

# natural wonders

The State of Children's Health in Arkansas

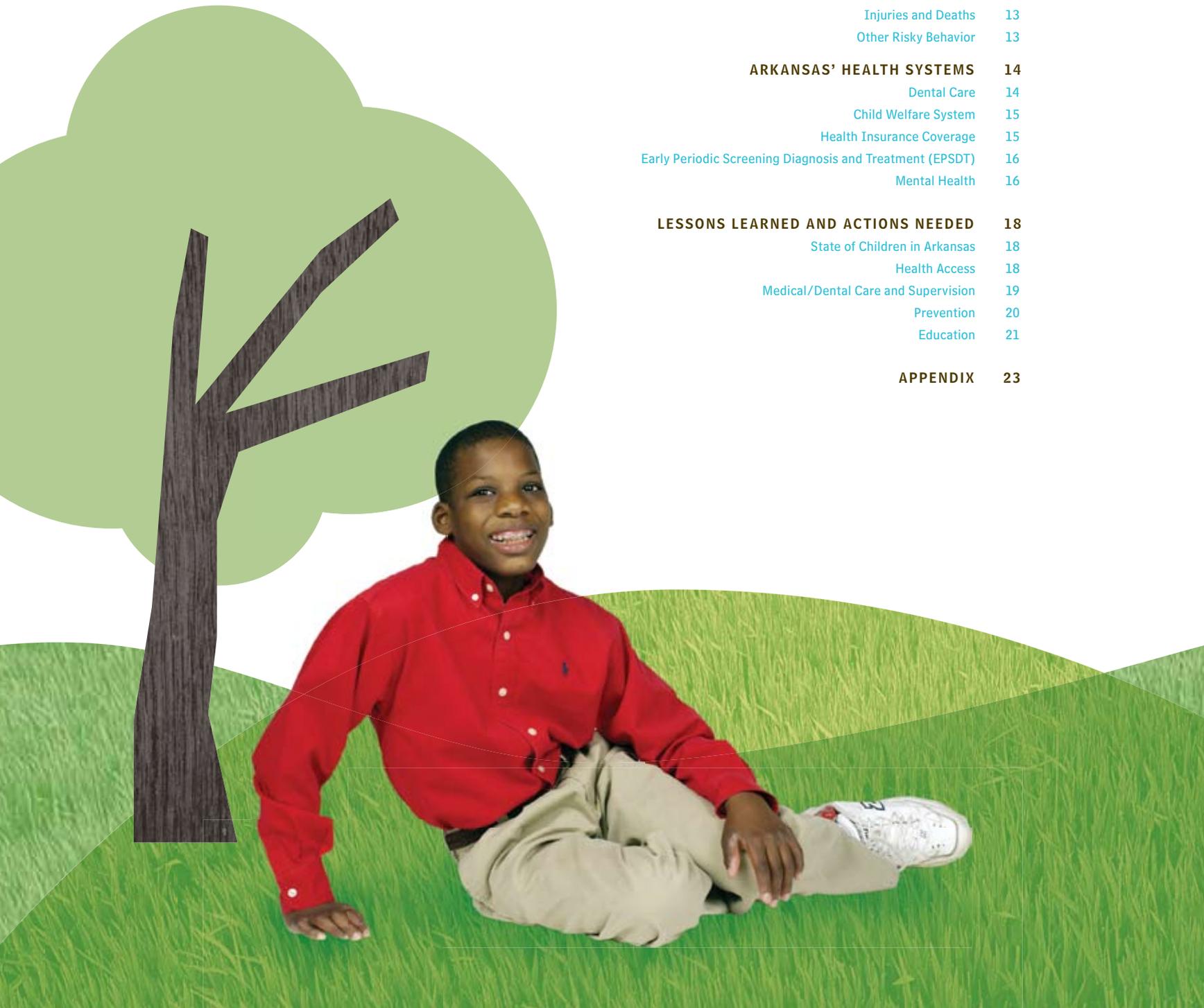


2007 EDITION



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## Preface

This report is the result of a collaborative effort between multiple agencies and healthcare providers in the state. These organizations share a common interest in improving the health status of Arkansas' children. This report includes a range of data on the current health status of Arkansas children, a discussion of their health needs, strategies for improving the health of children and suggestions for future analysis and data collection. While every effort was made to be thorough and comprehensive, this represents a first cut at analyzing the data we identified. It is likely that other data, not included in this report, could shed additional light on the state of children's health. The partners encourage you to come forward and identify other data and strategies that could be used in this ongoing effort to build a knowledge base of children's health.



The goal of this collaborative is to produce a similar report, annually, that will guide decisions made by providers, advocates, parents and policy makers to affect good health in children. We hope this report will become a valuable tool to all who are interested in the health of Arkansas children.



## Executive Summary

In an effort to obtain a comprehensive understanding of Arkansas children's health, a broad-based coalition has prepared a summary of the available information from 45 documents or data sources. Beyond traditional indicators of health (mortality rates, chronic disease rates, etc.), this review includes social factors that often influence health such as economics and education. Further, factors relating to behavioral and psychosocial aspects of health were also considered. The purpose of this report is to compile and organize what is known about the health of our children, in hopes that many different groups may find it a helpful guide to opportunities, both individually and collaboratively, to improve children's health. In addition, this report is a first step in responding to the ACH Board of Directors' initial request: "How do the future activities of Arkansas Children's Hospital benefit the overall health of a child in Dumas?"

**To answer this, we must start with the Arkansas Children's Hospital mission statement: "In order to enhance, sustain and restore the health and development of children, Arkansas Children's Hospital (ACH) provides excellent clinical services, teaching and research. ACH is committed to working with others to achieve high quality, cost-effective, fully accessible services for Arkansas' most precious resource—our children, without regard to race, religion or inability to pay."**

**The mission of the American Academy of Pediatrics is similar and puts this in different words; "To attain optimal physical, mental and social health and well-being for all infants, children, adolescents and young adults."**

This report addresses both mission statements by including, in addition to traditional measures of health, the now widely accepted social determinants of health. These measures include poverty rates, educational attainment and rates of incarceration of youth. It is clear that if ACH wishes to truly impact the health of the child in Dumas, Ashdown, Lake Village, Mena, Mountain Home, Fayetteville or Hughes that we must address not only the quality of our transplant programs but also confront the issues of poverty, child abuse/neglect, juvenile justice and education. ACH is in a unique position of being able to serve as a force for positive change by encouraging others to join in a collaborative effort to improve the health status of our children. Use of ACH resources to lead, join or simply support various initiatives will be important to our achieving a better life for the children in our state. This is a first effort which will serve as an initial guide for a journey we envision taking many years.



Among the key findings identified in this report:

- **By 2030, there will be about 14 percent more children under 20: ca. 866,000.**
- **Nearly 60 percent of these children live in urban environments.**
- **Almost 25 percent of children under five live in poverty compared to the U.S. figure of 18 percent.**
- **In 2006, there were 10,000 Arkansas children who had parents in prison.**
- **The advent of ARKids First reduced the percentage of uninsured children below 18 years of age from 23 percent to 10 percent.**
- **Births to teenagers (children) in Arkansas are nearly 50 percent greater than the U.S. average.**
- **Obesity, clearly too prevalent among Arkansas' children, is mirrored by poorer nutrition and less physical activity as well.**
- **Dental health is distinctly worse for our children compared to U.S. averages.**
- **Child abuse prevention and the welfare system in our state also stand out as needing more emphasis/support.**
- **Fatal accidents for children ages 1–14 in Arkansas happen 20–30 percent more often than is typical in the U.S., with infrequent seat belt use a strong factor.**
- **Risky behaviors such as frequent smoking, binge drinking and sexual violence are also more prevalent for Arkansas children.**
- **Indicators of mental illness (depression, suicide concerns) likewise are more prevalent in Arkansas youth vs. the U.S. average.**

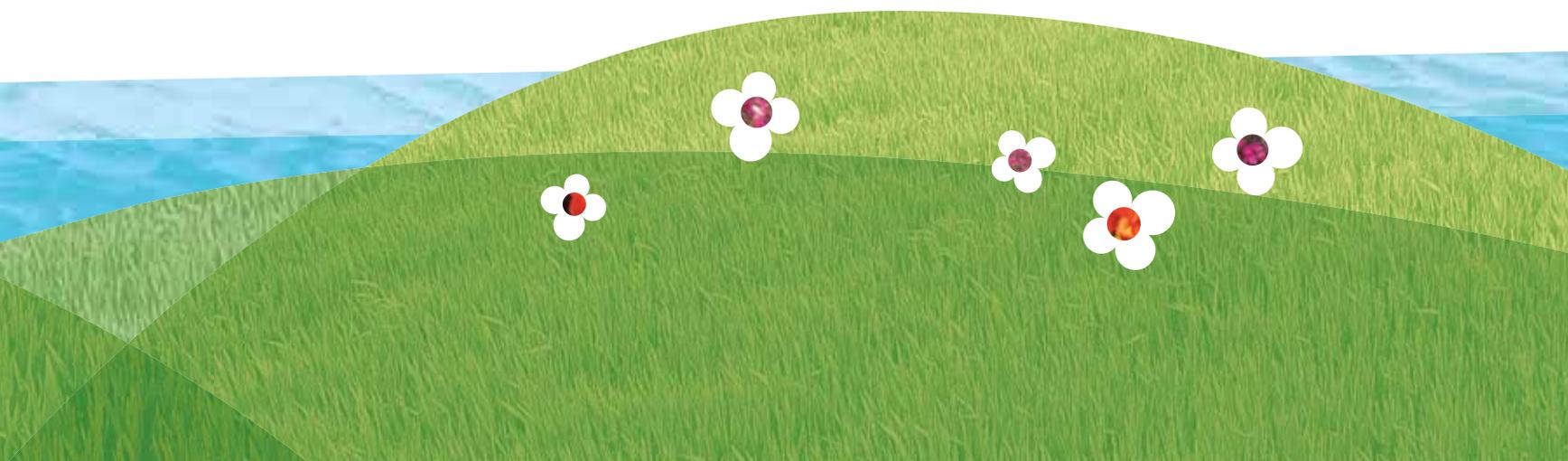
These findings have their roots in causes such as: poverty, lack of education and cultural practices. Most have multiple contributing factors. These conditions are further influenced by a sporadic care system in our state.

This review, while attempting to identify all possible sources of data about children's health, reveals how much more we need to know. We must not just ask what professionals think is good or bad for children's health and well-being. We must not think about isolated conditions/circumstances alone. Before the next report, specific studies will be undertaken to poll the communities and the providers to seek any unidentified needs and to characterize more clearly those we know about.

In addition to specific studies, the following actions are recommended:

1. Ask what our children and their families think is good or bad for children's health and well-being. This will require a second level of investigation (surveys and focus groups) before our problems and focus are fully defined.
2. Bring consumers and providers together in a systematic way to agree on what is a legitimate vision for the future. What will we want children's health and well-being to look like in five years when ACH celebrates its centennial as well as in 10 years after the hospital moves into its second hundred years?
3. Bring collaborators together to map the state's assets and strategically plan the solutions. The product, a strategic plan, will be the road map for all of us concerned about children's health and well-being. It will be critical for ACH to work with state government, foundations and organizations such as Arkansas Advocates for Children and Families (AACF) as part of a structure which will shepherd this process in whatever format is most effective. This could range from a formal Executive/Legislative Commission to an ad hoc coalition or the creation of an independent entity to pursue this goal.

However, even before a thorough understanding of the causes and their interrelationships affecting health come into focus, some broad areas of opportunity to improve children's health are identified which may help organizations choose how to best direct their efforts.



**A. Economic Development and Community Building**—While broad, any improvement to the fabric of the community will help almost every one of the substandard health issues. Businesses, legislators and other civic leaders are best positioned to influence these factors.

**B. Prevention**—Prevention can directly change certain causes of poor health. Fluoride, seat belt use, effective use of the existing medical screen programs (e.g. EPSDT), immunizations and newborn screening can all have measurable impact on their respective areas. Widespread support of these and other prevention programs by multiple groups would likely help overcome various obstacles.

**C. Link schools and healthcare**—With many children in school most of the year, there appear to be many opportunities to help children's health. Expand the school nurse program. Offer after-school programs that enhance self-esteem and advise against risky behaviors. Health educators and community health workers could further expand this influence. Increased availability of counselors and social workers in the schools could likewise help.

**D. Education**—Education of parents and providers will be promptly effective in many situations, such as helping more parents (and children) to know about health resources available even now. Many programs exist (and others could be added) to educate and train parents in both their parenting roles and in helping access the available healthcare resources. Pre-school programs are particularly effective. Parents need to be their child's first teacher and strongest advocate as they prepare to enter formal educational systems.

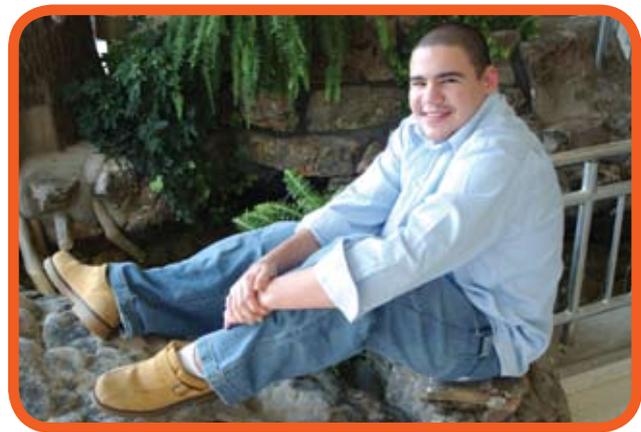
**E. Access**—When healthcare is needed, access should not be limited. Coordination of care, particularly among the schools and healthcare providers, can help the development of computerized records. Expanded use of physician extenders will be needed, as well as wide-spread and adequate insurance coverage. Access to dental providers, as facilitated by the recent Medicaid reimbursement increases, will continue to be important, as well as developing more clinics for children around the state, mobile or fixed. More importantly, those children abused and neglected definitely need proper case workers with suitable training and support to assume a coordinated and comprehensive medical/mental health intervention.

We hope these findings and suggestions about promising directions will be helpful, and will encourage more groups to work together to affect change.

**Our final caution:** It is clear, we still must learn much more about exactly what the needs are, what the causes are and how they inter-relate. Lastly, we must learn much more about identifying and promoting the more promising approaches to these problems.

In the meantime, we hope this effort will offer some help to the many people keen to make a difference for our children. Reliable, comprehensive information can serve as a foundation for collaborative actions to improve the present and future prospects for our greatest asset—our children.

Our next steps should include engaging the public and private sectors in a strategic partnership. To begin, it will be our mission to share the data gathered from this report with targeted, regional focus groups. With the assistance of Arkansans from all demographic profiles, we hope to gain more insight into our findings and begin constructing a blueprint to ensure healthier and happier Arkansas children.



## COLLABORATORS

- ARKANSAS ADVOCATES FOR CHILDREN & FAMILIES
- ARKANSAS BLUE CROSS AND BLUE SHIELD
- ARKANSAS CENTER FOR HEALTH IMPROVEMENT
- ARKANSAS CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
- ARKANSAS CHILDREN'S HOSPITAL
- ARKANSAS DEPARTMENT OF HEALTH AND HUMAN SERVICES
- UNIVERSITY OF ARKANSAS AT LITTLE ROCK, INSTITUTE FOR ECONOMIC ADVANCEMENT
- UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES, FAY W. BOOZMAN COLLEGE OF PUBLIC HEALTH
- CLINTON SCHOOL OF PUBLIC SERVICE

# Introduction

For many years, healthcare experts have attempted to improve the status of health for individuals by improving the provision and availability of medical care. While the provision of medical care has prolonged life and improved the prognosis of some diseases, it has become clear that improving the health status of the overall population is broader than the provision of medical care. Studies in recent years clearly show the direct relationship of social and economic status to poor health outcomes. These connections to the social environment, known as social determinants of health, are increasingly recognized as important factors in the status of children's health. Universal access to medical services is but one of many social determinants of health.

To adequately assess the state of children's health in Arkansas, it is apparent that we also need to examine social determinants of health, such as those which build knowledge and self-esteem in early childhood, further leading to healthy behaviors and avoidance of risky behavior later in life. These determinants, which begin as early as maternal health during pregnancy and extend through infancy and school age, depend on quality family and societal supports, as well as interaction to develop positive emotional attachments and development. They include factors such as race, economic levels, education levels and geographic location. The social and economic pressure brought to bear on the family structure that supports the child directly impacts the physical and emotional environment of the child thus affecting the self-esteem and decision making ability of that child into adulthood.

As this project progressed, many health issues rose to the surface for further analysis. Issues such as accidental injuries, childhood diseases, risky behaviors, obesity, oral health, health insurance, nutrition, pre-natal care, teen pregnancy and mental health were among those raising the most initial concern. However, it was clear that if this report was to be more than a traditional litany of indicators reflecting the poor health status of Arkansas' children, we needed to broaden the focus, examine social determinants, and link possible solutions and strategies to those determinants and their outcomes. Any serious effort to improve the long-term health status of children must also include strategies and services which build the self-esteem and efficacy of children and their families in order to improve their capacity to build their personal health assets.

## SELECTION OF KEY DATA INDICATORS

The collection and selection of data was a major component of this project. Time was initially spent identifying data sources and sets pertaining to children. Information concerning these data was compiled into a book by the College of Public Health to serve as an ongoing resource for the project. While there are many state-level data sources, there are fewer county or regional level data sources which allow for comparison among regions of the state. Additionally, many of the sets are the result

of research projects that did not have the same purpose or focus of this report. To improve the data going forward, this section concludes with a discussion of future data needs that should be addressed for future editions of this report.

After compiling a list of available data, this effort spent much time and attention identifying indicators and issues that would paint a more comprehensive picture of children's health in Arkansas. The areas were divided into two major components: Social Determinants of Health and Resulting Health Issues. The latter component has been further divided into three key areas of focus. Each major component includes many issues that affect children. A brief outline of those issues is listed below.

## SOCIAL DETERMINANTS OF HEALTH

- Economic
- Family Structure
- Education Level
- Housing/Shelter
- Rural vs. Urban Geography
- Race/Ethnicity

## RESULTING HEALTH ISSUES

### Physical

- Congenital/Development
- Accidents— Unintentional and Intentional
- Obesity/Hunger/Nutrition
- Chronic Disease
- Childhood Diseases
- Infant Mortality
- Low Birth Weight
- Oral Health
- Environmental Poisoning
- Asthma/Allergies

### Behavioral/Mental

- Risky Behavior
- Drugs/Alcohol
- Tobacco
- Sexual Activity
- Gangs

### Psycho-Social Issues

- Depression
- Bi-polar
- Schizophrenia
- Bulimia
- Anorexia
- ADD/ADHD

Data was collected on over 80 indicators related to the issues listed above. A complete list of the indicators and the data are included in the appendices of the report.

## SUMMARY

Some very basic data are routinely collected and available for analysts concerned about the status of the children in Arkansas. These data tend to be "snapshot" data representing a single point in time. Outcome-based data, which would allow the analyst to judge the quality of the programs, is generally not available. And in some areas, the data are not routinely collected and made available. The analyst is then forced to rely on special surveys or the estimates of experts in the field.

# Socioeconomic Determinants of Health

## BASIC FACTS ABOUT OUR CHILDREN

Between 1990 and 2000, the number of children in Arkansas increased in absolute terms, but declined as a percentage of the total population.

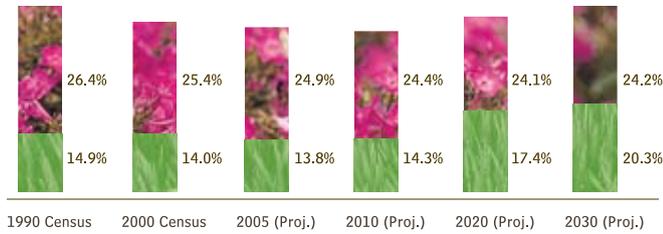
From the figures below, you will see in 2000, there were 680,369 children under the age of 18 in Arkansas. Based on the trend, this particular age group of the population increased, in number, over the 1990 Census, but dropped from 26.4 percent of the population to 25.4 percent.

The United States Census Bureau projects that the number of Arkansas children under 18 years of age will reach 783,223 by 2030, an increase of 13.1 percent. However, that age group will drop as a percentage of the total population from 25.4 percent in 2000 to 24.2 percent in 2030. Similarly, children under five years of age will increase to 220,672 by 2030, an increase of 17.7 percent. Their percentage of the total population is projected as unchanged at 6.8 percent.

Let's look at one more figure before drawing any conclusions from this data. According to the Census Bureau's projections, the average age of an Arkansas resident will rise from 36 in 2000 to 39.5 in 2030. The number of persons 65 and older will increase from 374,019 in 2000 to 656,406 in 2030, up over 75 percent. This older cohort is projected to grow from 14 percent of the total in 2000 to 20.3 percent in 2030.

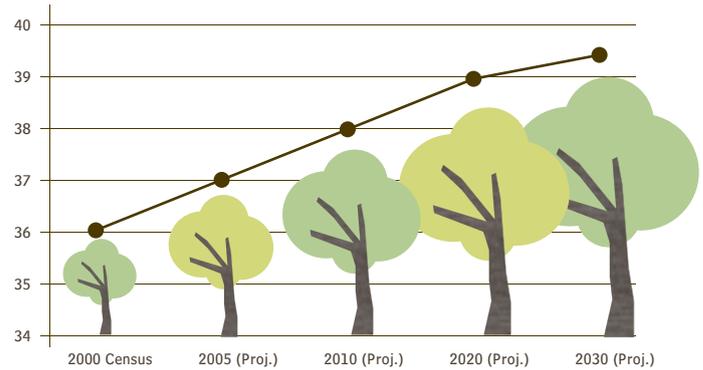
### Comparison of Age Groups BASED ON TOTAL ARKANSAS POPULATION

KEY: ● 65 and over ● Under 18



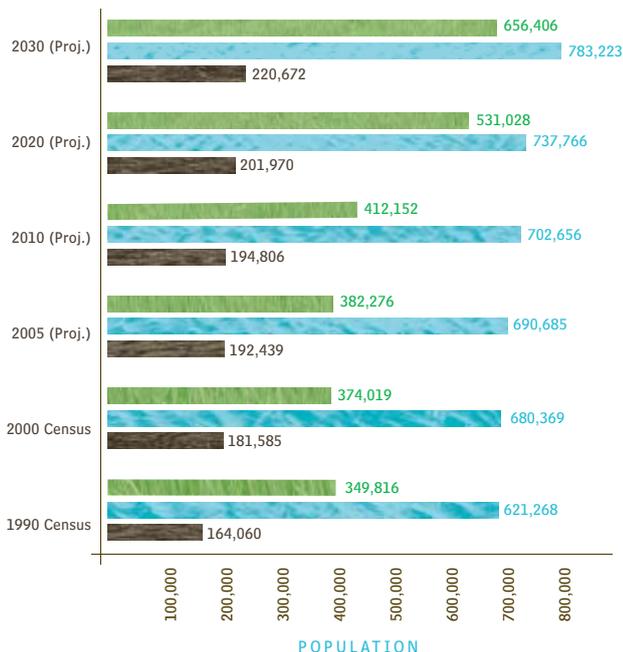
Using the figure in the column below, you will notice, in 2000, there were 181,585 children under the age of five in the state of Arkansas. This age group comprised 6.8 percent of the population, which was down from 7 percent a decade earlier. Males constituted 51 percent of this group.

### Average Age of Arkansas Residents



### Arkansas Population by Age Group

KEY: ● 65 and over ● Under 18 ● Under 5



### WHAT DOES THIS MEAN?

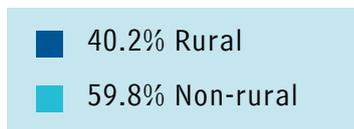
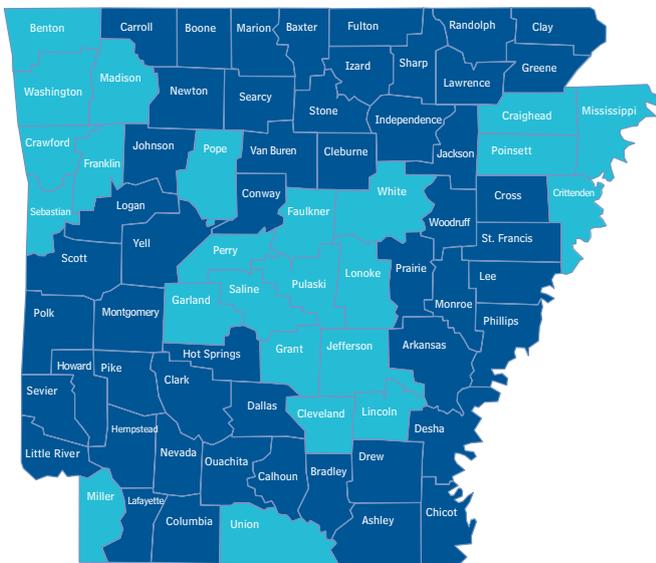
It seems clear that the competition for state resources will increase. The population of children remains relatively stable while the number of seniors rapidly expands.

Arkansas is most often characterized as a rural state, but only 40 percent of our children live in a rural setting according to the U. S. Department of Agriculture (USDA) Rural-Urban Continuum Codes. Rural is defined as a county with less than 20,000 residents living in its cities or towns and not a part of a Standard Metropolitan Statistical Area. The map below depicts rural versus non-rural counties based upon population. A complete breakdown by county can be found in the appendix.

Arkansas is medically underserved, according to data from the Bureau of Health Professions in the Health Resources and Service Administration of the U. S. Department of Health and Human Services. Sixty (60) counties are designated as Medically Underserved Areas as well as portions of 13 more. Only two counties are considered to have enough medical professionals and facilities to serve their residents basic health needs. Additionally, of the 75 counties, 69 are considered poor counties.

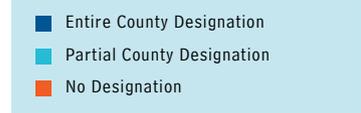
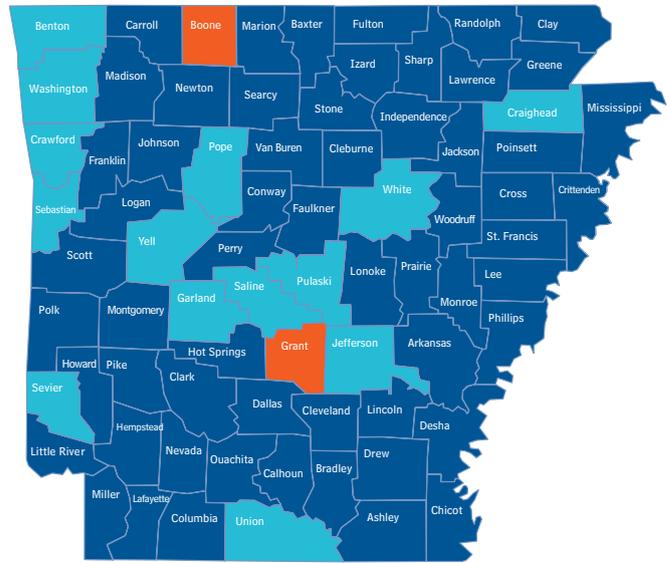
## Arkansas Children

### RURAL AND NON-RURAL COUNTIES



## Arkansas Children

### MEDICALLY UNDERSERVED AREAS (MUA)

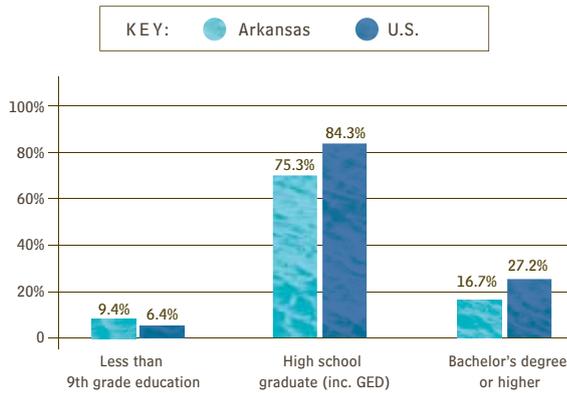


An additional map reflecting areas where there is a shortage of primary care professionals can be found in the appendix.

According to the 2000 Census, **Arkansas lags behind the rest of the nation in educational achievement.** The graph below shows that we have 46 percent more people with less than a 9th grade education. Only three out of four residents have a high school degree versus over 84 percent, nationally. One in six Arkansans have a bachelor’s degree or higher; nationally, over 27 percent of the population have reached that level of education.

### Educational Attainment

POPULATION 25 YEARS AND OLDER



### BEYOND THE BASICS

OK, now that we have gone through the basics, what do we generally know about these children?

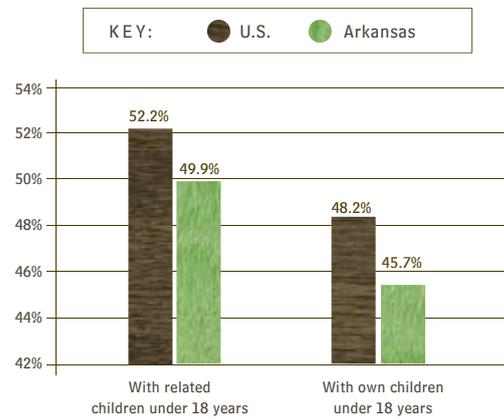
**Family households constitute 70.2 percent of all households in the state, a figure that is slightly higher than the national average, which is 68.1 percent.**

Family Households	2000 Census	
	U.S.	Arkansas
<b>HOUSEHOLDS AND FAMILIES</b>		
Family Households	68.1%	70.2%
Male Householder	49.1%	52.7%
Female Householder	18.9%	17.5%
<b>Non-Family Households</b>		
Male Householder	31.9%	39.8%
Living Alone	14.7%	13.4%
Female Householder	11.2%	10.8%
Living Alone	17.2%	16.4%
Living Alone	14.6%	14.7%

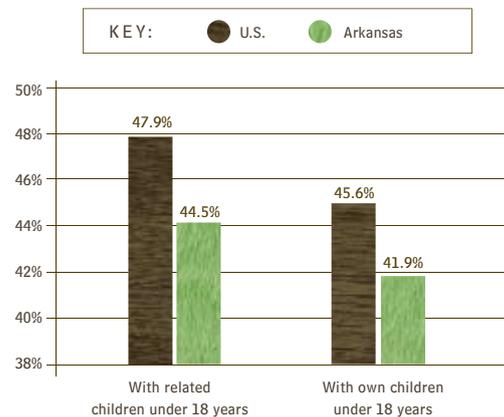
The data on the Family Households show that Arkansas closely parallels the national figures. That does not mean that the news is good, as the following graphs demonstrate.

Slightly less than 50 percent of all families in Arkansas include related children under the age of 18. That is slightly below the national figure of 52.5 percent. The same is true for married-couple families with the figure slightly trailing the national average. However, as compared to the national average, Arkansas has more female householders with related children and no husband present.

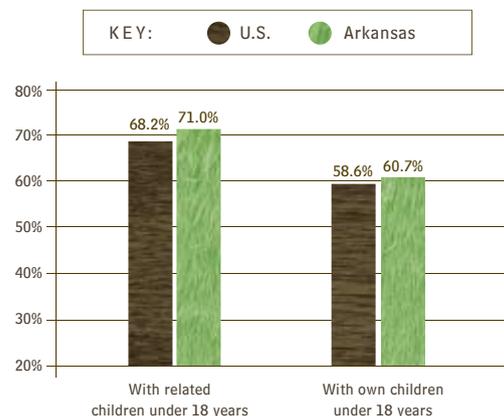
### All Families



### Married-Couple Families



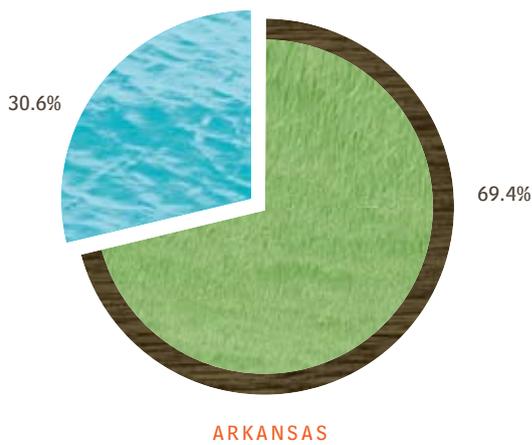
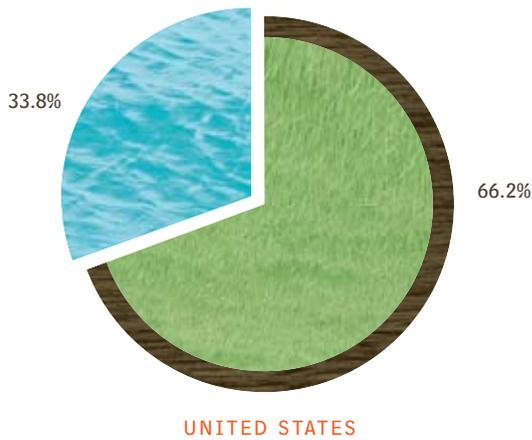
### Female Householder



What do we know about housing for these families? According to the 2000 Census, 88.9 percent of the housing units in Arkansas were occupied, slightly below the national figure of 91 percent. **Arkansas reported more owner-occupied units compared to the national average, however, these units had a much lower value.** Arkansans also tend to live in manufactured housing at a much higher rate than others across the nation.

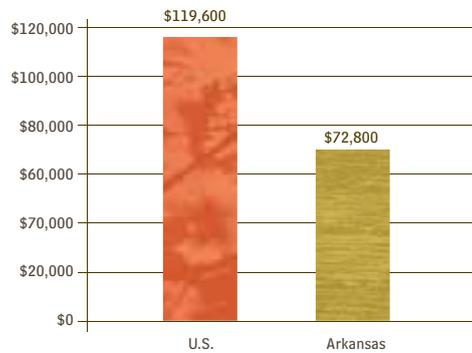
### Owner vs. Renter

KEY: ● Owner-Occupied Housing Units ● Renter-Occupied Housing Units



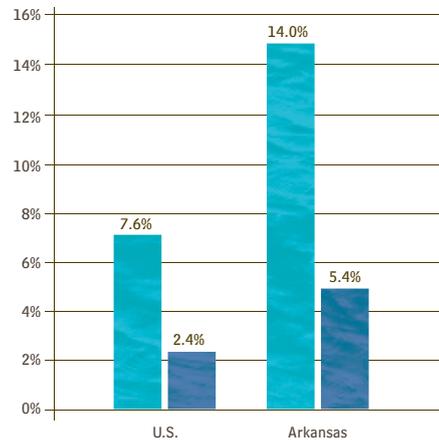
Most of these trends can be viewed as a result of the rural nature of Arkansas. Families tend to live in detached separate dwellings that cover a larger geographical area. The issue with this type of dwelling structure is isolation. Nationally, 10.3 percent of the population does not own a vehicle. However, many of the citizens represented in this division of the population live in an urban setting with available mass transit. In Arkansas, 8.1 percent of the population does not own a vehicle. According to the census, a much smaller percentage of Arkansans dwell in multi-unit structures typically found in urban areas with mass transportation.

### Median Value Comparison Owner Occupied Unit



### Housing and Phone Service

KEY: ● Mobile/Manufactured Housing ● No Phone Service



#### WHAT DOES THIS MEAN?

The national median value of an owner-occupied housing unit is 64 percent higher than the Arkansas average.

**The economics of families in Arkansas are marred by hardship;** 18.1 percent of families with children under age 18 were living below the poverty level according to the 2000 census. In those families with children under 5 years of age, the rate jumped to 22.7 percent. And if the family was headed by a female householder with no husband present, the poverty rate jumped to 43.7 percent when the children were under 18 and 55.7 percent when the children were under 5.

Childhood Poverty	2000 Census	
	U.S.	Arkansas
Families with children under age 18	16.6%	18.1%
Families with children under age 5	18.2%	22.7%

The number of households with two parents, both of whom are working, declined from 63.6 percent in 1990 to 61.6 percent in 2000. The number of children living with a single parent rose from 20.3 percent in 1990 to 24.7 percent in 2000.

In 2000, according to the US Census Bureau, 9.4 percent of the population, between 5 and 20 years of age, had a disability, a total of 57,733 individuals.

In 2000, a language other than English was primary in 5 percent of Arkansas homes, a jump of more than 50 percent since the 1990 Census.

In 2000, 33,618 grandparents told the Census Bureau that they were responsible for grandchildren under 18 years of age. That amounted to 58.1 percent of all grandparents living in a household with one or more of their own grandchildren under 18 years. Instead of being cared for by an extended family, these grandparents are raising a second family.

According to Arkansas Voices for Children Left Behind there are 10,000 children of state prisoners in Arkansas, and an estimated 50,000 children who have endured parental incarceration or criminal justice sanctions, i.e. parole, probation, within our state system. These numbers do not reflect the children of arrestees who are serving sentences in jails or awaiting trial and in jail, nor children with parents in the federal penitentiary system.

The number of children under five increased more than 10 percent from 1990 to 2000. From 2000 to 2005, that population has increased another 6 percent to 192,439 children. In 2000, the Department of Health and Human Services reports the child day care capacity in the state was 132,933. By 2004, it had risen, minimally, to 135,262.

Thanks to an increase in the income eligibility for ARKids First, the number of children with health coverage through Medicaid rose from 127,000 in September 1997 to 368,752 in September 2006. With that increase, the number of uninsured children under 18 years dropped from 23 percent during the years 1996-1998 to 10 percent during 2003-2005.



# Resulting Health Issues

## PREGNANCY AND BIRTHS

There is good news and bad news with regard to pregnancy and live births. The birth rate in Arkansas is less than that of the nation as a whole. The number of births in Arkansas reached 37,456 in 2002, up 5.6 percent from 1990, but the birth rate per 1,000 women of childbearing age has dropped from 15.5 percent in 1990, to 13.8 percent in 2002. The Arkansas rate in 2002 was below the national rate of 13.9 percent per 1,000 women.

The number of Arkansas women who sought prenatal care in the first trimester was up significantly. In 2002, 78.4 percent of pregnant women in Arkansas received early prenatal care, up from 68.3 percent in 1990; the national figure in 2002 was 83.7 percent.

The percentage of low birth weight babies in Arkansas is rising and exceeds the national rate. **In 2002, the Arkansas figure was 8.6 percent, up from 8.2 percent in 1990.** The comparable national figure was 8 percent in 2002.

More unmarried women in Arkansas give birth than for the nation as a whole. In 2002, unmarried mothers gave birth to 37.2 percent of all Arkansas babies, up from 29.4 percent in 1990. The comparable national figures in 1990 were 34 percent and 28 percent, respectively.

Infant mortality in Arkansas is higher than the national rate. **It has dropped from 9 per 1,000 births in 1995 to 8.3 in 2002 but still is 20 percent higher than the 2002 national rate of 6.9.** More disturbing, the infant mortality rate from black Arkansans was 13.8 percent in 2002 compared to a white rate of 7.2 percent.

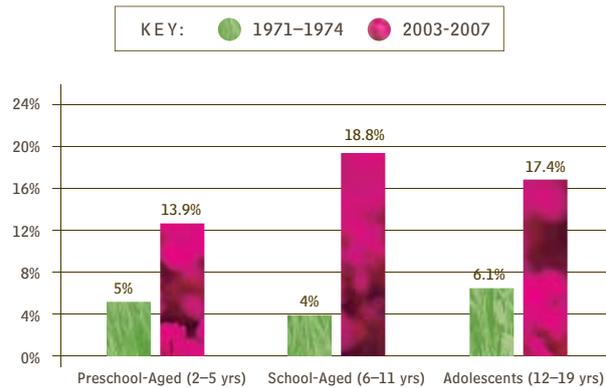
The number of births to Arkansas teens has dropped significantly but is still over 40 percent higher than the national rate. **In 1990, almost 20 percent of all Arkansas births were to teenagers; by 2002 that figure had dropped to 15.5 percent.** The comparable national figure for 2002 is 10.8 percent.

Another data finding often ignored is the rate of breastfeeding within the population. Nationally, 72.3 percent of women breastfeed for any length of time. Arkansas is substantially below that, at only 54.7 percent. Research shows that children who are breastfed are healthier.

## OBESITY

As a nation, the United States is gaining—and gaining—and gaining! And our children are not immune to the trend. National surveys taken during 1971–1974 and again in 2003–2004 led the Centers for Disease Control and Prevention to these conclusions as shown by the graph below.

### Prevalence of Overweight Children



Arkansas’ children are not immune from this ballooning problem. The Arkansas Center for Health Improvement (ACHI) has collected data on the body mass index (BMI) of Arkansas children over the last three years. ACHI has published data on children and adolescents in the first, fifth, and eleventh grades.

BMI data is being collected on pre-school children in Head Start and in some school-based Pre-K programs. This data is limited and cannot give us the comprehensive rate that we have from kindergarten through 12th grade. Based on the data collected, however, 35 percent of 3–5 year-olds measured are either at risk of being overweight or are overweight. Arkansas first graders are slightly less overweight in comparison to the national average for the school-aged children but the figure for Arkansas fifth graders is significantly higher. The figures for the eleventh grade students are higher than the national figures for adolescents.

**WHAT DOES THIS MEAN?**

35 percent of 3–5 year-olds measured are either at risk of being overweight or are overweight.

In addition, the ACHI data provides further information for children at risk of being overweight. Combining the two categories shows over one-third of the first graders, over 40 percent of the fifth graders, and over one-third of the eleventh graders are running serious risks to their physical and psychological health.

1st Grade	Male 2003-04	Male 2005-06	Female 2003-04	Female 2005-06
Overweight	17.5%	17%	16.7%	16%
At Risk	16.7%	17%	16.9%	16%
Total	34.2%	34%	33.6%	32%

5th Grade	Male 2003-04	Male 2005-06	Female 2003-04	Female 2005-06
Overweight	23.3%	24%	21%	21%
At Risk	17.6%	17%	18.1%	18%
Total	40.9%	41%	39.1%	39%

11th Grade	Male 2003-04	Male 2005-06	Female 2003-04	Female 2005-06
Overweight	21%	23%	17.3%	16%
At Risk	16.1%	16%	17%	17%
Total	37.1%	39%	34.3%	33%



Confirmation of these trends comes from the 2005 Youth Behavior Risk Survey (YBRS.) Almost one-third of the Arkansas respondents said they were overweight or at risk of being overweight, compared to 28 percent, nationally. Almost half reported they were trying to lose weight versus 45.6 percent, nationally.

Over 10 percent of the Arkansas participants in the YBRS described their health as fair or poor. That is 25 percent higher than the national figure. Only 13.9 percent reported eating fruits and vegetables four or more times a day; the national figure is substantially higher at 20.1 percent. Additionally, 13 percent reported no vigorous or moderate physical activity versus 9.6 percent nationwide. See the table below for more data confirming that Arkansas children are not eating right or exercising sufficiently to maintain a healthy life style.

Health Indicators	U.S.	Arkansas
<b>PHYSICAL ACTIVITY</b>		
Meets current recommended levels	35.8%	30.9%
No vigorous/moderate physical activity	9.6%	13%
Attended physical education classes daily	33%	27.2%
<b>NUTRITION</b>		
Ate fruits/vegetables five or more times a day	20.1%	13.9%
Drank three or more glasses of milk a day	16.2%	9.8%

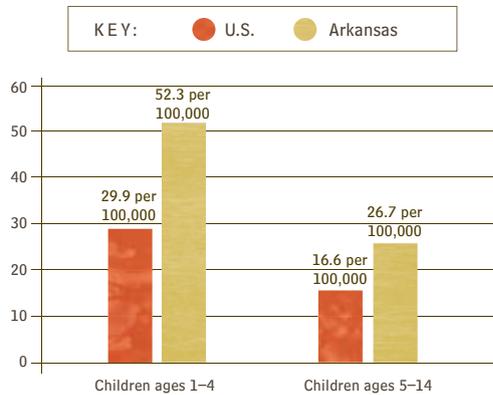
What are the consequences of obesity and overweight in children? Here is the CDC's report.

- **Psychosocial Risks**—Some consequences of childhood and adolescent overweight are psychosocial. Overweight children and adolescents are targets of early and systematic social discrimination. The psychological stress of social stigmatization can cause low self-esteem which, in turn, can hinder academic and social functioning, and persist into adulthood.
- **Cardiovascular Disease Risks**—Overweight children and teens have been found to have risk factors for cardiovascular disease (CVD), including high cholesterol levels, high blood pressure and abnormal glucose tolerance. In a population-based sample of 5 to 17 year-olds, almost 60 percent of overweight children had at least one CVD risk factor while 25 percent of overweight children had two or more CVD risk factors.
- **Additional Health Risks**—Less common health conditions associated with increased weight include asthma, hepatic steatosis, sleep apnea and Type 2 diabetes.

## INJURIES AND DEATHS

Accidents are the leading cause of injury and death for children 1–4 years of age no matter where they live in the United States. But the death rate for Arkansas children greatly exceeds that for the nation.

### Accidental Deaths and Injuries in 2004



Accidents accounted for 33.8 percent of the total deaths of the 1–4 year age group, in Arkansas during 2004. Transportation accidents accounted for one-third to one-half of the accidental deaths. The Arkansas and national figures for 2004 are comparable.

In Arkansas, accidents accounted for 47 percent of all deaths in the 5–14 year age group during 2004. Transportation accidents accounted for half to three quarters of the accidental deaths. Nationally, accidents accounted for 37.9 percent of the 2004 deaths in this age group, well below the average for Arkansas. Transportation accidents, nationally, accounted for 61.9 percent of the 2004 deaths in this age group. See the Death and Accidents table in the appendix for complete statistics.

Data from the 2005 Youth Behavior Risk Survey tends to confirm the high incidence of injury and death. Note the frequency of risky behavior related to serious injury and death in the following table.

What do these figures tell us? Arkansas has higher mortality rates for its children. While accidents are the leading cause of death, the ratios are close to the national ones. That means the other causes of death are much higher in Arkansas than in the nation as a whole.

At Risk of Injury or Death	U.S.	Arkansas
Threatened/injured by weapon on school property	7.9%	9.6%
Carried a weapon on school property	6.5%	10.5%
Rarely or never wore a seat belt	10.2%	17.8%
Rode in vehicle driven by someone drinking alcohol	28.5%	27.8%
Drove vehicle when they had been drinking alcohol	9.9%	12.9%

## OTHER RISKY BEHAVIOR

Data on other risky behavior comes primarily from the 2005 Youth Behavior Risk Survey; it is difficult to find reliable numbers to confirm or deny the data in the YBRS. The data are based on the youth’s own responses to a standardized survey administered nationally so the comparisons are probably valid.

Arkansas teenagers are more likely to smoke cigarettes and smoke more frequently than their counterparts nationwide. More Arkansas young people had used alcohol at least once versus the national figure, but are around the 75 percent mark. More Arkansas youth engage in binge drinking than their peers in other states.

**The effects of tobacco use are not always due to the choice of the child.** Forty-one percent of children in Arkansas live in households with tobacco smoke. Only 26.1 percent of children, nationally, live in households with tobacco smoke. This places a child at risk of the effect of second hand smoke as well as places them at a higher possibility for initiating tobacco use themselves.

Alcohol and Tobacco Use	U.S.	Arkansas
<b>TOBACCO USE</b>		
Current cigarette use	23%	25.9%
Current frequent cigarette use	9.4%	13.4%
<b>ALCOHOL USE</b>		
Ever	74.3%	76%
Current	43.3%	43.1%
Binge drinking	25.5%	29.7%

On the other hand, fewer Arkansas youth reported being currently sexually active (29.5%) than the youth in the United States. In a bit of an anomaly perhaps, 54 percent of Arkansas youth said that they had had sexual intercourse at least once versus 46.8 percent for the national group. And the Arkansas youth are almost twice as likely as the national group to have had that experience before they were 13 years old. Also, they reported having multiple partners at a rate 28 percent higher than the national figure. (see table in appendix)

Almost 14 percent reported dating violence versus just over 9 percent nationwide and 11.2 percent reported being forced to have sexual intercourse, a rate almost double that of the nation.

It seems clear that Arkansas youth are at least matching their national counterparts in the use and abuse of alcohol and tobacco. In addition, their sexual behavior is substantially higher than the national figures.

### WHAT DOES THIS MEAN?

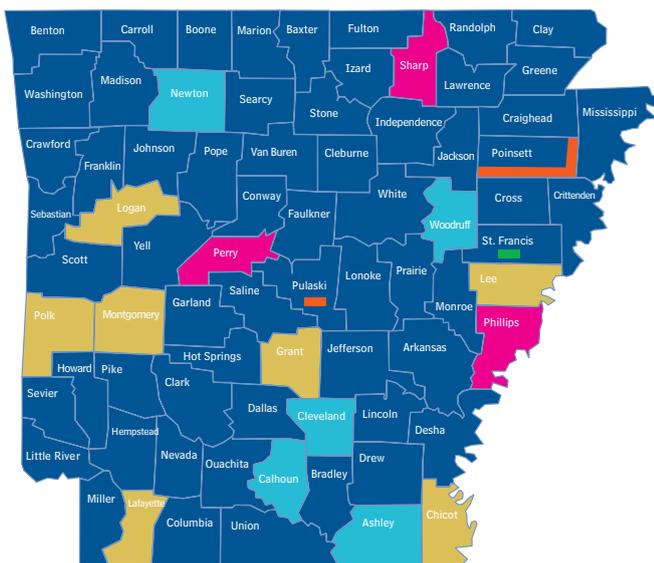
The death rate for Arkansas children greatly exceeds that for the nation.

# Arkansas' Health System

## DENTAL CARE

Arkansas has 1,312 licensed dentists, 1,158 of whom were practicing in the state in 2005. That is a ratio of one dentist for every 2,400 residents. Four counties have no dentists, and seven counties have 40 or more dentists. More than 60 percent of the state's dentists practice in just eight counties. Those counties account for 41 percent of the state's population.

## DENTAL HEALTH PROFESSIONAL SHORTAGE AREAS (HPSA)



### DEGREE OF SHORTAGE AREAS

8,000–up	5,000–5,999
6,000–7,999	4,000–4,999
Federal Prison	

A map depicting the number of dentists by county can be found in the appendix.

Arkansas has 40 pediatric dentists, a ratio of one for every 17,000 children and adolescents to age 17 years.

**Only about one-third of the dentists have enrolled in the ARKids First programs, Parts A and B.**

Children in Arkansas suffer from this lack of access to competent dental care, according to *Oral Health in Arkansas*, a report from the Office of Oral Health in the Arkansas Department of Health and Human Services issued in August 2006. This lack of competent dental care is not an Arkansas specific issue but is a national issue for those with oral health needs.

In a sample of 7,100 third grade children in public schools throughout the state in 2003, 61 percent had evidence of current or past cavities, 31 percent had untreated cavities, 21 percent were in need of routine care and 6 percent needed urgent dental care.

From 2004–2006, approximately 4,300 children were screened with 57 percent showing evidence of current or previous cavities and 27 percent having untreated cavities; 22 percent needed routine dental care and an additional 9 percent were referred for urgent dental care.

A small sample of high school students (124) of whom 91 percent were non-white showed that 81 percent had current or past cavities, 31 percent were referred for routine dental care, and 12 percent for immediate attention.

Only 15 percent of the children and 17 percent of the adolescents in Arkansas have had sealant applied to their teeth. Fluoridated water is available to less than two-thirds of the residents of Arkansas (62%).

For an interactive map regarding water fluoridation by county, visit the following DHHS Web site: [http://www.healthyarkansas.com/Oral\\_Health/fluoridation/map/state/statemap.htm](http://www.healthyarkansas.com/Oral_Health/fluoridation/map/state/statemap.htm).

In a recent effort to support the provision of dental care to low income individuals, the federal government has required that all new Community Health Centers must include dental care in their services and they must staff a dentist. These dentists are usually booked months in advance as the need for services is so great. Other options such as school-based care are just emerging. Arkansas has only one school-based dental center and it is located in Wakefield Elementary School in southwest Little Rock.



### CHILD WELFARE SYSTEM

Arkansas children need a better system to help them when their families break down and they are at risk of abuse or neglect. And the problem is growing.

**In State Fiscal Year 2000, the Department of Health and Human Services had 7,734 child protective services cases. By SFY 2005, that number had jumped by 1,298 or 17 percent.**

**In SFY 2000, 5,486 children were in state custody with 1,031 foster homes available for their care. In SFY 2005, that number had risen by 915 (17%) to 6,401.**

**In SFY 2000, 1,145 (21%) of the children had been in foster care for more than 24 months. The number rose in SFY 2005 to 1,325 but the percentage stayed at 21%.**

*The Arkansas Child Welfare System*, a study issued by Arkansas Advocates for Children and Families in August 2005, noted “the perpetual dilemma facing all child welfare agencies: how to balance the concerns protecting child safety with family preservation. The Arkansas child welfare system has struggled to effectively balance these two concerns.” The report continued, “The state child welfare system is plagued by high staff turnover and, in some areas of the state, caseloads that are many times higher than the recommended standard.”

In July 2006, AACF issued a second report appropriately entitled, *A Long Road Ahead; An Update on the Arkansas Child Welfare System*. Key findings from that report include:

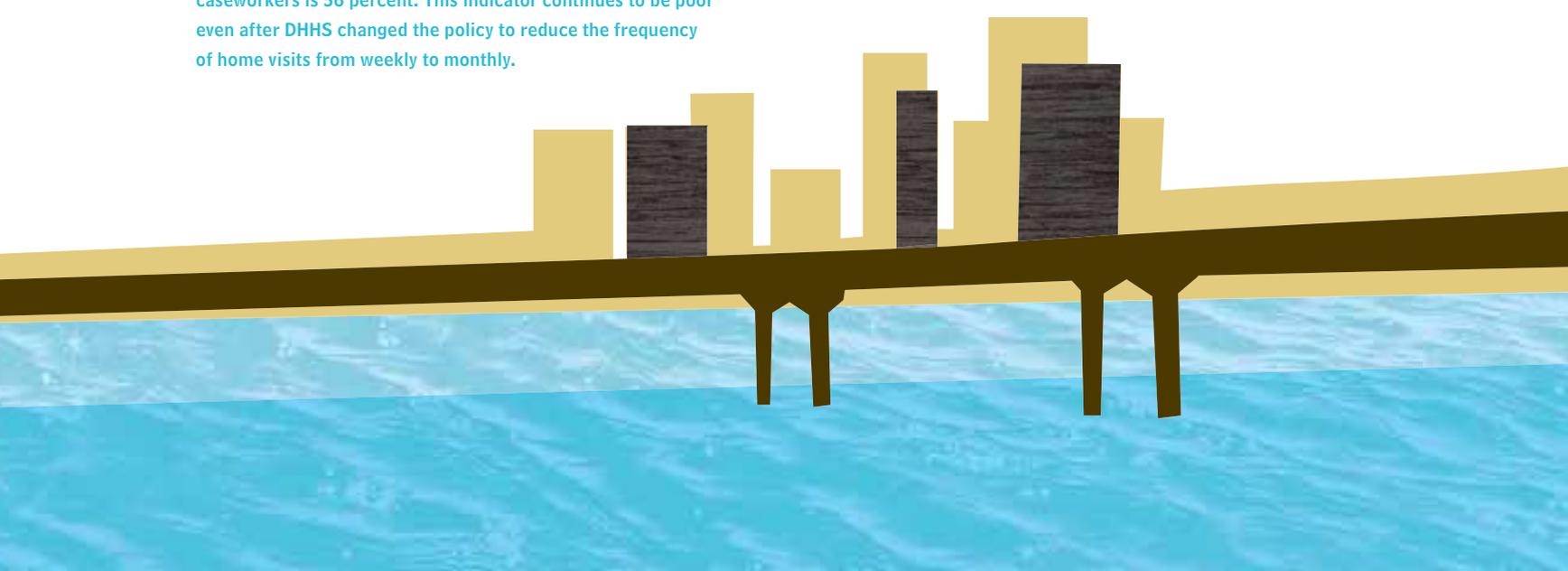
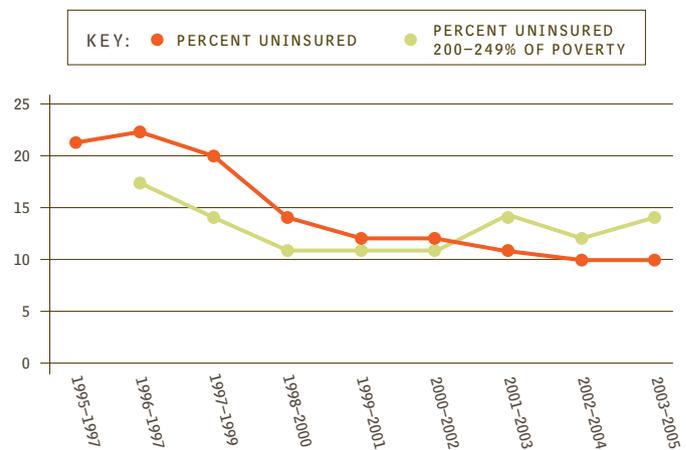
- **The percent of victims seen by an investigator within 72 hours is 69 percent as compared to 89 percent in 2000.**
- **Only 47 percent of maltreatment assessments are concluded within 30 days after an allegation of maltreatment is made compared to 80 percent in 2000.**
- **The initial staffing occurring within 30 days of a case opening happens in only 29 percent of the cases.**
- **The percentage of foster children receiving no monthly visits from caseworkers is 56 percent. This indicator continues to be poor even after DHHS changed the policy to reduce the frequency of home visits from weekly to monthly.**

### HEALTH INSURANCE COVERAGE

Access to affordable health insurance directly affects a child’s ability to receive needed healthcare services. Nationally, 25.6 percent of children who are uninsured for all or part of the year do not receive any medical care, compared to 12.3 percent of children who are insured all year (*The State of Children’s Coverage*, August 2006). Additionally, a new report from Families USA (*The Great Divide: When Kids Get Sick, Insurance Matters*, February 2007) shows that, even in life-threatening conditions, choices are made often based on insurance coverage that effect life or death outcomes.

While we have done a great job insuring children under 200 percent of poverty we are seeing a continued increase in the number of children losing health insurance coverage in the child population between 200 percent and 300 percent of poverty (for a family of four, annual income would range between \$40,000 and \$60,000 a year). The uninsured rate for children in this income group has increased from 11 percent to 14 percent and is now the income group with the highest uninsured percentage. Arkansas has approximately 70,000 still uninsured and 19,000 of them are in the 200 to 300 percent poverty income bracket.

Percent of Uninsured Children in Arkansas



ARKids First, Parts A and B, offers a rich benefits package that includes vision, dental, mental health, hospital, pharmacy and physician care. A conundrum with the Medicaid program is the lack of reimbursement for services of a non-clinical nature. The EPSDT program for children is the single vehicle for health education within the Medicaid program and it is under utilized in the state. Reimbursable services with the Medicaid program and other private insurance programs often do not fit the need of the child.

### EARLY PERIODIC SCREENING DIAGNOSIS AND TREATMENT PROGRAM

Arkansas children are not getting the full benefits of the EPSDT Program whose purpose is to provide low-income children with quality, well-child screens and guaranteed treatment services to address any diagnosed illness or health deficiency. These services are paid for by the state Medicaid program for children that are enrolled in the traditional program or ARKids First A.

In 1990, The Centers for Medicaid and Medicare Services set a national goal that 90 percent of the children eligible for EPSDT would have the screens done by 1995. That has not happened. In 2004, only 39 percent of those eligible, nationwide, used the services.

In Arkansas, the situation is even worse. In 2004, only 27 percent of the eligible children in Arkansas took advantage of this preventive health program. True, that is up from 21 percent in 1999, but it still trailed the national rate by a significant margin.

In August 2006, AACF issued its report on EPSDT. It concluded that no single element of the system was responsible for this failure. It went on to identify several contributing factors:

- **Low payments to physicians and excessive paperwork.**
- **Lack of staff and procedures in physicians' offices to track and monitor children who need a screen.**
- **Lack of awareness of the program on the part of the parents.**
- **Failure to link school health network with primary care physician.**
- **Family patterns of only visiting a physician when a child is sick.**

While Arkansas has led the nation in reducing the number of children who lack health insurance, we have done a poor job utilizing the opportunities provided through Medicaid to screen and treat children and perform health education with parents. With our uninsured rate now at only 10 percent we need to look at new ways to educate families about prevention and early detection.



### MENTAL HEALTH

According to the 2000 Surgeon General's Report, as many as 5 percent of the children in the United States are Seriously Emotionally Disturbed (SED), the highest diagnosis of mental illness in children. In 72 Arkansas counties, the Medicaid eligible population ages 9 to 17 years of age exceeds the national prevalence rate. In 26 counties, the rate is more than twice the national rate, and in 13 counties it is more than three times the national rate. The total number of Medicaid eligible children, age 9 to 17 years, with SED is estimated at 19,307.

The 2005 YBRS provides some further light on the issue. According to the Arkansas respondents, one-third of them felt sad or hopeless in the last year compared to 28.55 nationally. Over 19 percent had seriously considered committing suicide, almost 16 percent had made a plan for suicide, and 12.1 percent actually attempted suicide. All three rates are substantially higher than the national figures; the attempted suicide rate is 44 percent above the national. The details are in the following table.

Mental Illness Indicators	U.S.	Arkansas
Felt sad or hopeless	28.5%	32.4%
Seriously considered suicide	16.9%	19.2%
Made a plan for suicide	13%	15.8%
Attempted suicide	8.4%	12.1%

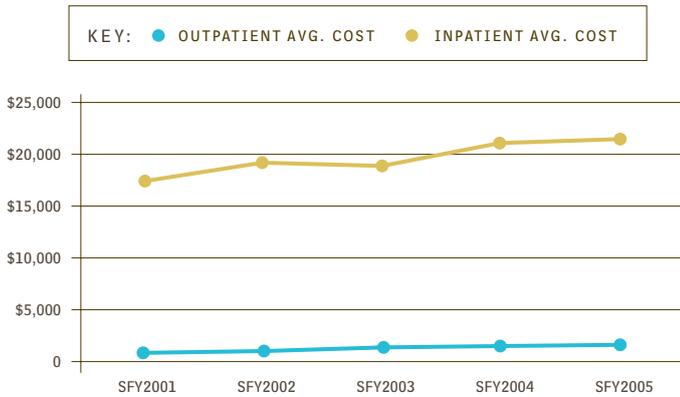
The state Medicaid program reported spending over \$201 million on children's mental health services in 2005, more than double the expenditures in 2001. The table below shows the Medicaid mental health expenditures for recipients less than 21 years of age. The bulk of the money goes to provide inpatient treatment for children and youth.

A detailed comparison of mental health costs can be found in the appendix.

The Community Mental Health Centers (CMHCs) reported serving 21,779 persons under the age of 18 in State Fiscal Year 2005. Virtually all of this care is outpatient. The state hospital reported another 79 received residential care at its facilities for a total of 21,858 for the year. Overall, 60 percent of the patients were male.

IN SFY 2000, the CMHCs reported serving a slightly lower number of persons under the age of 18 (20,015). The state hospital reported another 104 received residential care at its facilities for a total of 20,119. Overall, 60 percent of the patients were male.

### Mental Health Cost Comparisons



A recent study of the children's mental health system concluded that it is badly broken. The key findings include:

- A disproportionate number of Arkansas children are placed in bed-based institutions for mental health services, fracturing them from their families and communities.
- Publicly-funded services do not match children's needs. Experts suggest a maximum of 1,007 children under 18—regardless of insurance—require residential treatment for severe behavioral health needs.

- The existing system creates incentives to place children in more costly inpatient treatment facilities. Arkansas does not have an independent and standardized assessment and treatment process to verify decisions about a child's mental health designation, severity or treatment needs.
- Medicaid expenditures on children's mental health also reflect the overuse of inpatient treatment. Over \$112 million pays for inpatient care for fewer than 6,000 children or roughly \$21,000 per child. Approximately, \$89 million pays for outpatient services for over 50,000 children, about \$1,700 per child.

The Arkansas Department of Health and Human Services (DHHS) commissioned a consultant, the Human Service Collaborative, to design a systemic solution to the problems. In its report to the DHHS Director, dated May 8, 2006, the consultant wrote: "I recommend that you make the development of an Arkansas System of Care a department-wide priority, not simply a mental health initiative, because emotional disturbances among children and adolescents impact the early childhood, child welfare, juvenile justice, education, mental health, substance abuse, developmental disability and Medicaid systems, at a minimum. Without this priority status, System of Care development is likely to become 'one more plan' that never comes to fruition." The consultant went on to note that significant forces stand against System of Care development, and the entire administration, not just DHHS, must be prepared to work to counter the influence of those forces.



## Lessons Learned and Actions Needed

### STATE OF CHILDREN IN ARKANSAS

According to the data, children in Arkansas are facing challenges on many fronts when compared to children across the nation. Arkansas' children come from poor, often single-parent households. They live in rural areas and lack access to medical and dental care. Many families suffer from isolation due to lack of transportation and communication services. This isolation not only creates barriers for meeting day-to-day needs but also decreases the families' likelihood to take strides toward producing a healthier lifestyle. Arkansas children are more likely than their counterparts to drop out of school or not receive additional education. They are more likely to give birth at an early age and participate in risky behaviors such as substance abuse and smoking at a higher rate than their counterparts. As young children, Arkansans die from accidents at a much higher rate, eat fewer fruits and vegetables and get less exercise. Additionally, more of them live in households where smoking is more prevalent than with other children in the nation and more are institutionalized for severe mental disturbances than in other states. Arkansas has utilized the Medicaid program to drastically reduce the uninsured but have seemingly failed at utilizing the EPSDT program to screen, treat and educate children and families.

While more pregnant women are seeking early pre-natal care, Arkansas' females still access early care at a lesser rate than the national average and Arkansas still has a higher low-birth weight percentage and infant mortality rate than the nation. An additional look at the low-birth weight statistics and the infant mortality rate reveal an appalling disparity with minority infants. We will never maximize the health status of Arkansas children until we deal with the racial inequities within the healthcare system itself. Any solutions adopted must include specific strategies for implementation within the African-American and Hispanic populations.

In general, Arkansas' young and old do not embrace or practice healthy behaviors and seemingly perpetuate the similar unhealthy behaviors generation after generation. Availability of quality medical care is a portion of the problem but the data leads us to a much broader definition of the possible solutions. Arkansans need improved access to health. This includes supervision of care, prevention and education. The solutions discussed in the final pages of the report focus on these three areas.

### SOLUTIONS TO PRODUCE GOOD HEALTH OUTCOMES: HEALTH ACCESS

The state must identify key improvement strategies that will provide a strong foundation for a permanent and definitive change in health behaviors. These strategies must encompass community-building and economic development at the highest level. Without resources and jobs, families cannot access needed information or services. Some strategies involve healthcare providers; some involve schools and communities; while others rely on state policy makers to adopt policies that will provide a better foundation for good health. In general, the solutions recommended rely on a blending of clinical practice and public health practice.

There are two key points that precede the recommendations listed below. First, most of the recommendations are not specific to any single health issue, i.e. obesity, tobacco, teen pregnancy, etc. The recommendations are strategies to improve access to and use of current health information in order to change many behaviors that are producing poor health. The challenge is not the lack of information concerning specific topics but it is the lack of integrating that information into the lifestyles and cultures of the diverse population in Arkansas.

Second, there are no specific strategies listed to address the racial and cultural barriers to health in Arkansas. This important element is intrinsically woven into each and every recommendation. The implementation of any recommendation must include specific activities that will ensure that personnel, providers, services and information that are reflective of the state's minority population. The first and foremost solution of this report is that no activity should move forward until each organization or entity desiring to participate has revealed a strategy committed to including individuals and organizations of color and cultural diversity into the planning and implementation process.

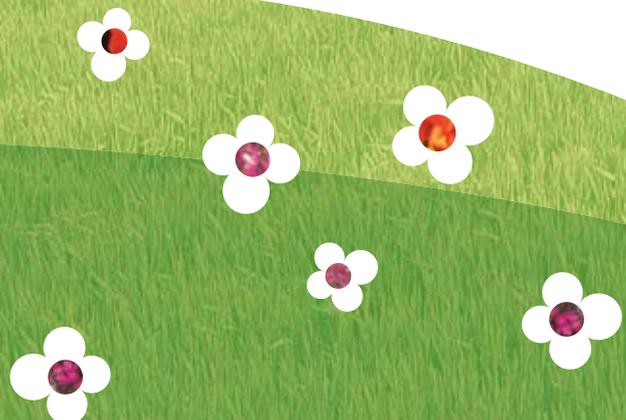




## MEDICAL/DENTAL CARE AND SUPERVISION

It is vitally important for children and their families to have access to quality healthcare providers that will assist them in determining their child's needs and locating the best possible provider for those needs. This concept has recently become known as a "medical home". In order to develop a medical home, there must be licensed providers, available services and adequate reimbursement mechanisms. Additionally, there must be a channel or forum which families, especially low-income families, feel comfortable utilizing in order to stay connected with their physician. These strategies, listed below, are examples of strategies that will help coordinate care and develop quality healthcare providers.

- **Better coordination of the child's health needs between schools, parents and local physicians. This will require adequately funding school nurses, increasing the number of RN's as school nurses and developing a mechanism to share information between schools, parents and physician offices.**
- **Expand utilization of health professionals such as Physician Assistants, Nurse Practitioners and Dental Hygienists. This will require improving and expanding licensure practices and regulations. There have been some improvements in this area with dental hygienists and it has provided additional access to children in underserved areas.**
- **Ensure children have access to health insurance coverage that includes a full range of benefits. This would include expanding ARKids First to families up to 300 percent of poverty and continuing outreach efforts for the families currently eligible for ARKids First. Additionally, we must ensure that benefits are not cut for children on Medicaid. There must also be efforts to ensure reimbursement for services match the actual medical and practical needs of children. Reimbursing for preventive services is critical in moving children to a healthier state.**
- **In order to adequately develop the concept of a medical home there must be a way to share health information. The development of an Electronic Health Records/Health Information System would allow for this transfer of data and still protect patient/physician privacy.**
- **Due to the overwhelming need for dental care for children, mobile dental clinics should be established in many areas of the state. Care given in these clinics can be reimbursed by Medicaid and could quickly become self-sustaining.**
- **The most vulnerable children in our state are those who are abused and neglected by adult care givers. We must ensure that the Division of Children and Family Services is adequately funded to increase the number of case workers and that quality training and support is available for those case workers.**
- **Ensure that holistic programs are available to treat alcohol and substance abuse for parents and children. Proven programs such as AR CARES can be a model for programs in the state.**



## PREVENTION

Improving long term health outcomes will require a shift in resources from acute and chronic care to the more nebulous activities of prevention. Prevention activities are often difficult to initiate due to personal rights, individual behaviors and the inability to adequately evaluate success and return on investment. Arkansas is the only state in the nation that has utilized its Tobacco Settlement dollars to focus on health needs within the state. A significant portion of the settlement has been set aside for prevention activities. The funds provided by the settlement are a foundation for prevention efforts in the state. However, Arkansas should utilize the opportunity provided by those dollars to prove the effectiveness of certain strategies and to develop mechanisms for future funding of preventive activities. Preventive efforts are both educational and policy in nature. The examples below reflect both types of strategies. Within each of these strategies is the over-arching need to develop the resources within a community to support families and to provide opportunities for positive activities and experiences for children.

**Coordinated School Health (CSH)** can be utilized in Arkansas to improve health outcomes for school-aged children. CSH is not a place, program or grant. It is a strategy that allows multiple programs, initiatives and providers to work together in the school setting to ensure that children are healthy and ready to learn. The Centers for Disease Control have defined 8 components within the Coordinated School Health Model. They are:

**Physical Education, Health Education, Health Services, Counseling, Psychological & Social Services, Healthy School Environment, Health Promotion for Faculty and Staff, Parent and Community Involvement, Nutrition/Food Service.**

This strategy would affect all 440,000 school-aged children and has been proven to increase school attendance, decrease crime in the community and to help increase test scores (data from McComb, MS evaluation of Coordinated School Health). The state should adopt the coordinated school health model and look at ways to provide incentives for schools to participate. Additionally, the state should set aside \$1 million dollars to pilot new projects for CSH.

**Provide the necessary tools and resources for healthcare providers to perform quality and complete EPSDT screens** for Arkansas children on Medicaid. Looking at ways for schools, communities and physicians to partner together to ensure that children are screened and opportunities to provide health education are taken, are critical to improving children's health. Specific measures should be taken to develop an EPSDT registry that will provide complete information concerning a child's screening history. This registry can be used as a tool for providers to access the results of screens performed in schools or other non-traditional settings. It will also be system based on screening performance and results rather than depending on the Medicaid billing system for data. This registry can be built upon our current immunization registry and possibly partially funded by Medicaid dollars.

**Development of after school programs in Arkansas.** Arkansas lacks programs to support positive activities for children during the time after school and before caregivers arrive from work. Research shows that children in quality, after school programs perform better in school, have higher self-esteem, and are more likely to stay out of trouble. Arkansas must begin laying the ground work for developing an infrastructure for after school programs similar to the current pre-school effort.

**Utilizing health educators and community health workers** is a way to provide vital health information to families and communities. Licensed health educators can be utilized by physicians, schools and other community organizations to work with families concerning appropriate health practices. Community Health Workers are typically lay persons that are well connected within their community who have received specific training, allowing them to share pertinent health information with families in their community. They too can be used in a variety of settings to help families change behaviors. Both practices have been proven to be successful, but it is very difficult to find funding to support their activities. The funding of a pilot project in the state with a strong evaluation component can help support improved reimbursement policies for these types of services.



**Community Based Treatment Programs** for children who are developmentally delayed and for children with mental illness are needed. Arkansas institutionalizes its children at an alarming rate. Institutional care is very expensive and often does not provide the desired results. Expanding the current DD Waiver to include more slots is critical for those families wanting to keep their developmentally delayed child at home. Arkansas also needs to shift services for children with mental illness from institutions to community-based care. A similar waiver for mental health services could help the state develop those services and keep kids at home. Additionally, the state needs to set aside funding for services that are not normally reimbursed by Medicaid or private insurance. These include things such as respite care, after school activities and mentoring programs.

**Increasing Licensed Social Workers** in schools will help provide the necessary staff to meet the everyday needs of children and families. Social Workers often are the key link in coordinating services recommended by healthcare providers, mental health providers and social service agents. Utilizing TANF dollars to provide social workers in low-income schools is good public policy and should be maintained. The greatest barrier to a program of this nature is the coordination between two large state agencies. Greater effort should be made by both agencies to promote this program to the local school districts.

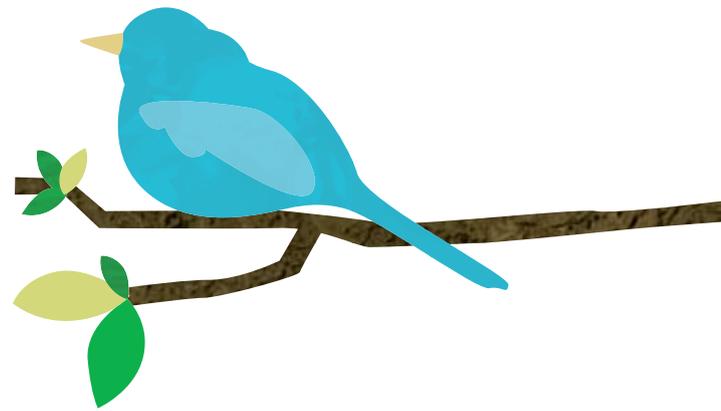
Childhood immunizations have been proven to be cost-effective and beneficial at preventing childhood diseases. **Arkansas should put a concerted effort into improving their childhood immunization rate.** The new childhood immunization registry has recently been rolled out across the state. The division of health should monitor and enforce its use by physicians. Making the registry available to day care providers will provide a much needed tool to those providers for enforcing immunization requirements. Looking at the development of specific reports and tools that will automatically flag a child's health record will assist physician's offices in utilizing the registry.

**Reduce immunization exemption usage.** During the 2003 legislative session, a bill was passed allowing parents to exempt out of immunizing their child-based on general philosophical principles. Since the time of this legislation, we have seen the number of children receiving immunization exemptions double. Arkansas should continue to monitor this trend and update the education provided to parents desiring an exemption.

Adopting a **primary seat belt law** will allow law enforcement personnel to stop a moving vehicle for not appropriately securing themselves and their passengers. The data clearly shows that children who are secured in a moving vehicle are at a much reduced risk of severe injury or death during a motor vehicle accident than those who are not. The ability for law enforcement to stop vehicles for this purpose would greatly increase the enforcement capacity in the state.

**Graduated drivers license** programs generally divide the licensure process for teenagers into three categories; Learning, Intermediate, Full license. The variation is based on the requirements for each stage. While Arkansas adopts a graduated license program, the only requirement to receive your full license is to complete your two years of intermediate driving without having a serious accident or traffic conviction. States that have included stipulations such as requiring a certain amount of supervised driving time during the learning phase, limiting the number of passengers in the vehicle and instituting an after midnight driving curfew have found significant reductions in teenage vehicular accidents.

**Dental sealants** prevent tooth decay, save money, and are an important preventive measure, complementing the use of fluorides. They work by preventing decay from developing in the pits and fissures of teeth, channels that are often inaccessible by brushing alone and where fluoride may be less effective. All states now include sealants as a dental benefit for children enrolled in their Medicaid dental programs; however, dental sealants are underused.



**Fluoridation of the water supply** has been a very controversial topic for many years. While data clearly proves the positive effect of reducing the onset of dental cavities, many of our citizens have inaccurate information concerning the small risks associated with fluoridation. State policy makers should continue to pursue mandating the fluoridation of water supplies in the state.

Within 48 hours of a child's birth, a sample of blood is obtained from a "heel stick," and the blood is analyzed for treatable diseases. **Expanding Newborn Screens** will bring Arkansas in line with other states in the nation. There will be an increased fee for these screens but it will not only provide for more disease to be screened but it will provide for follow-up and counseling when screens are returned positive.

The current distribution of the **Tobacco Settlement dollars** should be maintained to include prevention activities. These dollars provide a critical foundation for prevention activities at the state and local level. Funneling them into the support of integrated and coordinated programs will leverage their use and provide opportunities to change many risky behaviors that affect children and adolescents.

## EDUCATION

Ensuring that children and their families have access to quality education is a major key in improving access to health. The area of education links closely with prevention. A major component of prevention is providing health education to individuals, families and communities. The examples within this area encompass many efforts to better education for children, families and healthcare providers.

Children who participate in **quality pre-school** programs are better prepared for school than their counterparts. Arkansas has committed substantial resources to ensuring that at-risk children can access a quality pre-school education. We must gain the final \$40 million dollars needed to completely fund the Pre-K effort in Arkansas. Additionally, policy makers should support the Early Care Systems Initiative that will provide a structure for measuring and rewarding quality, based on a set of defined criteria. One of these criteria is a strong health component within the pre-school setting. Engaging parents in the pre-school setting is a good way to educate parents about future and current health needs of their child.

**Coordinated School Health** will integrate health education, services and policies into the school setting. There is currently a small amount of money set aside for schools to start a coordinated school health initiative. Additional funding would provide schools with the opportunity to hire a staff person to strengthen their efforts. The state should adopt the coordinated school health model and look at ways to provide incentives for schools to participate.

Arkansas should embrace every possible opportunity and method to provide **parenting education and skills training**. This can be done as part of a quality pre-school initiative, as part of coordinated school health or as part of a well-child check up. There are clearly many opportunities to provide parenting tips and education. Specific strategies for delivering parent education include the following:

- **Parenting education should come from someone to whom the parent relates. Health Educators and Community Health Workers will be ideal for providing this type of education.**
- **The message should be understandable and culturally sensitive.**
- **Utilize EPSDT visits as a way to provide parenting education as health education is a component of the program.**
- **Many parents are single parents and lack the time for long extensive training sessions. Design programs to be quick, focused and in non-traditional venues i.e., the development of a Child Health Report that includes the result of all screens performed on the child at school as well as providing appropriate tips for improving their child's health.**

**Physician/Provider Education and Training** is a critical part of the education cycle in Arkansas. There is a need to develop stronger education requirements around public health, community practice and health education. Many healthcare providers lack the knowledge and skills for dealing with behavior change within their medical models. This education can be done as part of their course work, as a residency requirement or as continuing education. This level of education will help integrate public health practices into the clinical setting.

Developing a dental residency program in central Arkansas can help bring much needed dental services to the state and will assist with recruitment of dentists in Arkansas.

Continuing to engage in quality research projects specific to Arkansas needs will help to educate providers and the public. Within this project alone, there are many areas ripe for research in the near future. The state should utilize opportunities provided by the College of Public Health and the Clinton School of Public Service for graduate level students to engage in research projects. There should be a list of research needs generated from this report each year that can be circulated within various institutions of higher learning as possible research and internship projects.

## CONCLUSION

The State of Children's Health Report is the initial report in what we hope will be an annual review of how children are fairing in Arkansas. The report has many areas for improvement and should be enhanced each year. In order to truly match needs with populations, the next report should seek to include several additional components:

**County Level Data**—Several of the indicators have county level data available. Including this data and grouping it into regions will allow for a more detailed look at children's health outcomes and needs. Strategies may then be targeted based on needs.

**Household Survey**—There is a need to develop and complete a survey to determine parent and family views concerning health and their healthcare needs. One limitation of many of the data sources is that Arkansas does not have a significant portion of the population surveyed; therefore, county level data cannot be extrapolated.

**Asset Mapping**—During the upcoming year, an effort should be established to explore the assets available in the state and map them according to their coverage. We often focus only on new strategies and problems when a complete list of assets may reveal a need to coordinate, redistribute or model certain activities and resources.

**Prioritizing Children's Health Strategies**—This report has listed numerous examples of programs and strategies that will help improve children's health in Arkansas. In order to make recommendations concerning the allocation of resources, the committee should develop a formula for determining the impact of a strategy, the cost and benefits accompanying that strategy and the feasibility of implementing the strategy given the current environment in the state.

Improving the health of children in Arkansas is not going to be accomplished with a one-time look at specific data indicators. It will require a long-term commitment from multiple organizations serving children. These partners must commit to identifying their role within the system and then actively pursue the identification of resources to implement strategies. Future editions of this report can be used to measure the changes in children's health.

## LIST OF ABBREVIATIONS

<b>AACF</b>	Arkansas Advocates for Children & Families
<b>ACH</b>	Arkansas Children's Hospital
<b>ACHI</b>	Arkansas Center for Health Improvement
<b>ACS</b>	American Community Survey
<b>ADD</b>	Attention Deficit Disorder
<b>ADHD</b>	Attention Deficit Hyperactivity Disorder
<b>BMI</b>	Body Mass Index
<b>CDC</b>	Centers for Disease Control
<b>CMHC</b>	Community Mental Health Center
<b>CPS</b>	Current Population Survey
<b>CSH</b>	Coordinated School Health
<b>CVD</b>	Cardiovascular Disease
<b>DCFS</b>	Division of Children and Family Services
<b>DD</b>	Developmentally Delayed
<b>DHHS</b>	Department of Health and Human Services
<b>DOE</b>	Department of Education
<b>EPSDT</b>	Early Periodic Screening Diagnosis and Treatment
<b>MSA</b>	Metropolitan Statistical Area
<b>MUA</b>	Medically Underserved Area
<b>PEDS</b>	Patient Encounter Data System
<b>PRAMS</b>	Pregnancy Risk Assessment Monitoring System
<b>SED</b>	Seriously Emotionally Disturbed
<b>SFY</b>	State Fiscal Year
<b>TANF</b>	Temporary Assistance for Needy Families
<b>USDA</b>	United States Department of Agriculture
<b>YBRS</b>	Youth Behavior Risk Survey



## 1: DATA SETS COMPILED FOR PROJECT

The following is a list of indicators utilized in the creation of this report.

DOCUMENT OR DATA SET	HOME	CONTACT	DETAIL LEVEL AVAILABLE
2005 Arkansas Fact Book: A Profile of the Uninsured	ACHI	Amy Rossi	state
Arkansas Assessment of Childhood and Adolescent Obesity	AR Center for Health Improvement	Amy Rossi	school
Arkansas County Trends in Maternal and Child Health 1990-2002	DHHS Div of Health	John Senner	county
Arkansas Department of Education Programs for Language Minority Students	AR Dept of Education	Andre Guerrero	school
Arkansas Maternal and Child Health Statistics 2002	DHHS Div of Health	John Senner	state
Arkansas Prevention Needs Assessment Survey	DHHS ADAP	Tommie Waters	county, school
Arkansas Racial and Ethnic Health Disparity Study	AR Minority Health Commission	Eduardo Ochoa and Creshelle Nash	some county
Arkansas Vital Statistics State Summary 2002	DHHS Div of Health	John Senner	county
Arkansas Youth Behavior Risk Survey	AR Dept of Education	Laura McDowell	state
Community-Level Information on Kids (CLIKS)	AR Advocates	Rhonda Sanders	community
DCFS Quarterly Performance Report	DHHS DCFS	Marilyn Counts	state
Enrollment and Eligibles in Free, Reduced Price and Paid Meals by County, District and School	AR Dept of Education Child Nutrition Unit	Wanda Shockey	school
Getting Ready for School 2003	DHHS DCCECE	Tim Lampe	county
Head Start Program Information Report—Health Section	Head Start state office	Ann Patterson	state
Health Professions Licensing Survey	AR DHHS DOH	John Senner	county
HIV/AIDS Report 2006	DHHS Div of Health	Keevan Murphy	county
Hometown Health Fact Book 2002	DHHS Div of Health	John Senner	county
Infant Hearing Database	DOH	Millie Sanford	county, facility
Injury in Arkansas - A State Profile 2002	DHHS Div of Health	John Senner; Mary Aitken, MD	some county
KIDS Count	AR Advocates	Rhonda Sanders	community
Measuring More of What Matters: HEDIS Measures in Arkansas 2005	AFMC and AR DHHS	Clayton Wells	state
National Immunization Program (state data)	CDC/DOH	Charles Beets	county
National Survey of Substance Abuse Treatment Services—Arkansas Profile	DHHS ADAP	Jo Thompson	facility
Newborn Screenings	DOH	JoAnn Bolick	state
Oral Health in Arkansas (2004 & 2005 reports)	DHHS Div of Health	Lynn Mouden	state

DOCUMENT OR DATA SET	HOME	CONTACT	DETAIL LEVEL AVAILABLE
Pediatric Nutrition Surveillance Report 2004	CDC and DOH (WIC)	Anita Southard	county
Pregnancy Risk Monitoring System (PRAMS) 2000	DHHS Div of Health	John Senner	state
Risk Factors for Adolescent Drug and Alcohol Abuse in Arkansas 2005	DHHS ADAP	Jo Thompson	county
State Report Card 2005	AR Dept of Education		school
STD Surveillance Report 1996-2006	DHHS Div of Health	John Senner	county
Treatment Episode Data Set (TEDS) Arkansas	DHHS ADAP	Jo Thompson	county
Youth Tobacco Survey	DOH	Linda Lehing	state
<b>Division of Behavioral Health Services</b>			
DBHS Clients Receiving Mental Health Services	DHHS DBS	Anne Wells	
<b>Division of Child Care and Early Childhood Education</b>			
Child Care Voucher Program 2005 Arkansas Better Chance Program (ABC) Special Nutrition Programs Licensed Child Care Facilities by County	DHHS DCCECE	Tim Lampe	county data available by request for most DHHS reports
<b>Division of Children and Family Services</b>			
Child Maltreatment Assessment Services DCFS Foster Care DCFS Services Provided Adoptions	DHHS DCFS	Pat Page	
<b>Division of County Operations</b>			
DCO Services Statistical Report (includes TEA, Food Stamps, Medicaid Eligibles)			
<b>Division of Developmental Disabilities</b>			
DDS Services Statistics	DHHS DDS		county data available by request for most DHHS reports
<b>Division of Youth Services</b>			
DYS Residential and Community Programs Report	DHHS DYS	Karen Scott	
Hunger in America 2006: Arkansas Report	AR Hunger Relief Alliance	Debra Alich	state
<b>Arkansas DHHS Statistical Reports Online 1999–2004</b>	<a href="http://www.arkansas.gov/dhhs/NewDHS/DHSAnnualStats">http://www.arkansas.gov/dhhs/NewDHS/DHSAnnualStats</a>		

## 2: DATA SOURCES

Much of the data on the status of children in Arkansas came primarily from three sources: The United States Census, the Department of Health and Human Services and the Department of Education. Let's examine each of these and their reliability.

### Census Data

The decennial census provides some of the most comprehensive and useful data. In addition to data on race, gender and age, the census produces information on housing, household composition, poverty, educational attainment and occupation. This data is available at the county level, even to the precinct level, with a high-degree of accuracy.

Each year, the Census Bureau updates this information based on sampling in all 50 states, the District of Columbia and American territories. The Current Population Survey (CPS) typically provides usually reliable projections at the state level; however, because of the small sample (approximately 400 households in Arkansas), there is no attempt to provide data at the county level.

In 1993, the Census Bureau recognized the limitations of the CPS and began work on a continuing population measurement program, officially named the American Community Survey (ACS). Surveys similar to the census long form are mailed to 3,000,000 households (250,000 per month) in the United States. The first ACS population and housing profiles became available in 2006 for communities with a population of 65,000 or more. In 2008, similar reports will be available for communities with population of 20,000 or more. By 2010, ACS reports will be available for all census tracts. When fully implemented, ACS will help fill a big gap with more accurate data.

### Health Statistics and Vital Records

This data is collected by the Center for Health Statistics, a unit located in the Division of Health, the Arkansas Department of Health and Human Services. These cover a significant range of data from pregnancies and births, to deaths. The sources for the data are official documents such as birth and death certificates. The data is published at the county level, except in instances when the numbers may be so small

as to compromise the confidentiality of individual records. The data is highly reliable although generally not available until nine to 12 months after the close of the year.

The data collected by the Center and its counterparts in the other states is consolidated at the national level and available from the National Center for Health Statistics so that comparisons can be made among states and to national averages. This data is generally available within 24 months after the close of the year.

The Arkansas Center also publishes statistics including data based on hospital discharges. These data can be useful in identifying state trends in acute healthcare. However, they are not available at the county or regional level. These data are produced annually.

### Department of Health and Human Services (DHHS)

DHHS maintains a number of databases that involve children. Several are designed as components of billing and payment systems, including: Medicaid, Food Stamps, and Early Periodic Screening Diagnosis and Treatment program (EPSDT). Any descriptive data involving the number of clients or beneficiaries require special analyses and permission from DHHS. The basic data, however, is available at the county level. National data is available for comparison purposes. Assessments of the effectiveness of these programs in meeting the needs of children require special studies as outcome based data are typically not available from these sources.

The Division of Health operates a Patient Encounter Data System, one potential source of outcome-based data that is longitudinal in structure. However, it currently only records the kind of treatment and the referrals for further health care. The system does not report by diagnosis and does not track whether the referral appointment was kept.

The other DHHS data systems are essentially management information systems tailored to the special needs of different divisions, such as data maintained on Child Welfare, Summer Food and Child Care programs for the Division of Children and Family Services; juvenile arrest and incarceration data for the Division of Youth Services; children at risk of developmental delay for the Division of Developmental Disabilities; and



mental illness and drug abuse treatment for the Division of Behavioral Healthcare. These systems tend to be point in time systems and designed to track individual cases and caseloads for the different divisions. These data are available at the county level. While the possibility for longitudinal data exists in each system, legitimate privacy concerns make access to these data difficult to obtain. In most cases, the division managers are the ones who interpret the information to provide outcome-based reports. National data is available but not always comparable.

### Department of Education (DOE)

DOE provides data on enrollment by school district as well as data on graduation rates, dropout rates, disciplinary actions and standardized test scores. It also collects information on students receiving free and reduced price meals. This data is generally complete and accurate. It is available at the county level except where a school district might cross county lines.

Similar national data is available and can be used for comparison purposes in most cases. However, that is generally not true of the standardized test scores as not all states use the same tests.

### Other Data Sources

Routine and regular data come primarily from state agency management information and program billing systems. Two annual surveys, however, do provide some useful information. The Youth Behavior Risk Survey (YBRS) samples teenagers in public schools as to their sexual behavior, alcohol and drug use, smoking habits and other behaviors. The results can be considered representative but not definitive in that participation is optional.

The Pregnancy Risk Assessment Monitoring System (PRAMS) involves an annual questionnaire sent to a sample of all women who deliver babies in the state. Again, the data can be considered representative, but participation is voluntary. Other states participate in these federally-sponsored programs so data are available for comparison. However, the data is not meaningful at the county level.

For many concerns, the only sources of data are special one-time surveys or studies, such as those done for research or program evaluation purposes at the College of Public Health, Arkansas Children's Hospital and Arkansas Advocates for Children & Families. These areas of concern include homelessness, dental health, obesity, and hunger, among others. Usually, those special studies are prompted by some major event that catches the attention of the public and their elected representatives or as a result of a program evaluation.

The Arkansas Center for Health Improvement is the repository for the new Body Mass Index database that is collected annually on all children in the public school system. While some children opt out of the screening, this is a very comprehensive database that can be used to track children longitudinally.

### 3: ARKANSAS AGE POPULATION MATRIX

Arkansas Age	Census 2000	Projection 2005	Projection 2010	Projection 2020	Projection 2030
Total Pop.	2,673,400	2,777,007	2,875,039	3,060,219	3,240,208
0-4	181,585	192,439	194,806	201,970	220,672
5-9	187,224	188,835	199,032	203,460	219,060
10-14	192,935	192,505	194,613	207,306	216,269
15-19	198,765	192,353	191,719	205,031	210,072
Median Age	36	37	38	39	40
5-17	498,784	498,246	507,850	535,796	562,551
18-24	261,738	265,104	260,410	265,738	280,011
16 and over	2,072,622	2,163,293	2,248,434	2,405,700	2,541,469
18 and over	1,993,031	2,086,322	2,172,383	2,322,453	2,456,985
21 and over	1,873,359	1,973,110	2,056,254	2,203,760	2,333,557
62 and over	442,588	463,481	511,883	651,583	766,906
65 and over	374,019	382,276	412,152	531,028	656,406

## 4: RURAL-URBAN CONTINUUM MATRIX

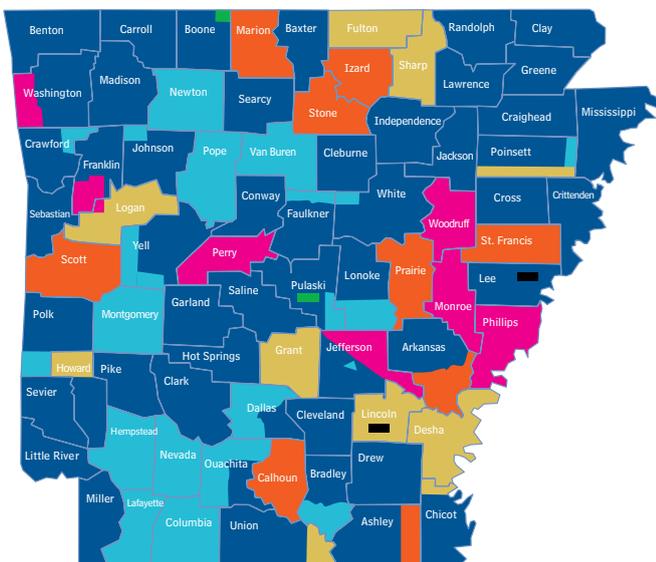
FPS Code	County Name	2003 Rural-Urban Continuum Code	2000 Population	No. of Children by County
05001	Arkansas	6	20,749	4,696
05003	Ashley	7	24,209	5,911
05005	Baxter	7	38,386	6,853
05007	Benton	2	153,406	38,911
05009	Boone	7	33,948	7,691
05011	Bradley	6	12,600	2,683
05013	Calhoun	9	5,744	1,340
05015	Carroll	6	25,357	5,692
05017	Chicot	7	14,117	3,297
05019	Clark	7	23,546	4,811
05021	Clay	7	17,609	3,858
05023	Cleburne	6	24,046	4,837
05025	Cleveland	3	8,571	2,065
05027	Columbia	7	25,603	5,770
05029	Conway	6	20,336	4,844
05031	Craighead	3	82,148	18,911
05033	Crawford	2	53,247	14,310
05035	Crittenden	1	50,866	14,270
05037	Cross	6	19,526	4,994
05039	Dallas	6	9,210	1,974
05041	Desha	6	15,341	3,997
05043	Drew	7	18,723	4,465
05045	Faulkner	2	86,014	20,950
05047	Franklin	2	17,771	4,318
05049	Fulton	9	11,642	2,502
05051	Garland	3	88,068	17,597
05053	Grant	2	16,464	4,066
05055	Greene	6	37,331	8,755
05057	Hempstead	6	23,587	5,833
05059	Hot Spring	6	30,353	7,012
05061	Howard	7	14,300	3,546
05063	Independence	7	34,233	7,961
05065	Izard	9	13,249	2,611
05067	Jackson	6	18,418	3,813
05069	Jefferson	3	84,278	20,023
05071	Johnson	6	22,781	5,403
05073	Lafayette	8	8,559	1,914
05075	Lawrence	6	17,774	4,009

FPS Code	County Name	2003 Rural-Urban Continuum Code	2000 Population	No. of Children by County
05077	Lee	6	12,580	2,786
05079	Lincoln	3	14,492	2,890
05081	Little River	6	13,628	3,230
05083	Logan	6	22,486	5,470
05085	Lonoke	2	52,828	14,354
05087	Madison	2	14,243	3,630
05089	Marion	9	16,140	3,313
05091	Miller	3	40,443	9,852
05093	Mississippi	4	51,979	13,783
05095	Monroe	7	10,254	2,608
05097	Montgomery	8	9,245	2,078
05099	Nevada	7	9,955	2,272
05101	Newton	9	8,608	2,031
05103	Ouachita	7	28,790	6,907
05105	Perry	2	10,209	2,393
05107	Phillips	7	26,445	7,586
05109	Pike	9	11,303	2,693
05111	Poinsett	3	25,614	6,119
05113	Polk	7	20,229	4,799
05115	Pope	5	54,469	13,159
05117	Prairie	8	9,539	2,111
05119	Pulaski	2	361,474	84,023
05121	Randolph	7	18,195	4,221
05125	Saline	2	83,529	7,487
05127	Scott	6	10,996	20,149
05129	Searcy	9	8,261	2,748
05131	Sebastian	2	115,071	1,808
05133	Sevier	7	15,757	28,207
05135	Sharp	7	17,119	4,088
05123	St. Francis	6	29,329	3,499
05137	Stone	9	11,499	2,466
05139	Union	5	45,629	10,902
05141	Van Buren	8	16,192	3,236
05143	Washington	2	157,715	37,564
05145	White	4	67,165	15,545
05147	Woodruff	9	8,741	2,061
05149	Yell	6	21,139	5,092

### 5: SUMMATION OF RURAL-URBAN CONTINUUM MATRIX

2003 Rural-Urban Continuum Code	Number of Counties	2000 Populations	Number of Children by County	Percent Children
Rural (Codes 6-9)	51	937,707	254,723	40.2%
Urban (Codes 1-5)	24	1,735,693	378,930	59.8%
Total	75	2,673,400	633,653	

### 6: PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS (HPSA)



#### DEGREE OF SHORTAGE AREAS

5,000: 1 or physicians	4,000-4,999:1
3,500-3,999:1	3,000-3,499:1
Prison Designation	Facility Designation

### 7: HOUSEHOLD COMPOSITION MATRIX

Family Type and Presence of Children	2000 Census	
	U.S.	Arkansas
<b>ALL FAMILIES</b>		
With related children under 18 years	52.2%	49.9%
With own children under 18 years	48.2%	45.7%
Under 6 years only	11.2%	10.8%
Under 6 and 6 to 17 years	9.6%	8.4%
6 to 17 years only	27.4%	26.5%
<b>MARRIED-COUPLE FAMILIES</b>		
With related children under 18 years	47.9%	44.5%
With own children under 18 years	45.6%	41.9%
Under 6 years only	10.8%	9.9%
Under 6 and 6 to 17 years	9.8%	8.3%
6 to 17 years only	25%	23.7%
<b>MARRIED-COUPLE FAMILIES</b>		
With related children under 18 years	68.2%	71%
With own children under 18 years	58.6%	60.7%
Under 6 years only	11.9%	13.9%
Under 6 and 6 to 17 years	9.9%	10%
6 to 17 years only	36.9%	36.8%

### 8: GENERAL HOUSING CHARACTERISTICS

Family Type and Presence of Children	2000 Census	
	U.S.	Arkansas
Occupied Housing Units	91%	88.9%
Owner-Occupied Housing Units	66.2%	69.4%
Renter-Occupied Housing Units	33.8%	30.6%
Multi-Unit Structures	26.4%	13.9%
Mobile/Manufactured Housing	7.6%	14.9%
Median Value, Owner-occupied Unites	\$119,600	\$72,800
No Phone Service	2.4%	5.4%



## 9: ARKANSAS PREGNANCY AND BIRTH STATISTICS

	1990	1995	2000	2002
Total Births	35,454	35,155	37,791	37,456
1st Trimester Prenatal Care	68.3%	75%	77.9%	78.4%
Birth Rate per 1,000 Women of Childbearing Age	15.5	13.9	14.1	13.8
Births to Teenage Women	19.2%	19.1%	15.9%	15.5%
Births to Unmarried Women	29.4%	32.4%	35.8%	37.2%
Low Birthweight Babies	8.2%	8.2%	8.6%	8.6%
Infant Mortality per 1000 births	na	9	8.4	8.3



## 10: HEALTH INDICATORS

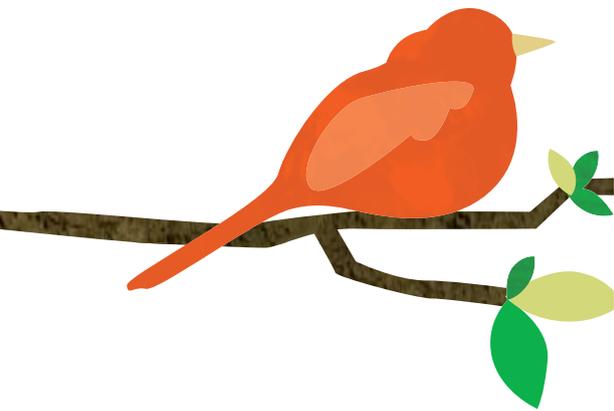
	U.S.	Arkansas
Described health as fair or poor	8.3%	10.4%
At risk of overweight	15.7%	16.7%
Overweight	13.1%	15.4%
Trying to lose weight	45.6%	49%
<b>PHYSICAL ACTIVITY</b>		
Meets current recommended levels	35.8%	30.9%
No vigorous/moderate physical activity	9.6%	13%
Attended physical education classes daily	33%	27.2%
<b>NUTRITION</b>		
Ate fruits/vegetables five or more times daily	20.1%	13.9%
Drank three or more glasses of milk a day	16.2%	9.8%

## 11: DEATH AND ACCIDENTS

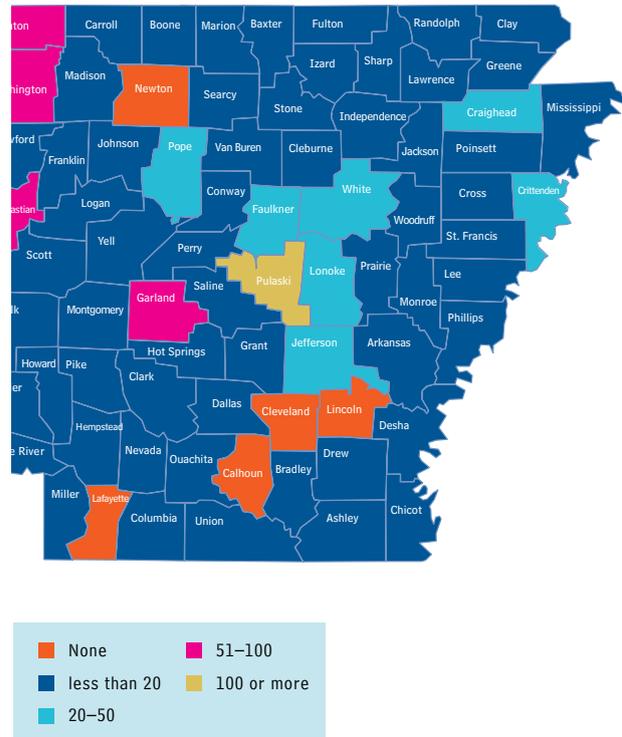
ARKANSAS	2000	2001	2002	2003	2004
<b>Deaths, Age Group 1–4</b>					
Total Deaths	76	73	59	67	77
Rate per 100,000 population	52.7	49.9	40.3	45.5	52.3
National Rate	—	—	—	—	29.9
Accidents	36	39	24	27	26
Percent of Total Deaths	47.4%	53.4%	40.7%	40.3%	33.8%
Rate per 100,000 population	25.0	26.7	16.4	18.4	17.6
<b>Deaths, Age Group 5–14</b>					
Total Deaths	101	82	96	75	100
Rate per 100,000 population	26.6	21.6	25.4	19.8	26.7
National Rate	—	—	—	—	16.6
Accidents	49	52	39	38	47
Percent of Total Deaths	48.5%	63.4%	40.6%	50.7%	47%
Rate per 100,000 population	12.9	13.7	10.3	10.0	12.5

### 12: SEXUAL ACTIVITY STATISTICS

	U.S.	Arkansas
Currently sexually active	33.9%	29.5%
<b>HAVE HAD SEXUAL INTERCOURSE</b>		
Ever	46.8%	54%
Before age 13 years	6.2%	9.2%
With four or more partners	14.3%	18.3%
Dating Violence	9.2%	13.8%
Forced to have sexual intercourse	7.5%	11.2%



### 13: DENTISTS BY COUNTY



### 14: CHILDREN’S MENTAL HEALTH COSTS—INPATIENT VS. OUTPATIENT

	SFY2001	SFY2002	SFY2003	SFY2004	SFY2005
Outpatient Cost	\$38,564	\$55,081	\$62,714	\$70,843	\$88,730
Number of Recipients	28,988	34,812	42,426	45,517	50,497
Average Cost	\$1,330	\$1,582	\$1,478	\$1,556	\$1,757
Inpatient Cost	\$62,087	\$75,688	\$84,300	\$97,696	\$112,469
Number of Recipients	3,528	3,911	4,426	4,597	5,154
Average Cost	\$17,598	\$19,353	\$19,047	\$21,252	\$21,822
Total Cost	\$100,651	\$130,769	\$147,014	\$168,539	\$201,199

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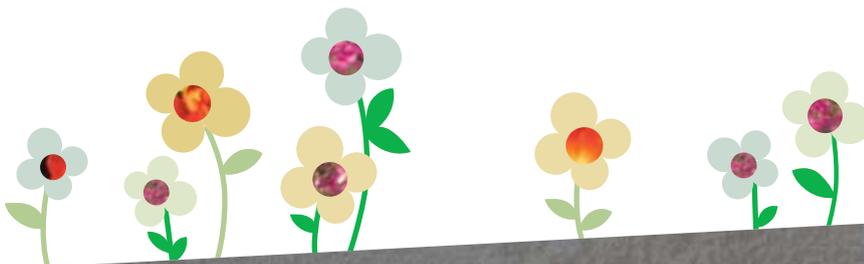
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