

### **2010 SURVEY DATA**

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# The Healthy Development of Arizona's Youngest Children

# A 21st Century Profile of Opportunity and Challenge



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## Introduction

Young children are Arizona's, and the country's, future.

Young children's healthy development not only involves their physical health; it also involves their social, educational and behavioral development. Young children's healthy development is the foundation for all their future growth and success in life – and to the growth and prosperity of Arizona as a whole.

This report provides information about Arizona's young children (birth to five) and their healthy development. It presents new information from the 2010 Arizona Health Survey. The survey was sponsored by St. Luke's Health Initiatives, a Phoenix-based public foundation focused on Arizona health policy and strength-based community development. The 2010 child survey was developed in partnership with First Things First, a state agency focused on improving health outcomes for young children in Arizona.

The 2010 child portion of the Arizona Health Survey complements and builds upon the 2007 National Survey of Children's Health, whose results also are summarized, as they provide for comparisons of Arizona with the country as a whole. However, the Arizona Health Survey is much larger, both in the number of questions about young children and the size of the sample. This provides additional content information, enables geographic breakdowns within Arizona, and provides opportunities for more detailed analyses by different subgroups than is possible with the national survey.

# Healthy Child Development: What's Important

Young children's healthy growth and development is critical to their long-term health and success. Brain research has identified the first years of life as critical ones to the actual wiring of the brain and the development of lifelong abilities and patterns of response. During the early years, there is a complex interplay between a child's environment and the child's developing brain. Factors affecting healthy growth and development in the early years include:

- Genetic predispositions and conditions
- Healthcare services to address clinical health issues and concerns
- Other services to support the social, emotional, language and cognitive development of the child; and, most important
- Family and community environments that protect, nurture and guide a child's growth and development

These latter "social determinants" of health include:

- Family economic security that meets basic food, shelter, clothing and other needs
- Safe environments free from violence or environmental toxins in the home and the community
- Consistency in parental nurturing, support and response to stress
- Opportunities to explore the world starting with home and neighborhood that provide multiple avenues for experience, interaction and growth

In short, parents are their children's first and most important teacher. They also are their children's first and most important nurse, safety officer, nutritionist, care coordinator, ambassador, environmental specialist, mentor and coach.

Information about the status of young children in Arizona is needed in all these areas. Information itself is available from a number of sources, from birth records and American Community Survey data to incidence data on such things as elevated blood lead levels and child abuse reports. Information also is available through research and demonstration projects.

Parent survey data, however, is the only way to obtain population-level information about many essential family and social factors related to healthy young child development, including the content, use and value of health and other early care services; parenting beliefs and perspectives about child development; and young children's nutrition, exercise and early literacy activities.

# Information on Arizona's Young Children from the 2007 National Survey of Children's Health

The National Survey of Children's Health was conducted in both 2003 and 2007, sponsored by the Maternal and Child Health Bureau and overseen by the National Center for Health Statistics and the Centers for Disease Control and Prevention. The telephone survey of at least 1,700 households from each state focused on a specific child in each household. The survey provides a broad range of information about children's health and well-being that allows comparisons among states as well as nationally. Some questions relate specifically to children five and under; others relate specifically to older children, and others relate to all children. In 2007, there were 1,769 Arizona surveys completed overall, 568 for children birth through five.

The survey itself includes questions related to children's health status, the use and content of children's health services, family activities that relate to children's health and development and neighborhood factors that relate to a healthy environment for children.

Table One shows Arizona results from the 2007 Survey of Children's Health and compares those with the nation as a whole on key questions where information on children birth to five is available. In some instances, the information for the entire birth to seventeen population also is provided.

#### Table One: 2007 National Survey of Child Health: Arizona and the United States

		CHILDRI	EN 0-5	CHILDREN 0-17		
ategory	Descriptor	Arizona	U.S.	Arizona	U.S.	
Health Status						
Child Health Status	Report excellent/very good	82.8%	86.7%	80.7%	84.4%	
Oral Health Status	Report excellent/very good	71.7%	77.9%	63.7%	70.7%	
Injury	Injury requiring medical attention last year	8.4%	10.4%			
Risk of Developmental or Behavioral Problems	Moderate of high risk based on parent concerns	27.7%	26.4%			
Health Care						
Current Health Insurance	Currently insured	88.5%	92.1%	83.8%	90.9%	
Coverage Consistency	Lacking insurance at some time in year	20.9%	14.9%	22.4%	15.1%	
Preventive Health Care	Preventive medical visit in last year	94.9%	96.0%	83.9%	88.5%	
Preventive Dental Health	Preventive dental visit in last year (age 2+)	55.8%	53.5%	75.5%	78.4%	
Developmental Screening	Standardized screen received (10 mos5 years)	17.3%	19.5%			
Medical Home	Care provided in medical home	61.2%	64.0%	50.0%	57.5%	
Child's Family						
Breastfeeding	Ever breastfed	82.7%	75.5%			
Reading to Young Children	Reported reading everyday	40.7%	47.8%			
Singing and Telling Stories	Reported singing/storytelling everyday	54.9%	59.1%			
Smoking in Household	In household where someone smokes	20.3%	25.8%	24.1%	26.2%	
Watching Television	More than one hour per day (age 1-5)	58.7%	54.4%			
	More than four hours per day (age 1-5)	16.3%	12.8%			
Child and Family's Neighborhood						
Neighborhood Amenities	Parks, library, sidewalks, community center	49.7%	50.4%	46.0%	48.2%	
Neighborhood Conditions	Poorly kept or dilapidated housing	16.5%	15.1%	14.9%	14.6%	
Supportive Neighborhoods	Living in supportive neighborhood	75.0%	79.8%	79.0%	83.2%	
Safety of Child in Neighborhood	Living in usually or always safe neighborhoods	80.4%	85.5%	82.7%	86.1%	

Source: National Child Health Survey. Information retrieved at: www.nschdata.org.

Bold-faced green type indicates that question is very similar to a question asked on the 2010 Arizona Health Survey.

**HEALTH CARE FACTORS.** As Table One shows, on measures related to health coverage and physical health, Arizona's young children fare substantially worse than the country as a whole on most measures. Arizona lags the country on children's reported health and oral health status, current and continuous health insurance coverage and the presence of a medical home. For both Arizona and the country as a whole, however, young children are much more likely than older children to be insured, receive preventive care visits and have a medical home. The Medicaid and CHIP programs (in Arizona known as the Arizona Health Care Cost Containment System/AHCCCS and KidsCare, respectively) provide for a very substantial share of this coverage and have the highest use rates among young children.

### CHILD HEALTH INSURANCE COVERAGE

Arizona children are covered by a mix of public and private health insurance programs – through their parents' employers, through individual forms of coverage, and through Medicaid and CHIP programs, as well as select other public programs (Medicare, Indian Health Services, etc.). There are several sources that need to be accessed to estimate the level and sources of child health insurance coverage. The Center for Children and Families at Georgetown University has compiled comparable estimates across the fifty states on the source of health coverage for children under 19, which is shown below for both Arizona and the United States and is based upon American Community Survey data.

	Number of	SOURCE OF COVERAGE							
	Children		Individual	Medicaid/CHIP	Other	Uninsured			
All Children									
Arizona	1,808,000	46.8%	4.5%	32.5%	-	15.3%			
U.S.	78,661,000	54.8%	4.2%	28.7%	1.5%	10.8%			
Low-income Chil	dren (below 200% of pover	ty)							
Arizona	910,000	19.3%	3.4%	54.2%	-	22.9%			
U.S.	34,241,000	23.3%	3.4%	54.2%	-	17.6%			

With a much lower rate of employer-based coverage in Arizona than in the country as a whole, public programs are required to do more, particularly for low-income children, in order to reduce the number of uninsured children.

Arizona's Medicaid and CHIP programs, AHCCCS and KidsCare, incorporate some, but not all, of the practices established by many states to increase enrollment. Many states have higher levels of eligibility both for their Medicaid and their CHIP programs. In Arizona, infants up to one year of age are eligible for AHCCCS if their families earn no more than 140 percent of the federal poverty level. Children ages one to five are eligible up to 133 percent of poverty. Children between those levels and 200 percent of poverty are eligible for KidsCare.

Other differences also exist between Arizona's public coverage programs and those that exist in other states. Arizona's Medicaid and CHIP programs do not provide for presumptive eligibility or allow simplified methods for income verification that have been adopted by a number of other states. Arizona has also not lifted the ban on covering legal immigrant children until after they have been in the country five years.

While AHCCCS is an entitlement for all Medicaid-eligible children, Arizona has the discretion to limit enrollment in KidsCare to meet available state and federal funding. The freeze on KidsCare enrollment instituted in December, 2009 clearly impacts enrollment for children above 133 percent of poverty (although this is not reflected in the data above, which was collected before the freeze went into effect). However, it is reflected in the 2010 Arizona Health Survey, which identified a very small percentage of children enrolled in KidsCare. **FAMILY AND COMMUNITY FACTORS.** On the positive side (as shown in Table One), Arizona parents are much more likely to report breastfeeding their infants and much less likely to have smoking in the home, both recognized as very significant contributors to healthy child development. On the negative side, Arizona parents are less likely to read, sing or tell stories to their young children than parents in the country as a whole and more likely to have their young children watch television for extended parts of the day. The active engagement of young children with parents rather than passive engagement with television is recognized as important to strong language development, early literacy and supporting a positive life course that contributes to overall health. Table One also provides parent perceptions of the safety and supportiveness of their neighborhoods, again part of the important social determinants of a child's health. Arizona parents are less likely to report living in safe and supportive neighborhoods.

**REASONS FOR DIFFERENCES.** As the underlying survey demographics (which mirror census data) indicate, Arizona's young children are similar to the country's children as a whole in terms of family structure, but more likely to be low-income and much more likely to be Hispanic/Latino and much less likely to be White, non-Hispanic in ethnicity. These differences in poverty status and ethnicity provide some explanation for the differences between Arizona and the country on some survey measures, but do not fully account for them.

In short, the 2007 National Survey on Child Health shows where Arizona ranks on many important indicators of children's health and the factors – both health-care related and social and economic – which contribute to that health. The differences in health coverage, in particular, are ones that are subject to state policy actions, particularly around Medicaid and CHIP coverage, but there are opportunities for state policy actions to address other factors as well.



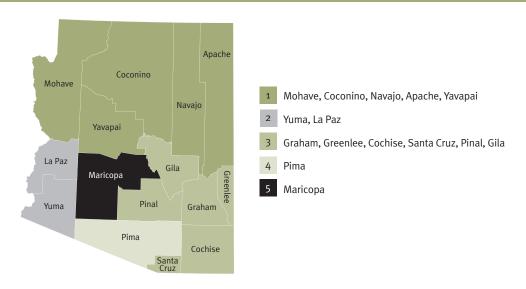
# The 2010 Arizona Health Survey

The 2007 National Survey of Children's Health provides important Arizona baseline and comparative information about child health. However, the 0-5 survey size does not enable detailed analyses for differences among geographic regions in Arizona nor by many subgroups of the population.

The 2010 Arizona Health Survey updates child health information gleaned from the 2007 Survey. It also collects much more detailed information on certain child health issues, particularly around diet and child care. These questions are covered in depth in this report, as they are very important to healthy child development and provide information and insight that is not available elsewhere. Questions similar to the 2007 Survey enable comparisons between the two surveys and greater analysis of the factors contributing to differences in survey response.

The 2010 Arizona Health Survey was conducted from May 4th to August 16th, 2010. In addition to the statewide sample of 2,148 completed interviews, an additional survey of Hispanic/Latino families in South Phoenix was conducted and is the subject of a second report.

**SURVEY DEMOGRAPHICS.** The 2,148 completed surveys were collected from five geographic regions in Arizona, shown in the map below, which allows for cross-regional comparisons. The responses were weighted to reflect response rates and select population characteristics of the Arizona child population.



### Figure One: Geographic Regions

Demographic information about the child and family include the child's gender, age, race and ethnicity, family composition, child poverty level, education level of parent(s), work status of the parent or parents and rental or home ownership status. The weighted responses are contrasted with information about Arizona's children from the most recent American Community Survey (2009 census data), as shown in Table Two. Because the questions regarding ethnicity (Hispanic/Latino origin) were asked differently from the census, the information requires some interpretation for analysis.

#### Table Two: Demographic Comparisons Between 2010 Arizona Health Survey and 2009 American Community Survey

	2010 Arizona Health Survey	2009 American Community Survey
Child Gender		
Male	51.1%	51.0%
Female	48.9%	49.0%
Child Age		
Less Than 1 Year	16.6%	16.7%
1 Year	16.2%	16.6%
2 Years	17.5%	17.1%
3 Years	16.9%	16.7%
4 Years	16.9%	16.6%
5 years	15.9%	16.3%
Child Race/Ethnicity (1)		
White, Non-Hispanic	40.9%	38.8%
Hispanic/Latino	45.1%	46.7%
Native American, Non-Hispanic	5.7%	5.5%
African American, Non-Hispanic	4.5%	4.7%
Other	3.8%	4.3%
Family Structure (2)		
Married	75.3%	66.8%
Single Parent	24.7%	33.2%
Highest Education Level/Respondent (3)		
Less Than High School	14.8%	13.9%
High School Diploma/GED Only	23.9%	21.5%
Some College/Trade School	30.9%	36.0%
B.A. and Above	30.3%	28.6%
Child Poverty Level		
Under 100%	25.3%	26.4%
Under 200%	46.8%	53.2%
Housing (4)		
Own	64.2%	67.1%
Rent	31.0%	
Other	4.8%	

There are some differences in the data source definitions, but the figures should be roughly comparable.

(1) Race and ethnicity are asked differently on the Arizona Health Survey and the American Community Survey. On the American Community Survey, Hispanic origin is asked as a separate question and individuals can designate themselves multiple races. On the 2010 Arizona Health Survey, respondents were asked for the primary race/ ethnicity and for any secondary race/ethnicity.

(2) Family Structure for the American Community Survey refers to the percentage of children in a married couple or single parent household, while the 2010 Arizona Health Survey is by household (more than one young child might have been in the household).

(3) Highest education level is for the head of household in a family (and not just a family with young children) for the American Community Survey, and the highest education level for the 2010 Arizona Health Survey is by the respondent, who might or might not be the head of household.

(4) Housing status is by respondent designation for 2010 Arizona Health Survey and by percentage of owner-occupied housing units by Census (all households).

As Table Two shows, the 2010 Arizona Health Survey is largely representative of the overall Arizona young child population on these characteristics, although the Arizona Health Survey has a higher percentage of married couple families than reported in the American Community Survey and a lower percentage of children under 200 percent of the poverty level. Analyses by race and ethnicity in this report use both primary and secondary racial and ethnic responses to describe children, with children categorized as Hispanic/Latino if they describe themselves as that on either the primary or secondary question.

The five Arizona regions that are subject to analysis also have different demographics, and this different demographic information by each region is shown in the Appendix. The following are highlights from these differences:

- Region 1 has the largest Native American and Black/African American child populations, accounting for over one-third of all young children in the region. It has a high rate of home ownership and slightly higher rate of child poverty than the state as a whole, but a much larger proportion of children in low-income families (below 200 percent of poverty). Very few respondents have advanced educational degrees.
- Region 2 has by far the largest Hispanic/Latino population, with nearly seven in ten defining that as their child's primary race. Over half of respondents have a high school diploma or less, and a much larger proportion of children are in low-income families, yet home ownership is highest in this region.
- Region 3 has the highest percentage of White, non-Hispanic children, but the highest percentage of parents who are raising their children alone and the highest proportion of children living below the poverty level.
- Region 4 has by far the lowest rate of home ownership, the lowest rate of married couple families, and a higher rate of parents who are raising their children alone. At the same time, respondents have the highest education levels, with over one-third reporting at least a bachelor's degree.
- Region 5 is the most economically secure, with the fewest children living in poverty or in low-income families. Respondents report the highest level of advanced degrees: nearly one in five and more than three times the rate of Region 1. At the same time, Region 5 respondents have equivalent home ownership rates and married couple families as respondents from the state as a whole. [See Appendix for demographics for region.]

**CHILD HEALTH STATUS.** The 2010 Arizona Health Survey asks a question that is comparable to the 2007 National Survey of Children's Health regarding how the respondent views the child's health status. Overall, 79.2 percent of 2010 respondents report their child's health as excellent or very good (with good, fair or poor the other alternatives), a little below that found in the 2007 Survey. Eight in ten (82.8 percent) describe their child's health status as excellent or very good. As stated earlier, this is significantly below the 2007 national average of 86.7 percent. Table Three shows the results on this question by several different subgroupings – poverty level, race/ethnicity and insurance coverage.

#### Table Three: Child Health Status by Diffferent Surveys and Characteristics

% Reporting Excellent or Very Good on Child Health Status

		2007 CHILD AN	D ADOLESCENT SURVEY*
	2010 Arizona Health Survey	Arizona	United States
All Respondents	79.2%	82.8%	86.7%
Poverty Status			
100% or Less	69.2%	59.3%	67.9%
100-200%	74.1%	77.9%	79.4%
200-300%	86.3%	89.0%	89.5%
300%+	93.0%	90.9%	92.9%
200% or Below	71.4%	68.9%	74.0%
Above 200%	90.4%	90.0%	91.8%
Race/Ethnicity			
White, Non-Hispanic	90.4%	90.7%	91.0%
Hispanic	66.9%	68.1%	68.4%
Black, Non-Hispanic	74.2%	77.9%	80.4%
Native American	93.5%	NA	NA
Asian, Non-Hispanic	77.6%	NA	85.0%
Other, Non-Hispanic	93.5%	NA	87.5%
Insurance Coverage			
No Coverage	70.6%	68.4%	72.9%
Private Insurance	88.8%	87.7%	90.9%
Public Health Ins/Med/CHIP	69.9%	72.4%	74.2%

\* The National Survey data for all respondents is for 0-5 year-olds, but the data for other breakdowns is by 0-17 year-olds. This should not affect general comparisons within and across the surveys.

As Table Three shows, children in families above 200 percent of the federal poverty level are much more likely to be reported in excellent or very good health than children in families below that level. Arizona children rank comparably to children across the nation in this respect. Arizona children in families with incomes below 200 percent of the poverty level are significantly less likely to be reported in excellent or very good health than their more economically secure counterparts and to lower-income children in the country as a whole.

Children designated as Hispanic/Latino by their parents are less likely to be reported in excellent or very good health than their counterparts in both the 2007 and 2010 national surveys. This is in large part explained by their income level, but the question also may be responded to differently by different cultures or other factors could contribute to the perception. In fact, in the 2010 Arizona Health Survey, only 64 percent of Hispanic/Latino children below 200 percent of poverty were reported in excellent or very good health, compared with 76 percent of white, non-Hispanic children.

Similarly, children are much less likely to be described in excellent or good health by their parents if they have no insurance coverage or are on public programs that provide health coverage for low income children and the majority of children with special health care needs (Medicaid/AHCCCS/Medicare/Arizona Long Term Care System).

The 2010 Arizona Health Survey shows a higher percentage of low-income children (below 200 percent of the poverty) are reported in excellent and very good health with health coverage (72 percent) than those without coverage (65 percent).

Overall, the data from both the 2007 and 2010 surveys indicate that family income and poverty status play a huge role in parental reports of child health status. While one in ten parents with incomes over 200 percent of poverty report their young child's health status as only good, fair or poor, three in ten parents with incomes below 200 percent of poverty report their young children's

health status as only good, fair or poor. Securing health insurance coverage for these children (most of whom are categorically eligible for AHCCCS or KidsCare) is a key step to improving health status, but addresses only one of the threats to health that must be addressed in economically struggling families.

**YOUNG CHILD HEALTH COVERAGE AND HEALTH CARE.** Compared with other states, Arizona has a higher rate of children who are uninsured and not insured continuously during a calendar year, not only as reported in the 2007 national survey but also in the most recent American Community Survey. According to the Center for Children and Families' report based upon 2008-9 Current Population Survey data, there are an estimated 275,000 uninsured children in Arizona, or 15.3 percent of all children. (The national rate is 10.8 percent, ranking Arizona 46th among states and only ahead of Florida, New Mexico, Nevada and Texas.) Most of these uninsured children (210,000) are in families with incomes below 200 percent of poverty, making them at least income-eligible for AHCCCS or KidsCare in Arizona. Although children under five are more likely than other children to have health insurance coverage, receive an annual well-child visit, and be covered under public programs (Medicaid/AHCCCS, CHIP/KidsCare or Indian Health Services), coverage for Arizona's young children is below the national average, according to the 2007 national survey.

The 2010 Arizona Health Survey provides information both on which young children have health insurance, which children are covered through AHCCCS or their parent's employer-sponsored plan, and how groups of children differ in the health services they receive.

Table Four provides some of these comparisons.

#### Table Four: Arizona Health Care Coverage and Use

	Total	Covered	Not Covered	Covered by Employer	Covered by AHCCCS	Covered by Other *
Poverty Level						
Less Than 100	453	88.7%	11.3%	11.9%	75.9%	0.9%
100 to 200	386	85.8%	14.2%	40.3%	29.1%	16.3%
200 to 300	379	90.0%	10.0%	62.7%	9.8%	17.4%
300+	576	96.9%	3.1%	92.0%	0.7%	4.2%
Total**	1,794	91.0%	9.0%	54.4%	27.7%	8.8%
Ethnicity						
White, Non-Hispanic	1,028	93.0%	7.0%	62.0%	18.9%	12.2%
Hispanic	825	85.8%	14.2%	31.3%	40.1%	14.4%
Black	125	92.8%	7.2%	56.8%	33.6%	2.4%
Asian/Pacific Islander/Hawaiian	50	100.0%	0.0%	90.0%	6.0%	4.0%
Native American	89	88.8%	11.2%	47.2%	37.1%	4.5%
Total**	2,117	90.2%	9.8%	49.8%	28.5%	12.0%
Household Type						
Married	1,615	91.4%	8.6%	60.7%	19.4%	11.2%
Single Parent	531	87.0%	13.0%	18.5%	56.0%	12.4%
Total**	2,137	9.3%	9.7%	50.3%	28.5%	11.6%
Regular Source of Care						
One Person is Personal Doctor		81.9%	59.9%	83.5%	79.5%	
More Than One Person		14.9%	18.9%	13.3%	17.3%	
No Person		3.1%	21.3%	3.2%	3.1%	
Routine Well-Child Check-up						
Within One Year or Less		95.7%	86.0%	96.8%	93.2%	
Routine Dental Visit (2-5 Year-old	s)					
Within One Year or Less		56.6%	44.4%	53.0%	60.2%	

\* Covered by other includes individually purchases care, KidsCare, Medicare, other public coverage, other private coverage, and military care.

\*\* Different numbers of respondents provided income that could determine poverty status and race and ethnicity information, so the totals are different.

As Table Four shows, most young children have health coverage at all income levels. However, it is only at the highest level (300 percent of poverty or above) that almost all children have health insurance. Almost two-thirds of children without health coverage (66 percent) live in families with incomes below 200 percent of the poverty level, which should make them income-eligible for AHCCCS or KidsCare. Virtually all live in families below 300 percent of poverty, although those between 200 percent and 300 percent of poverty are not eligible under Arizona's income guidelines for its CHIP program.

The source of coverage by income varies far more than the presence of coverage. Fifty-four percent of children are covered through one of their parents' employer health coverage plans. However, this varies from 12 percent of children in poverty to 92 percent of children at 300 percent or more of poverty. Although the sample size is too small to provide detailed analysis of either Black/African American or Native American/American Indian children, insurance coverage rates for both are very close to those for White, non-Hispanic children, although children are much more likely to be covered by public as opposed to private insurance.

National studies show that rising healthcare costs have resulted in reductions in employer-sponsored health coverage, particularly in providing dependent or family coverage (as opposed to employee-only coverage) in small and medium-sized companies and in companies in the lower two-thirds of median overall wages. The 2010 Arizona Health Survey shows this impact. There is a high rate of children in households with incomes above 200 percent of poverty who lack insurance even though most have a parent with full-time employment.

The survey also shows the importance of AHCCCS in providing health coverage to Arizona's children, with over three-quarters of children under poverty covered by AHCCCS and almost one-third of children at the 100 percent to 200 percent of poverty level covered. Both AHCCCS (which covers children under age one up to 140 percent of poverty and children 1 to 5 up to 133 percent of poverty) and KidsCare (which covers children birth to five between AHCCCS and 200 percent of poverty) are jointly funded by the state and federal government, with the federal government picking up the majority of the costs.

There are very significant differences in insurance coverage by ethnicity. A much larger percentage of young Hispanic/Latino children are uninsured. In fact, they represent 56 percent of the total uninsured population. Parents report almost all of these children (99 percent) as being born in the United States. Therefore, they are citizens eligible for coverage under AHCCCS and KidsCare. However, if some of these children have parents who are undocumented, the parents may be reluctant to apply for coverage due to concerns that an application for public benefit may raise immigration issues for all members of the household. Outreach from trusted messengers is likely to be a key to raising enrollment levels among eligible Hispanic and Latino children.

While Hispanic/Latino parents themselves are more likely to be in the workforce than other survey respondent groups, they are much less likely to have employer coverage for their children (31 percent versus 62 percent for White, non-Hispanic children), which makes use of public programs that much more critical to ensuring full coverage. These differentials in coverage also hold for regions, with Region 2 and Region 3 (those with the largest Hispanic/Latino populations) having the higher rates of reported lack of child insurance coverage (13.7 percent and 13.6 percent, respectively). Outreach efforts in these geographic areas are particularly important to enrolling eligible children.

Under the federal Child Health Reauthorization Act (CHIPRA) of 2009, states are provided with a number of options and incentives to increase enrollment in both Medicaid and CHIP. Many states have taken steps to streamline and simplify eligibility and re-enrollment procedures and conduct outreach campaigns to increase child participation in both CHIP and Medicaid. Coverage is a first step to not only treating illness and injury but also promoting healthy development.

There are slight differences in the degree to which children with different types of coverage (e.g. employer-union based coverage through parent or AHCCCS) report having a regular source of medical care, having a routine or well-child visit in the prior year, and (for 2-5 year-olds) having a dental visit in the prior year. However, there are much larger differences in access to health care between children with health insurance and those who lack coverage.

While 97 percent of children with health insurance have a regular source of medical care, only 79 percent of those not covered have a regular source. Similarly, the likelihood of having a routine or well-child check-up (97 percent to 86 percent) and a dental visit (57

percent to 44 percent) is much higher among children who are insured. In fact, children covered by AHCCCS report higher rates of dental visits (60 percent) than those covered by employer-sponsored plans (53 percent). This is likely due to the fact that many employer-sponsored plans lack dental coverage, yet AHCCCS provides such coverage.

In short, securing health insurance coverage is not the answer to meeting children's health needs, but it is a start and leads to more regular, preventive health and dental care services which can contribute to that healthy development. Nearly two-thirds of children not insured likely are eligible for AHCCCS or KidsCare. Virtually all would be eligible if the eligibility level for young children were raised to 300 percent of poverty. Outreach (particularly within the Hispanic/Latino population), streamlining eligibility and renewal processes, and expanding eligibility all hold promise to increasing child health insurance rates and therefore the provision of primary and preventive health care.

**PRESENCE OF SPECIFIC CHILD HEALTH CONDITIONS.** The 2010 Arizona Health Survey also asked a number of questions about specific child health conditions including asthma, ADHD, Asperger's syndrome, autism and other developmental or behavioral concerns (include Cerebral Palsy, Down's syndrome and congenital birth defects, among others). Fortunately, most of these are rare occurrences, and the small number of responses did not provide for subgroup analysis.

The exception to this was asthma, with 7.1 percent of parents of young children indicating a doctor had told them their child had asthma. (For the 2003 National Survey of Child Health, 4.0 percent of Arizona parents reported asthma had affected their 0-5 child in the last twelve months compared with a national rate of 6.3 percent.) Asthma reports are highest in the three most rural regions and among Native Americans, in particular, with 18.0 percent reporting asthma, compared with 5.1 percent of White, non-Hispanics, and 8.8 percent of Hispanics/Latinos.

While there were a relatively small number of Native American responses, these differences were pronounced and statistically significant, deserving additional public health attention. Asthma is the leading cause of school absence among elementary school children. Environments with poor air quality can trigger attacks. National studies have shown much higher rates of asthma in non-White ethnic groups generally, a share of which can be attributed to housing conditions and air quality.

**CHILD NUTRITION AND EXERCISE.** The 2010 Arizona Health Survey asks eight different questions about what and where young children eat and one question about the amount of exercise they receive. These questions are asked for all children ages two through five. A summary of responses to the eight questions about nutrition is provided in Table Five, with selected additional breakdowns of the questions, including by child age (2-3 year-olds and 4-5 year-olds).

#### Table Five: Child Nutrition Questions (Children 2-5 Only)

During a typical day, does your child:

- 1 Drink one or more glasses or boxes of 100% fruit juice, such as orange or apple juice?
- **2** Eat one of more servings of fruit, such as an apple or orange?
- **3** Eat one of more servings of vegetables like green salad, green beans, or carrots? Do not include fried potatoes such as French fries or hash browns.
- 4 Drink milk or have milk on (his/her) cereal?
- 5 Drink one or more servings of soda, such as Coke or 7-UP, or other sweetened drinks, such as fruit punch or sports drinks? Do not count diet drinks.
- 6 Eat one or more servings of sweets such as cookies, candy, doughnuts, pastries, cake, or popsicles?
- 7 Eat fast food? Include fast food meals eaten at school or at home, or at fast food restaurants, carry-out or drive-through. This is meals per week, not per day.

	1 Juice Drink	2 Fruit	3 Vegetables	4 Milk	5 Soda	6 Sweets	7 Fast Food
Children 2-5 Years Old							
None	27.7%	5.9%	13.9%	6.6%	81.3%	40.8%	39.0%
One	28.7%	16.4%	29.6%	16.7%	13.1%	39.8%	39.6%
Two	24.5%	34.8%	35.5%	31.1%	3.9%	13.5%	16.4%
Three or More	19.1%	42.9%	21.0%	45.6%	1.7%	5.9%	5.0%
Children 2-3 Years Old							
None	30.3%	4.6%	13.4%	5.9%	84.9%	40.7%	41.8%
One	28.0%	14.7%	30.4%	14.1%	11.0%	44.4%	39.5%
Two	24.5%	35.0%	33.7%	30.3%	2.9%	11.4%	14.6%
Three or More	16.7%	45.7%	22.6%	49.7%	1.2%	3.4%	4.2%
Children 4-5 Years Old							
None	24.4%	7.2%	14.4%	7.3%	77.5%	40.9%	36.1%
One	29.4%	18.2%	28.8%	19.5%	15.4%	34.9%	39.7%
Two	24.5%	34.7%	37.5%	32.0%	5.0%	15.7%	18.3%
Three of More	19.1%	39.9%	19.3%	41.3%	2.1%	8.5%	5.8%
200% of Poverty or Below							
None	19.6%	2.9%	10.9%	3.9%	80.8%	41.4%	35.1%
One	29.6%	25.0%	33.2%	13.3%	12.4%	36.5%	46.9%
Two	22.5%	29.9%	27.8%	36.3%	5.9%	16.2%	14.8%
Three or More	28.4%	42.2%	28.1%	46.5%	1.0%	6.0%	3.2%
200% of Poverty or Above							
None	34.2%	6.4%	13.4%	8.7%	86.8%	40.8%	36.8%
One	27.4%	10.3%	27.5%	17.8%	12.0%	41.4%	42.4%
Two	23.0%	41.9%	44.5%	26.2%	0.3%	11.6%	14.8%
Three or More	15.5%	41.4%	14.8%	47.4%	0.9%	6.2%	6.0%

**8** What type of milk does your child usually drink? (Totals may be more than 100% because some respondents reported more than one type.)

	Whole	2 Percent	Nonfat	Other	
Children 2-5 Years Old	26.1%	54.2%	11.6%	10.7%	
200% of Poverty or Below	17.8%	63.1%	12.3%	7.4%	
Above 200% of Poverty	36.5%	46.0%	11.0%	15.3%	

Table Five clearly shows that, even by parental reporting, many children do not receive the full complement of nutritious foods that their growing bodies deserve. They also receive more than the recommended amount of some foods.

Fewer than half of all children are reported as having three or more servings of milk per day, and a minority has five or more helpings of fruits and vegetables. While over three-quarters of parents report keeping soda from their preschoolers (4-5 year-olds), nearly two-thirds report at least one fast food meal per week, where high levels of sugar, salt and saturated fat are common. While there are differences by income level, the survey shows that changes in diet are needed at all income levels.

Despite increased attention given to childhood obesity in the United States, gaps remain in general knowledge about good nutrition practices for young children which the 2010 Arizona Health Survey highlights.

### NUTRITION AND EXERCISE FOR YOUNG CHILDREN: THE GAP BETWEEN RESEARCH AND COMMON PRACTICE

Both malnutrition and obesity in children affect lifelong growth and healthy development. The obesity rates among children, including young children, have grown substantially over the last four decades, the result of changes in both diet and exercise. Nationally, the percentage of 2-5 year-olds with BMI's showing obesity increased from 5.0 percent to 10.4 percent between 1976-80 and 2007-8. The obesity rate among low-income young children in Arizona rose from 9.7 percent in 1998 to 14.6 percent in 2008.

While obesity rates are most often reported for school-aged children and youth, there has been an equally dramatic increase in overweight toddlers and preschoolers. Further, young children are developing tastes for food and proclivities to exercise in these early years that they are likely to carry throughout life.

National nutritional guidelines for preschoolers (2-5) have been established in MyPyramid – which recognize the need to provide children healthy food options in small portions and let the child's own biology guide eating. This includes balanced options to children of fruits, vegetables, whole grains, milk (or milk substitutes for children who cannot have milk) and meat and protein.

For infants, breastfeeding is strongly recommended and known to contribute to future healthy eating and reduce the likelihood of later obesity.

For preschoolers, non-fat or two-percent milk is recommended over whole milk. One hundred percent fruit juice is not recommended at any time but meals.

Research suggests the increasing use of sugar, glucose and salt in foods generally – and foods marketed to young children, in particular – influence biological responses of young children. The American Academy of Pediatrics (as well as other groups) has recommended moderation – if there is any use at all – of fruit juices to infants, toddlers and preschoolers, with no more than a four to six ounce portion per day for children ages 2-5. Juice drinks and soft drinks are not recommended for young children at all, and other sweets are recommended as only very occasional items.

Also important is physical exercise for young children. Again, guidelines for young children are at least one hour every day of rigorous physical activity and no more than one hour of television or other screen time.

Research and evidence regarding the best nutritional practices and physical activity for young children has not reached many parents. Current work patterns, lifestyles and food options can also make it challenging to follow the best nutritional practices.

Two current dietary recommendations for young children are to limit (or eliminate) the intake of juice and to use two percent or skim milk instead of whole milk for young children. The 2010 Arizona Health Survey shows that parents report nearly half of all children receive more than one serving of juice per day, with nearly twenty percent receiving three of more per day. Meanwhile, over onequarter of parents report their children primarily drinking whole milk, with the percentages higher among higher-income children than lower-income children. Clearly, both of these reported practices are very much counter to the latest knowledge about young child nutrition and healthy development. At the same time, most families can easily change these practices without any additional cost to their families if they are presented the information. The incidence of SIDS has been reduced in the United States through public health campaigns, as parents have received information on the importance of children sleeping on their backs.

The survey question on physical activity shows that one-third of all children are not physically active for at least one hour every day of the week. Almost one in five are inactive at least four days per week. Children below 200 percent of poverty are much more likely to be inactive at least four days per week (25 percent versus 6 percent) and Hispanic/Latino children are much more likely to be inactive than white, non-Hispanic children. These can be coupled with the 2007 national survey regarding watching television for more than one hour per day (59 percent of Arizona 1-5 year-olds) and more than four hours per day among Arizona's children (16 percent of Arizona 1-5 year-olds) to emphasize the need for more exercise and less sedentary (and passive) activities for young children.

The 2010 Arizona Health Survey survey points to the need for further public health education – in Arizona and the United States as a whole – on the diet and exercise needs of infants, toddlers and preschoolers. While it also is important to focus on school-aged children, providing nutrition information at birth (and prenatally) is critical to ensuring healthy diet and exercise so that children are neither malnourished nor overfed. Primary health practitioners can play a major role in providing this information, but it also needs to be reinforced with broader public messages. Malnutrition and obesity represent two of the greatest health hazards for young children and require intentional responses that include public health campaigns.

The federal Women, Infant, and Children (WIC) program represents the major federal effort to encourage healthy eating and exercise activities among young children and their mothers and is broadly, although not universally, used in Arizona. Because of the key role WIC can play in healthy child development among lower-income families, WIC information from the 2010 Arizona Health Survey is provided in a sidebar to this report.

### WIC PARTICIPANTS

The Women, Infant, and Children (WIC) program provides nutritional counseling and supplemental foods to pregnant women and children up to five years of age and 185 percent of poverty. WIC has a strong emphasis on promoting breastfeeding and good diets and exercise for both mothers and their children.

According to the 2010 Arizona Health Survey, 45 percent of all children birth to five in households up to 200 percent of poverty participate in the WIC program, although most are eligible. The participation rate is higher among those with incomes below 100 percent of poverty (58 percent) than between 100 percent and 200 percent of poverty (41 percent), but WIC still has broad reach in both populations. Comparisons of WIC and non-WIC participants among this income group show differences in diet, exercise and other parent-reported activities, indicating that those involved in WIC are more likely to participate a variety of healthy development activities.

WIC participants report diets that are more likely to include multiple servings of fruits, vegetables and milk and less likely to have any soda drinks. They are much more likely to drink primarily low-fat or nonfat milk, with only 5 percent of WIC children drinking primarily whole milk, compared with 28 percent of children not on WIC. The same, however, does not hold for juice drinks, with 35 percent of WIC children having three or more fruit drinks a day, compared with 17 percent of children not on WIC. This may point to an area where WIC nutrition efforts could be directed to promote healthier eating.

**CHILD CARE.** The 2010 Arizona Health Survey asks a number of questions regarding child care arrangements for young children. Currently, such surveys are the only way to obtain important information on parents' use of different child care arrangements. National data is periodically available through the census (the most recent report, *Who's Minding the Kids*, is from 2005-2006), but does not provide state-level data. The way questions are asked does not allow for detailed comparisons between the census data and the Arizona Health Survey data, but both confirm relatively high use of grandparent and relative care as a source of care for young children, and infants and toddlers in particular.

Select information from the 2010 Survey on child care arrangements in provided in Table Six, with breakdowns by age, poverty status and respondent work status.

Table Six: Child Care Arrangements and			
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	Y	EARS OF AG	E	POVERT	Y LEVEL	RESPONDENT WORK STATUS		
	All	2&3	4&5	<200%	>200%	Working	Looking	Home
All Respondents, Use of Regular, Nonparental Care								
None or Less Than 10 Hours per Week	74.1%	69.0%	75.4%	84.9%	60.6%	57.0%	90.9%	94.7%
10-19 hours	4.4%	4.1%	3.8%	4.0%	5.2%	5.6%	2.0%	3.7%
20-29	5.5%	3.8%	3.8%	1.0%	5.9%	7.0%	1.0%	0.2%
30-39	6.0%	4.8%	7.6%	2.1%	10.7%	10.7%	0.3%	0.5%
40 or more	10.0%	18.3%	9.4%	8.0%	17.5%	19.7%	5.8%	0.9%
Regular Nonparental Care at Least 10 Hours per Week	25.9%	31.0%	24.6%	15.1%	39.4%	43.0%	9.1%	5.3%
For Families with Source of Regular Care, Type of Care *								
Grandparent or Other Family Member	43.5%	55.5%	27.1%	54.0%	39.6%	40.4%	46.9%	82.6%
Head Start or Preschool Program	8.9%	1.7%	22.4%	11.3%	9.0%	7.3%	17.0%	31.1%
Other Preschool or Nursery School	45.9%	39.2%	63.3%	20.9%	55.7%	44.4%	43.7%	60.8%
Childcare Center not in Someone's Home	44.4%	46.5%	65.0%	26.8%	53.6%	43.6%	35.8%	60.9%
Non-family Member Who Cares for Child in Parent's Home	9.4%	11.7%	10.3%	6.1%	9.8%	9.3%	14.9%	11.3%
Non-family Member Who Cares for Child in Member's Home	27.5%	20.8%	12.8%	30.4%	24.9%	39.6%	39.5%	7.3%
Concerns in Securing Care, All Respondents**								
Could Not Find Childcare When Needed It for a Week or Longer	7.4%	7.3%	6.7%	10.5%	6.0%	8.8%	11.8%	2.5%
Have Had to Reduce Work Hours or Quit Job Because Unable to Find or Afford Care	6.0%	8.4%	2.5%	9.6%	3.9%	5.6%	14.3%	1.8%

\* These figures are only for families who indicated they made use of at least ten hours per week of such care. Figures total more than 100% because respondents often indicated yes for more than one type of care.

\*\* These figures are based upon all respondents, whether or not they responded that they had a regular source of nonparental care.

As Table Six shows, almost three-quarters of parents of young children report no regular child care arrangements for their young children that are for ten hours a week or more. The majority (57 percent) of working parent respondents report having no such child care arrangements. Overall, families who do report regular child care often identify more than one source of care. Grandparents or other family members are – with child care centers, preschools, and nurseries – very common sources of care for those who report care. The survey reports a very small percentage of all children receive a government subsidy (in FY2008, Arizona's child care subsidy program served approximately 29,500 children monthly, 20,000 of them zero to five, or only 5 percent of the overall young child population).

Further, a significant share of working families, and particularly those looking for work, report some difficulty finding child care, and 14 percent of those looking for work report having had to reduce hours or quit a job because of the absence of affordable child care.

For some parents, child care is a necessity. The survey shows that parents make very significant use of relatives as well as formal child care providers in offering this care. The survey also shows that the lack of affordability and availability of regular child care can be a barrier to some families in securing or sustaining their work.

Research is clear that quality matters in providing child care, and that high quality care also can identify and respond to a full range of child needs for healthy development. There is a fundamental mismatch, however, between what many parents can afford to pay for care and what is required to ensure that care is of high quality. Survey research also shows that grandparents and other friends and relatives are a key resource in providing care and the preferred source of care in many instances, particularly for very young children. These family, friend and neighbor caregivers often have no desire to become part of a paid or professional child care community. Nonetheless, they may still be receptive to and benefit from information and support. The survey also provides information on the role that child care providers play in performing developmental assessments of young children. Two questions ask parents whether a doctor, health provider, teacher or child care provider asked parents to "fill out a checklist of concerns about the child's learning, development, or behavior" or "have child roll over, pick up small objects, stack blocks, throw a ball, or recognize different colors?" Both questions relate to the degree to which someone outside the child's family may have conducted some form of developmental assessment of a child. In both instances, children with a regular source of child care had higher response rates (44 to 35 percent on the first question and 51 to 40 percent on the second question), indicating that child care providers can play an important role in ensuring that developmental assessments occur.

# Arizona clearly has a stake in supporting both formal child care (through reimbursement and regulation) and informal child care (through information and support) as a key component of an overall system supporting children's healthy development.

**OTHER FAMILY CONDITIONS AND DEVELOPMENTAL SUPPORTS.** Parents are their children's first and most important teachers. The 2010 Arizona Health Survey poses specific questions regarding parental activities to support child learning and development – regarding days per week a parent or family member spends reading or looking at picture books and playing music or singing songs with the child. The 2010 Arizona Health Survey also asks about days per week the child goes on outings to a park, store or playground and, more specifically, days per month the child goes to a park and to a library.

The 2007 national survey shows that Arizona ranks below the country nationally on the first set of questions regarding reading, singing and storytelling, although differences in the actual questions do not enable numeric comparisons between the 2007 National and 2010 Arizona Health Survey. The 2010 Arizona Health Survey allows for comparisons by subgroups that can identify areas where greater attention to such parent-child interactions are needed. Table Seven provides these comparisons.

	READ OR TELL STORIES PER WEEK		PLAY MUSI	PLAY MUSIC OR SING PER WEEK			GO TO PARK PER MONTH			GO TO LIBRARY PER MONTH		
	Every Day	3-6 Days	2 or Less	Every Day	3-6 Days	2 or Less	o-1 Days	2-3 Days	4 or More	None	1-2 Days	3 or More
State Totals	65.6%	24.0%	10.4%	71.1%	18.6%	10.3%	19.4%	24.9%	55.7%	57.5%	20.1%	22.4%
Regions of State												
Region 1	74.0%	19.7%	6.2%	71.8%	23.0%	5.2%	22.7%	23.6%	53.7%	60.6%	15.7%	23.7%
Region 2	43.2%	32.4%	24.4%	60.0%	25.3%	14.7%	25.6%	24.0%	50.4%	59.7%	24.1%	16.2%
Region 3	61.4%	29.0%	9.7%	71.6%	17.0%	11.4%	17.8%	32.4%	49.8%	67.0%	17.7%	15.3%
Region 4	63.4%	26.0%	10.6%	68.8%	22.9%	8.3%	24.4%	27.5%	48.1%	57.6%	22.5%	19.9%
Region 5	66.7%	23.1%	10.2%	71.9%	16.8%	11.3%	17.7%	23.5%	58.8%	54.8%	20.4%	24.8%
Poverty Status												
Below 200%	59.0%	25.7%	15.3%	63.1%	24.4%	12.4%	16.0%	27.0%	57.0%	57.0%	17.0%	26.0%
Above 200%	74.9%	18.0%	6.9%	79.5%	15.3%	5.2%	24.0%	26.0%	50.0%	52.0%	26.0%	22.0%
Race/Ethnicity												
White Non-Hispanic	76.4%	18.2%	5.3%	75.9%	17.7%	6.4%	18.4%	20.7%	60.9%	47.0%	27.4%	25.6%
Hispanic	50.4%	32.4%	17.2%	61.9%	22.7%	15.4%	19.7%	31.0%	49.3%	70.0%	11.7%	18.3%
Black/African American	71.2%	13.6%	15.2%	84.8%	8.0%	7.2%	33.9%	11.3%	54.8%	62.3%	18.0%	19.7%
Native American	65.2%	29.3%	5.6%	82.0%	12.4%	5.6%	12.8%	25.5%	61.7%	72.3%	4.3%	23.4%
Educational Status												
High School or Less	52.4%	32.5%	15.1%	61.1%	22.6%	16.2%	17.7%	31.9%	50.4%	70.9%	12.5%	16.6%
Some College/Trade	65.7%	26.6%	7.7%	76.7%	12.7%	10.5%	24.2%	17.7%	58.1%	64.2%	17.7%	18.1%
College Degree +	77.2%	15.7%	7.2%	77.4%	17.4%	5.2%	19.3%	24.9%	55.8%	41.8%	27.8%	30.4%

Reading to children, as well as storytelling, singing and other play, is important for language development and early literacy and for a child's social and emotional development. Table Seven shows that there are differences in the proportion of children read or told stories to everyday – by income level, parental education level and child ethnicity. There also are differences by geographic area. Region 2, which has the largest Hispanic/Latino population, has the lowest percentage of children read or told stories every day. Similar but less pronounced differences exist for reading and playing music. There are fewer differences in parents taking their children to parks and libraries, with lower-income children actually more likely to make extensive use of these facilities. By contrast, children from Region 2 also are less likely to use parks or libraries than children from other regions of the state.

Programs such as Reach Out and Read have proven to be successful in promoting reading and other forms of parent-child interactions. Such programs also provide families with reading materials in different languages. When parents whose native language is not English are given children's books in their native language and encouraged to read to their children, reading to children increases. Similarly, books with stories that reflect the traditions and cultures of the children offer greater opportunities for parent and child discussions. Promoting programs such as Reach Out and Read and working with Native American and Hispanic/Latino groups to increase access to linguistically and culturally-appropriate books for young children can increase early learning. Libraries as well as health practitioners are key resources for such materials and support.

## Conclusion

This report summarizes some of the key information in the 2010 Arizona Health Survey and provides additional context from other national survey and state data about Arizona's children. There remains substantially more information to be mined from the survey to address more specific questions and issues.

Survey responses indicate specific areas for both public and community action. These areas have been highlighted in the report and are summarized below:

- Increase efforts to ensure all children have health insurance coverage, with a particular focus upon AHCCCS and KidsCare enrollment through outreach activities to specific populations, streamlined enrollment and re-enrollment, and expanded coverage options for children in families with incomes between 200 percent and 300 percent of poverty.
- Develop public and community education campaigns that emphasize healthy eating and exercise among young children and their families to address child obesity and promote child health.
- Support both formal child care (through reimbursement and regulation) and informal child care (through information and community support) in promoting healthy child development.
- Promote early literacy programs such as Reach Out and Read. Work with Hispanic/Latino and Native American groups to develop strategies for ensuring access to and promotion of linguistically and culturally enriching early literacy materials.

In three of these areas, primary child health practitioners play a key role – including but going beyond providing traditional clinical health services. Most young children have a regular source of health care, and the health provider is therefore in the position to be at least a first responder to both biological and social determinants of health and to encourage and support parents in all aspects of child nurturing and development. This, in turn, requires attention to how public policies support primary care practitioners in such roles. The survey shows that there continue to be opportunities to strengthen such primary care practice.

Even more fundamentally, the report emphasizes the need to support parents in being the child's first and most important teacher, nurse and safety officer. This requires attention to ensuring that young children have their basic needs met, with access to a full range of opportunities for growth and development as they explore the world. Children who are excluded – by reasons of income, geography, gender, language, race or special need – suffer as a result. Insuring the inclusion of all young children requires intentional public efforts to ensure that their parents are equipped to succeed, economically and socially, as well.

# Appendix

#### Appendix: Comparisons by Five Regions in Arizona

	Statewide	Region 1	Region 2	Region 3	Region 4	Region
2000 Population (census)						
Total	5,130,632	605,762	179,741	429,234	843,746	3,072,149
0-5 Year-olds	263,042	28,552	9,419	20,551	38,175	166,345
Child Gender						
Male	51.1%	51.3%	50.7%	51.4%	50.9%	51.0%
Female	48.9%	48.7%	49.3%	48.6%	49.1%	49.0%
Child Race/Ethnicity (1)						
White, Non-Hispanic	40.9%	49.1%	21.0%	43.0%	36.8%	41.3%
Hispanic/Latino	45.1%	19.8%	73.6%	41.9%	50.4%	46.6%
Native American, Non-Hispanic	5.7%	21.9%	0.8%	9.2%	4.2%	3.5%
African American, Non-Hispanic	4.5%	6.0%	1.4%	2.6%	4.2%	4.8%
Other	3.8%	3.1%	3.2%	3.2%	4.4%	3.8%
Family Structure (2)						
Married	75.3%	75.6%	76.9%	69.6%	65.2%	78.0%
Single Parent	24.7%	24.4%	23.1%	30.4%	34.8%	22.0%
Highest Education Level/Respondent (3)						
Less Than High School	14.8%	10.1%	23.0%	15.7%	17.9%	14.3%
High School Diploma/GED Only	23.9%	31.1%	29.9%	19.3%	18.8%	24.1%
Some College/Trade School	30.9%	35.2%	26.4%	40.3%	28.4%	30.1%
B.A. and Above	30.3%	23.6%	20.7%	24.7%	34.9%	31.5%
Child Poverty Level						
Under 100%	25.3%	28.2%	25.6%	32.3%	24.8%	24.0%
Under 200%	46.8%	58.8%	59.6%	58.2%	47.0%	42.4%
Housing						
Own	64.2%	78.9%	82.1%	65.0%	49.8%	64.1%
Rent	31.0%	17.3%	13.8%	30.5%	46.0%	30.8%
Other	4.8%	3.8%	4.1%	4.5%	4.2%	5.1%
Child Health Status						
Excellent/Very Good	79.2%	91.9%	71.5%	80.2%	78.9%	77.5%
Good/Fair/Poor	20.8%	8.1%	28.5%	19.8%	21.1%	22.5%

There are some differences in the data source definitions, but the figures should be roughly comparable.

(1) Race and ethnicity are asked differently on the Arizona Health Survey and the American Community Survey. On the ACS, Hispanic origin is asked as a separate question and individuals can designate themselves multiple races. On the 2010 Arizona Health Survey, respondents were asked for the primary race/ethnicity and for any secondary race/ethnicity.

(2) Family Structure for the American Community Survey refers to the percentage of children in a married couple or single parent household, while the 2010 Arizona Health Survey is by household (more than one young child might have been in the household).

(3) Highest education level is for the head of household in a family (and not just a family with young children) for the American Community Survey, and the highest education level for the 2010 Arizona Health Survey is by the respondent, who might or might not be the head of household.

# About the Authors

### Charles Bruner

Charles Bruner serves as Executive Director of the Child and Family Policy Center, a nonprofit organization established in 1989 "to better link research and policy on issues vital to children and families." He holds an M.A. and Ph.D. in political science from Stanford University, and received his B.A. from Macalester College. He served twelve years as a state legislator in Iowa.

Through the Child and Family Policy Center, Bruner provides technical assistance to states, communities, and foundations on child and family issues. He heads the State Early Childhood Policy Technical Assistance Network (SECPTAN). Through SECPTAN, Bruner has produced a number of policy briefs on early learning and school readiness, including *Seven Things Policy Makers Need to Know About School Readiness, The ABC's of Planning and Governing Early Childhood Services, Beyond Parallel Play: Coordinating State and Community Strategies to Improve School Readiness, and Village Building and School Readiness: Closing Opportunity Gaps in a Diverse Society.* 

Bruner also serves as the national research and evaluator director for the Build Initiative, funded by a consortium of foundations and designed to help states develop comprehensive and accountable early learning systems. Most recently, Bruner completed a series of reports for the Build Initiative on federal funding streams supporting early learning and options for providing states greater flexibility in using those funding streams to improve children's health and readiness for success in school.

### Syed Noor Tirmizi

Syed Noor Tirmizi earned his Ph.D. in Sociology, with a minor in Statistics, from Iowa State University (ISU) in August 2005. Tirmizi serves as Senior Research Associate for the Child and Family Policy Center, a position he has held since 2003. He is an expert in large set data analysis and responsible for all quantitative data analysis conducted by the Center on original data sets. Tirmizi also has headed CFPC's geo-coding and geo-mapping work, including collaborating with Dr. Bruner in producing a report on all census tracts in the country by their child-raising vulnerability, *Village Building and School Readiness*.

## About the Funders

### First Things First

First Things First was created in 2006, when Arizona voters – through Proposition 203 ballot initiative – decided to set aside 80 cents from each pack of cigarettes sold in order to fund the expansion of education and health programs for children 5 years and younger. Under the terms of the proposition, decisions about how to best use the funds are made on a per-region basis by 31 councils made up of local leaders. The statewide board – which has final approval of the councils' recommendations – is responsible for ensuring that the funds are used on programs proven to work at improving outcomes for children. For additional information, please visit www.azftf.org.

### SLHI

St. Luke's Health Initiatives (SLHI) is a public foundation focused on its role as a catalyst for community health in Arizona since 1995. SLHI principally connects people, ideas and resources; functions as a message framer and non-partisan thought leader; and leverages investment opportunities for positive social change. Throughout its history SLHI has been, and will continue to be, a learning community, focused on applying strength-based approaches in the areas of health policy, technical assistance and community development. For additional information, please visit www.slhi.org.



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