Community Health Needs Assessment Arkansas Children's Hospital





Executive Summary

Arkansas Children's Hospital (ACH) is a private, nonprofit hospital within Arkansas Children's, Inc., the only healthcare system in the state solely dedicated to caring for Arkansas's 710,000 children. This status gives the organization a unique ability to shape the landscape of pediatric care in Arkansas and transform the health of children throughout the region. The private, nonprofit organization includes two pediatric hospitals, a pediatric research institute and USDA nutrition center, a philanthropic foundation, a nursery alliance, statewide clinics, and many education and outreach programs. Arkansas Children's Hospital (ACH) is a 336-bed, Magnet-recognized facility in Little Rock operating the state's only Level I pediatric trauma center; the state's only burn center; the state's only Level IV neonatal intensive care unit; the state's only pediatric intensive care unit; and the state's only nationally recognized pediatric transport program. Generous philanthropic and volunteer engagement has sustained Arkansas Children's since it began as an orphanage in 1912, and today that ensures the system can fundamentally transform the health of children in Arkansas and beyond.

This 2019 Community Health Needs Assessment (CHNA) provides ACH the opportunity to understand and prioritize its community's health needs through input gathered from community members, public health experts, and existing data sets. It also satisfies the requirements of the Internal Revenue Service (IRS) for tri-annual needs assessment for nonprofit hospitals. For the purposes of the CHNA, ACH defines its community as all children under age 18 in the state of Arkansas (2017 population 705,718.) From September 2018 through February 2019, hospital staff gathered data for the CHNA. The following data sources contributed to the wide range of input gathered from community members and organizations who represent children's health interests:

- 16 focus groups targeted to parents and children's service providers across Arkansas
- 39 key informant interviews targeted to child health thought leaders and subject matter experts
- A telephone survey of 401 Arkansas parents that was statistically significant at the state level
- A comprehensive review of child-specific secondary data from local, state, and national sources.

Resulting data were analyzed and prioritized into ten priority themes based on public health and qualitative research methods. Additional perspective is added to each theme through seven cross-cutting factors, including transportation and substance use, which were mentioned frequently as contributing elements to multiple priority themes. The themes, in priority order, are:

- 1. Parenting Supports
- 2. Social Issues
- Mental Health and Substance Use
- 4. Equitable Access to Care
- 5. Food Insecurity
- 6. Child Obesity
- 7. Reproductive Health
- 8. Oral Health
- 9. Child Injury
- 10. Immunizations

Over the coming months, the CHNA will be used to inform ACH's strategic initiatives that improve child health, including its formal Implementation Strategy, a growing array of population health solutions, and the collective impact work of the Natural Wonders Partnership Council, a coalition of organizations working to improve child health in Arkansas.

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A. PURPOSE AND SCOPE

This report summarizes the findings of Arkansas Children's Hospital's (ACH) 2019 efforts to engage and understand the health needs of the community it serves. The assessment was planned and executed by hospital staff and vetted by a wide variety of public health and child health stakeholders. In addition to satisfying the federal tax-exemption requirements as laid out in the Affordable Care Act, the purpose of the Community Health Needs Assessment (CHNA) is to:

- Identify and analyze unmet healthcare needs as well as assets that exist in the community served by ACH.
- 2. Inform the hospital's strategic initiatives that improve child health by using a social determinants of health framework.
- 3. Guide the collective impact efforts of a number of agencies that serve children statewide including the Natural Wonders Partnership Council (NWPC).

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Comments:

Comments on the 2019 Community Health Needs Assessment can be sent to Ellie Wheeler (wheelerEA@archildrens.org). The 2016 Community Health Needs Assessment was printed, distributed and posted to the public on the hospital website www.archildrens.org. There were no written comments received for the 2016 needs assessment.

B. COMMUNITY DEFINITION

The ACH community (2017 Pop. 705,718¹) is defined for the purposes of this needs assessment as all children from birth to age 18 in the state of Arkansas. ACH is a private, nonprofit institution working to champion children by making them better today and healthier tomorrow. As the only pediatric health system in the state that treats children from every county in Arkansas and some from neighboring areas, ACH defines the community it serves broadly. The child population count for the previous needs assessment was approximately 709,600.²

Arkansas's child population is increasingly diverse. Twelve percent of Arkansas kids live in immigrant families, up from 10 percent in 2010.³ Similarly, Hispanic or Latino children make up 12 percent of kids in Arkansas, up from 11 percent in 2010. The percentage of the population made up of white children has decreased over that time, from 65 percent to 63 percent. African American children also make up a slightly smaller share of the child population in Arkansas now, 18 percent (compared to 19 percent in 2010).

Arkansas Children Under 18 by Race					
Source: National Kids Count Data Center analysis of 2017 Census Bureau data					
	Arkansas	US			
American Indian and Alaskan Native alone	1%	1%			
Asian alone	2%	5%			
Two or More Race Groups	4%	4%			
Hispanic or Latino	12%	25%			
Black alone	18%	14%			
White alone	63%	51%			
Native Hawaiian and Other Pacific Islander alone	<.5%	<.5%			

C. COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS OVERVIEW

From September 2018 through February 2019, hospital staff gathered primary and secondary data for the CHNA. The following data sources contributed to the wide range of input gathered from community members and organizations who represent children's health interests:

- 16 focus groups targeted to a diverse population of parents and children's service providers across Arkansas.
- 39 key informant interviews targeted to Arkansas's child health thought leaders and subject matter experts,
- A telephone survey of 401 Arkansas parents that was statistically significant at the state level,
- A comprehensive review of child-specific secondary data from local, state, and national sources.

Resulting data were sorted into 10 priority themes, coded, and ranked. The ranked themes are intended to be broad while allowing for detailed analysis on current trends and issues within each theme. The Priority Health Needs Profiles section provides descriptions and analysis of each ranked theme. The priority themes include:

- PARENTING SUPPORTS
- 2. SOCIAL ISSUES
- 3. MENTAL HEALTH AND SUBSTANCE USE
- 4. EQUITABLE ACCESS TO CARE
- FOOD INSECURITY
- CHILD OBESITY
- 7. REPRODUCTIVE HEALTH
- 8. ORAL HEALTH
- 9. CHILD INJURY
- 10. IMMUNIZATIONS

ACH and the Natural Wonders Partnership Council

D. COMMUNITY PARTNERSHIPS: PREVIOUS CHNA AND IMPLEMENTATION STRATEGY

"Over the years this collaborative organizational partnership has worked cooperatively to promote, coordinate and advocate for children's health ... The work of the Natural Wonders Partnership Council remains as essential today as it was when it began over a decade ago."

-James L. "Skip" Rutherford, Professor and Dean of the University Of Arkansas William J. Clinton School Of Public Service

This 2019 Community Health Needs Assessment identifies the most pressing child health needs in Arkansas and will inform the Arkansas Children's Implementation Strategy, due in the fall of 2019. The Implementation Strategy will guide ACH efforts and investments in child health improvements. However, the work that ACH does to improve child health cannot be done alone. The ACH Implementation Strategy is complemented by collaborative work with partners through the Natural Wonders Partnership Council (NWPC).

The NWPC is a coalition of diverse child health organizations, nonprofits, agencies and funders that work together to address the changing health needs of children. ACH will continue to serve as the backbone entity for this group by planning, managing, and supporting NWPC's efforts through financial, administrative, logistic, and evaluative support. The CHNA will inform a three year action plan for the NWPC, with specific activities slated for ACH investments.

By coordinating and targeting efforts, ACH and the NWPC can make measurable improvements in child health. Figure 1 outlines the integration of strategy for the CHNA, NWPC, and ACH as well as the upcoming ACH Implementation Strategy. During the previous CHNA cycle, (2016 – 2019) ACH and NWPC members took many steps to address the health needs of children that were identified in the 2016 CHNA. In 2016, ACH approved a \$200,000 "Child Health Innovation Fund" for the NWPC which was distributed through contracts to organizations working to improve outcomes for issues identified in the CHNA. These funds supported many projects, including but not limited to:

- A parenting support gap analysis report
- Enrollment of Marshallese and new immigrant children in ARKids First
- SPARK evidence-based physical activity training for PE teachers
- A partnership with FrameWorks, a strategic messaging organization, to create tested messages, metaphors, and value statements that resonate with real Arkansans
- Training for school nurses from "Seed Digging," which empowers school personnel to improve students' mental health through screening and strategic solutions

ACH has also developed hospital-linked initiatives to address the needs identified in the previous Community Health Needs Assessment. These initiatives include but are not limited to: the implementation and expansion of a child social needs screening and referral tool in primary care clinics, the ACH Injury Prevention Center's evidence-based health promotion and prevention programs delivered in communities across Arkansas, and community-based clinical programs which provided dental and primary care through mobile and school-based initiatives. Further evaluation of the 2016-2019 ACH Implementation Strategy can be found in the appendix.

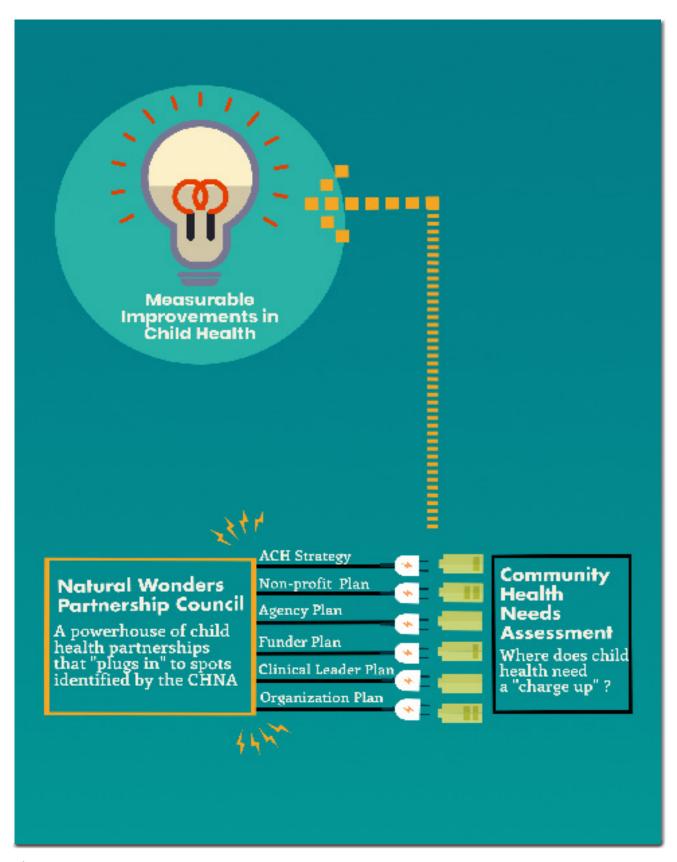


Figure 1

Methods

A. SECONDARY QUANTITATIVE DATA COLLECTION

Hospital staff collected a range of child-specific secondary data from local, state, and national sources. Local data includes sources such as Arkansas Children's Hospital and research studies that focus on specific diseases or groups. The Arkansas Health Department, other state agencies, and statewide nonprofit organizations provided state-level data and analysis, some of which can be viewed at the county level. Nationally, sources included the Annie E. Casey Foundation's Kids Count Data Center, the Centers for Disease Control and Prevention, the Youth Risk Behavior Survey, and the US Census Bureau. When possible, year-over-year trends and comparisons to national data are noted. This comprehensive review of child health data informed the prioritization of health needs and complemented the perspectives gathered from community members.

B. PRIMARY QUALITATIVE DATA COLLECTION

i. PARENT AND CAREGIVER PHONE SURVEY

ACH contracted with the University of Arkansas at Little Rock (UALR) Survey Research Center (SRC) to design and carry out a statewide telephone survey of parents and guardians who had children currently living in their home. The goal of the survey was to assess Arkansas caregivers' views and attitudes towards their children's health and community health needs.

Methodology: ACH and UALR staff worked together to develop a questionnaire that would explore parents' perspectives on community health issues, needs regarding child health issues, and interests in new health programs and services. Data collection was conducted between November 29, 2018, and February 11, 2019. Interviews were conducted with Arkansas adult residents who are a parent, stepparent or guardian of a child under the age of 18 who lives in the household, either full or part-time (n=401). The results are statistically significant at the state level.

The survey was conducted in English and Spanish. The average length of interview was 13 minutes. The study used a wireless-frame sample of phone numbers drawn from both random digit dialing and list-assisted cell phone banks generated by Scientific Telephone Samples.

The response rate for the survey was 58 percent. This rate represents the number of completed interviews expressed as a percentage of all eligible persons in the sample. The cooperation rate was 95 percent. This rate represents the percent of eligible respondents who, having been contacted, agreed to participate in the survey. With the number of completed interviews, one can say with 95 percent confidence that the margin of sampling error is ± 5 percentage points. This research was conducted in accordance with protocols and procedures approved by the UALR Institutional Review Board for Human Subjects Research. The complete questionnaire used in this survey, as well as demographic data summaries and question outcomes, is available in the appendix.

Key Takeaways: Parents were asked "When it comes to your child's health and well-being, what do you consider to be the number one problem being faced by your community today?" Obesity and Lack of Exercise topped the list, followed by Affordable Health Insurance and Poor Nutrition (see list below for all rankings and percentages). When asked specifically about a range of child health issues, Poverty was ranked as the most severe child health need, followed by Child Obesity and Poor Parenting Skills.

Topics parents reported as the "number one community problem":

- 1. Obesity/Lack of exercise (10%)
- 2. Affordable health insurance (8%)
- 3. Poor Nutrition (7%)
- 4. Mental health issues (incl. bullying) (7%)
- 5. Lack of healthcare services (6%)
- 6. Contagions/Cold/Flu (6%)
- 7. Vaccination issues (5%)
- 8. Poor parenting (5%)
- 9. Drugs (5%)
- 10. Access to quality healthcare (5%)
- 11. More focus on specific health issue (5%)
- 12. Violence/Guns (3%)
- 13. Food insecurity (3%)
- 14. Better schools/school programs (2%)
- 15. Social Media/Internet/Pop culture (2%)
- 16. Poverty/Finances (2%)
- 17. Lack of regular health visits (1%)

ii. KEY INFORMANT INTERVIEWS

Community members across Arkansas were asked to participate in interviews that were conducted in person or via telephone by ACH staff. Interviews were conducted with 39 educators, policy and elected officials, business and industry leaders, faith leaders, and key decision makers. Questions for key informant interviews were structured with broad topic domains based on the Social Determinants of Health as well as open-ended questions designed to obtain seminal information. The full guide is included in the appendix.

Methodology: ACH staff identified the primary themes and cross cutting factors that emerged during each interview. Up to three primary themes were identified for each interview session, and up to three cross cutting factors were matched to each of those primary themes. These results were then coded and tabulated to determine which primary themes were most important to interviewees, and to understand which cross cutting factors were most commonly cited as driving those themes.

Key Takeaways: The top three child health related needs brought up by key informants concerned access to care, lack of parenting supports, and poverty and social issues. When asked about the root causes of these areas of need, key informants were most likely to discuss problems associated with transportation or rural isolation in Arkansas. They also very frequently mentioned a need for increased health education in all areas (including dental care, parenting, and nutrition). Discrimination based on immigration status, language, or race was also a major underlying theme, especially for the topic of access to care. Finally, interviewees cited problems with housing, both the cost and the condition, as detracting from the health and safety of children in Arkansas.

iii. PARENT AND SERVICE PROVIDER FOCUS GROUPS

Community members from across the state were invited to share their experience as parents, guardians, educators, or service providers for children in Arkansas, or stakeholders with knowledge of child health through community discussions. Each focus group involved recorded conversations in groups of 5-15 people for about 90 minutes. ACH staff conducted 16 total focus groups, with 164 total participants, in three languages (English, Spanish, and Marshallese). Focus groups were split among consumers (the lay community of legal parents or guardians of children under 18 years of age) and providers (healthcare providers or educators who serve children and their families such as school nurses and teachers, social service agency employees, and health educators).

To ensure inclusion of under-served, low-income and minority populations, staff reached out to diverse areas of the state, both rural and urban, seeking feedback from providers and guardians in culturally and linguistically underrepresented groups. Three focus groups were held in Spanish and one in Marshallese. Staff conducted participant outreach through community representatives and advocates, non-profit community-based services, religious and secular organizations, and health and educational organizations. See the appendix for more details on focus group locations and participant counts.

Participant Information: Staff used a 15-item Participant Information Questionnaire to obtain basic information about focus group participants, their children, and their families. The questionnaire asked about demographic information, number of children, family insurance coverage, and availability of resources in the community to keep children healthy. A table of focus group demographic data is available in the appendix.

Focus Group Guide: ACH staff created and implemented a Focus Group Interview guide. This guide was structured to solicit input on community health assets and gaps by allowing for open-ended responses before probing for details on specific topics and reactions to data points tailored to each community. The focus group guide included 8 questions, which can be found in the appendix.

To ensure a holistic look at state child health, staff asked focus group and interview participants about social determinants of health in addition to child health themes. Social determinants of health topics included education, socio-economic status, physical environment, employment, social support networks, and access to health care.

Methodology: To analyze focus group data, staff utilized the Constant Comparative Method from the Grounded Theory Approach developed by Glaser and Strauss.⁴ This method provides a methodology to gather, summarize, and analyze qualitative data, allowing the participants' answers inform results instead of trying to match the participants' responses to an already existing framework.

To conduct the research, staff collected responses from the focus groups via typed notes backed up by audio recordings. The audio recordings for the Spanish focus groups were transcribed and translated, and the Marshallese group was conducted via an interpreter, so the notes were collected in the same manner as the English-speaking groups. Responses for all focus groups were compiled in a document, using a classification system based on themes. Key child health issues and codes emerged from the data and were used as themes. Each theme was then analyzed to understand which aspects were most frequently mentioned and their significance to participants. Staff also identified aspects that intersected across multiple themes, and these informed the cross cutting factors.

Focus Group Locations and Types

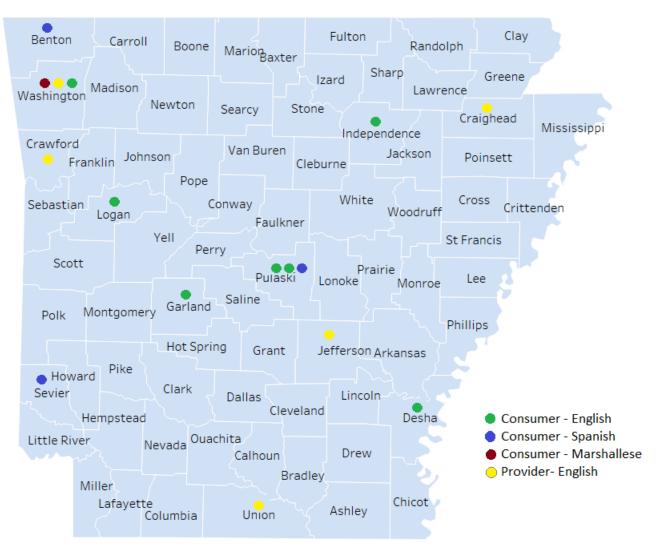


Figure 2

Key Takeaways: The leading topics of interest for focus group participants were access to care, poverty and social issues, parenting supports, and mental health. Participants commented that access to care was confounded by things like transportation, urban isolation, and parents' work schedules. A lack of providers, especially for specialty care, was another frequently mentioned problem for many participants. Other social issues like language barriers and cultural or racial discrimination were reported to impede health care access for many families and their children. School- based health centers were repeatedly suggested as a solution for many of these barriers.

Poverty was frequently described as a cause of health disparities, with high housing costs, low-quality housing conditions, and unsafe neighborhoods as associated factors detracting from child health. The cost of care was also a common complaint, mostly among parent groups. However, providers also reported concerns about how the health care system is currently focused more on billing than treatment or care. Participants also saw industry and local economics as strongly tied to community health.

Participants discussed the need to support parents with health education. Parents and providers consistently reported a need for more access to parenting classes. However, they also suggested nutrition education and reproductive health education for both parents and children.

Mental health was a common theme for parents and providers that covered many issues. Participants reported that technology, or over-use of "screen time" was a problem for both parent and child mental health. Parent phone use was also reported to detract from parenting quality. Mental health was also repeatedly connected to trauma (or Adverse Childhood Experiences) and the increase in youth and adult substance use.

Participants also saw a need for better education about healthy nutrition and better access to healthy food. In connection to this, participants mentioned that unhealthy food options were contributing to child obesity issues. A lack of safe places to exercise was also a commonly cited contributor to child obesity.

Reproductive health education was mentioned less often, but when it came up, most participants acknowledged a lack of understanding of basic reproductive health issues among teens in their communities. Child injury was also infrequently mentioned, but it was most often connected to the presence of crime and unsafe neighborhoods. Immunizations were not a topic of focus for participants, but some parents reported social media as a cause of misinformation about the need for childhood vaccinations.

Comments from focus group participants also varied based on income, socioeconomic status, and primary language. Providers and parents also disagreed on some areas of child health. These distinctions are summarized below.

Input from medically underserved, low-income, and minority populations: Rural or isolated areas of the state desired better access to medical services. They suggested more pediatricians and specialist care, mobile health units, and telemedicine. Travel to Little Rock or other larger cities to obtain medical services is often made difficult by the lack of transportation or funds for the travel and lodging. Parents had difficulty taking time off from work for the trips as well. Low-income populations are also reported to live in unhealthy housing, due in part to the high cost of rent and a lack of housing safety regulations. Sub-standard housing was seen as unsafe for children because of mold, crime, and a lack of safe places to play. This was said to cause physical ailments, such as asthma as well as mental health issues, such as anxiety and stress. Minority populations also expressed a desire to improve relations with law enforcement agencies.

Language considerations (Marshallese and Spanish populations): Linguistic and cultural barriers persist for Marshallese and Spanish-speaking families in the state. Both groups report difficulty in finding bilingual health providers or qualified interpreters. Language challenges are especially difficult for the provision of mental healthcare. This also makes it difficult for parents to schedule preventive or follow-up care appointments and for providers to educate parents on health issues. The Marshallese population said that medical information is frequently available in Spanish, but rarely in Marshallese. Both



Figure 3: Recruitment flyer for Spanish Focus Groups

groups have problems accessing care due to difficulty securing insurance. Many families live in fear of deportation and therefore do not seek preventative care for their children and abstain from programs like WIC and SNAP. Benefits in general are seen as potentially disqualifying families from gaining US citizenship. This fear of deportation also places a mental strain on children.

Provider versus parent perceptions: Providers and parents would like to see an increase in access to healthcare services and insurance coverage. Both groups also see the benefit of school-based health centers. Some providers believe that parents are not using available resources for their child's well-being and fear that too many parental responsibilities are shifting onto schools. Parents, however, see barriers to access services related to work schedules and transportation. Parents say this is often compounded by a lack of awareness of the services available.

A. PRIORITIZED HEALTH NEEDS Findings

After all four data sources (focus groups, interviews, telephone survey, and secondary data) were analyzed and prioritized individually, the results of all data collection were combined into a single overall ranking. Data was grouped around top issues facing Arkansas children that already had natural existing workgroups or initiatives addressing them based on past needs assessments. Ten issues were prioritized. For the secondary data section, a primary indicator was selected for each of the ten themes. Indicators were selected based on their ability to represent progress in their associated theme area, as well as the availability of recent state and national-level data.

The CHNA team prioritized this list of child health issues using a criteria weighted ranking method. The ranking consisted of identifying severe, major, and moderate need issues in each data source and assigning a point-based value. The scores were 2 points for a severe need, 1 point for a major need, and 0 points for a moderate need. The values were summed to a total score for each issue across all 4 data sources. Based on the total score for each issue area, issues were defined as:

- Severe (total score of more than 5 points): These needs were Parenting Supports, Social Issues, and Mental Health.
- Major (total score of 3 to 5 points.): These needs were Access to Care, Food Insecurity, Obesity, and Reproductive Health.
- Moderate (0 to 3 points points): These needs were Oral Health, Child Injury, and Immunization.

See the following chart for each issue area's ranking and data source. Profiles for each of the issue areas, along with details on focus group, key informant, phone survey, and secondary data results, can be found in the Priority Health Needs Profiles section.

	Overall Points	Focus Group Mentions	Focus Group Score 0=(0-50) 1=(50-150) 2=(150+)	Key Informant Mentions	Key Informant Score 0=(1-10) 1=(10-20) 2=(20+)	Phone Survey: % reporting as a "serious problem"	Phone Survey Score 0=(1-20) 1=(20-30) 2=(30+)	National Rank	National Rank Score 0= last 20 1 = last 10 2 = last 5
Parenting Supports	7	213	2	13	1	37%	2	46/50 (Infant Mortality)	2
Social Issues	7	248	2	27	2	44%	2	43/50 (Child poverty)	1
Mental Health and Substance Use	6	110	1	15	1	37%	2	46/50 (% Child ACEs)	2
Equitable Access to Care	5	355	2	26	2	26%	1	34/50 (EPSDT rate)	0
Food Insecurity	5	101	2	8	0	35%	1	48/50 (Child Food Insecurity)	2
Child Obesity	5	82	1	9	0	37%	2	50/50 (High School obesity)	2
Reproductive Health	5	89	1	1	1	27%	1	50/50 (Teen birth rate)	2
Oral Health	3	36	0	4	0	24%	1	48/50 (Decayed teeth 1-17)	2
Child Injury	1	18	0	3	0	14%	0	42/50 (Child deaths)	1
Immunization	0	18	0	4	0	19%	0	33/50 (% with 7 series)	0

B. CROSS CUTTING FACTORS

Each of the ten prioritized health themes has a complex array of subtopics and emerging issues. To shine light on the root causes behind these dynamic health needs, ACH staff also identified 7 cross cutting factors (below). Each cross cutting factor was mentioned as a contributing element for multiple priority themes during key informant interviews and focus group discussions, but was not prominent enough to be its own health need category.

These cross cutting factors help describe how the ten themes are interrelated. For instance, "Transportation and Rural Isolation" is a cross cutting theme that drives outcomes in virtually every category of health need. Lack of transportation makes specialty care more difficult (Access to Care), but it also creates a barrier for everything from buying fresh produce (Food Insecurity) to attending parenting classes (Parenting Supports). The Priority Health Needs Profiles section includes descriptions of the top cross cutting themes for each health need.

Health Education: Focus group participants suggested an increase in the frequency and location options for health education. Parents suggested more education topics for school children including nutrition, reproductive health, financial literacy, basic hygiene, and disease transmission. A two-generation approach to health education was also discussed in focus groups, with participants reporting a need for education to be extended to the parents on topics like parenting skills and healthy habits for their children.

Focus group parents and providers also saw a direct link between academic education and health. Participants reported desiring an increased emphasis on life and job skills for school children and discussed literacy and education as being key to a healthier population.

Early childhood education was also recommended by focus group participants and key informants. One Washington County provider asked "wouldn't it be great if public education started at [age] 0?". Focus group participants identified early childhood education as a way to extend preventive health services and identify instances of abuse, neglect, and behavioral health needs before children start public school.

Adverse Childhood Experiences (ACEs): Adverse Childhood Experiences, or ACEs, are events that occur in childhood but can have long-lasting influences on mental and physical health. These traumas include having a parent incarcerated, extreme economic hardship, neighborhood violence, domestic violence, mental illness or drug abuse in the family, divorce or parental separation, and death of a parent. Focus group participants reported a need for more education on recognizing trauma and how to deal with it, both for adults and children. Groups reported that there are a few resources at the schools but teachers and counselors need more training. Participants reported that some parents are hesitant to reach out for help because they are afraid their children will be taken away or they simply distrust the available resources. Focus group participants link ACEs to untreated trauma and mental health issues, which they describe as often leading to drugs or alcohol and creating other problems.

Substance Abuse and Tobacco Usage: Focus group participants discussed a perceived drug crisis stemming from kids having easy access to drugs as well as from doctors over-prescribing to adults. Focus group participants linked adult substance use to child health by noting that for some children, substance abuse starts at home with adults using or providing drugs and alcohol. Participants also reported little to no education for kids or their parents on substance abuse and a decrease in the perceived seriousness of drugs like marijuana and prescription drugs, which have reportedly become widespread.

Many focus group and key informant interview participants also described a connection between mental health and substance use. One Northwest Arkansas focus group parent commented "It is easier to get drugs than mental health [care]". Parents, providers and key informants noted that access to mental health and substance abuse treatment is limited or cost prohibitive. Focus group parents reported that the legal system can send families on a downward spiral of abuse for minor offenses.

Housing and Environmental Quality: During focus group discussions, participants described how unsafe neighborhoods and high crime prevents children from participating in outdoor activities and creates stress for children. Parents and providers cited a need for more outdoor and indoor recreational safe spaces, sidewalks, or afterschool activities for kids. Unsafe housing was also a major concern. Mentioned issues included dangerous, unhealthy, or poor housing conditions, lack of water or electricity, lack of landlord maintenance or accountability, overcrowded conditions, and transient housing. At the root of the problem, participants identified unaffordable housing options and a lack of legislative oversight on housing conditions. Participants mentioned a need for increased police presence while also improving the community relationship with police. Several focus group parents report living in a culture of fear, and this was particularly true for minorities.

Discrimination based on Language, Culture, or Race: The lack of access to healthcare was a primary concern for focus group parents who were undocumented. The fear of deportation was described as making these parents hesitant to take their children to the doctor. Language barriers were also brought up as a major issue in the healthcare system, and families report a need for more access to care that is culturally and linguistically appropriate.

Focus group parents from mixed immigration status homes reported avoiding or discontinuing their social benefits (even if their child is an American citizen) for fear that using those benefits would impede their progress toward naturalization. Legal worries and fear of deportation places a mental strain on undocumented families and they described an intrinsic fear of the authorities, with some participants reporting racial profiling by police.

Focus group participants report that low-income and immigrant families have fewer opportunities and they therefore work long hours. Participants report that these families often have no option but to leave children unattended or under the care of siblings or friends. These parents report a need for cultural awareness training for the community as a whole in order to break down barriers.

Transportation, transit, and rural isolation: Focus group participants and key informants repeatedly reported problems with transportation and rural areas expressed having a more pronounced need. Lack of transportation was identified as a barrier for parents seeking healthcare for their children, attending school meetings, and obtaining quality work or education. The distance in travel to healthcare centers and specialists was cited as an issue especially for people in rural areas of the state. Several participants mentioned that telemedicine could be a way to increase healthcare access to underserved areas. Participants also expressed strong support for mobile healthcare services (like Dental Vans) and would like to see those expanded.

Technology: Participants reported that children and adults have too much screen time. They report that this affects ability to communicate and interact in person, and shortens children's attention span. Focus group discussions frequently circled back to social media, which was seen as impacting people's perceptions of themselves and general healthcare knowledge. The reported impacts of this were broad, from people opting not to immunize their children to increasing feelings of inadequacy and isolation in children, which can manifest in depression and even suicide.

C. PRIORITY HEALTH NEEDS PROFILES

The following section provides profiles of all ten of the prioritized child health needs. Each profile contains the major cross cutting factors associated with that issue, and feedback from focus groups, key informant interviews, and the phone survey. Profiles also contain major secondary data indicators and analysis. There is a leading metric for each healthcare need that has Arkansas's national rank for context and comparisons.



Parenting Supports

Children need capable, loving parents who can support them physically, mentally, emotionally, and financially. Supporting parents and primary caregivers means giving them the tools to improve their parenting or caregiving skills (such as parenting programs, home visiting programs, and teen parenting support) and creating a community network of resources and supports outside the family home.

Leading metric: Infant Mortality
Arkansas's Rank: 46th

Parenting Supports

KEY INFORMANT FEEDBACK

"[Services] are better in Northwest Arkansas than they are in rural Arkansas; there are way more options and service providers, way more types of service. You get into other parts of the state and those things become nonexistent. You should be getting help and support, but because of where you live we cannot help you."

"Parenting is focused on providing parenting skills and education, but [what] is equally if not more important is looking at the environmental factors that impact a parent's ability to be a good parent ... Parenting doesn't occur in isolation, it occurs within a context of a community, if you have a parent with mental health issues or intimate partner violence, it is hard for those parents to be good parents, you can provide education but if you don't address these root issues you won't help, it has to be a combined focus."

Key informants saw home environment and health education as the two most important factors driving parenting supports in Arkansas. They recognized the need for parenting supports in the form of parenting education including traditional classes, but found it crucial, if not more important, to ensure that parents have a living environment that can allow them to succeed as parents. Stress, untreated mental health (including parent's own Adverse Childhood Experiences), substance use, and unsafe living environments were all listed as barriers to effective parenting. Some participants also identified issues with DHS and parenting related problems based on cultural misunderstandings or language barriers.

FOCUS GROUP FEEDBACK

"I think there is a stigma with the parenting classes because a lot of times they are court ordered." -Washington County Provider

"If there was a resource, early intervention, where the parents got parenting advice earlier on it would be good. Parenting sucks at times and it's hard and tiring. Would they access it? Maybe not." -Garland County Parent

Participants place a lot of responsibility on parents, but also acknowledge that parents often have to work too much, and face transportation and budget challenges. Participants mentioned that the community would benefit from early childhood education, daycares, after-school care and community centers, and extra curricular activities that are affordable to take some pressure off parents. Churches are said to have helped a lot previously, but people would like to see more community collaboration with neighbors helping each other.

Parents and providers frequently note that parents would benefit from parenting education. They said that education needs to start with the parents so they can teach the kids, and some suggested these classes could be provided at schools. However, families also report a lack of awareness about existing resources, and participants mentioned stigma and hesitancy towards taking parenting classes. Some report that work schedules and transportation are barriers to parenting education classes. For some families, legal issues also impact the family structure and the ability for parents to care for their children.

PHONE SURVEY RESULTS

During phone survey interviews, participants were asked about the number of parents who have poor or inadequate parenting skills and support. Overall, lack of parenting skills was ranked as the third most severe problem by parents who participated in the phone survey. Seventy-seven percent of respondents said this was a serious or moderate problem. Only 3 percent of respondents felt this was not a problem.

When asked about their own interest in attending a class that would help manage behavioral, developmental, or emotional problems with their children, the majority of parents (52 percent) said they were either somewhat or very interested. A third of parents said they were not at all interested in parenting classes.

Parents showed moderate interest in parent-child therapy services. Forty-eight percent said they were either very or somewhat interested in these services, while 37 percent said they were not at all interested. Relatively fewer parents were interested in home visiting services. All parents in the survey were asked about home visiting. Sixty percent said they were not at all interested in being part of a home visiting program for parents of newborns and young children, though this may be skewed by the inclusion of parents with older children. Only 27 percent said they were very or somewhat interested.

CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of parenting issues.)

- **Health Education:** The foremost cross cutting topic for parent supports was a desire for more, or even mandated, parenting classes.
- **Technology:** Participants were concerned with screen time replacing quality parenting, and parents themselves being too absorbed in social media. Some suggested technology could help via parenting apps.
- **Transportation and Rural Isolation:** Parents without access to reliable transportation are reported to have a harder time making parent teacher conferences and other activities related to parenting.
- Housing and Environmental Quality: A safe and peaceful home environment was seen as a
 prerequisite for effective parenting, and something that is not easily attainable for some lowerincome families.

Secondary Data: Parenting Supports

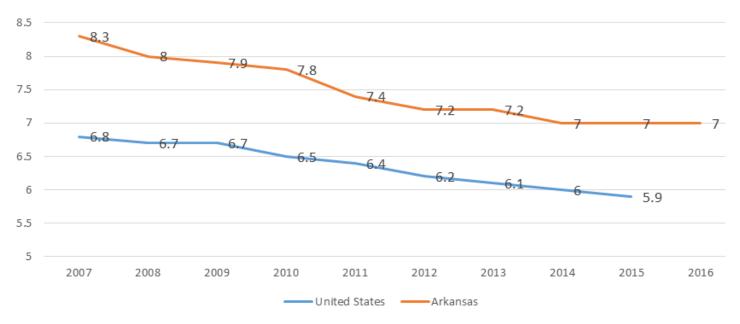
Infant mortality:

Arkansas is among the worst states for rates of infant mortality, ranking 46th out of 50 states according the Kids Count Data Center. Rates of infant mortality have plateaued over recent years in Arkansas, while national rates have gone down.

Arkansas Infant Mortality by Race and Ethnicity (per 1,000) Source: Aspire Arkansas analysis of Arkansas Department of Health data				
Asian or Pacific Islander	8			
Black	10			
Hispanic	5			
Native American	4			
Non-Hispanic	7			
White	6			

Infant Mortality: Arkansas and the US

Source: Aspire Arkansas analysis of Arkansas Department of Health and CDC data



Parenting needs across the state:

The Natural Wonders Partnership Council collaborated with Child and Family Evaluation Services in 2018 to develop a report of available resources for parents in select locations across Arkansas. This report identified several unmet needs for supporting parents:⁵

- There is a lack of parenting courses available in Arkansas despite numerous certified trainers. Very few parenting classes use evidence-based curriculum courses.
- Although home visiting is present across all regions of Arkansas, not all parents have access. Home visiting services in Arkansas reach about 7,000 kids at any given time, far less than the true number of children under age five living below the poverty line.
- The report also identified the special needs associated with Arkansas's high rates of Adverse Childhood Experiences. The ARBEST (Arkansas Building Effective Services for Trauma) has recently increased the number of clinicians that can offer evidence-based mental health therapy services to children with ACEs. However, the need greatly outweighs the supply of services. About 480 ARBEST providers are in training, but there are thousands of children every year who experience new traumas (54 percent of kids in Arkansas have at least one ACE).

Parenting needs for infants and toddlers:

Arkansas Advocates for Children and Families and the Arkansas Campaign for Grade Level Reading identified 4 important supports for parents of children aged 0-3: Prenatal Care, Paid Family Leave, Economic Support, and Home Visiting:⁶

- Prenatal care: 12.7 percent of babies in Arkansas are born pre-term. Expanding access to prenatal care can improve the health of mothers and infants, and reduce pre-term births.
- Paid Family Leave: Although Arkansas recently passed legislation providing paid maternity leave for certain state employees, there is no state-wide paid leave program. Such a program would improve the health and recovery time of children, and "Just a few extra weeks of paid leave is also connected to a significant reduction in infant deaths."
- Economic Support: Arkansas has high and persistent child poverty rates. Unlike most other states, Arkansas does not have a state Earned Income Tax Credit program that would target financial assistance to working families with low-incomes.
- Home Visiting: This is a crucial strategy for supporting vulnerable parents of young children in Arkansas. This includes programs like Parents as Teachers (PAT) and HIPPY (Home Instruction for Parents of Preschool Youngsters).

Child welfare:

The Arkansas Department of Health reports 9,364 cases of true child maltreatment, 5,113 children in foster care, and 451 young people committed to youth service centers in Arkansas in fiscal year 2017.⁷

Social Issues

Social issues that impact child health include poverty, low-quality and unstable jobs, housing instability, and low educational attainment. These issues are intertwined with child health, the well-being of parents, and the health and economic success of communities.

Leading metric: Child Poverty

Arkansas's Rank: 43rd

Social Issues

KEY INFORMANT FEEDBACK

"I was talking to a woman today about how much being poor costs her...By the time she gets to pay day she has to pay late fees and has to factor that into her budget. How that impacts her kids, and what she is able to provide for them and do with them. It was disheartening to listen to her blame herself."

"You've got third world countries with public transportation, in the most rural parts of the world, but not in rural Arkansas."

"Any family who is scared to get healthcare because of political talk - that is inequitable."

"We're seeing more stress, more people being apprehensive of taking care, of food or housing, of medical needs in the general well-being, the fear in communities based on what is happening nationwide is affecting them."

The number one theme brought up during discussions of poverty and social issues related to housing and safe living environments.

Key informants repeatedly cited the physical environment as critical for child health, from prevention of injuries to asthma, stress, and mental health. Transportation was also a major theme in this category. Many participants discussed the limited mobility of low-income residents, especially those who are isolated in rural areas.

Discrimination, lack of trust, and fear were also issues, particularly among immigrant and marginalized groups. Several informants discussed political changes, saying that qualified families frequently forego benefits like SNAP due to fears of future legal or political repercussions. This added to the mental and economic strain on families, especially those of mixed immigration status.

FOCUS GROUP FEEDBACK

"Everyone goes trick or treating [there] because that's the neighborhood that everyone considers safe. The kids in that neighborhood ride their bikes more, walk to their friend's house more, throw the football more...

It's a predominately white but not all white neighborhood." -Union County Provider

"You would think this is an old house that is abandoned, and in the back off a tree hanging is a brand new swing, and recent coloring on the wall in the laundry, a family was living here not too long ago. A lot of places for rent are like that."

-Garland County Parent

"They had a sense of pride, a less stressful situation, and now the town is very depressed. There have been issues even at sporting events. There is just an angry, depressed cloud over the town and it was related to the plant closing."

-Garland County Parent

The economic health of communities was reported to be related to the physical and emotional health of families. Participants mentioned a lack of quality employment, and said income influences physical environment, quality of life, and unhealthy habits. Children are left unattended for long hours due to parents' tough work schedules and long commutes. This was also a reason for kids missing their medical appointments.

Participants worried that earning more could disqualify families from benefits. Participants report having to rely on an "underground" network of friends and families to care for children while the parents go to work because of the costs and limited availability of daycares.

PHONE SURVEY RESULTS

Poverty was ranked as the number one most severe community problem by parents who participated in the phone survey. A large majority of parents (80 percent) said that the number of children experiencing the negative effects of poverty was either a serious or moderate problem. Only 4 percent said it was not at all a problem.

A quarter of parents surveyed reported that they did not have paid time off from their job that allowed them to take their children to receive medical services. Parents were also asked "Poverty is associated with many poor health outcomes for children. Would you support or oppose a tax break for working families to make ends meet?" Eighty-six percent strongly or somewhat supported a Tax Break for working families.

CROSS CUTTING FACTORS:

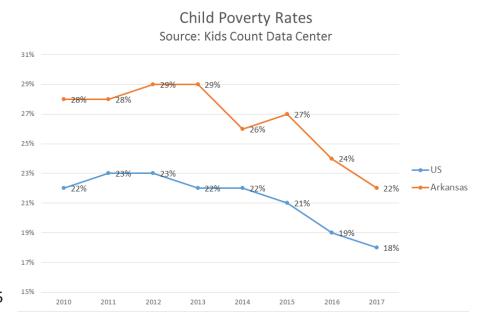
(Themes identified by parents, providers, and key informants as root causes of social issues.)

- **Discrimination based on Language, Culture, or Race:** There remain cultural divides across racial lines in Arkansas, including access to employment opportunities. Some groups are also hesitant to use benefits because of fear of legal repercussions due to political changes.
- Housing and Environmental Quality: Income was reported as being strongly tied to ability to live in "good" neighborhoods with more resources and less crime. Low-quality housing was seen as unsafe or unhealthy.
- **Transportation:** Families have limited access to both services and opportunities for employment when their transportation is lacking. Issues with transportation and work hours also make getting kids to doctor's appointments and checkups more difficult.

Secondary Data: Social Issues

Child poverty:

Arkansas is a high poverty state, with 165,000 children living below the federal poverty line.⁸ Arkansas child poverty rates are higher than the national average (19 percent) but are declining (from 28 percent in 2010 to 24 percent in 2016).⁹ Almost one third (31 percent) of children in Arkansas live in families where their parents don't have full time, year-round jobs. Arkansas also has a higher than average rate of children living in single parent families (38 percent compared to 35 percent for the nation).¹⁰



Housing:

Arkansas ranks relatively well for housing cost burden for homeowners (11th) and housing cost burden for renters (13th). However, about one third of Arkansans rent instead of own, and Arkansas is the only state that does not ensure that landlords maintain reasonable living standards with a "warranty of habitability". A 2016 survey of Arkansas renters found that a quarter of those who struggled to get their landlords to make repairs had a health issue related to their housing conditions. These health problems included "elevated stress levels, breathing problems, headaches, high blood pressure, and bites or infections. Fifteen percent of Arkansans live with at least one housing problem: overcrowding, high housing costs, or lack of kitchen or plumbing. Headaches in the problems in the problem in the problem

Health education:

A July 2016 convening of child health and education stakeholders in Arkansas identified Arkansas specific barriers to developmental and social-emotional screenings. These barriers included family transportation issues, family lack of understanding about the importance of screenings, lack of pediatrician access, and billing complications.¹⁵

Family type:

Children in Arkansas are a little more likely to live in single parent households compared to the national average (38 percent and 35 percent respectively). Female-headed households in Arkansas with children under 18 live in poverty at 46.8 percent, much higher than the national average for this type of household (39.7 percent). Percent is 15 percent.

Central Arkansas has the lowest rate of poverty for single parent households (37.9 percent), and Northwest Arkansas is next lowest (48.2 percent). The highest rates are in the Southwest (56.8 percent) and Southeast (57.4 percent). Thirteen Percent of Arkansas youth (ages 18-24) are also young parents. This is above the national average of 10 percent. Children living in these young families are far more likely to be in poverty (67 percent). ²⁰

Race, ethnicity, and language:

Economic factors differ greatly by race and ethnicity in Arkansas. Forty-six percent of African American children live in poverty in Arkansas, more than twice the rate of their white peers (21 percent). Hispanic children fall in the middle, living in poverty at a rate of 39 percent. Language barriers can influence access to healthcare in Arkansas. Children whose first language was not English are less likely to have health insurance. These children are uninsured at a rate of 9.5 percent, much higher than the uninsurance rates of children who speak English as a first language (4 percent).

Employment:

Arkansas's economy has been improving since 2010 in terms of economic growth and employment rates. However, these gains have not been evenly spread. Between 2010 and 2016, the economic growth of urban areas of Arkansas has greatly outpaced their rural counterparts.²³ In rural Arkansas, employment in 2016 was still below pre-recession era numbers.

Physical environment:

Good housing, crime-free streets, and fresh air all contribute to a healthy living environment. Arkansas has a violent crime rate of 470 per 100,000, but the rates are not consistent across the state.²⁴ High concentrations of violent crime are in Central Arkansas (Pulaski and Jefferson Counties) as well as counties along the Delta (Phillips, Crittenden, and Mississippi Counties). In Northwest Arkansas, violent crime is relatively low, with rates ranging from 193 in Johnson County to 595 in Sebastian County.²⁵

Air pollution is also not consistent across all counties in Arkansas. The highest particulate matter concentrations are in Central Arkansas (Pulaski, Lonoke, Jefferson, and Saline Counties), the lowest is in Northwest Arkansas (Newton County). Overall, Arkansas has a fine particulate matter density of 10.1 per cubic meter.

Mental Health and Substance Use

Mental health and substance use problems include depression, anxiety, suicide, tobacco, alcohol, and illicit drug use. These issues effect entire families, not just individual parents or children. Children living in households with untreated mental health or substance use problems are more prone to Adverse Childhood Experiences (ACEs) and their profound lifelong health affects.

Leading metric: Child Trauma (ACEs)
Arkansas's Rank: 46th

Mental Health and Substance Use

KEY INFORMANT FEEDBACK

"We used to think of drug abuse as being a big city issue but now it is a rural problem...our patients, they have issues that cannot be addressed within the walls of a hospital, they need community solutions."

"I think there is much better awareness of postpartum depression. But even our PCP provider's stop asking questions after a baby is a few months ... if a child is three and mom is depressed the child is at great risk...It undermines the mom's ability to parent in so many ways."

"The PASSE, the PASSE, the PASSE... We have very clear examples of states that have done this [the PASSE] really well, and states that have done this as bad as you can imagine, and it doesn't seem like we are really taking many of those lessons."

Key informants connected problems with mental health most frequently to either substance use or childhood trauma. The lack of affordable mental health providers was also a significant theme. There is a growing awareness of the impact childhood trauma has on mental and physical health problems down the road, although needs are not being met. Some suggested that technology could play a role in increasing access to care especially for mental health services which are less hands-on.

Intergenerational mental health was another priority, especially in terms of the connection between parental mental health and the physical and behavioral development of the child. Several key informants also expressed concern about the future implementation of the PASSE (a provider-led approach to Medicaid Coverage called the Provider-Led Shared Savings Entity or PASSE) for children with disabilities and behavioral disorders.

FOCUS GROUP FEEDBACK

"Do legislators even know what is going on with trauma? [Adverse Childhood Experiences]" -Union County Provider

"I think we are all familiar with the opioid use increase, and the lack of mental health providers across the state. It's a challenge to say the least. There aren't residential places where people can go to get assistance. It turns into neglect of the child." -Washington County Provider

Participant 1: "I think every one of us has someone who was involved in that [drug abuse].

I've lost a brother-in-law to it."

Participant 2: "My brother."

Participant 3: "Cousin."

Participant 4: "My own kid."

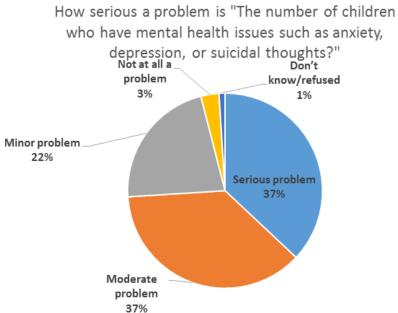
-Logan County Consumer Focus Group

Mental health is a very big concern for parents and providers, who both say it doesn't receive the attention it needs and that many issues are connected to opioid use. Participants report that there is more awareness now around mental health than in previous years, although stigma remains. Those who need care are faced with a lack of providers and prohibitive costs.

The language barrier for minority populations makes mental health care even harder to access. Social media and technology or "screen time" were also identified as contributing to an increase in children's feelings of inadequacy and isolation. This technology was said to take a toll on children's health when they don't have the appropriate coping skills.

PHONE SURVEY RESULTS

Mental Health was the fourth most severe community problem as ranked by phone survey data. A large majority of parents (74 percent) said that the number of children with a mental health issue (such as anxiety, depression, or suicidal thoughts) was either a serious or moderate problem. Only 3 percent said that it was not at all a problem. Parents showed strong support for inschool mental health services. When asked how important it was that schools provide basic mental health services, 94 percent of parents said it was either very or moderately important. Parents were also asked about the number of children



and adolescents who use E-cigarettes, Juuls and other vaping products. Sixty-seven percent said that the use of these products by children was a serious or moderate problem. Only 7 percent said that it was not at all a problem.

CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of mental health and substance use issues.)

- **Technology:** Many focus groups reported concerns that social media and technology were damaging to the mental health of children in their communities. However, technology was also seen as an option for increasing access to mental health services.
- **Substance use:** Participants described parental substance use problems (including opioids) as are detracting from the physical and mental health of kids. They also mentioned an increase in vaping by teens.
- Adverse Childhood Experiences: Providers and consumers reported increasing awareness of how childhood trauma contributes to mental health issues in children. They also were concerned about how a parent's ACE scores could affect their parenting ability and their child's behavioral development.

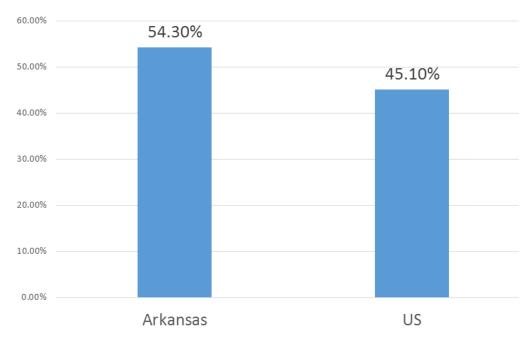
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Secondary Data: Mental Health and Substance Use

Adverse Childhood Experiences (ACEs):

Arkansas children are more likely to have at least one Adverse Childhood Experience compared to other kids in the US.27 These traumas include having a parent incarcerated, extreme economic hardship, neighborhood violence, domestic violence, mental illness or drug abuse in the family, divorce or parental separation, and death of a parent. There were 14,280 cases of domestic violence services in 2017, of which 5.386 were children.²⁸ There were 47 domestic violence related homicides in 2017, of which 15 were children.²⁹ Research has found a connection between

Children with one or more Traumas Source: National Survey of Children's Health 2016-2017



ACE scores and increased need for health services later in life. These childhood traumas have been connected to poor physical health outcomes (such as diabetes and stroke) as well as poor mental and behavioral health outcomes (such as mental distress and depression).³⁰ Identifying childhood trauma rates anticipates certain future health care needs in the community.

Substance use:

In general, drug use by adolescents in Arkansas has been going down, following a national trend. Students in Arkansas are less likely now to try substances like cigarettes and alcohol, and if they do they are waiting longer to try them.³¹ Arkansas DHS served 1,517 substance use clients under age 18 and 22,256 mental health clients under 18 in fiscal year 2017; the majority of these clients (12,544) were male.³²

E-cigarettes:

The CDC identifies e-cigarettes as the reason for increasing nicotine usage among children in the United States. From 2017 to 2018, the rate of use of tobacco products (including e-cigarettes) increased by 38.3 percent.³³ Use of e-cigarettes is also on the rise in Arkansas schools. The 2017 Arkansas Prevention Needs Assessment reports that there have been major increases in e-cigarette use across grades for males and females, and that younger and younger kids are trying e-cigarettes; "e-cigarettes was the only category in which students were younger in 2017 vs 2014".³⁴ A majority of 12th grade students (55.4 percent) said it was easy to get e-cigarettes and 42.7 percent of 12th grade males and 36.1 percent of 12th grade females reported ever using e-cigarettes.³⁵

Reported rates of depression:

High schoolers in Arkansas also report high rates of depression and suicide-related thoughts and activity. Forty percent report feeling regularly sad or hopeless, and 26 percent reported making a plan about how they would attempt suicide in the past year.³⁶ Sixteen percent report actually attempting suicide at least once in the past year.³⁷

The PASSE:

In 2017 the Arkansas Legislature enacted a new Medicaid-managed care program called the PASSE (Provider-Led Shared Savings Entities) with the goal of coordinating healthcare services for Medicaid beneficiaries of Behavioral Health, Intellectual, or Developmental Disability services.³⁸ Arkansas Advocates for Children and Families (AACF) interviewed stakeholders about the PASSE, and found several major concerns:³⁹

- Assessment Issues: Initial assessments were delayed, and stakeholders worry that the assessors
 themselves may not be neutral or well-qualified. Consumers may be overburdened by the lengthy
 beneficiary questionnaire (up to 400 questions) and some have challenged the appropriateness of
 the assessment tool.
- Consumer Education Gaps: Consumers have questions about navigating the PASSE, and some have worried that calls from assessors are scams.

Equitable Access to Care

Equitable access to care allows all families to receive appropriate, convenient, affordable, and consistent health services, including preventive care and specialty care, vision and hearing screenings, and other developmental screenings and services. This also includes removal of barriers like transportation and cost as well as language and cultural barriers.

Leading metric: Well-Child Visits (Screening Ratio)

Arkansas's Rank: 34th

Equitable Access to Care

KEY INFORMANT FEEDBACK

"There are fewer and fewer doctors and nurses in rural communities. Transportation is always an issue. Telemedicine is starting to come into being but there are a lot of challenges... whole person wellness happens outside the hospital doors, I [can't] overstate the importance of that."

"[Parents] often have to make a decision about how someone has to stop working so that they can access this level of Medicaid [for their child].

The economic stipulations that 'I need to be impoverished to access disability services', is pretty problematic."

"For so many families, they aren't interacting with that formal system until their kids start school. Pre-K then becomes so important, it's not just about starting the academic journey off on the right foot, it's about exposing families to the resource systems and social support."

"One of the things we find when providing health services is a trust issue. Does that community trust you to provide services to them and their families? We have a challenge in dispensing services... dispensing them and being sensitive to a particular culture or situation."

Transportation was the number one barrier to families accessing medical care according to key informants. This related to the rural nature of the state, a lack of providers in some areas, and minimal public transportation options. Low-income residents are particularly vulnerable to this type of barrier. Telemedicine was frequently mentioned as a solution. Confidence in the healthcare system was another barrier to care that came up in discussions and a lack of trust was reported, especially among marginalized groups.

FOCUS GROUP FEEDBACK

"The system is set up to make money, not to provide healthcare." – Craighead County Provider

"[Healthcare] is a stress factor more than it is assistance to you." -Pulaski County Parent

"A School-Based Health Center in every school would be ideal because then you've got the dentist, you've got the nurse, and the student doesn't have to leave and there is no transportation problem." -Jefferson County Provider

Many participants identified a need for free or more discounted healthcare. They also described Medicaid and DHS services as inefficient and said many families are losing services due to departmental red tape.

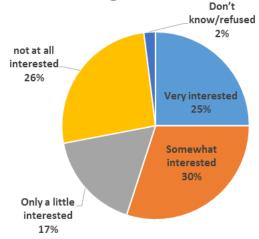
Undocumented families or families with language barriers were described as having an especially hard time navigating the system. Participants reported a lack of providers, specialists, and local health centers.

Both the insured and uninsured reported difficulty accessing dental care. For the insured, reported high costs of co-pay and deductibles sometimes prevented regular dental visits. Participants suggested parents should also have preventive care.

Most parents (68 percent) said that the number of children who are not receiving regular health checkups is either a serious or moderate problem. Seven percent said that it was not at all a problem. When asked about the healthcare provider that serves their own children, most parents (92 percent) rated that healthcare professional as excellent or good. No parent rated their healthcare professional as poor.

Parents were also in favor of school-based health services for their kids. Most parents (83 percent) said that it was either very important or moderately important for schools to offer

"How interested would you be in your child receiving an online doctor visit?"



basic healthcare services for students. Parents were more divided on a preference for telemedicine services. A little more than half (55 percent) reported being very or somewhat interested in having their child receive on online doctor's visit. Forty-three percent were either only a little interested or not at all interested.

CROSS CUTTING FACTORS:

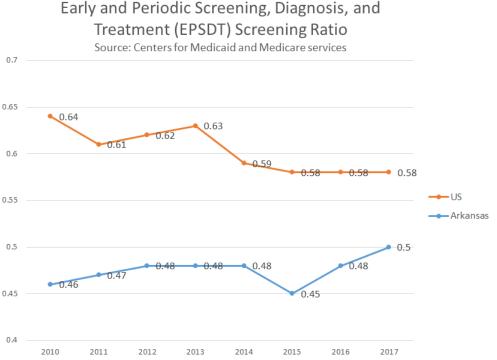
(Themes identified by parents, providers, and key informants as root causes of issues with Access to Care)

- **Technology:** School-Based Health Centers (SBHCs) were identified as a way that technology can help provide access to preventive medicine and help parents not to miss work or incur extra costs.
- **Health Education:** There is a desire for education on how to navigate the medical system, including information on visits, healthy habits and preventive care.
- **Discrimination based on Language, Culture, or Race:** Language barriers and lack of trust in systems make accessing care more difficult for some families in Arkansas.
- **Transportation and Rural Isolation:** Respondents, especially low-income families with restrictive work schedules, frequently cited transportation as a barrier to getting kids to the doctor when needed.

Secondary Data: Equitable Access to Care

Screening ratio:

Of children enrolled in traditional Medicaid or ARKids First A, 50 percent received at least one of their Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) preventive visits required by Medicaid in 2017 compared to 58 percent nationwide. 40 Despite being behind the national average, Arkansas has improved its screening ratios over the past several years.



Well-child visits also vary by age group and race. Native

Hawaiian or Pacific Islander populations in Arkansas are among the least likely to have well-child visits. Hispanic or Latino groups are among the most likely.

Health insurance rates and affordability of care for Arkansas Families:

After Arkansas's Medicaid expansion legislation, the rate of uninsured kids in Arkansas fell from 6 percent (2013) to just 4 percent (2016).⁴¹ Most recently, the rate of children without health insurance has ticked up slightly to 4.4 percent (2017).

However, even with insurance there are barriers to care. About 38 percent of parents attending an ED visit with a child under age 4 reported having to choose between healthcare, like a prescription medication, and basic needs, like food and shelter, because they could not afford both.⁴² Even among those with private insurance, a large number (17 percent) still reported having to choose between health care and basic needs. There are significant health outcome disparities for those who face these difficult choices.

Moreover, there remain significant disparities in health insurance rates by age group, income level, and race. The largest difference between racial and ethnic groups is between white children (who go uninsured at a rate of 3 percent) and Hispanic children (who are uninsured at a rate of 9 percent). Children with behavioral and developmental disabilities also face additional barriers to care. (See the "Mental Health and Substance Use" profile section for more information about the new PASSE model).

Arkansas Well-Child Visits by Gender and Race, select ages Source: DHS Medicaid, released Sept. 2018						
		In the 3rd, 4th, 5th, and 6th Years of life	Adolescents			
Candar	Female	56.07%	35.08%			
Gender	Male	57.49%	36.29%			
Race	White	53.85%	33.55%			
	Black or African American	59.02%	36.53%			
	American Indian or Alaska Native	49.19%	32.16%			
	Asian	58.80%	31.26%			
	Hispanic or Latino	63.88%	41.17%			
	Native Hawaiian or Other Pacific Islander	36.34%	16.00%			
	Hispanic or Latino and one or more races	55.81%	39.01%			
	More than one race	56.98%	37.75%			
	Unknown	58.66%	37.49%			
Statewide		56.79%	35.68%			

Access points:

There is a statewide network of primary care practitioners that includes pediatricians and family practice doctors. Community health centers are a critical resource for primary care for underserved Arkansans. ACH treats children for a very wide variety of injuries and illnesses in its inpatient and outpatient departments. In 2018, ACH had 15,950 admissions, including neonatal and observation. Outpatient visits during that time totaled 338,694, including 4,633 dental outreach van visits, 61,376 emergency department visits, and 76,807 total primary care visits. The top five specialty clinics by volume in 2018 were Ear, Nose and Throat, Dental (including orthodontia), Hematology/Oncology, Ophthalmology (includes Ophthalmology/Optometry Clinics), and Orthopedic. The top three reasons for visiting the hospital for primary care were for well-child visits, fever, and cough. Just 13 of Arkansas's 75 counties do not have a primary care health professional shortage area.⁴⁴

Asthma:

A third of Arkansas youth reported ever being told by a doctor that they had asthma compared to less than a quarter of kids nationwide (22.5 percent).⁴⁵ Although the majority of Asthma Admissions to ACH (98 percent) are from in-state, the average distance traveled was still more than 30 miles.⁴⁶ This may be related to the rural nature of Arkansas and the prevalence of health professional shortages.

School-Based Health Centers (SBHCs):

As a rural state, Arkansas parents face additional barriers when accessing healthcare for their children. School-Based Heath Centers (SBHCs) offer a convenient solution. Arkansas has 31 state-funded SBHCs and over 23,000 students have enrolled or consented to use these centers.⁴⁷ During the 2017-18 school year, Arkansas SBHCs billed 5,601 medical encounters, 6,084 mental health encounters, and 2,538 EPSDT exams.

Food Insecurity

Children who do not have consistent access to a nutritionally adequate diet are considered food insecure. These children and their families often make difficult tradeoffs, sometimes foregoing healthcare, to afford food. Children who go without needed food also are more likely to struggle to pay attention in school and face additional health problems.

Leading metric: Child Food Insecurity
Arkansas's Rank: 48TH

Food Insecurity

KEY INFORMANT FEEDBACK

"Some folks see SNAP and food pantries as enabling versus helping. People don't know enough of the story of the working poor to know this is not so. We need to do more to help some folks understand what the poor and working poor are experiencing."

"Many of the kids in the rural areas of Northwest Arkansas have very limited resources. Some come to school without a winter coat. Some come to school on Monday, having not eaten on the weekend. Contrary to popular belief, there is a lot more poverty in Northwest Arkansas than anyone is aware of or cares to admit exists."

"It was a shock to me that in a town so small, there are more places to buy alcohol than just about anything else."

Educating parents and kids on healthy nutrition options was a priority for key informants. Classes like Cooking Matters were mentioned as successful options for increasing education in communities. Some families were said to have less access to healthy options because of living far from grocery stores and having limited access to transportation.

Certain parts of town often have a much different selection of retail options, with lower-income neighborhoods reportedly having much higher rates of fast food restaurants, liquor stores, and places to buy tobacco than healthy food options. Other barriers to adequate nutrition for families included a fear of signing up for benefits. Some families, particularly mixed immigration status families, were hesitant to use programs like SNAP for fear of future legal repercussions.

FOCUS GROUP FEEDBACK

"We are very rural, and that plays a role in childhood hunger. If [children] are riding a bus and parents are working late in the evening, they can't even walk to get McDonalds. The logistics of this community mean once you're out of town, you're out of town." -Independence County Parent

"When you have parents who are striving to pay bills or keep food and the lights on, they are not getting healthcare themselves, the last thing they are concerned about is if their kid ate something they shouldn't have, they aren't going to limit access to social media and devices because that's a break for them. To have healthy kids we have to have adults who are healthy." - Washington County Provider

"The grocery stores are not in the low-income communities for the most part. They have less access to services because they are less mobile."

-Craighead County Provider

Participants would like to see an increase in nutritional education at schools for kids as well as information for parents. They suggested an increase in community gardens and other opportunities to learn how to grow food. There is a general lack of access to healthy foods. Participants said that for habits to change, healthy food needs to be affordable and easy to prepared quickly.

They also suggested that nutritional information on food preparation could be helpful. Participants note that schools provide free or reduced meals and some people rely on food pantries. However, some parents complain that the food provided in schools is poor quality and teaches the children unhealthy behaviors, such as eating pizzas, nachos, and hot dogs as regular meals.

Most parents (74 percent) said that the number of children who are often hungry was either a serious or moderate problem. Only 5 percent said it was not at all a problem. Parents are more divided on their opinions of the nutritional quality of the food served in their child's school. Fifty-one percent said that the food was either excellent or good, and 49 percent said that it was fair or poor. Their opinions of the nutritional quality of food served in pre-school or daycare was more favorable. Seventy-one percent said that food at daycare or pre-school was either excellent or good, 24 percent rated it fair, and only 6 percent rated this food as poor.

Parents were supportive of the prospect of Arkansas developing regulations to increase the standards of the nutritional quality of meals served in pre-schools. Sixty-five percent said they would strongly support such a measure, and only 8 percent said they would not at all support it. However, parents were not supportive of the idea of attending a class to teach them how to shop for and prepare affordable healthy meals. Forty-eight percent said they were not at all interested and only 11 percent said they were very interested.

CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of food insecurity.)

- **Health Education:** Participants again saw a need for a two-generation style approach to health education for nutrition and healthy cooking. Some also suggested increased education on gardening.
- Transportation and Rural Isolation: Location is a major issue reported by providers and parents
 in relation to access to healthy food. Many communities, or certain areas within communities,
 have much more restricted access to grocery stores.
- Discrimination based on Language, Culture, or Race: Cultural divides that dictate income and neighborhood in Arkansas communities also influence access to grocery stores and healthy food options. Some groups are also hesitant to use benefits because of fear of legal repercussions or deportation.

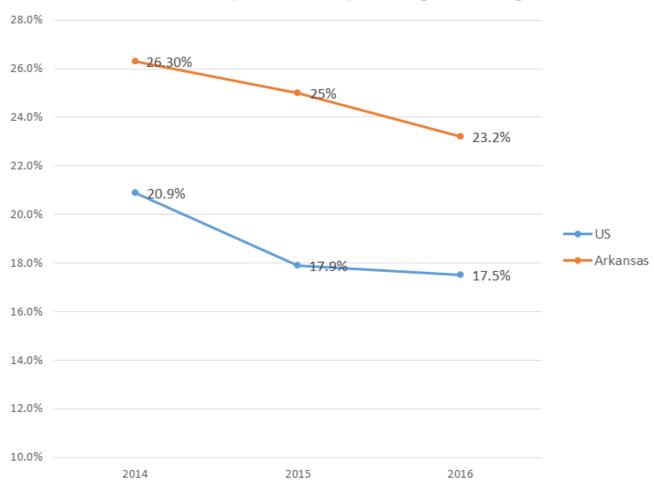
Secondary Data: Food Insecurity

Food insecurity rates:

Almost one in every four (23.2 percent) children in Arkansas is food insecure.⁴⁸ Arkansas adults are food insecure at a lower rate of 17.2 percent. The number of children with food insecurity in Arkansas had plateaued at around 200,000 for several years before finally edging down. The current number of food insecure children (about 163,000) is a 19 percent decrease from 2015. The rate of food insecure children is also going down in Arkansas, dropping from 26.3 percent in 2014 to 23.2 percent in 2016.

Children who are Food Insecure

Source: Map the Meal Gap, Feedingamerica.org



School breakfast and lunch:

As one of the 10 most rural states in the country, Arkansas faces additional barriers to providing school breakfasts for kids.⁴⁹ Despite this, Arkansas is showing improvement in school meal participation. According to the 2017-18 School Breakfast Scorecard from the Food Research and Action Center (FRAC), Arkansas is now ranked 6th in the nation for school breakfast participation. This report shows that 65.7 percent of low-income students in Arkansas who participate in school lunch also participate in school breakfast programs. This represents an increase of nearly 2 percentage points over the previous year. Arkansas was ranked 8th (63.8 percent participation) for the previous school year.

Nutrition assistance:

Fourteen percent of Arkansas families received SNAP (the Supplemental Nutrition Assistance Program) benefits over the last year.⁵⁰ During that time, over 145,000 kids in Arkansas also benefited from SNAP. Still, about 255,000 Arkansans (or 8.9 percent) have limited access to healthy foods.⁵¹

Screenings:

ACH screened 8,858 patients with a social needs screener during fiscal year 2018, and connected them to appropriate resources.⁵² Of those screened, 23 percent reported being worried about running out of food during the last month, and 16 percent report needing food today. Overall, 26.3 percent of respondents provided answers that indicated that they were food insecure.



Child Obesity

Child Obesity is most often defined in terms of excessive Body Mass Index (BMI) for the child's height and age. An elevated BMI carries risk of current and lifelong health issues. Children with healthy weights require healthy food options, safe places to play and exercise, and a community-based approach to family health.

Leading metric: High School Obesity
Arkansas's Rank: 50th

Child Obesity

KEY INFORMANT FEEDBACK

"Many communities don't have safe places to play outside. In some communities, it's not safe to walk to school."

"We can say, yes, there is a playground, but what about the street you have to travel on to get there?"

"The dollar menu at McDonalds, when you can drive through ... and spend \$10 and feed their whole family. People at low incomes get stuck in that, there is not a healthy choice that is easy and affordable."

"In some areas where the kids live the easiest option is fast food."

"It comes down to comfort food and there's a lot of uncomfortable people out there."

Key informants most often cited a need for increased education and awareness of healthy eating and cooking habits regarding obesity problems in Arkansas. However, many also acknowledged that environmental constraints play a large role.

Many listed a lack of easily accessible or affordable healthy food options, as well as a lack of safe places for children to play and get exercise. Transportation to places for recreational activity was also listed as a barrier to getting the right amount of physical activity.

FOCUS GROUP FEEDBACK

"Most of these homes are on a service road and not in a neighborhood, you can't just go outside and play because you're going to be in the street." – Pulaski County Parent

"There are parents who are afraid to let their children out in the yard, and when I went through these areas I didn't see any children outside. None of that was out there. Pine Bluff looks like a ghost town." -Jefferson County Provider

Participants discussed the need for better education on nutrition and healthy habits in the school systems as well as for parents so they can prepare healthy meals. The quality of the food offered at schools is an issue for many and some say it fuels unhealthy eating habits.

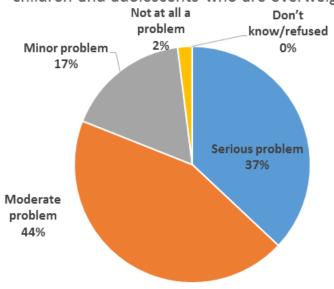
The lack of areas to exercise or do outdoor activities was also noted as a contributing factor to the obesity epidemic. Issues like neighborhood safety, lack of nearby parks, and unsafe sidewalks all reportedly deterred children from going outdoors and being more active.

Participants would like to see more recreation centers where children can play freely and for those centers to be affordable. The availability of healthy foods was a concern as well as time to prepare healthy meals.

Parents recognized child obesity as a problem in Arkansas. This issue was ranked as the second most severe community problem in the phone survey. Eighty-one percent of parents said that the number of children and adolescents who are overweight is either a serious or moderate problem. Only 2 percent said it was not at all a problem.

When asked about GoNoodle (a program used by schools that provides breaks in the classroom to get kids moving), 20 percent of parents said that their children use the program. Sixty-four percent said that their children did not use

How serious of a problem is "the number of children and adolescents who are overweight?"



GoNoode, and 14 percent said they did not know.

CROSS CUTTING FACTORS:

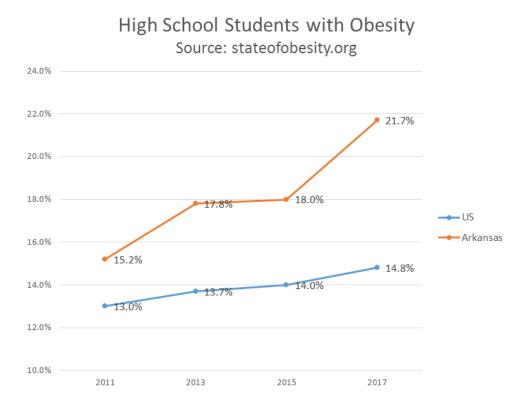
(Themes identified by parents, providers, and key informants as root causes of child obesity)

- **Health Education**: There is a desire for a two-generation approach to teaching healthy eating habits, nutrition, and cooking.
- **Housing and Environmental Quality:** A lack of safety in neighborhoods and a shortage of parks and recreational activities are preventing children from exercising and going outdoors according to focus group and key informant discussions.
- **Transportation:** Although less prominent, transportation was also mentioned as a barrier to accessing places to exercise for kids.

Secondary Data: Child Obesity

Child obesity rates:

Arkansas has the highest rate of high school obesity in the nation (21.7 percent).⁵³ Arkansas child obesity rates range from a low of 16 percent in Madison County to about double that in Bradley County (31 percent).⁵⁴ They also vary by race, with children of racial and ethnic minority groups such as Hispanics or African Americans more likely to experience obesity.



Proximity to places to exercise:

Overall, 66 percent of Arkansans live at half a mile or more from a park or recreational facility.⁵⁵ Only about one in 5 (21.4 percent) high school students in Arkansas get an hour or more of daily exercise. This is low compared to neighboring states, and only Louisiana has a lower rate of high schoolers getting an hour of daily exercise (data for Mississippi was not available).

Diet:

Maintaining a quality, nutritious diet is a problem in general for Arkansans, 255,000 (or 8.9 percent) of whom have limited access to healthy foods. Thirty-two percent of Arkansas youth drink one or more sodas every day (compared to 19 percent nationally). Some Arkansas youth (12 percent) drink three or more sodas daily. Fourteen percent of children in Arkansas don't regularly eat vegetables (compared to 7 percent nationally).

Arkansas Child Obesity by Race and Age Group Source: ACHI 2017-18 Assessment of Childhood and Adolescent Obesity in Arkansas http://www.achi.net						
Child obesity by ra	ce and ethnicity	Child obesity b	oy age group			
White	19.60%	Kindergarten	15.30%			
Black	25.40%	2nd Grade	19.80%			
Hispanic	30.30%	4th Grade	23.90%			
Asian	13.10%	6th Grade	24.90%			
Native American	21.80%	8th Grade	24.70%			
		10th Grade	25.30%			

Reproductive Health

Positive reproductive health includes avoidance of sexually transmitted infections, low likelihood of teen births, and deterrence of sexual assault. These outcomes are driven by providing appropriate health education, giving male and female youth the tools they need to have healthy relationships, and providing access to comprehensive healthcare services for adolescents.

Leading metric: Teen Births
Arkansas's Rank: 50th

Reproductive Health

KEY INFORMANT FEEDBACK

"The statistics for teen pregnancy really have improved for us, it's just that we started in last place and we are still in last place. I think it's the internet and the availability of information. In one sense they may be less sexually active, but in another sense they know more about contraception and are using it."

"A lot of the moms are teens, really young teens, so educating the parents is important."

Reproductive health was not a frequently mentioned priority for key informants. However, some mentioned a lack of opportunities, or a lack of perceived alternative life paths as contributing to complacency among teens about reproductive health. When reproductive health came up, participants also discussed the need for increased education, and acknowledged that although Arkansas is ranked low in the category, things have been steadily improving.

FOCUS GROUP FEEDBACK

"Whenever I have to talk to my daughter when she is of age, I just don't know. I don't want to but I know she is going to [be sexually active]. People are set on their mindset of 'you get married and then you have a baby'. But it doesn't always happen like that. I would like to take a class to know how to talk to my child." -Washington County Parent

"You have a lot of conservative families that don't address sex-ed issues... The conservative families are not as open to it." -Independence County Parent

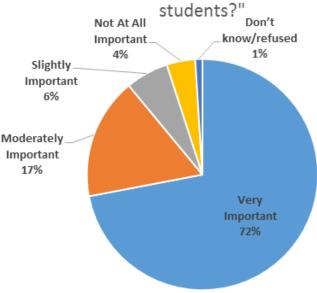
Focus group participants reported a lack of education about reproductive health for teens; in many communities this is still seen as a taboo subject. Participants perceive that there is some sex education in schools but say it is very basic, and does not address the issues kids want to talk about so they turn to peers and the internet for answers. Groups said that birth control is very expensive and hard to access for uninsured teens, and that others lose coverage when they reach age 18.

Participants reported that, due to situations that demand parents work long hours, many children are left unsupervised and this leads to risky behaviors. In small towns, privacy concerns prevent adolescents from seeking birth control methods or purchasing pregnancy tests. A mobile unit that provides these services discreetly was offered as a possible alternative.

In the Hispanic community, sexual abuse is reported as a risk due to crowded housing conditions which can include strangers in the home. Participants report they would like to see more done in child abuse prevention.

Most parents (61 percent) said that teen pregnancy was a serious or moderate problem. Only 4 percent said it was not at all a problem. Parents were very supportive of the idea of reproductive health education in the school setting. Parents felt very strongly that it is important for schools to provide factual sex education to teenage students (92 percent said that it was either very important or moderately important). Seventy-six percent felt that factual sex education for teenage students in school was very important, and only three percent said that it was not at all important. Parents were similarly supportive of healthy relationship education in schools, with 91 percent saying it is very or moderately important.

"How important is it that schools provide education about birth control to teenage



Parents also were strongly supportive of schools providing education about birth control to teenage students. Eighty-nine percent said that it was either very or moderately important, and just 4 percent said that it was not at all important. Finally, education on sexually transmitted infections in schools was almost universally considered either very important or moderately important (95 percent) by parents. Only 1 percent said that this was not at all important.

CROSS CUTTING FACTORS:

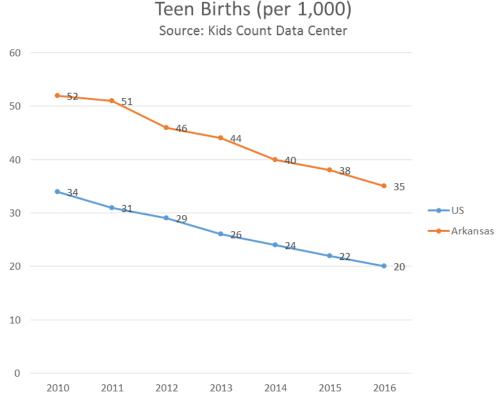
(Themes identified by parents, providers, and key informants as root causes of reproductive health issues.)

- **Health Education:** Many discussions on reproductive health focused around increasing education and conversations between parents and teens. Some saw lingering social taboos and cultural expectations as barriers to adequate reproductive health education.
- **Housing and Environmental Quality:** Crowded housing conditions, often due a shortage of affordable housing, were seen as contributing to the risk of sexual assault.

Secondary Data: Reproductive Health

Teen births:

Arkansas has the highest teen birth rate in the nation, even though numbers have been improving. 57 These young moms are less likely to receive prenatal care in Arkansas. Just 56.7 percent of mothers aged 40 15-19 had any first trimester prenatal care (compared to 67.8 percent for mothers of all ages). 58 Prenatal care in the first trimester, however, is up overall 20 from 68.4 to 70.1 percent in Arkansas from 2016 to 2017. 59



Healthy relationships:

Nineteen percent of high schoolers in Arkansas report

being physically forced to have sexual intercourse when they didn't want to.⁶⁰ Reports of rape increased from 9.7 percent of high schoolers in Arkansas in 2011 to 19.2 percent in 2017.⁶¹

Health education:

High schoolers in Arkansas are much less likely than other students across the nation to use any kind of pregnancy prevention method. About one in 5 sexually active high schoolers in Arkansas didn't use any method to prevent pregnancy the last time they had sexual intercourse; the US average rate is lower at 13.8 percent.⁶² Arkansas does not require information on contraception, sexual orientation, negative outcomes of teen sex, healthy decision making, family communication, or condoms in sex education courses in schools.

Attitudes toward teen pregnancy:

Researchers from UAMS and the Clinton School of Public Service held 12 focus groups across Arkansas in 2018. These focus groups included teens and parents of teens, and centered on discussions of their attitudes towards teen pregnancy prevention.⁶³

Their research found that parents felt uneasy discussing these topics with their teens, put off the conversations, and hoped or assumed that they received pregnancy prevention information from school or other sources. Parents, like teens, felt skeptical about the safety and effectiveness of some types of contraception including IUDs. Teens in particular reported inadequate understanding of contraception options. They also reported imbalanced access to contraception, for instance citing that boys were given condoms while girls were not.

The key needs that arose suggested that teens and their parents both want better communication about pregnancy prevention, and parents in particular needed help feeling empowered to have these conversations. The report finds that parents "need to know how to have this conversation in a way that does not feel like they are condoning sex" and teens "desire a conversation about teen pregnancy prevention and/or contraception that is open and honest with someone they trust."

Sexually Transmitted Infections (STIs):

Children in Arkansas are vulnerable to sexually transmitted infections, especially in the older teen years. Chlamydia is one of the more common STIs (Sexually Transmitted Infections), and the number of total cases is increasing in most regions of the state. Southwest and Southeast Arkansas were the only regions to see small decreases in total Chlamydia cases.

Arkansas STI Counts by Age (2016) Source: Source: ADH STI Annual Report					
Age at Diagnosis	Chlamydia cases	Gonorrhea	Early Syphilis		
<13	31	14	-		
13-14	136	37	-		
15-18	3509	865	2		

Oral Health

Oral health is connected to the health of the whole child. Ideal oral health is achieved when children and adolescents are free from chronic mouth and facial pain, tooth decay, tooth loss, and other mouth and gum diseases. Healthy environments, nutrition, and appropriate dental treatment all reduce family costs of care, and lead to longer term improvements in education and general health.

Leading metric: Tooth Decay or Cavities in Children

Arkansas's Rank: 48th

Oral Health

KEY INFORMANT FEEDBACK

"It's difficult to innovate or focus on new initiatives when political capital is used to keep important public health efforts in place. Especially things like water fluoridation, which has been established in many places for decades but is under threat in Arkansas."

"If you have a limited budget and you are looking at how you are going to pay utilities, get food, dental care is probably not even on the table."

"Parents are taught that baby teeth are impermanent and don't matter."

"There is an overall misperception about the connection between oral health and overall health."

Key informants reported a lack of understanding of the importance of oral health among community members and healthcare providers and that oral health is seen as a separate and less important part of child well-being. They also reported a lack of parent education on the importance of child dental health, especially among very young children.

Parents are said to put off dental care for fear of expense, even with dental insurance. Some systemic concerns were also mentioned, including slow progress with legislative changes at the state level. This inlcuded fluoridation as well as resistance to changes in scope of practice by some health care providers who are concerned about competition.

A lack of dental care providers, especially pediatric dentists, was another major concern. This is especially true in the rural parts of the state. This compounds the transportation issues that already pose a barrier to families in accessing dental care.

FOCUS GROUP FEEDBACK

"I've had a child this year whose teacher handed him a toothbrush and he didn't know what to do with it and I teach 4th grade." -Logan County Parent

"What is sad about it is parents have it covered by ARKids but they won't take their kids to the dentist." -Garland County Parent

"For some it is they are working and they don't make a lot, you can't afford to take off of work. Sometimes it comes down to 'OK, I can take my kids to the dentist and lose a day of pay?'"

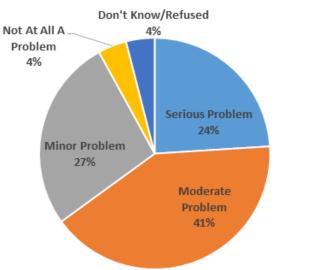
-Garland County Parent

Providers are of the opinion that dental health is not a priority for parents. Dental care offered at schools is helpful but it would be better if it started earlier (home visiting programs, childcare facilities, etc.). For many people transportation issues and matters of lost work days prevent them from taking their children to the dentist.

There is also a lack of awareness that dental care is covered by ARKids First. It is hard to predict upfront costs, especially for the uninsured, and this causes families to forego preventive checkups. Providers noted the cost differences between preventive and therapeutic care.

The number of children who have dental problems is considered a serious or moderate problem by 65 percent of parents. Just 4 percent said that it was not at all a problem. Some parents (7 percent) report that their child has missed school due to a toothache.

"How important of an issue is the number of children who have dental problems?"



CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of oral health issues.)

- Health Education: There is a reported lack of awareness of basic dental care among kids and their parents, especially regarding the relationship between dental care and whole health. There is also a lack of awareness about when children need to start seeing the dentist and other health care system navigation issues.
- **Transportation and Rural Isolation:** Like many other services, parents without access to reliable transportation are reported to have a harder time making dental appointments. This is an additional barrier in rural areas where there are fewer dental providers and some have limited slots for publicly insured patients.

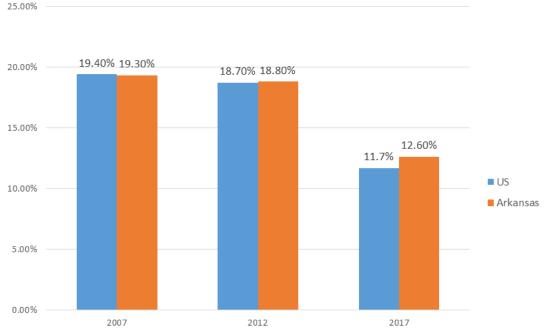
Secondary Data: Oral Health

Tooth decay:

Arkansas kids had lower rates of tooth decay in 2017 (12.6 percent) compared to 2012 (18.8 percent). Kids in Arkansas are also less likely now to have untreated dental issues or dental decay. In 2010, 29 percent of Arkansas third graders had a cavity or dental decay that was not treated. In 2016 that percentage dropped to 18.7, which is below the Healthy People 2020 target for the United States (25.9 percent). Arkansas was ranked 36th for the percentage of Medicaid children who received a sealant on a permanent molar in the most recent (2013) state-level analysis by the American Dental Association. In that year, Arkansas was at 12 percent while the US rate was 14 percent.

The Arkansas Department of Health recommends that a baby's first dental checkup happen within the first year of life. However, many parents in Arkansas have trouble accessing dental care for their very young children because of a lack of pediatric dentists.

Children with Tooth Decay or Cavities (in last year) Source: National Survey of Children's Health

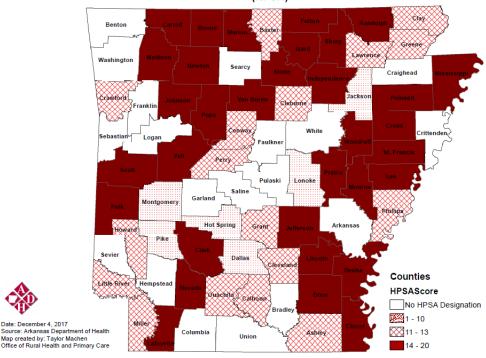


Note: The National Childrens Health Survey 2017 asked if the child had "frequent or chronic difficulty with: decayed teeth or cavities in the past 12 months". Previous surveys used variations for oral health survey item 1.2a. See Childhealthdata.org for m

Preventive dental sealants:

More kids in Arkansas are receiving preventive dental procedures called "dental sealants" to protect their teeth from cavities. In 2010, 27 percent of third graders in Arkansas had them, and in 2016 that figure went up to 43.4 percent. That is well above the healthy people 2020 United States goal of 28.1 percent.65 Arkansas benefits from some progressive laws related to preventive dental services. For example, if they have a collaborative practice agreement, hygienists are

ARKANSAS Dental Health Professional Shortage Areas (HPSA)



allowed to go into schools to do cleanings, apply fluoride varnish, place sealants, and even take X-rays for kids who haven't had a prior dental exam. However, Medicaid still does not reimburse for portable dentistry, which has become important to reaching rural parts of Arkansas.⁶⁶

Fluoridated water:

Not all public water systems in Arkansas have access to fluoridated water, and some families use other sources for water like wells. Kids in Arkansas who drink mostly city or county water show less evidence of dental decay (62.3%) compared to those who consume mostly well water (65.7 percent), or mostly bottled water (70.5 percent).⁶⁷ Eighty-six percent of Arkansans have access to fluoridated drinking water, which is up from 64.7 percent in 2010.

Disparities:

A 2016 screening of Arkansas third graders found that 64 percent had evidence of dental decay or cavities. This varied by race group, with 73.1 percent of African American third graders in Arkansas showing evidence of dental decay, 69.1 percent of Hispanics, and 59.6 percent of whites. ⁶⁸ African American children in Arkansas are less likely to be referred for urgent dental care (0.6 percent) compared to whites (2.3 percent) and Hispanics (3.3 percent). African American children in Arkansas, however, are more likely to be found to have early dental needs (24.4 percent) compared to whites (16.8 percent) and Hispanics (16.2 percent).

Child Injury

Child injuries are most often predictable and preventable. Common child injuries include burns, falls, drowning, motor vehicle or recreational vehicle crashes, suffocation, poisoning, suicide, and homicide.

Leading metric: Child and Teen Death Rate
Arkansas's Rank: 42nd

Child Injury

KEY INFORMANT FEEDBACK

"I see less promise for new laws that promote safety ... we have to be on defense to preserve the progress we have already made."

"In injury prevention physical environment is key, we need to make sure kids live in safe and healthy homes with safety equipment and free of chemical and physical hazards. That is clearly a key issue."

"The rural nature of our state really puts our kids at risk of injury, you are [further away] from care if you get hurt...There are all kinds of injury hazards that are more risky in rural environments."

"Moms with even very low levels of depression are less likely to use car seats or safety plugs, are more likely to leave the child outside too long or in the bathtub when they walk out. Sometimes it is not attending to the parents' needs that contributes to the enhanced possibility of child injury."

Key informants described a strong link between parental mental health and child safety. They saw a need for more awareness of the impacts of post-partum depression and general mental health of parents. Addressing parent mental health was tied directly to improved parenting and avoidance of child injury.

Participants said that child injury education, though important, was not enough on its own. Parents were also said to need a safe and peaceful living environment as well as mental health services to succeed. Some key informants also expressed frustration with slow progress on child injury prevention laws at the state level.

FOCUS GROUP FEEDBACK

"Even me, I like to get out and walk but I don't have a sidewalk, and I might get hit. Getting out and walking would make me feel better, the endorphins would go, but I don't go walking because I need safety gear to go out walking, it's ridiculous."-Craighead County Provider

"Some kids don't have a safe place to sleep, they will hear guns go off. They will hear it at night and they will come and tell you." -Craighead County Provider

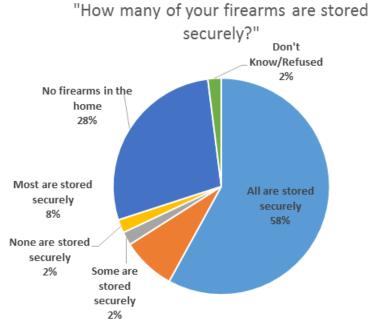
"[In an ideal scenario] Parents will be educated on things pertaining to the kids like car seat safety." -El Dorado Provider

Parents report that most of the problems arise from unsafe play areas or limited access to play areas, sidewalks, or parks. Providers say parents are afraid to use social services because DHS will inspect their homes and take children away because of inadequate or unsafe living environments.



Parents were split on how severe of a problem child injury is in their communities. Forty-eight percent said it was either a serious or moderate problem, while 48 percent also said it was a minor problem or not at all a problem.

When asked about firearms in the home, 28 percent said there were no firearms in the home. Four percent of parents said that either none or only some of their firearms are stored securely, 58 percent said all are stored securely, and 8 percent said most are stored securely. Most parents said that their child under the age of one slept in a crib or bassinet (95 percent). The remaining reported co-sleeping with their infant.



CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of child injury)

- Housing and Environmental Quality: Unsafe houses that are near busy streets were a common safety concern for focus group participants and key informants alike. Neighborhoods were also frequently reported as "unsafe" because of crime and specifically gun violence.
- **Transportation:** Rural isolation is a factor that makes life riskier in some ways for children and adults, who have farther to travel to a hospital during an emergency.
- Health Education: Best practices for child safety like safe sleep and car seats are critical elements
 of community knowledge that need to be sustained.

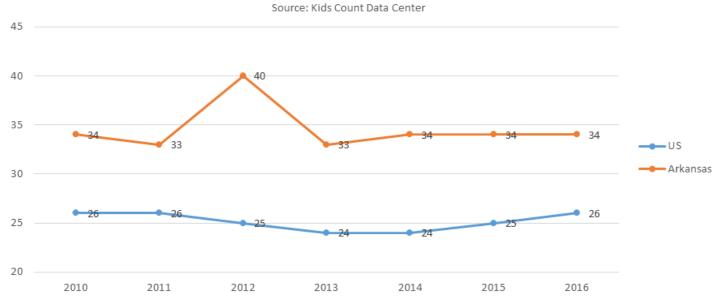
Secondary Data: Child Injury

Leading causes of child and teen death:

The top three leading causes of death for ages 1-18 in Arkansas are Unintentional Injury, Suicide, and Homicide. For children less than one year of age, SIDs (Sudden Infant Death Syndrome), which is injury-related, is the second leading cause of death.⁶⁹ While the most common cause of unintentional death for infants is suffocation, motor-vehicle crashes are the leading cause of unintentional death for children over age 1.⁷⁰ Unintentional Injury accounts for 39 percent of child deaths in Arkansas.⁷¹

Arkansas: Leading Causes of Death Source: CDC WISQUARS database, 2015-2017 all races, both sexes					
Rank	<1 year	1-18 years			
1	Congenital Anomalies	Unintentional Injury			
2	SIDS	Suicide			
3	Short Gestation	Homicide			
4	Unintentional Injury	Malignant Neoplasms			
5	Maternal Pregnancy Comp.	Congenital Anomalies			
6	Placenta Cord Membranes	Heart Disease			
7	Circulatory System Disease	Cerebrovascular			
8	Homicide	Chronic Low. Respiratory Disease			
9	Respiratory Distress	Diabetes Mellitus			
10	Influenza & Pneumonia	Influenza & Pneumonia			

Child and Teen Death Rates (ages 1-19 from all causes, per 100,000)

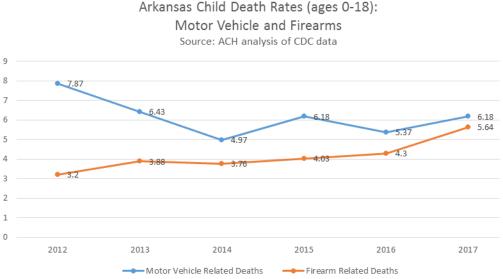


Suicide:

The Arkansas Infant and Child Death Review program conducts in-depth reviews of unexpected deaths of children under 17 in order to aid in the development of interventions to prevent future injury-related deaths. The 2018 Arkansas Infant and Child Death Review found that Firearms accounted for 71 percent of suicide deaths (among children under 18). The AICDR also found that the majority of suicide deaths among children in Arkansas (71 percent) occurred in children ages 15-17 during that year.

Firearms:

While motor vehicle teen deaths have been trending down in Arkansas, firearm-related deaths (for ages 0-18) have been increasing steadily. Firearm-related child deaths have been rising much faster in Arkansas than in the nation as a whole. In 2007, US and Arkansas child firearm-related deaths per 100,000 for ages 0-18 were 2.87 and 3.64 respectively. By 2017, the US rate had increased slightly to 3.32 and the Arkansas rate



had more than doubled, increasing to 5.64.

Preventive measures - Safe Sleep:

The Arkansas Department of Health promotes safe sleep practices which can reduce infant fatalities. Babies should be placed "alone, on their backs, and in a crib". They also recommend securing pools with 4-foot fences and with self-latching gates to prevent drowning as well as installing smoke alarms in furnace and sleep areas.

Preventive measures - Graduated Driver License

Arkansas has a Graduated Driver License law as of 2009 which requires extra supervision, cell phone restrictions, passenger limitations, and curfews for young drivers. Motor vehicle deaths for youth from age 0 to 19 in Arkansas have dropped from 7.87 in 2012 to 6.18 in 2017, although Arkansas is still above the national average of 5.64. Arkansas is still above the national average of 5.64.

Immunizations

Without proper immunizations, children are vulnerable to dangerous childhood diseases, complications, and even premature death. It is critical that Arkansas children and adolescents receive the proper recommended schedule of vaccinations and that their parents receive educational materials about the timing and nature of these vaccinations.

Leading metric: 7 vaccination series (19-35 months)

Arkansas's Rank: 35th

Immunizations

KEY INFORMANT FEEDBACK

"They [parents] don't always have reliable information. They may be influenced to pay attention to information that is not science-based. I would love to see more health education, so they don't deny vaccinations."

"Community beliefs about immunizations have impacted immunization rates in the region. More parents are opting out. It's made kids and families more vulnerable to disease."

Many key informants are troubled by the potential harm from lower rates of childhood vaccinations. Most saw a need for more education for parents who were unsure about immunizing their children. They recognized that parents are faced with an increasing amount of misinformation that makes choosing the best option for their children more difficult.

FOCUS GROUP FEEDBACK

"They only got them [immunizations] to come into school and they didn't get them after that age."-Logan County Parent

"Working in a clinic, we have this gap where kids are coming for their shots and when there's that gap where they don't need shots, they aren't coming." -Jefferson County Provider

"We have a lot of parents who won't take their kids [to be immunized]."-Washington County Provider

School-based measures are important in getting children immunized, but participants expressed that this could be improved upon by reaching children before they enter public schools. Providers commented that before they touch the school system, many kids are not checked in on to see if their immunizations are up to date. Participants also report that social media is contributing to misinformation about immunizations and inflating the perceived dangers.

CROSS CUTTING FACTORS:

(Themes identified by parents, providers, and key informants as root causes of immunization issues.)

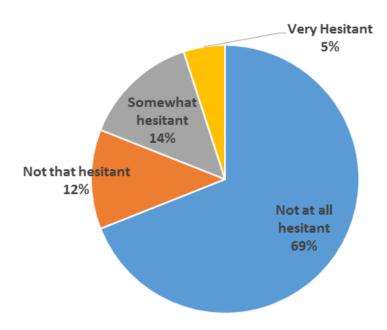
- **Technology:** The internet and social media reportedly have a significant impact on perceptions of childhood vaccinations. Participants report that social media plays a big role in spreading misinformation, and that parents are unsure about what to believe.
- **Health Education:** Often at odds with technology are efforts to promote educational resources about child immunizations. Key informants, parents, and providers describe a recent change in the perceptions of the need for childhood vaccinations.

PHONE SURVEY RESULTS

Most parents said that they were not at all hesitant (69 percent) about childhood vaccinations. Some felt "not that hesitant" (12 percent) and others felt "somewhat hesitant" (14 percent). Only 5 percent of parents report being "very hesitant" about childhood vaccinations.

Parents were split on how important they saw the problem of lack of child vaccinations in their communities. Forty-six percent said it is a serious or moderate problem, and 46 percent said it is a minor problem or not at all a problem.

"How hesitant about childhood vaccinations would you consider yourself to be?"



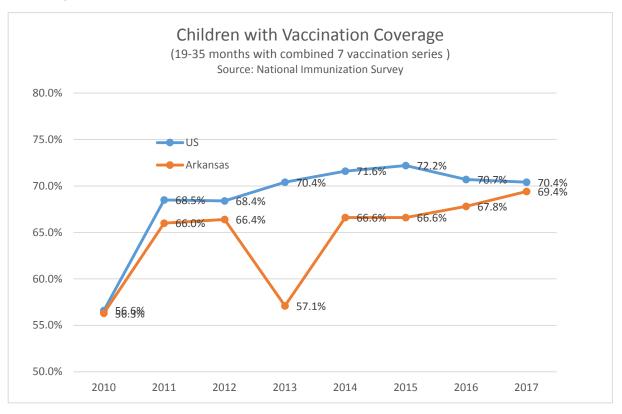
Secondary Data: Immunization

Vaccination rates:

Arkansas lags behind the US for vaccination rates in several areas. In particular, Arkansas is below target for the 7-vaccine series for children ages 19-35 months, as measured by the CDC National Immunization Survey (NIS). Arkansas's children get the full 7-vaccine series just 69.4 percent of the time, which is well below the Healthy People 2020 goal of 80 percent.⁷⁸

2017 Vaccination Rate among Adolescents, ages 13-17 years Source: CDC National Immunization Survey						
	US	Arkansas				
≥1 Tdap	88.7	92.4				
≥1 MenACWY	85.1	91.7				
≥1 HPV	65.5	61.1				
HPV UTD	48.6	35.2				
Tdap = Tetanus, diptheria, and pertussis vaccine MenACWY = Meningococcal vaccine HPV = Human papillomavirus vaccine UTD = Up-to-date						

Act 999 of 2003 authorized the Arkansas Department of Health to allow additional individual immunization exemptions.⁷⁹ In the 2017-18 school year, 7,595 students received exemptions from vaccinations required by the Arkansas Board of Health for school attendance. About 2 percent of these exemptions were for medical reasons. The rest were for either religious (32 percent) or philosophical reasons (67 percent).⁸⁰



Vaccine hesitancy:

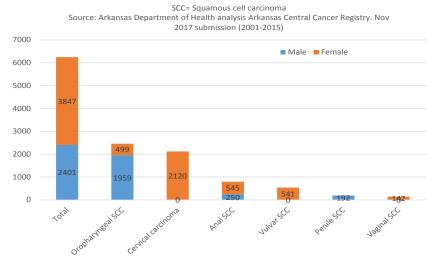
The World Health Organization (WHO) defines vaccine hesitancy as "a delay in acceptance or refusal of vaccines, despite availability of vaccination services". Vaccines protect the health of children, but they also work to protect the health of other people in the community, even those without vaccinations.⁸¹ A growing number of Arkansas families are choosing not to vaccinate their children. This hesitancy may be due to:⁸²

- Complacency: Families may feel that the risk of infection is low and therefore the vaccine is not needed.
- Confidence: Some families do not trust health care providers or organized medicine. Some are also fearful that vaccinations could be harmful to children.
- Convenience and Freedom of Choice: Some barriers like cost and location make vaccinations inconvenient. Some families also have ethical or religious concerns when deciding whether to vaccinate their children.

 Number of HPV Associated Cancers in Arkansas

HPV (Human Papillomavirus) and cancer prevention:

HPV (Human Papillomavirus) is a group of viruses that can lead to cancers of the mouth, throat, vagina, cervix, and anus and other cancers in both men and women. ⁸³ It is most commonly spread through sexual contact, and most people get HPV at some point in their lives. The CDC recommends that all kids get vaccinated for HPV at age 11 or 12 years to develop protection well before they have



any exposure to the virus. Cancers associated with HPV infections have been increasing over time, and Arkansas ranks 5th worst in the nation for rates of HPV-Associated cancer (Arkansas' rate is 14.18 per 100,000).⁸⁴ Boys are much less likely than girls to get HPV vaccinations in Arkansas, even though 38 percent of HPV-associated cancer diagnoses in Arkansas are among males.⁸⁵

Flu prevention:

Arkansas is below the US average for influenza vaccination coverage overall, and 228 people in Arkansas died during the 2017-18 flu season, including five children. Arkansas is not currently meeting any of the Healthy People 2020 goals for flu vaccinations among children, and is behind the US average for all child and adolescent age groups in this category except for ages 5-12 years.

Looking Forward

This needs assessment is an important step toward building on Arkansas's previous achievements in child health. We offer thanks to the key informants, providers, and parents (and their children) who took time out of their schedules to help us gain a greater understanding of child health needs in Arkansas. The following section describes the current assets supporting child health in Arkansas, as well as a summary of the most commonly suggested options for improving child health during community discussions.

A. COMMUNITY RESOURCES TO SUPPORT CHILD HEALTH

The needs assessment outlines a broad range of child health issues that need help. Thankfully, a similarly extensive variety of resources exist to improve child health in Arkansas, and many representatives of those resources are at the Natural Wonders Partnership Council table. Schools, parents, caregivers, and a variety of organizations with an interest in this issue are engaged in defining the issues through this CHNA and are likewise engaged in the process of addressing child health through their daily work.

- Arkansas Children's Hospital and Arkansas Children's Northwest
- Arkansas Department of Health
- Arkansas Department of Education
- Arkansas Department of Human Services
- Arkansas Minority Health Commission
- The Arkansas Coalition for Obesity Prevention
- The Arkansas Food Bank and the Northwest Arkansas Food Bank
- The University of Arkansas for Medical Sciences
- The University of Arkansas's College of Public Health
- The Clinton School of Public Service
- Advocacy organizations including Arkansas Advocates for Children and Families, the Hunger Relief Alliance, the Northwest Arkansas Workers Justice Center, and the Hispanic Women's Organization of Arkansas
- Health policy organizations including the Arkansas Center for Health Improvement and the Arkansas Support Network
- Health care providers including pediatricians, family practices physicians, and nurses
- Health researchers
- The Arkansas Oral Health Coalition
- The Arkansas Immunization Action Coalition
- The Arkansas Foundation for Medical Care (AFMC)
- The network of Arkansas School-Based Health Centers and the School-Based Health Alliance of Arkansas
- Nonprofit organizations providing direct services
- Membership organizations including the American Academy of Pediatrics, the Arkansas Hospital Association, pharmacy representatives, and dentist representatives
- Community Health Centers of Arkansas
- Behavioral health agencies
- Dental insurance companies and providers
- Private health insurance companies
- Faith community representatives
- Low-income legal services
- Private foundations and the Arkansas Community Foundation
- The Arkansas Campaign for Grade-Level Reading
- Private industries ranging from pharmaceutical companies to chambers of commerce
- Parents

B. CHILD HEALTH ASSETS FROM FOCUS GROUPS AND KEY INFORMANTS

During focus group and key informant conversations, participants discussed what they saw as the most important assets that are currently supporting child health in their communities. These are important considerations for planning how to build on past progress.

Child health assets mentioned at Focus Groups: Many participants were very supportive of recent additions to mobile health units, and said they would like to see more mobile health options. The newly constructed Northwest Arkansas Children's Hospital was seen as a major boon to child health in that region by increasing availability to services and specialists. Free and low-cost clinic options were highly valued especially because they provide healthcare to undocumented children across the state. Many parents also saw services like WIC, SNAP, and ARKids as primary child health assets.

Participants also mentioned that nutrition initiatives like Cooking Matters and improved school nutrition services in schools have been great assets. They appreciated that these programs educate children as well as their parents in healthy eating habits. Free and reduced-price lunches, free breakfast, and free meals during summer are also considered valuable services to help combat food insecurity for students.

Focus group participants, like key informants, commented on the value of the collaboration among community partners. This was seen as having a tangible impact on child health. Community organizations and faith-based groups that are providing mentoring, tutoring, and after-school programs are viewed as important support systems for working families. The newly approved minimum wage increase was mentioned by many focus group participants as a way to alleviate many of the socioeconomic factors that prevent children from achieving optimal health.

Child health assets mentioned in Key Informant Interviews: When discussing child health assets, key informants frequently commented on the great partnership that occurs within the state. They said that state institutions, health centers, satellite clinics, local initiatives, and nonprofit organizations all work together in efforts to improve child health. Collaborations between the Health Department and the Department of Education are mentioned as extremely valuable, and school-based health initiatives are considered instrumental in expanding coverage of preventive health services. School-centered health initiatives were also consistently mentioned by key informants, including a broad range of services like backpack programs, free and reduced-price lunches, oral health services, and shared use agreements. Collaboration between agencies has also aided efforts to improve behavioral health, oral health, and immunizations in the state.

Key informants saw high child health insurance rates as another great asset, including the recent expansion of ARKids First services to non-citizen children and to the lawfully present Marshallese population. Increased access for children with disabilities was also mentioned as an asset, especially through the schools for the Hispanic and Marshallese populations.

Arkansas Children's Hospital Northwest was identified as a principal asset in children's health in the region, both by increasing the number of available providers and decreasing the need to travel to receive services. Mobile health units were mentioned as a helpful resource in bringing services to rural and underserved areas of the state.

C. BIG IDEAS FOR CHILDREN'S HEALTH FROM FOCUS GROUPS

Focus group participants were asked to imagine funding a major child health improvement project. Below are brief summary descriptions of the ideas grouped by topic.

Recreational opportunities: The most common suggestion involved some type of recreation activity for children. These suggestions included outdoor activities like parks, community gardens, bike paths, fishing or hunting clubs, playgrounds, and pools. Participants also suggested indoor options like library activities, community centers, "whole child" facilities, and after school activities. Participants were adamant about the need to keep kids, especially teenagers, busy – "get them doing something!" was a common sentiment. They also emphasized the need for these options to be affordable for all families. Many suggestions involved making free versions of currently available activities. These suggestions were tied to several health outcomes. Participants thought these options would help to reduce obesity by increasing physical activity. They also envisioned this decreasing substance abuse and mental health issues by keeping kids "out of trouble".

Health education: Increasing awareness and understanding of health issues was a very common suggestion from participants. Much of the time, they suggested training or classes for parents. Suggested topics for parents included nutrition, cooking, parenting, and safety issues like co-sleeping. For youth, suggested education topics were more centered on reproductive health issues and drug and tobacco prevention.

Academic education: Like health education, academic education was a very common suggestion for improving child health. These suggestions started at early ages, with some participants proposing comprehensive early childhood education and free or reduced price child care. Participants also saw a need for more practical education for older kids as well as their parents. Suggested class topics for teens and parents included life skills training like car maintenance, cooking, and computer skills.

Other proposals included a focus on increasing the employability of parents with job training or higher education. Participants suggested job training programs (like Goodwill) that would help link people with skills needed for jobs in their specific community. This type of program was linked to communities well-being and decreased substance abuse and mental health problems for parents.

Mental health in schools: Participants had a variety of ideas that focused on preventing or treating mental health issues. Some suggested incorporating trauma training into the education curriculum that teachers get when they are getting their licenses. They also largely focused on increasing the availability of counseling services, by offering them in the schools, providing them through telemedicine, increasing multilingual counselors, and generally increasing the number of mental health providers and facilities for youth.

Cultural awareness: Some groups expressed the need for broad community-based cultural awareness training, especially for teachers. Minority groups saw teachers as less likely to support minority children who are bullied in school, and they suggested that a cultural training program for teachers would be beneficial. They saw this type of awareness training as important to protecting child mental health, especially for minority students. Participants also saw room for improved cultural awareness in hospital settings. They suggested that the hospital have more interpreters as well as more documents translated into Marshallese. People said they are willing to go out of their way to get to "a facility that is culturally friendly".

Access to food: Some direct options for nutrition assistance were suggested (like soup kitchens) while other participants suggested broader systemic solutions like better stores in the neighborhoods. Food for kids in schools was mentioned as a good option to help kids academically.

Access to healthcare: The most common problem for accessing healthcare was cost. Many participants suggested cost reduction initiatives like free clinics, reduced cost prescriptions, and affordable or free insurance. Another very common suggestion in this category was increased school-based health options. Participants wanted to see more medical professionals in schools, covering care from mental to dental and vision. Similarly, participants often discussed the success and convenience of mobile health units. They wanted to see more options for mobile healthcare.

Increased hospital specialty care options were also a concern, especially for more rural or remote parts of the state. Things like on-site pediatric dentistry and oncology were suggested as ways to expand specialty care.

Improving hospital logistics was also a common suggestion. Participants wanted to be able to have walk-ins instead of having to go to the Emergency Room. They also proposed evening hours for doctors to accommodate parent work schedules. Parents also suggested making it easier to transition from doctor to doctor. The Connect Care system was seen as challenging.

Substance and Tobacco use prevention and treatment: Participants suggested rehabilitation facilities for people who have drug or alcohol abuse problems. This type of facility was suggested for both juveniles and adults. Furthermore, some participants said that more needs to be done to stop teenagers from using e-cigarettes or vaping.

Transportation accommodations: Participants saw transportation as a large barrier to both employment and access to healthcare. To address this, many suggested increased public transportation options and housing units for families visiting hospitals. Parents also thought that hospitals should be more understanding of parents' work schedules and the time they spend driving to the hospital. Some said that parents who have to take off work to get to an appointment and are then told to come back in a few weeks will be discouraged and not return for care. Generally, better public transportation options were seen as a way to improve access to healthcare for kids.

D. NATURAL WONDERS INPUT

The Natural Wonders Partnership Council has provided input and guidance along the full timeline of this needs assessment process. In February of 2019, hospital staff presented data and qualitative data results to the NWPC and incorporated their feedback and comments into the final product. During these discussions staff also solicited "Bold Ideas" from the NWPC members, and asked them them to rank each other's ideas. The top five "Bold Ideas" (listed below) are a starting point for the Implementation Strategy.

- 1. Universal Health Care for All Children
- 2. Increased School-Based Health Centers Statewide
- 3. Universal Newborn Home Visiting, underscored by local NWPC Partnerships
- 4. Community Activity Center, located centrally in each community
- 5. Finance Higher Education

APPENDICES:

Appendices are available online

Appendix A: Secondary Data

- A1: Demographics
- A2: Equitable Access to Care
- A3: Obesity
- A4: Mental Health and Substance
- A5: Reproductive Health
- A6: Social Issues
- A7: Parenting Supports
- A8: Food Insecurity
- A9: Child Injury
- A10: Immunization
- A11: Oral Health

Appendix B: Phone Survey

- B1: Survey Questions
- B2:Survey Demographics
- B3:Question Outcomes

Appendix C: Key Informant Interviews

Appendix C1: Key Informant Interview questions

Appendix D: Focus Groups

- D1:Focus Group Questions
- D2: Focus Group locations and participant counts
- D3: Focus Group Demographic Data
- D4: Focus Group Profiles by Region

Endnotes

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