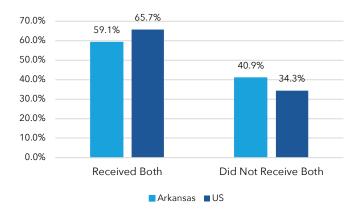
- Accessible
- Family-centered
- Continuous
- Comprehensive
- Coordinated
- Compassionate
- Culturally effective

Having a medical home not only ensures high-quality primary care for children, but additionally, ensures children who need specialty referrals or care coordination will get the attention needed. <sup>29</sup> Based on responses to the National Survey of Children's Health, approximately 324,000 children receive comprehensive care within a medical home. <sup>30</sup>





## Children Receiving Both Medical & Dental Preventive Care



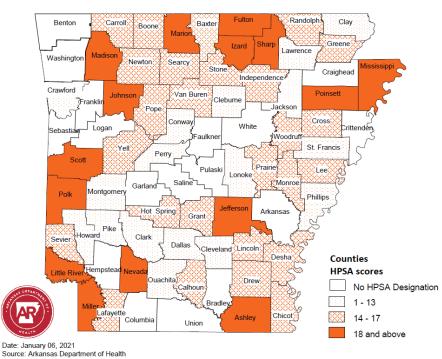
Statewide Parent Survey of Arkansas Children's 2022 CHNA Process

#### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Access to Care, including Oral Health and Telehealth, should be considered child health needs in this CHNA. Following are data points that support the inclusion of these child health needs.

- Arkansas has been a leader in providing health insurance for children through the ARKids First health insurance program and ranks 31<sup>st</sup> in the nation for children without health insurance.
- The state's rural geography makes it challenging to find specialist care when needed. While Arkansas ranks 32<sup>nd</sup> nationally, only 22.4% of respondents to the National Survey of Children's Health indicated that it is difficult or very difficult to access specialty care.
- The National Survey of Children's Health also evaluates whether children receive care in a well-functioning healthcare system. Arkansas ranks 41<sup>st</sup>, with 17.3% of children receiving care through a system that provides children with a medical home; access to medical and dental care; available insurance; no unmet needs; and teens prepared to transition to adult healthcare. This compares to 18.1% of children in the U.S.
- BroadbandNow, a research organization monitoring broadband expansion across the US, has ranked Arkansas 50<sup>th</sup> for broadband access. This ranking is based on availability of broadband, low-cost access to services, and the average speed available.
- The 2021 KIDS COUNT® Report ranked Arkansas 47<sup>th</sup> for households that have both internet access and a computer available for educational uses. While telehealth is a different-use case, typically a device and internet access are necessary to have a telehealth visit.
- The 2021 KIDS COUNT® Report places Arkansas at 48<sup>th</sup> for children with teeth in "very good or excellent condition." Arkansas has 74% of its children receiving that evaluation, while the US total is 79%.
- Fifteen counties in Arkansas have a classified in the highest tier of rating for the lack of dental health professionals (HPSA). HRSA determines a Health Provider

# ARKANSAS Dental Health Professional Shortage Areas (HPSA)



Date: January 06, 2021 Source: Arkansas Department of Health Map created by: Naomi Sweeney Email: Naomi.Sweeney@arkansas.gov Office of Rural Health and Primary Care

Office of Rural Health and Primary Care Data Source: Health Resources and Services Administration (HRSA)

Shortage Area with three scoring criteria: population-to-provider ratio, percent of population below 100% of the federal poverty level (FPL), and travel time to the nearest source of care outside of the HPSA designated area.

 Additionally, Arkansas ranks 42<sup>nd</sup> for children who received preventive dental care in the past year, with 76% of children receiving that care, compared to 80% in the US, according to the 2021 KIDS COUNT® Report.



#### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Access to Care.

Access to care was one of the issues receiving the greatest amount of input from stakeholders (surveys, focus groups, key informants), while data also demonstrates the importance of addressing this children's health need.

### KEY INFORMANT FEEDBACK

- Some key informants expressed concerns about the limited number of dentists who will accept patients on Medicaid. While the number of providers is already too low to meet demand, this limitation makes it very difficult for children on Medicaid to have routine access to oral health services.
- Key informants also discussed the challenges of access to care for parents who have hourly-wage jobs, pointing out that primary care, dental care, and vaccinations are part of a health system that is not designed to consider parents' work responsibilities.
- While Arkansas children have a high rate
  of being insured, key informants said that
  just because a high number of children are
  insured doesn't mean there are not still
  access-to-care issues. Some mentioned
  that medical providers often do not want
  to engage with patients who have a
  government-funded insurance plan.
  Others suggested this issue is even greater
  for dental health than for primary care
  access.
- One key informant suggested that access issues go beyond availability of care, saying, "We are lacking in services and access to services and even education for parents and caregivers to know when or how to look for services."

Primary care is where children's health needs are met. If we could resolve that, we could make a lot of inroads in improving children's health.

Pediatrician Key Informant



Dental is always seen as a luxury. It is one of those things that can be overlooked. But it gets really expensive when you do that.

Oral Health Key Informant



#### **FOCUS GROUP FEEDBACK**

- Some focus group participants mentioned the connection between food insecurity-lack of fresh, healthy foods-and children with unhealthy teeth, primarily because of the sugar intake and a lack of milk, which contains calcium.
- Telehealth was also discussed by focus group participants, with some believing that telehealth will provide easier access to families who live in very rural areas or have no transportation.
- Another focus group participant said that telehealth "is a good alternative, but many parents are new to learning how to use Zoom." They elaborated that there is a learning curve to telehealth that providers need to acknowledge, and even widely used products like Zoom can cause confusion because not all parents are comfortable with using these or have experience.

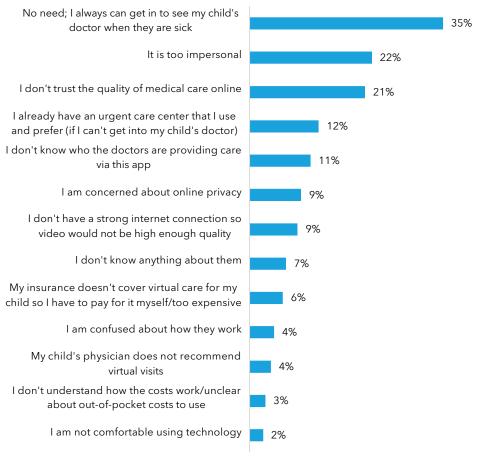
How do we utilize telemedicine? We have to be creative to give all children access to good care.

Healthcare Community Leader
Key Informant

#### PARENT SURVEY RESULTS

- Of the parents surveyed as part of the Arkansas Children's CHNA parent survey, 42% indicated an interest in their child receiving care via a virtual visit. Interest was significantly higher in the southwest areas of the state and among African American parents.
- The CHNA parent survey showed that 19% of parents say that their child has missed school due to a toothache, with this percentage being much higher (33%) among parents with a child with an acute or chronic condition.

### Why Not Very Interested in Virtual Care for Child



Statewide Parent Survey of Arkansas Children's 2022 CHNA Process

### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to Arkansas 3rd Grade Basic Screening Survey 2019-2020, Black and Hispanic students are more likely to have dental problems than are White children. In that survey, 72.4% of Hispanic students and 68.3% of Black students had decay experience, compared with 61.1% of White students. Black students also had the highest rate of untreated decay at 29.5%, with White children at 19.6% and Hispanic students at 17.0%. Additionally, a greater percentage of Black children need dental treatment when compared to White and Hispanic students.

In examining statewide oral health data, disparities exist related to two of the three areas of concern: racial and economic. Four of 10 counties defined as rural have a higher ratio of dentists to population than the state. (No data were available for five of the 10 counties.) Six of the 10 counties with the highest non-White population have a higher ratio than the state average. Seven of the 10 counties with the greatest poverty rates also have higher ratios for dentists to population than the state rate of 2,100:1, with one county having no data available.

For telehealth, disparities exist related to all three of concern: rural, racial, and economic.

**Access to Care** 

Source: County Health Rankings 2021 & Broadband Now

	Oral Health		Teleh	ealth
County	County	AR	County	AR
<b>RURAL DISPARITY</b>	,			
Calhoun	N/A	2,100:1	9.20%	69.20%
Woodruff	2,110:1	2,100:1	54.90%	69.20%
Lafayette	N/A	2,100:1	22.70%	69.20%
Dallas	3,500:1	2,100:1	74.80%	69.20%
Monroe	1,680:1	2,100:1	22.30%	69.20%
Searcy	2,630:1	2,100:1	76.00%	69.20%
Newton	N/A	2,100:1	45.60%	69.20%
Prairie	8,060:1	2,100:1	48.10%	69.20%
Cleveland	N/A	2,100:1	85.80%	69.20%
Nevada	N/A	2,100:1	60.60%	69.20%
RACIAL DISPARITY	1			
Phillips	2,540:1	2,100:1	88.30%	69.20%
Jefferson	2,160:1	2,100:1	70.30%	69.20%
Chicot	1,450:1	2,100:1	73.80%	69.20%
Crittenden	1,550:1	2,100:1	82.70%	69.20%
St. Francis	2,780:1	2,100:1	43.00%	69.20%
Lee	2,950:1	2,100:1	35.40%	69.20%
Desha	3,790:1	2,100:1	74.90%	69.20%
Pulaski	1,290:1	2,100:1	98.20%	69.20%
Monroe	1,680:1	2,100:1	22.30%	69.20%
Dallas	3,500:1	2,100:1	74.80%	69.20%
ECONOMIC DISPA				
Phillips	2,540:1	2,100:1	88.30%	69.20%
Chicot	1,450:1	2,100:1	73.80%	69.20%
Woodruff	2,110:1	2,100:1	54.90%	69.20%
Lee	2,950:1	2,100:1	35.40%	69.20%
Desha	3,790:1	2,100:1	74.90%	69.20%
St. Francis	2,780:1	2,100:1	43.00%	69.20%
Searcy	2,630:1	2,100:1	76.00%	69.20%
Monroe	1,680:1	2,100:1	22.30%	69.20%
Columbia	2,350:1	2,100:1	73.00%	69.20%
Lafayette	N/A	2,100:1	22.70%	69.20%

Seven of 10 counties defined as rural have a lower rate of broadband availability than the state. When considering racial disparities, seven of the 10 counties have a higher rate than the state average. And when considering economic disparities, five of the 10 counties with the greatest poverty rates also have lower rates of broadband access than the state rate of 69.2%.

The data for oral health at the county and state levels is provided by County Health Rankings 2021, while county and state broadband access data is from Broadband Now.



### **OVERVIEW**

Approximately 20% of Arkansas children ages 10-17 are identified as obese, according to the 2020 National Survey of Children's Health, and 14% of Arkansas children are identified as overweight. The definitions used identify children between the 85<sup>th</sup> and 95<sup>th</sup> percentile Body Mass Index (BMI)-for-age as overweight, with children at or above the 95<sup>th</sup> percentile BMI-forage characterized as obese.

Over 47% of Arkansas 8<sup>th</sup> grade students are either overweight or obese, according to the Arkansas Center for Health Improvement. Data from this source show that the percent of obese children increases until high school and then remains steady. More than half (54.3%) of Arkansas Hispanic students are overweight or obese, with African American students at 49.3%. Asian students have the lowest rate of being overweight or obese at 34.4%.

The Arkansas General Assembly, in 2003, led the country and approved the first state-level legislation to address obesity among school-age children in the state. That legislation established the Child Health Advisory Committee (CHAC) to make recommendations related to nutrition and physical activity in schools.

Additionally, it required healthier foods and beverages and confidential reporting of every public school student's weight status to parents and/or guardians every two years. <sup>31</sup> In 2007, the screening requirements were amended to assess children in kindergarten and even-numbered grades 2 through 10. Since that time, the Arkansas Center for Health Improvement (ACHI) has annually published the Assessment of Childhood and

Adolescent Obesity in Arkansas report. The data are reported at both the individual school and the school district levels.

The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Obesity can be found in the Appendix.

## **OBESITY**

### AT A GLANCE

### 46<sup>th</sup>

ARKANSAS'S RANK FOR CHILDREN AND TEENS WHO ARE OBESE

### 1 IN 5

ARKANSAS CHILDREN ARE OBESE

### 51%

ARKANSAS CHILDREN AND TEENS WHO DO NOT EXCERISE REGULARLY

## 44%

ARKANSAS 8<sup>TH</sup> GRADE STUDENTS WHO ARE OVERWEIGHT OR OBESE

## 32.2%

INCREASE IN HEALTHCARE COSTS FOR CHILDREN WHO ARE OVERWEIGHT OR OBESE

## 43.2%

AFRICAN AMERICAN STUDENTS IN ARKANSAS WHO ARE OVERWEIGHT OR OBESE

#### **INTERSECTING NEEDS**

Obesity is a multi-faceted health outcome that can be impacted by (lack of) physical activity; consuming foods high in calories but low in nutrients; cultural norms and practices; stress; lack of access to healthy foods; and food insecurity. Many of the factors that affect obesity in childhood are areas in which Arkansas also ranks behind other states.

Food insecurity, which is covered in depth in a separate needs profile, often plays a significant role in obesity. Many who are food insecure in Arkansas have access only to predominantly low-nutrient, processed foods. According to the National Institute of Diabetes and Digestive and Kidney Diseases, "access to and ability to afford healthy foods and safe places to be active" are among the factors that contribute to excess weight gain in both children and adults. <sup>32</sup>

A lack of physical activity is another factor that contributes to childhood obesity. Families living at or near the poverty line may live in areas that do not include parks, playgrounds, and other public spaces for children to play and remain active. In an effort to encourage more physical activity for children, the Arkansas General Assembly passed legislation in 2019 requiring elementary schools to offer 40 minutes of recess time per day. 33



### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Obesity should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- Arkansas ranks 46<sup>th</sup> in percentage of obese children and teens, according to the 2020 National Survey of Children's Health, with almost 5% more Arkansas children identified as obese than the national average.
- The National Survey of Children's Health found that 7.5% of Arkansas parents have been told by a medical provider that their child is overweight, compared to 8% of parents nationwide.
- Physical activity also factors into the obesity equation, and the 2021 KIDS COUNT® Report ranks Arkansas at 34<sup>th</sup> for the percentage of children and teens not exercising regularly.
- More than one in four (26%) of Arkansas public school students are obese, with 27.8% of students in 10<sup>th</sup> grade classified as obese.
- 47.3% of Arkansas 8<sup>th</sup> grade students are either overweight or obese, according to the Arkansas Center for Health Improvement. Data from this source show that the percent of obese children increases until high school and then remains steady.
- More than half (54.3%) of Arkansas Hispanic students are overweight or obese, with African American students at 49.3%. Asian students have the lowest rate of being overweight or obese at 34.4%.
- According to *America's Health Rankings* from the United Health Foundation, adult obesity in Arkansas has increased from 23.3% in 2000 to 36.4% in 2020. The highest rate of obesity since 1990 occurred in 2019 with a rate of 37.4%.

#### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Obesity.

Obesity was discussed by stakeholders in both focus groups and one-on-one interviews. Additionally, parents, both in focus groups and those who participated in the parent survey, indicated that obesity is a significant concern when addressing children's health in Arkansas.

#### KEY INFORMANT FEEDBACK

- More than 53% of key informants interviewed for the CHNA mentioned food and nutrition among the issues negatively impacting children's health in Arkansas. There were nearly 100 mentions of food and nutrition among focus group participants.
- One Key Informant expressed concern about nutrition and health, saying that evidence shows that children who grow up without enough food are often obese adults because of the types of food available to them during childhood.
- Key informants also discussed ways to eliminate food insecurity in an effort to address overall health. One said, "You are what you eat. I would feed children healthy foods and make them move more."

#### **FOCUS GROUP FFFDBACK**

- One educator who participated in a focus group said there is a pilot curriculum that teaches children how to cook healthy foods, with directions, ingredients, and proper utensils sent home.
- Parents in focus groups discussed the importance of physical activity to help children achieve a healthy weight.

Understanding the long-term health impacts of poor nutrition on kids is critical. Poverty and nutrition share identical indicators of need. Unfortunately, calories are cheap.

Community Leader
Key Informant



We need more nutritionists, dieticians, and people to teach parents. It's a struggle in how to feed a family and set them up for success. They know how to eat better, but they fiscally cannot afford it

Medical Provider
Focus Group Participant



One suggested children need 60 minutes of exercise daily, with others expressing concern about the impact obesity can have on children.

- Several parent focus group participants discussed the fact that many parents cannot afford to feed their children healthy foods, especially fresh fruits and vegetables. They also mentioned the role that food deserts play in feeding their children healthy foods, as well as the importance of exercise.
- One medical provider said the unhealthy weight is related to family finances, saying families will get food, but it is easier to get junk food. He went on to say that not many children stick to a diet plan, a concern echoed by parents.

### PARENT SURVEY RESULTS

- More than a quarter (27%) of parents who responded to the statewide parent survey of the Arkansas Children's CHNA process say that they know someone outside their household who has children who are very overweight or obese, and 7% of parents say they have a child who is very overweight or obese.
- Forty-five percent of surveyed Arkansas parents said the nutritional quality and healthfulness of food served in their children's school cafeteria is excellent or very good, which is important for children participating in the free and reduced lunch program.

# **Sustaining Activities: Obesity**

#### HEALTH DISPARITIES

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to *America's Health Rankings*, funded by United Healthcare, the number of Black adults who are obese is 45.5%, the highest of any racial group. Multi-racial is the second highest at 38.2%. Additionally, the same data shows that people who hold a college degree have a lower rate of obesity (31.5%) than those with less than a college degree. <sup>34</sup>

In examining statewide data, the disparities exist related to all three areas of concern: rural, racial, and economic. Eight of the 10 counties defined as rural have a higher rate of obesity in children than the state. Nine of the 10 counties with the highest non-White population have a higher rate than the state average. All 10 counties with the greatest poverty rates also have higher childhood obesity rates than the state rate of 44%.

The data for county and state food insecurity rates is from Arkansas Center for Health Improvement BMI Report 2022.

### **Disparities in Obesity**

Source: Arkansas Center for Health Improvement 2022

County	County Rate	AR Rate
Calhoun	58.62%	44%
Woodruff	46.89%	44%
Lafayette	49.76%	44%
Dallas	56.38%	44%
Monroe	48.73%	44%
Searcy	54.25%	44%
Newton	33.33%	44%
Prairie	47.62%	44%
Cleveland	44.10%	44%
Nevada	40.06%	44%
RACIAL DISPARITY		
Phillips	53.80%	44%
Jefferson	46.78%	44%
Chicot	53.33%	44%
Crittenden	47.10%	44%
St. Francis	51.90%	44%
Lee	61.21%	44%
Desha	54.25%	44%
Pulaski	42.62%	44%
Monroe	48.73%	44%
Dallas	56.38%	44%
<b>ECONOMIC DISPAR</b>	RITY	
Phillips	53.80%	44%
Chicot	53.33%	44%
Woodruff	46.89%	44%
Lee	61.21%	44%
Desha	54.25%	44%
St. Francis	51.90%	44%
Searcy	54.25%	44%
Monroe	48.73%	44%
Columbia	44.68%	44%
Lafayette	49.76%	44%

#### **OVERVIEW**

Arkansas has made improvements over the past ten years, with improved positive safety behaviors to prevent injury. These include increases in the use of car seats and appropriate restraint for children of all ages in motor vehicles. The use of seat belts by teenagers has increased over the past 10 years. Additionally, there has been a decrease in teenage drivers having motor vehicle crashes with the introduction of the graduated driver's license program in 2009.

While certain injury rates in Arkansas are improving, the state still ranks negatively compared with national averages in most injury mechanisms. Although Arkansas has made progress, other states are improving at a faster rate. Sustaining current prevention efforts is imperative as new babies are born each day and new teens become drivers. Training and prevention around injury prevention initiatives must continue, because most new initiatives take a generation before behaviorsbecome social norms.

Arkansas ranks in the top five states for death rates of children ages 1 to 14 in addition to ranking poorly in the top 10 for death rates for teens between the age of 14 and 17. Many of

these deaths are preventable with adequate public education, access to safety devices, and additional

prevention and firearm safety.

### Arkansas ranks 9th in the nation for homicide by firearms for ages 1-18 at a rate of 7.37 per 100,000. (CDC WISQARS, 2015-20)

intervention strategies. Emerging injury prevention issues that need concentrated focus are suicide

Arkansas ranks 9th in the nation for suicide by firearm for ages 9-18 at a rate of 11.17 per 100,000.(CDC WISQARS, 2015-20)

### INJURY PREVENTION

AT A GLANCE

### **42**nd

ARKANSAS'S RANK FOR CHILD AND TEEN **DEATH RATE** 

## 35/100,000

CHILD AND TEEN ANNUAL DEATH RATE

### 50/100,000

ARKANSAS TEEN DEATHS BY ACCIDENT. HOMICIDE, OR SUICIDE

### 46.2%

ARKANSAS YOUTH WHO TEXTED OR EMAILED WHILE DRIVING IN THE PAST 30 **DAYS** 

The chart below shows the leading causes of injury-related death by age group in Arkansas. The statistics are sourced from the Centers for Disease Control and Prevention (CDC) Web-Based Injury Statistics Query and Reporting System (WISQARS). The data cover a 19-year period in order to have accurate rates and percentages. An accurate rate cannot be determined from one or even four years of mortality data, because the rates are not reliable.

## Leading Causes of Injury Related Death 0 to 18 Years, Arkansas, 2000-2019

Rank	Less than 1 (n=367)	1 to 4 (n=638 )	5 to 9 (n= 379)	10 to 14 (n=498 )	15 to 18 (n=1738 )
1	Suffocation (169) 46%	Motor Vehicle Crashes (158) 25%	Motor Vehicle Crashes (149) 39%	Motor Vehicle Crashes (187) 38%	Motor Vehicle Crashes (870) 50%
2	Homicide (68) 19%	Drowning (124) 19%	Fire/Burn (58) 15%	Suicide (86) 17% (48% by firearm)	Suicide (301) 17% (57% by firearm)
3	Motor Vehicle Crashes (43) 12%	Homicide (114) 18% (9% by firearm)	Drowning (45) 12%	Homicide (45) 9% (82% by firearm)	Homicide (236) 14% (83% by firearm)
4	Poisoning (19) 5%	Fire/Burn (80) 12%	Firearm (39) 10% (70% unintentional)	Drowning (45) 9%	Drowning (86) 5%
5	All Other Injuries (68) 18%	Suffocation (43) 7%	Other Land Transport (16) 4%	Other Land Transport (26) 5%	Other Land Transport (36) 2%

The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Injury Prevention can be found in the Appendix.



### INTERSECTING NEEDS

Childhood injuries and deaths span a wide range, from accidents at home to intentional injury. In addition to the effects of actual injuries, some preventable actions also result in long-term physical or emotional health impacts.

Child maltreatment and interpersonal violence are both likely to result in mental health issues that must be addressed. Other incidents such as vehicle accidents, concussions, firearm accidents, and water safety may all require significant physical care and rehabilitation, with some victims having lifelong medical problems as a result of these injuries.

Motor vehicle safety is among the most common and potentially most serious injuries involving children. Arkansas has a high rate of motor vehicle crashes and fatalities. Teen drivers have a higher rate of crashes, due in part to their inexperience, but also resulting from distracted driving.

Approximately 25% of motor vehicle crashes that result in teen deaths involve alcohol, with many more injured in crashes resulting from underage drinking.<sup>35</sup> Arkansas youth who abuse alcohol and drugs may require mental health and addiction treatment, in addition to addressing any injuries they may have experienced or inflicted on others as a result of the risky behaviors. Substance abuse also results in other long-term physical health problems, including heart disease, high blood pressure, and brain development.<sup>36</sup>

### **Injury Prevention Topics**

### **RECREATIONAL SAFETY**

- ATV safety
- Bicycle safety & helmets
- Concussions
- Dog bite prevention
- Hunting safety
- Hydration
- Pedestrian safety
- Playground safety
- Toy safety
- Water safety

### **HOME SAFETY**

- Bathing safety
- Burn prevention
- Crying baby
- Fall safety
- Safe sleep for infants

#### **MOTOR VEHICLE SAFETY**

- Car seats & booster seats
- Distracted driving
- Kids in hot cars
- Motorcycles
- Teen driving

#### **INTENTIONAL INJURY**

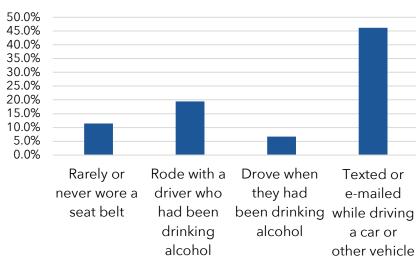
- Child maltreatment
- Firearm safety
- Interpersonal violence
- Suicide
- Youth violence

### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Injury Prevention should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- Arkansas ranks 42<sup>nd</sup> nationally for the overall child and teen death rate, according to the 2021 KIDS COUNT® Report.
   Among children ages 1 to 19, 35 out of every 100,000
   Arkansas children die, which is higher than the national rate of 25 per 100,000 children.
- The 2021 KIDS COUNT®
  Report ranks Arkansas at 35<sup>th</sup>
  for teen deaths by accident,
  homicide, or suicide, with the
  state rate of 50 per 100,000
  teens, which is higher than the
  US rate of 36 per 100,000
  teens.

### Arkansas Youth Risk Behavior Survey Results



Source: 2021 KIDS COUNT® Report

- According to the 2021 United Health Foundation *America's Health Rankings*, the number of Arkansas children that die by suicide is 21.9 per 100,000, which is significantly more than the national rate of 13.9 per 100,000 and places Arkansas's national ranking at 37<sup>th</sup>.
- Arkansas's child restraint use rate was 82.1% in 2021, which is a decrease from 88.2% in 2019.
- The child fatality rate in vehicle crashes in Arkansas is 3.09/100,000, compared to a US rate of 1.74/100,000, which ranks Arkansas 44<sup>th</sup> nationally.
- In 2018, 44% of all preventable child deaths in Arkansas were among children < 1 year of age, followed by 15-17 years of age at 24%.
- Accidental deaths of children in 2018 totaled 68, with nearly half the result of motor vehicle accidents.
   Drowning accounted for 13 deaths, and suffocation the cause of 10 deaths.
- Arkansas's unintentional death rate of 13.08/100,000 for children is much higher than the US average of 8.44/100,000.

### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Injury Prevention.

Injury prevention was not discussed significantly by stakeholders (surveys, focus groups, key informants), but data demonstrate the importance of addressing this children's health need. Following are examples of how this topic was framed by the community:

#### KEY INFORMANT FEEDBACK

- Several key informants expressed concerns about tobacco use and vaping, with some saying it seems to have been forgotten during the stress of the COVID-19 pandemic, but the issue remains.
- Key informants also discussed substance abuses, specifically opioids, as another risky behavior among Arkansas teens that is concerning.

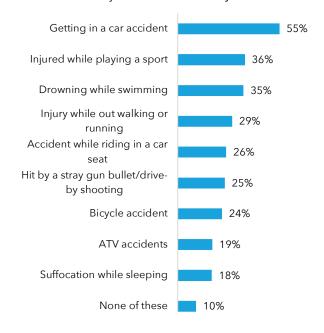
Children are not healthy and in a safe place in general in Arkansas. Children who get sick or injured get good care, but the overall health of children is poor to fair at best.

Public Health Key Informant



- In the focus group instant poll, almost 20% of participants identified preventable injury topics such as: bullying, violence/guns, accidents, or drug use as their greatest concern when thinking about children's health in the state.
- Bullying, accidents, drug/alcohol abuse, and violence/guns combined were the fourth most important resources or services needed for children's health in Arkansas.

### Preventable Injuries Parents Worry About Most



- More than 11% of focus group participants believe bullying, accidents, drug/alcohol abuse, or violence/guns were the most important needed resources in children's health.
- Community leaders participating in focus group discussions suggested bullying, both online and at school, is a disturbing issue that has both physical and mental impacts on children.
- Medical providers discussed tobacco use and vaping, along with substance abuse, as concerns. Some believe that significant drug use, particularly marijuana, is becoming culturally acceptable.

Drug use, especially marijuana, is so prevalent that it is being treated as not a big deal.

Medical Provider
Focus Group Participant



### PARENT SURVEY RESULTS

- Fifty-three percent of parents surveyed for the CHNA worry about their children being bullied or beaten up, while 51% are concerned about violence at school.
- Fifty-three percent of parents also worry about their children being in a car accident, which ranked as the top preventable injury parents worry about the most. An additional 25% worry about an accident involving a car seat.



### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

According to the Arkansas Infant and Child Death Review Report 2020, there is no conclusive evidence there are any racial disparities for motor vehicle accidents resulting in death. In considering data for 2015 through 2018, the death rate was higher for White victims in 2015 and 2016, while there was a greater death rate for Black victims in 2017 and 2018. <sup>39</sup>

In examining motor vehicle crash data, disparities exist in all three areas of concern: rural, racial, and economic. Eight of 10 counties defined as rural have a higher rate of motor vehicle crash deaths than the state. (Note that data is unavailable for two counties.) Nine of the 10 counties with the highest non-White population have a higher rate than the state average. Nine of the 10 counties with the greatest poverty rates also have higher rates of motor vehicle crash deaths than the state rate of 18/100,000, with no data available for the 10<sup>th</sup> county.

The data for motor vehicle crash deaths at the county and state levels is sourced from County Health Rankings 2021.

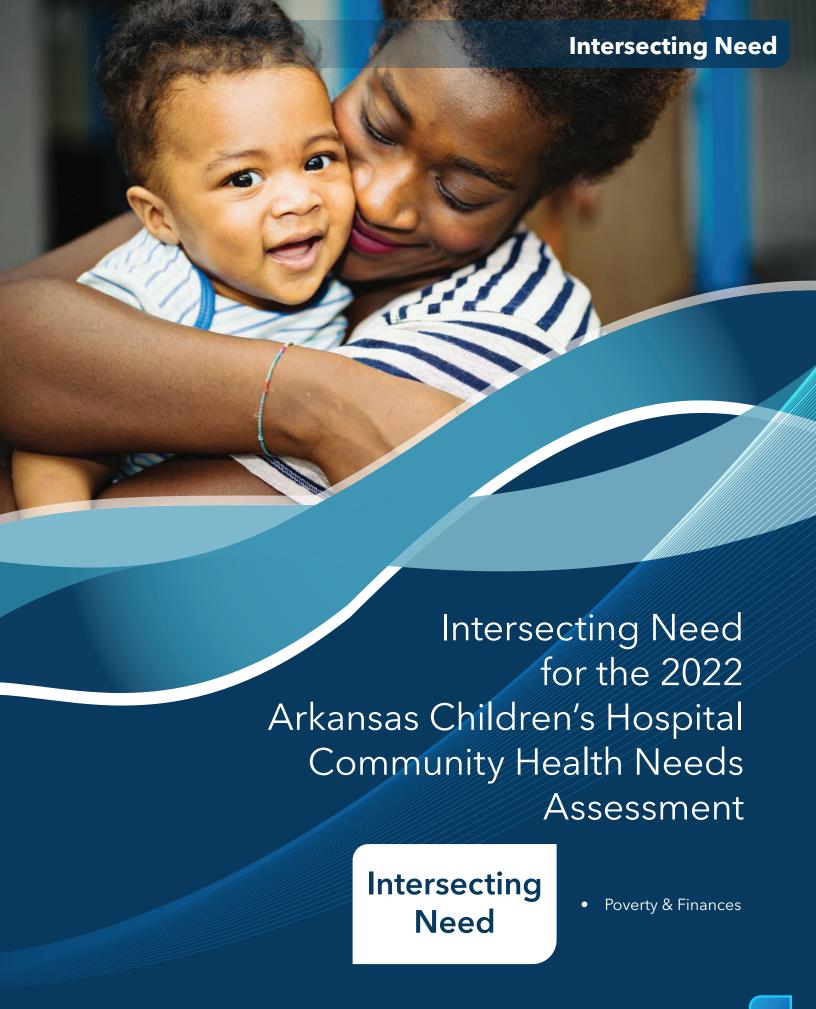
### **Motor Vehicle Crash Deaths**

Source: County Health Rankings 2021

RURAL DISPARITY			
County	County	AR	
Calhoun	33/100,000	18/100,000	
Woodruff	30/100,000	18/100,000	
Lafayette	N/A	18/100,000	
Dallas	25/100,000	18/100,000	
Monroe	34/100,000	18/100,000	
Searcy	25/100,000	18/100,000	
Newton	29/100,000	18/100,000	
Prairie	N/A	18/100,000	
Cleveland	38/100,000	18/100,000	
Nevada	24/100,000	18/100,000	
RACIAL DISPARITY			
Phillips	30/100,000	18/100,000	
Jefferson	19/100,000	18/100,000	
Chicot	20/100,000	18/100,000	
Crittenden	20/100,000	18/100,000	
St. Francis	19/100,000	18/100,000	
Lee	27/100,000	18/100,000	
Desha	29/100,000	18/100,000	
Pulaski	14/100,000	18/100,000	
Monroe	34/100,000	18/100,000	
Dallas	25/100,000	18/100,000	
ECONOMIC DISPAR	RITY		
Phillips	30/100,000	18/100,000	
Chicot	20/100,000	18/100,000	
Woodruff	30/100,000	18/100,000	
Lee	27/100,000	18/100,000	
Desha	29/100,000	18/100,000	
St. Francis	19/100,000	18/100,000	
Searcy	25/100,000	18/100,000	
Monroe	34/100,000	18/100,000	
Columbia	22/100,000	18/100,000	







#### **OVERVIEW**

By most measures, Arkansas consistently ranks as one of the poorest states in the nation. Lack of income and/or monetary resources affect the health outcomes of Arkansas children perhaps more so than any other single topic area reviewed. Economic stability is a key component of social determinants of health because of the significant connection between the financial resources of families and their health. It considers poverty, employment, food security, and housing stability in understanding how lack of financial resources truly impacts overall health. <sup>40</sup>

Not only does quantitative data point to the seriousness of poverty in Arkansas, but virtually every stakeholder who provided input into this CHNA connected the dots between poverty and children's health. Arkansas's comparison of per capita income and the number of low-income working families with children both put the state at a rank of 49<sup>th</sup>. That results in 22% of the state's children currently living in poverty.

Poverty & Finances intersect with every other children's health need in the state, from food insecurity to whether telehealth could be a potential solution to access-to-care issues. In fact, consideration of the social determinants of health reveals the cross-cutting issues of poverty:

- Clinical care access to care issues are much more challenging for those children living in poverty or in low-income working families.
- Physical environment living conditions, access to healthy food, lack of transportation, and unsafe neighborhoods all negatively impact children's health.
- Social and economic factors lack of employment opportunities, access to supportive services, educational opportunities, and safety, all of which are critical to children's health, negatively impact low-income families.
- Healthy behaviors exercise, a healthy diet, mental health and substance abuse treatment, and having trusted sources for information about children's health generally are much more challenging for families struggling financially.

The clear intersection of poverty and all other children's

health needs in Arkansas, combined with the long-term nature of the state's place near the bottom of the financial ladder, is why Poverty & Finances is a foundational children's health need. Yet, the state's healthcare system is not positioned to have a significant impact on increasing family income and decreasing poverty rates.

### **POVERTY & FINANCES**

AT A GLANCE

### 49th

ARKANSAS'S RANK FOR LOW-INCOME WORKING FAMILIES WITH CHILDREN

### 22%

ARKANSAS CHILDREN LIVING IN POVERTY

### **49**th

ARKANSAS'S RANK FOR PER CAPITA INCOME

### 30%

LOW-INCOME FAMILIES WITH CHILDREN IN ARKANSAS

### \$26,797

PER CAPITA INCOME IN ARKANSAS, \$8,300 LESS THAN US AVERAGE

### 11

ARKANSAS COUNTIES HAVE POVERTY RATES GREATER THAN 30%

If we could solve poverty, it would take care of a lot of things.

Community Leader
Focus Group Participant

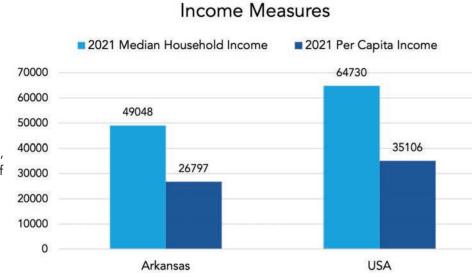
The scoring process described in the Findings section of this report used key data points to determine priority order for each of the identified needs. The metrics used to prioritize Poverty & Finances can be found in the Appendix.

### SECONDARY QUANTITATIVE DATA

Significant secondary data were identified and considered in determining whether Poverty & Finances should be considered as a child health need in this CHNA. Following are data points that support the inclusion of this child health need.

- Arkansas's poverty rate is 16.7%, compared to the national rate of 12.93% for 2021.
- The state ranks 49<sup>th</sup> in percentage of low-income working families with children, according to the 2021 KIDS

COUNT® Report. Thirty percent of Arkansas families are identified as low-income with children, which is 8% higher than the national average.



- The 2021 KIDS COUNT® Report ranks Arkansas at 46<sup>th</sup> for children experiencing poverty, with the state percentage being 22, which is 5% higher than the US average of 17%.
- According to the United Health Foundation America's Health Rankings 2021, Arkansas is the second poorest state by per capita income, with an average per capita income of \$26,797.
- The number of children living in poverty has declined from 28% in 2010 to 22% in 2019, according to 2021 KIDS COUNT® Report.

### STAKEHOLDER ENGAGEMENT

Multi-faceted stakeholder engagement provided a framework for identifying community priorities. Following is a summary of findings from stakeholder engagement related to Poverty & Finances.

The matter of Poverty & Finances was one of the issues receiving the greatest amount of input from stakeholders (surveys, focus groups, key informants), while data also demonstrates the importance of addressing this children's health need.

#### KEY INFORMANT FEEDBACK

- Key informants also discussed the challenges of access to care for parents who have jobs, pointing out that primary care, dental care, and vaccinations are part of a health system that is not designed to consider parents' work responsibilities.
- While Arkansas children have a high rate of being insured, key informants said that just because a high number of children are insured doesn't mean there are not still access-to-care issues. Some mentioned that medical providers often do not want to engage with patients who have a government-funded insurance plan. Others suggested this issue is even greater for dental health than for primary care access.
- One key informant discussed concerns about the disparity in care among those who don't have the financial resources to access care, saying, "One thing we know is tremendously impactful is family income and financial security. That's why you see so much disparity."

### FOCUS GROUP FEEDBACK

 In a focus group instant poll, almost 20% of participants in the CHNA focus groups said affordability is their greatest concern when thinking about children's health in the state of Arkansas. Race and wealth are intertwined. The lack of wealth impacts so many things from access to healthcare to access to education that perpetuates poverty.

Community Leader
Key Informant

Poverty is the biggest obstacle in everything encompassing children's health.

Physician Key Informant



- Poverty & Finances was the third most identified concern following Access to Care and Child Abuse & Neglect. There were more than 50 mentions of Poverty & Finances among focus group participants.
- A common theme from the focus groups is that family economics is connected to almost every
  children's health topic area. As one medical provider put it, "Personal income is a huge determinant in
  whether families are equipped to care for their children." Another participant agreed, saying, "If a
  family struggles financially, it impacts their day-to-day safety, food access and healthy options, ability to
  participate in physical activity through extracurricular activities, and time off from work to get
  healthcare and pay for that."
- Parents said they believe their stress levels related to not working or living in poverty have impacts on the health of their children. Some suggested that financial literacy education would help reduce stress.
- A group of community leaders discussed their concerns about affordable housing. They said some
  families live in poverty-stricken environments in homes that are in unsafe condition. Children who are
  raised in generational poverty often grow up thinking this is the way they are supposed to live.

#### PARENT SURVEY RESULTS

Poverty & Finances ranked second (40%) in the CHNA parent survey list of the top five problems
impacting children's health. Eighty percent of parents surveyed for the CHNA parent survey believe
the number of children experiencing the negative effects of poverty is a moderate or a serious
problem.

The CHNA parent survey also showed that one-third of those surveyed personally know families struggling with poverty and joblessness.

#### **HEALTH DISPARITIES**

In addition to identifying general children's health needs, it is critical to understand any impacts that occur only with certain populations of children. The process for identifying and measuring health disparities is included in the Findings section of this report.

Race and poverty have a very clear linkage in Arkansas. Black or African-American residents have the highest poverty rate at 28.9%, followed by Hispanics and Latinos at 26.7%. White non-Hispanic Arkansans have a poverty rate of 13.7%. <sup>41</sup>

In examining statewide data for children living in poverty, disparities clearly exist related to all three areas of concern: rural, racial, and economic. Nine of 10 counties defined as rural have a higher poverty rate than the state. When considering racial disparities, all of the 10 counties with the highest non-White population have a higher poverty rate than the state average. And when considering economic disparities, all of the 10 counties with possible economic disparities have higher poverty rates than the state rate of 20.8%.

The data for poverty at the county and state levels were sourced from the 2021 KIDS COUNT® Report.

### **Poverty & Finances**

Source: 2021 KIDS COUNT ® Report

RURAL DISPARITY			
County	County	AR	
Calhoun	22.30%	20.80%	
Woodruff	33.10%	20.80%	
Lafayette	29.50%	20.80%	
Dallas	32.30%	20.80%	
Monroe	36.50%	20.80%	
Searcy	34.90%	20.80%	
Newton	29.80%	20.80%	
Prairie	24.40%	20.80%	
Cleveland	19.30%	20.80%	
Nevada	27.80%	20.80%	
RACIAL DISPARITY			
Phillips	37.00%	20.80%	
Jefferson	24.70%	20.80%	
Chicot	36.70%	20.80%	
Crittenden	35.00%	20.80%	
St. Francis	39.60%	20.80%	
Lee	45.40%	20.80%	
Desha	34.00%	20.80%	
Pulaski	22.50%	20.80%	
Monroe	36.50%	20.80%	
Dallas	32.30%	20.80%	
ECONOMIC DISPARITY			
Phillips	37.00%	20.80%	
Chicot	36.70%	20.80%	
Woodruff	33.10%	20.80%	
Lee	45.40%	20.80%	
Desha	34.00%	20.80%	
St. Francis	39.60%	20.80%	
Searcy	34.90%	20.80%	
Monroe	36.50%	20.80%	
Columbia	25.50%	20.80%	
Lafayette	29.50%	20.80%	





Looking Forward

- Engagement of Community Stakeholders
- Big Ideas from Community Stakeholders
- Authors & Acknowledgements

### REVIEW OF 2020-2022 ACH IMPLEMENTATION STRATEGY

The 2022 Arkansas Children's Hospital (ACH) Community Health Needs Assessment (CHNA) identifies the most pressing child health needs in Arkansas and will inform the Arkansas Children's Hospital Implementation Strategy, due in the fall of 2022. The implementation strategy will guide ACH efforts and investments in child health improvements. However, the work that ACH does to improve child health will not be successful without the efforts and collaboration of other organizations working to improve the well-being of children in the state. The 2022 ACH Implementation Strategy will connect with the work of the Natural Wonders Partnership Council and other partners working to improve child health throughout the state.

Formed in 2006, the Natural Wonders Partnership Council is a coalition of diverse child health organizations, nonprofits, agencies, and funders that work together to address the health needs of children in Arkansas. In recent years, Natural Wonders has strategically configured from 10 workgroups into five workgroups that cover overlapping health needs for children and their families. These five groups include: Mental Health & Well-being, Immunizations, First 2100 Days, Building Community Assets, and Healthy Relationships.

Arkansas Children's will continue to serve as the backbone entity for this group by planning, managing, and supporting Natural Wonders's efforts. The 2022 ACH CHNA will inform the next goals and action plan for Natural Wonders, as it has for the previous three statewide needs assessments for ACH. By coordinating and targeting efforts, ACH and Natural Wonders can make measurable improvements in child health.

The 2020-2022 ACH Implementation Strategy created goals to address the needs identified in the 2019 ACH Community Health Needs Assessment. The 2020-2022 ACH Implementation Strategy included 61 goals and program activities. Major accomplishments of the ACH Implementation Strategy include:

- Responding to impact of the COVID-19 pandemic on children and their families in a variety of methods. As a system, Arkansas Children's responded by launching a statewide hotline, answered by clinical support staff, responding to over 20,000 calls over a seven-month period. Arkansas Children's shared over 50,000 face masks, that were donated by the community, to children and families in need. Arkansas Children's senior leadership served in various capacities on local and statewide advisory boards, including a collaborative task force that has focused on providing resources for schools, educators, students, and families, as the state prepared for a return to safe, in-person learning.
- Implementing Arkansas Children's Resource Connect, a closed-loop referral platform to help connect families to organizations that can help meet their social needs at no cost or in low-cost ways. This system was launched in April 2021 for use by patients, families, and staff at Arkansas Children's Hospital. Resource Connect helps staff address social needs in a clinical setting and provides connection to community resources. In addition, the site has an outward-facing component that allows for anyone, anywhere, to search for free and reduced-cost resources that help address and alleviate the social vulnerabilities that impact health. In the first three months of use (April-June 2021), over 350 searches occurred, with the most common searches being for food pantries, help to pay for utilities, and help to pay for housing.
- Responding to the food insecurity needs of children and their families around the state is an additional
  accomplishment from the past implementation strategy. Arkansas Children's Hospital is following best
  practice models to help improve the food security of children and their families around the state. This
  process begins at the individual level, with screening programs to determine food insecurity needs at
  the individual and family levels. Patients are screened at most primary care appointments. Additionally,

# **Looking Forward**

Arkansas Children's made a \$1 million contribution to food banks and pantries around the state in June 2021. This contribution provided over 4.6 million meals to 315,867 children.

- Additionally, school-based health education programs have grown over the past three years. These include the following:
  - o Project Prevent is the statewide youth tobacco-prevention coalition in Arkansas. Coordinated by Arkansas Children's and funded by the Arkansas Department of Health, Project Prevent works with young people across the state to address the harmful effects of smoking, dipping, and vaping. The coalition continued to grow in FY21, with 64 chapters across 41 counties. Over 1,200 youth have participated in activities, including an annual conference and a film contest to promote messaging for youth to avoid tobacco.
  - Love Notes is an evidence-based healthy relationships program for teenagers. The program teaches how to build healthy relationships, recognize dating violence, plan for sexual choices, and more. During the 2021-22 school year, the program expanded significantly from four schools to 23 schools.
  - o Pop-Up Cooking Matters is an interactive experience for students and other people to learn about cooking healthy food and shopping on a budget. Each year, 40 to 55 presentations were given to junior high and high school students throughout the state.

Additionally, the Arkansas Children's Hospital Community Health Fund contracts with organizations to address specific health issues identified in the 2019 ACH CHNA. These small funding opportunities allow ACH to financially support the project of another organization to address a specific need. These funds supported many projects, including but not limited to:

- One of the ACH Community Health Fund contracts went toward a Mental Health Reserve Corps aimed
  to develop community teams that could support schools or other groups after traumatic events. These
  volunteers can support schools and communities to respond to the social-emotional challenges of
  traumatic events. One hundred three people completed the first training which focused on building
  skills, creating regional teams, and planning for future trainings
- An ACH Community Health Fund contract project supported the Regional Mental Health Forum:
   School Nurse and School Counselor Team Approach. This project brings the school counselor and the
   school nurse together to realize their role as a team and offer a networking opportunity that will ensure
   a more robust level of communication and health services. This project trained 72 nurses and
   counselors representing 38 school districts.
- ACH made financial contributions to four organizations that assist families experiencing homelessness in Central Arkansas and the Northwest Arkansas areas. These donations help cover the expenses due to increased need of families experiencing homelessness during the pandemic, as well as spark a partnership for future safety baby shower programs.
- An additional project funded the Arkansas Rural Hospital Partnership to deploy a mobile vaccination program to increase immunization rates in South Arkansas. The project aimed to help rural, underserved children ages 12 to 18 and their parents/caregivers get vaccinated against COVID-19 and flu. South Arkansas counties had low rates of COVID-19 vaccination, so this mobile effort is aimed at better reaching people by using a mobile drive-thru vaccine clinic strategy that occurs after school hours and on weekends. As of February 2022, the mobile initiative has provided 342 vaccines in seven South Arkansas counties.

### **ENGAGEMENT OF COMMUNITY STAKEHOLDERS**

This needs assessment outlines a broad range of child health issues. This needs assessment engaged individuals and organizations that represent the communities served. Many representatives of organizations are part of Natural Wonders Partnership Council. Schools, parents, caregivers, and a variety of organizations with an interest in these issues were engaged in defining the needs for this CHNA. Those organizations include:

- Arkansas Children's Hospital and Arkansas Children's Northwest
- Arkansas Department of Health
- Arkansas Department of Education Division of Primary and Secondary Education
- Arkansas Department of Human Services
- Arkansas Minority Health Commission
- The Arkansas Food Bank and the Northwest Arkansas Food Bank
- The University of Arkansas for Medical Sciences
- Arkansas Hunger Relief Alliance
- Arkansas Advocates for Children and Families
- Health policy organizations, including the Arkansas Center for Health Improvement
- Health care providers, including pediatricians, family practices physicians, and nurses
- Health researchers
- Immunize Arkansas
- The Arkansas Foundation for Medical Care (AFMC)
- Nonprofit organizations providing direct services
- Private health insurance companies
- Faith community representatives
- Low-income legal services organizations
- Private foundations like the Arkansas Community Foundation
- The Arkansas Campaign for Grade-Level Reading
- Private industries ranging from pharmaceutical companies to chambers of commerce
- Parents and caregivers
- Educators
- Community leaders

# **Looking Forward**

### BIG IDEAS FROM COMMUNITY STAKEHOLDERS

Many of the stakeholders engaged through focus groups and key informant interviews for this CHNA were asked how they would address children's health needs if they had unlimited resources. Following are ideas related to each of the prioritized needs that resulted from those conversations:

#### **BROAD HEALTH NEEDS**

- Establish a children's health board in every county to look at the entirety of children's health. These organizations often have money to administer and fund programs.
- Having multi-lingual resources available for communities, including medical documents to increase access, but also community health reports like this CHNA.
- Have a social worker and nurse in every school.
- Provide universal healthcare and take into consideration all of the determinants of health-physical, medical, financial, racial.
- Offer free access to high-quality pre-K education.
- Establish 24-hour day care that provides transportation to and from the home.

#### **BEHAVIORAL & MENTAL HEALTH**

- Research other states with successful evidence-based programs in regard to suicide prevention, such as Colorado.
- Ensure that every program has tools to support social and emotional development in young children and include a family component.
- Invest in providers who are unaware of what patient needs are and how to meet them, because primary care physicians are doing psychiatry, social work, and community work.
- Invest in the mental health of the children, with more psychotherapists and therapists to help them through traumatic experiences.
- Invest in training the healthcare providers who are here to assess mental health needs and provide preliminary care to children.
- Invest in the mental health infrastructure.
- Make children's development and behavior a priority by investing in behavioral health.
- Incentivize workers going into behavioral health.

#### **IMMUNIZATIONS**

- A well-funded voice of public health could promote the importance of childhood immunizations.
- Expand the network of vaccine providers for children around the state.
- Consider having school-based health centers offer vaccines clinics more frequently.
- Provide information about immunizations in schools to educate parents with trusted information.

### **FOOD INSECURITY**

- Overhaul the whole nutrition system to ensure that all children start with the right nutrition in their early years. This would include early education to prevent children from falling behind before they reach school age.
- Provide fresh fruits and vegetables and establish community or school gardens.

- Establish a daily or weekly impact point related to nutrition and cooking in schools. Actively work on curriculum for elementary-age children to maximize the impact seen with younger children before they establish regular habits.
- Identify funding sources such as a soda tax to help fund feeding organizations, allowing them to focus their attention on "boots-on-the-ground" activities, rather than on fundraising.

#### **INFANT HEALTH**

- Establish a home visit program for the first year of life for every child and offer universal pre-K.
- Create resources related to pre-birth maternity care, early intervention, home visiting, and post childbirth.
- Consider a more robust early-care program that would be similar to Head Start with health intertwined.
- Provide free well-child checkups and vaccines.
- Utilize available resources to provide safety products and pay for home visits.
- Create a universal home visiting program for at least three visits after birth.
- Expand home visit programs to include touch-base visits every year to ensure families are continuing to receive services.

### **ACCESS TO CARE**

- Complete a resource assessment of who's doing what in providing any sort of children's resource.
- Expand the role of school counselors to address children's needs through social workers.
- Find ways to attract doctors and nurses needed in all areas of the state.
- Expand Arkansas Children's clinics in other parts of the state.
- Develop and implement K-12 education on health and include parents in that education.
- Ensure an available pediatrician for every child to provide developmental screenings and services needed.
- Create a network of places around the state to access care and provide transportation to get there.
- Eliminate children's healthcare deserts in the state.
- Establish one-stop shops in every community for healthcare, oral health, mental health, and supportive services.
- Provide a medical navigator for every family.
- Expand school-based health clinics to include a telemedicine component for more specialized care.

### **OBESITY**

- Define earlier obesity interventions (pre grade school).
- Offer accessible recreational programming, particularly in the summer.
- Ensure that community centers provide activities for children and adults in the same place.
- Offer programs to teach families how to grocery shop and prepare healthy foods.

### **POVERTY & FINANCES**

- Implement a pilot program where people on government assistance could work their way to self-sufficiency.
- Ensure that all families below the poverty line have the resources and support to rise above the poverty line.

# **Looking Forward**

- Eliminate cost as a barrier for healthcare and education.
- Construct an apartment-type building with a community garden, group kitchen, on site-tutor, etc.
- Offer financial health/literacy to teach parents, giving them the means to provide adequate health care for their kids, and reducing stress in the household.

#### **AUTHORS & ACKNOWLEDGEMENTS**

An internal Arkansas Children's Community Engagement team, working together with Boyette Strategic Advisors, a Little Rock-based consulting firm, completed this assessment. Boyette provided both qualitative and quantitative research support under the guidance of the Arkansas Children's team. Boyette has experience in providing holistic strategic plans, workforce solutions, impact evaluations, corporate services, and general business consulting, allowing their team to see through each of those lenses to provide research, creative thinking, and implementation guidance to Arkansas Children's. This Community Health Needs Assessment (CHNA) has been prepared to satisfy the federal tax-exemption requirements of the Affordable Care Act, in addition to meeting specific planning objectives of Arkansas Children's Hospital.

### COMMUNITY HEALTH NEEDS ASSESSMENT AUTHORS

- Bolton Kirchner, MPH, MPS Coordinator, Community Engagement, Arkansas Children's
- Kay Stebbins, BFA Director of Research and Analytics, Boyette Strategic Advisors

### **INTERNAL ADVISORS**

- Marisha DiCarlo, Ph.D., MPH, Vice President of Community Engagement, Advocacy and Health, Arkansas Children's
- Scott Allen, Director of Community Engagement, Arkansas Children's
- Kelsi Ballard, Administrative Fellow, Arkansas Children's

#### INTERNAL GROUPS

### Arkansas Children's Advisory Group for 2022 Community Health Needs Assessment Process

A group of Arkansas Children's senior leadership, representing Arkansas Children's Hospital (ACH), Arkansas Children's Northwest (ACNW), and system-wide views, provided oversight and leadership for the CHNAs of both ACH and ACNW. The advisory group reviewed all needs assessment findings and participated in the process to identify the priority health needs.

### Working Group for the 2022 Community Health Needs Assessment Process:

The working group included team members representing ACH, ACNW, and the system, with individual expertise from a variety of areas, including strategy, community engagement, process improvement, research, and clinical areas. The working group served many roles through the ACH and ACNW Community Health Needs Assessment processes. Specifically, the working group helped design, refine, and use the index tool to prioritize the needs for each assessment.

### **APPENDIX TABLE OF CONTENTS**

### Sections of Appendix:

• Index sources for each priority need

ACH Prioritization Index			
Metrics for Index Factors			
Primary Priorit	ies (Score Range: 80-85)		
<b>FACTOR</b>	METRIC	SOURCE	
	Behavioral & Mental Health (Total Sco	re: 82)	
• Scope	<ul> <li>Children with Emotional, Behavioral or Developmental Conditions</li> <li>Suicide-related Risky Behaviors (Considered, Planned, or Attempted Suicide)</li> </ul>	Source: 2021 KIDS COUNT® Report  Source: CDC Youth Risk Behavior Survey	
Severity	<ul> <li>Ratio of Population to Mental Health Providers</li> <li>Deaths by Suicide Ages 15 to 24</li> </ul>	Source: 2021 County Health Rankings Source: America's Health Rankings, United Health Foundation	
<ul><li>Community Priority</li></ul>	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
<ul><li>Health Disparities</li></ul>	<ul> <li>Comparison of Ratio of Population to Mental Health Providers for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> <li>Total Suicides for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & 2021 County Health Rankings Source: Esri Business Analytics Online & 2021 County Health Rankings	
	Immunizations (Total Score: 81)		
• Scope	Percentage of 19-35 Month Children Not Immunized	Source: Arkansas Department of Health	
<ul><li>Severity</li></ul>	<ul> <li>Number of Counties with Two or Fewer Vaccine for Children (VFC) Program Providers</li> </ul>	Source: Arkansas Department of Health	
Community Priority	AC CHNA Parent Survey & Discussions in Focus Groups and Key Informant Interviews	Source: Arkansas Children's Stakeholders	
Health Disparities	<ul> <li>Comparison of Ratio of Population to Immunized Children (19-35 months) for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Arkansas Department of Health	
	Food Insecurity (Total Score: 81)		
Scope	Food Insecurity Rate for Children in Arkansas	Source: Feeding America - Map the Meal	
Severity	Very Low Food Insecurity for Children	Source: Feeding America	
Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
Health Disparities	<ul> <li>Comparison of Ratio of Population to Rate of Food Insecurity for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Aspire Arkansas/Feeding America	

Se	Secondary Priorities (Score Range: 65-79)			
FA	CTOR	METRIC	SOURCE	
	Infant Health			
		Infant Mortality (Total Score: 77)		
•	Scope	Infant Mortality Rate	Source: CDC WISQARS	
•	Severity	Sudden Unexpected Infant Death Rate (SUID)	Source: CDC WONDER	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Rate of Infant Mortality for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Aspire Arkansas	
		Teen Pregnancy (Total Score: 65)		
•	Scope	Total Teen Births	Source: 2021 KIDS COUNT® Report	
•	Severity	<ul> <li>Low-birthweight Babies to Under-20-year-old Mothers</li> </ul>	Source: March of Dimes Peristats	
•	Community Priority	AC CHNA Parent Survey & Discussions in Focus Groups and Key Informant Interviews	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Teen Births by County for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & 2021 County Health Rankings	
	Child Abuse & Maltreatment (Total Score: 73)			
•	Scope	Children Subject to Investigative Reports	Source: 2021 KIDS COUNT® Report	
•	Severity	True Reports of Child Maltreatment	Source: Aspire Arkansas	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to True Reports of Child Maltreatment for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Aspire Arkansas	

Sustaining Activities (Score Range: 50-64)				
	FAC	TOR METRIC	SOURCE	
		Access to Care		
		Oral Health (Total Score: 59)		
•	Scope	<ul> <li>Children with Teeth in Very Good or Excellent Condition</li> </ul>	Source: 2021 KIDS COUNT® Report	
•	Severity	<ul> <li>Children Who Received Preventive Dental Care in Past Year</li> </ul>	Source: 2021 KIDS COUNT® Report	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Ratio of People Per Dentist for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & 2021 County Health Rankings	
Telehealth (Total Score: 64)				
•	Scope	Percentage of Population with Broadband Access	Source: BroadbandNow	
•	Severity	<ul> <li>Adults Living in Households with Children Who Delayed Medical Care Because of the COVID-19 Pandemic</li> </ul>	Source: 2021 KIDS COUNT® Report	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	

# **Appendix**

•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Percent of Broadband Access for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Broadband Now	
		Childhood Obesity (Total Score: 64	4)	
•	Scope	Children & Teens Who Are Obese	Source: 2020 National Survey of Children's Health	
•	Severity	Overweight & Obese Students by Grade	Source: Arkansas Center for Health Improvement Assessment of Childhood and Adolescent Obesity in Arkansas 2019	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Obesity Rate by County for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & Arkansas Center for Health Improvement Assessment of Childhood and Adolescent Obesity in Arkansas 2019	
	Injury Prevention: Motor Vehicle Safety (Total Score: 53)			
•	Scope	Seatbelt/Car Seat Use	Source: National Traffic Safety & AC Injury Prevention Center	
•	Severity	Child Fatalities in Traffic Crashes	Source: National Highway Traffic Safety Administration	
•	Community Priority	<ul> <li>AC CHNA Parent Survey &amp; Discussions in Focus Groups and Key Informant Interviews</li> </ul>	Source: Arkansas Children's Stakeholders	
•	Health Disparities	<ul> <li>Comparison of Ratio of Population to Motor Vehicle Crash Deaths for Counties with a High Level of Poverty (financial), a Low Overall Population (rural), and a High Non-White Population (racial)</li> </ul>	Source: Esri Business Analytics Online & 2021 County Health Rankings	

### **CITATIONS**

- <sup>1</sup> https://www.cdc.gov/childrensmentalhealth/basics.html
- <sup>2</sup> https://achi.net/newsroom/adverse-childhood-events-more-common-for-arkansas-kids/
- <sup>3</sup> https://www.americashealthrankings.org/explore/annual/measure/ACEs\_8/state/AR
- <sup>4</sup> https://www.americashealthrankings.org/explore/annual/measure/Suicide/state/AR
- <sup>5</sup> https://www.cdc.gov/childrensmentalhealth/basics.html
- <sup>6</sup> https://www.cdc.gov/childrensmentalhealth/basics.html
- <sup>7</sup> Arkansas State Health Assessment 2020, Arkansas Department of Health
- <sup>8</sup> https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/interactive-reports/index.html
- 9 https://www.americashealthrankings.org/explore/annual/measure/Immunize\_b/state/AR
- <sup>10</sup> https://www.immunize.org/catg.d/p4037.pdf
- 11 https://www.immunizear.org/arkansas-immunization-rate-reportca
- <sup>12</sup> https://www.immunizear.org/for-parents-and-families
- 13 https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/interactive-reports/index.html
- <sup>14</sup> https://hungerandhealth.feedingamerica.org/understand-food-insecurity/
- 15 https://www.fao.org/hunger/en/
- <sup>16</sup> America's Health Rankings analysis of U.S. Department of Agriculture, Household Food Security in the United States Report, United Health Foundation, AmericasHealthRankings.org, Accessed 2022.
- <sup>17</sup> https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity
- <sup>18</sup>America's Health Rankings analysis of U.S. Department of Agriculture, Household Food Security in the United States Report, United Health Foundation, AmericasHealthRankings.org, Accessed 2022.
- <sup>19</sup> https://www.healthy.arkansas.gov/programs-services/topics/infant-mortality
- <sup>20</sup> https://achi.net/library/infant-mortality-arkansas/
- <sup>21</sup> https://achi.net/library/teen-pregnancy-in-arkansas/
- <sup>22</sup> https://achi.net/library/teen-pregnancy-in-arkansas/
- <sup>23</sup> https://achi.net/wp-content/uploads/2018/10/Infant-Mortality-Infographic-.pdf
- <sup>24</sup> https://www.childwelfare.gov/pubpdfs/long\_term\_consequences.pdf
- <sup>25</sup> https://valleycares.com/blog/families-in-crisis-how-parental-substance-abuse-and-mental-health-impacts-kids/
- <sup>26</sup> https://humanservices.arkansas.gov/wp-content/uploads/ARC\_SFY\_2020\_-\_FINAL.pdf
- <sup>27</sup> https://telehealth.hhs.gov/providers/billing-and-reimbursement/?gclid=CjwKCAjw0a-
- SBhBkEiwApljU0qaKz\_wiHjClGys\_zLb6LQpjZ\_OKDGmNf4cyrgzS3h\_lwAwWFU7VBxoCd98QAvD\_BwE
- <sup>28</sup> https://broadbandnow.com/Arkansas
- <sup>29</sup> https://www.childhealthdata.org/browse/survey/results?q=8632&r=5
- $^{30}$  https://www.childhealthdata.org/browse/survey/results?q=8632&r=5
- <sup>31</sup> https://achi.net/wp-content/uploads/2020/04/Year-16-State-BMI-Report.pdf
- <sup>32</sup> https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity
- <sup>33</sup> https://senate.arkansas.gov/senate-news/posts/2019/june/new-law-guarantees-elementary-students-at-least-40-minutes-of-recess-every-day/
- <sup>34</sup> America's Health Rankings analysis of U.S. Department of Agriculture, Household Food Security in the United States Report, United Health Foundation, AmericasHealthRankings.org, Accessed 2022.
- <sup>35</sup> file:///Users/Kay/Documents/ACH%20Needs%20Assessment/FactSheet\_English.pdf
- <sup>36</sup> https://www.cdc.gov/ncbddd/fasd/features/teen-substance-use.html
- <sup>37</sup> Arkansas Infant and Child Death Review (ICDR) Annual Report 2020
- 38 ICDR Annual Report 2020
- <sup>39</sup> ICDR Annual Report 2020
- 40 https://www.cdc.gov/socialdeterminants/about.html
- 41 https://uca.edu/acre/citizens-guide-
- poverty/#:~:text=Arkansans%20categorized%20by%20the%20census,lowest%20poverty%20rate%20at%2013.7%25.

