

# NEEDS AND ASSETS REPORT

2008



 **FIRST THINGS FIRST**

**Cochise**

Regional Partnership Council



## **First Things First**

Cochise Regional Partnership Council

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### **2008 Needs and Assets Report**

Submitted in accordance with ARS 8-1161. Each regional partnership council shall submit a report detailing assets, coordination opportunities and unmet needs to the board biannually. The regional partnership council's needs and assets assessment shall be forwarded to the board for final approval no later than September 1 of each even-numbered year, beginning in 2008. The board shall have discretion to approve or reject a council's assessment in whole or in part or to require revisions. The board shall act on all needs and assets assessments no later than October 1 of each even-numbered year, beginning in 2008.

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**T**he mission of First Things First (FTF) is to increase the quality and access to early childhood programs that will ensure that a child entering school arrives healthy and ready to succeed. The governance model of First Things First includes a State-level Board (twelve members in total, nine are appointed by the Governor, with three ex-officio, non-voting members that include the Directors of the Departments of Economic Security and the Department of Health, and the Superintendent of Public Instruction). There are thirty-one Regional Partnership Councils, each comprised of eleven members appointed by the State Board. The model combines consistent state infrastructure and oversight with strong local community involvement in the planning and delivery of services.

First Things First has responsibility for planning and implementing actions that will result in an improved system of early childhood development and health statewide. The Regional Partnership Councils, represent a voluntary governance body responsible for planning and implementing strategies to improve early childhood development and health outcomes within a defined geographic area (region) of the state. The State Board and Regional Partnership Councils will work together with the entire community and the Arizona Tribes to ensure that a comprehensive, high quality, culturally sensitive early childhood development and health system is put in place for children and families to accomplish the following:

- Improve the quality of early childhood development and health programs
- Increase access to quality early childhood development and health programs
- Increase access to preventive health care and health screenings for children birth through age five
- Offer parent and family support and education concerning early child development and literacy
- Provide professional development and training for early childhood development and health providers
- Increase coordination of early childhood development and health programs and public information about the importance of early childhood development and health
- Coordinate and integrate with existing early childhood development and health programs and services

## The Cochise Regional Partnership Council

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**T**he First Things First Cochise Regional Partnership Council (Regional Council) works to ensure that all children in the Cochise County region are afforded an equal chance to reach their full potential. The Regional Council is charged with partnering with the community to provide families' with opportunities to improve their children's educational and developmental outcomes. By investing in young children, the Regional Council and its partners will help build brighter futures for Cochise County's next generation of leaders, ultimately contributing to economic growth and the county's overall well being.

To achieve this goal, the Cochise Regional Partnership Council, with its community partners, will work to create a system that builds and sustains a coordinated network of early childhood programs and services for the young children of Cochise County. As a first step, The First Things First report, *Building Bright Futures: A Community Profile*, provides a glimpse of indicators that reflect child well being in the state and begins the process of assessing needs and establishing priorities. The report reviews the status of the programs and services serving children and their families and highlights the challenges confronting children, their families, and the com-



munity. The report also captures opportunities that exist to improve the health, well being and school readiness of young children.

In the fall of 2008, the Cochise Regional Partnership Council will undertake strategic planning and set a three-year strategic direction that will define the Regional Council's initial focus in achieving positive outcomes for young children and their families. The Regional Council's strategic plan will align with the Statewide Strategic Direction approved by the FTF Board in March 2008.



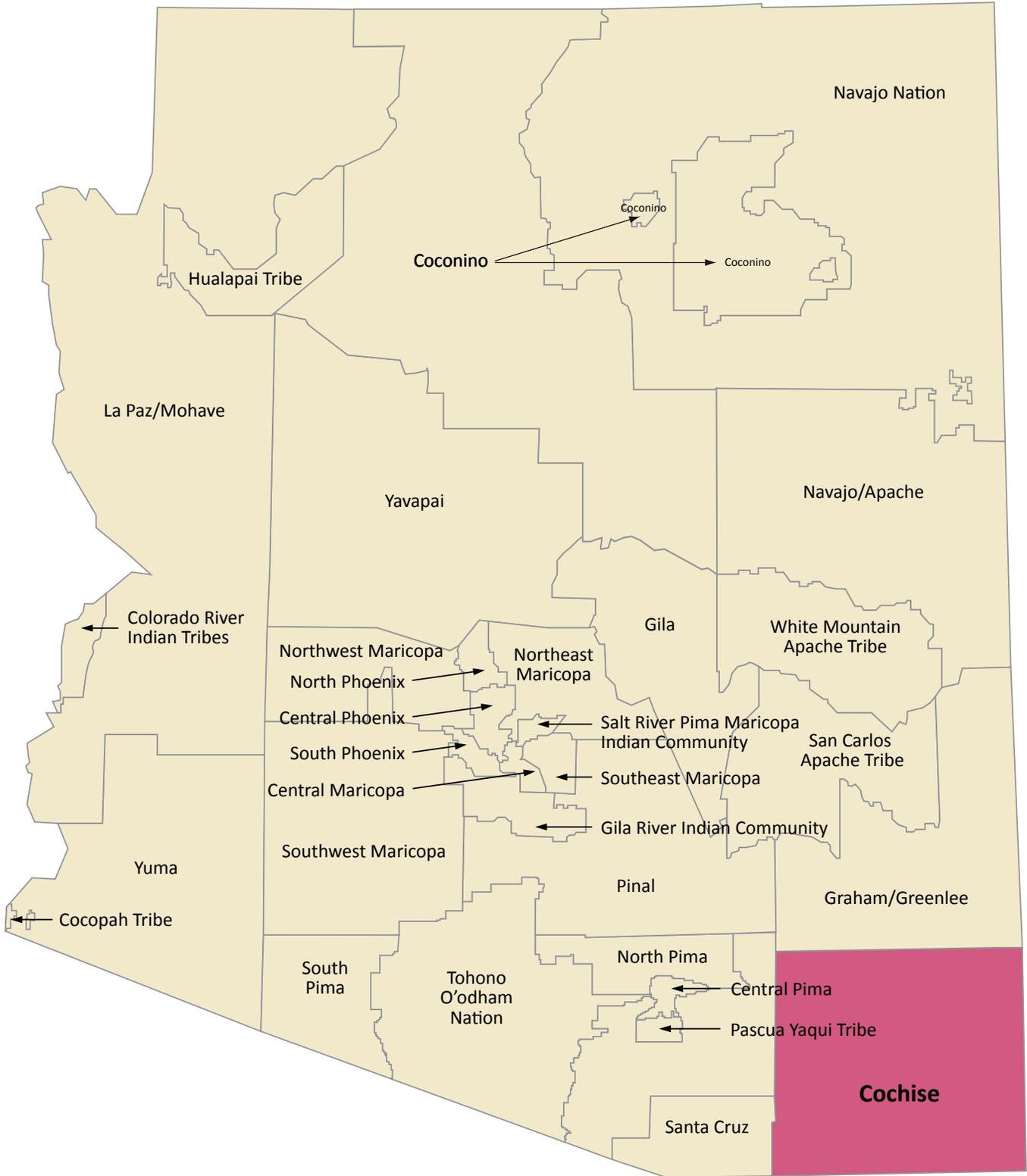
To effectively plan and make programming decisions, the Regional Council must first be fully informed of the current status of children in Cochise County. This report serves as a planning tool for the Regional Council as they design their strategic roadmap to improve the early childhood development and health outcomes for young children. Through the identification of regional needs and assets and the synthesis of community input, this initial report begins to outline possible priority areas for which the Regional Council may focus its efforts and resources.

It is important to note the challenges in writing this report. While numerous sources for data exist in the state and region, the information was often difficult to analyze and not all state data could be analyzed at a regional level. Lack of a coordinated data collection system among the various state agencies and early childhood organizations often produced statistical inaccuracies and duplication of numbers.

Additionally, many indicators that could effectively assess children's healthy growth and development are not currently or consistently measured.

Nonetheless, FTF was successful in many instances in obtaining data from other state agencies, Tribes, and a broad array of community-based organizations. In their effort to develop regional needs and assets reports, FTF has begun the process of pulling together information that traditionally exists in silos to create a picture of the well being of children and families in various parts of our state.

The First Things First model is for the Regional Council to work with the FTF Board to improve data collection at the regional level so that the Regional Council has reliable and consistent data in order to make good decisions to advance the services and supports available to young children and their families. In the fall of 2008 FTF will conduct a family and community survey that will provide information on parent knowledge related to early childhood development and health and their perception of access to services and the coordination of existing services. The survey results will be available in early 2009 and include a statewide and regional analysis.



# Cochise Regional Needs and Assets Report 2008

## Executive Summary

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**W**ith a land area the size of Rhode Island and Connecticut combined, the Cochise Region consists of 6,219 square miles. This geographically diverse region was created in 1881 by carving out the eastern portion of the previously existing Pima County to the north and is named after the famous Apache Chief Cochise. The area is well known for its year-round temperate climate with a temperature 15 to 20 degrees cooler than Phoenix and the flora and fauna of the high desert, as well as the largest annual migration path of rare hummingbirds and butterflies, enjoyed by nature lovers from around the country.

Cochise County consists of approximately 28 communities, including the incorporated cities of Tombstone, Benson, Willcox, Huachuca City, Sierra Vista, Bisbee, and Douglas. Sierra Vista is the largest of these cities, partly because it includes the historic military base, Ft. Huachuca. It is also one of only three counties in Arizona that does not have an Indian Reservation within its boundary. Cochise is bordered by Graham, Greenlee, Pima, and Santa Cruz counties, with its southern line bordering the Mexican state of Sonora, making this area a true border community.

The massive land area that is Cochise brings with it many challenges. Services and opportunities that should ideally be afforded to all children are extremely limited and spotty, leaving many without easy access. Several factors contribute to this but poverty, lack of transportation, citizenship status, and limited available or appropriate providers are the primary reasons.

This Needs and Assets Assessment echoes some of the same concerns brought to light in the Cochise County School Readiness Partnership (CCSRP) Assessment that was completed in March of 2008 and other community assessments.

In both reports key informant interviews, surveys, and community forums helped fill in the gaps of missing, incomplete, inconsistent, and not always accurate data. Many indicators that can effectively assess children's growth and development are not currently or consistently measured. Another factor that is of concern in the Cochise region is that the statistical data from the communities of Ft. Huachuca and Sierra Vista may not give an accurate picture of the entire region due to the higher level of education, wealth, opportunities and resources that exist in these communities. This leaves the impression that Cochise as a whole is doing better than it is. The many rural and isolated communities that exist within the county are experiencing great hardship, and this needs to be acknowledged and addressed.

An examination of child and family indicators within Cochise sheds light on conditions that impact early childhood health and development. Almost four of ten households in Cochise County in 2006 were headed by a single parent. Teen births exceeded 30% in certain communities within the county in 2007. Grandparents in Cochise are more likely to be the primary caregiver for their own grandchildren than in any other region in the state.

Prenatal care visits and the incidence of low-birth weight babies in Cochise County as a whole match the state average however, rural areas within the county have rates that are much higher than the state averages. Early intervention, well child checks, and dental visits (Cochise infants rank over two times higher than the state

in children with tooth decay) are critical in the realm of healthy child development, yet geographic barriers and lack of parent awareness frequently impede these efforts. Infant mortality rates within Cochise County have consistently been higher than the state and national level according to the data available from 2001 to 2003. In 2007, 80% of all child deaths in Cochise County occurred to children under the age of one.

Research has shown that high quality child care is associated with many positive outcomes including language and cognitive development. Without positive learning opportunities, no matter the setting, be it home or center environment, school readiness is impacted. According to a local kindergarten survey 71% of the teachers felt that less than half of all incoming students were ready for kindergarten. When asked about the importance of preschool, 94% of the educators agreed that developmentally appropriate preschools are important in preparing a child for school. The capacity to provide quality early childhood care and education is quite limited in Cochise County. As of August 2008, the county has 37 ADHS licensed facilities. Of these, 21 are contracted with DES to accept families that qualify for child care subsidies. There are 97 DES certified homes and an unknown number of unregulated child care facilities. All but one preschool in Sierra Vista do not meet National Association for the Education of Young Children (NAEYC) recommendations for quality care. Area child care centers and home providers find it difficult to survive financially and have a limited pool of qualified teachers and caregivers.

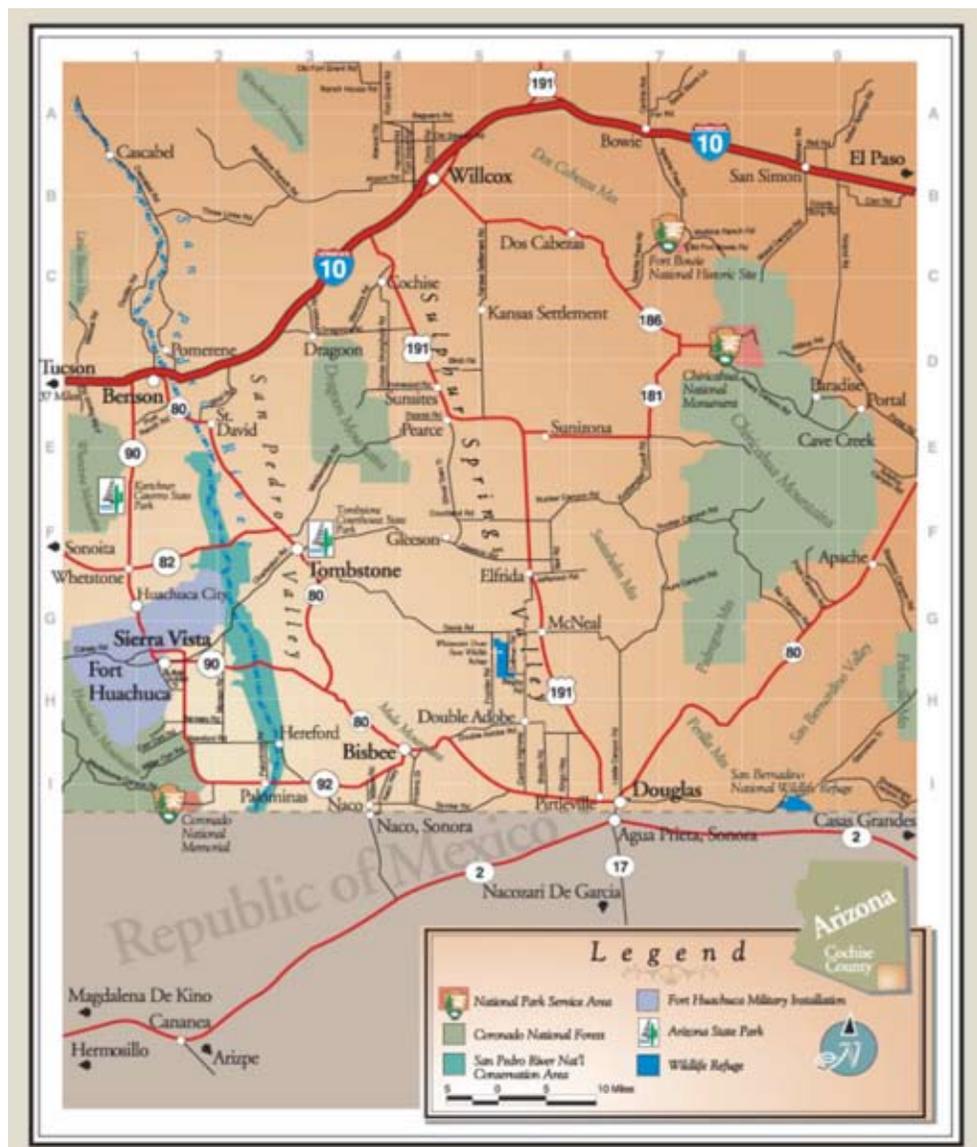
Another important indicator of quality is the education and experience of the early childhood workforce. Nearly one-third (32%) of the early childhood education workforce has less than a high school diploma and 33% of the workforce has a high school diploma or GED. There is a profound shortage of professional development opportunities, thus making it difficult for teachers and caregivers to increase skills or work toward advanced academic degrees. Research shows that the educational level of the staff providing services to young children is directly related to the level of quality experienced by the child.

Overall there are many early childhood needs and gaps facing this region and great challenges regarding access to and availability of resources. Quality and access to family support services are inconsistent and fragmented. While there are several programs and supports in place, there is a lack of true coordination across the county hampered by geographic dispersion and a system that is not cohesive. Public awareness of the importance of positive early childhood experiences is limited.

Many of the county's parents are on the edge economically, ineligible for AHCCCS and child care subsidies while at the same time facing hardship due to low income. Substance abuse and the related risk factors that accompany living in and around that sort of environment greatly impact children in this community. Systems are stressed that serve children and their families abusing substances, in particular the foster care system. There are issues of capacity, lack of specialized services, and the challenge of how best to serve these families. In many cases, the children experience a wide range of disabilities and needs, including mental health, so that no single approach is sufficient.

In order to overcome these challenges, a sense of urgency must be adopted in Cochise County. There needs to be a clear and consistent effort by the local community residents, parents, and agencies aimed at systemic change. The long history of collaboration that already exists in this county must be built upon. This will ultimately enable Cochise County to increase the capacity and quality of our early childhood care, education, and health system.

## Overview of Region: Cochise County



The Cochise region comprises all of Cochise County and includes the cities of Sierra Vista, Douglas, Bisbee, Benson, and Willcox. As the map above shows, this region is characterized by a mixture of small rural towns, with medium-sized urban areas close to the Mexican border. Sierra Vista is the county's largest city with its population growing twenty-eight percent to 44,870 from 1990 to 2006. This city's history and continued growth are tied to its close relationship with nearby military base, Fort Huachuca. Sierra Vista also serves as a gateway for tourists visiting the numerous wildlife areas and state and national parks in the county.

Douglas is the region's second largest urban center, with a thirty-eight percent (38%) increase in population from 12,822 to 17,660 between 1990 and 2006. Situated on the U.S.-Mexico border, manufacturing has become increasingly important to this local economy that in the past was dependent on copper mining and agriculture.

Agua Prieta, Mexico, with which it shares a border, has an influence on the political, social and economic culture of Douglas.

Bisbee is the county seat of Cochise County. It has a history of copper mining, but in recent decades the picturesque town has turned to tourism, a thriving arts community, and retirees to move its economy. As of 2007, Bisbee's population is 6,095 people. It has had a population growth of eight hundredths of a percent (0.08%) since 2000.

Located in the San Pedro River Valley, Benson's population grew by twenty-six percent to 4,820 between 1990 and 2006. The town's economy benefits as a gateway to historic and scenic attractions, such as Tombstone, the Amerind Foundation, and Karchner Caverns State Park. It has a growing community of retirees and winter visitors.

Willcox stands out as the livestock and agricultural center of the county. It has a long history of cattle ranching, and is known for its production of apples, pistachios, pecans, and hothouse tomatoes. The city grew by twenty-five percent to 3,910 from 1990 to 2006 largely due to an expanding population of retirees.

According to the 2000 U.S. Census, thirty-four percent of the county's population are children less than 18 years of age. Of the child population, twenty-six percent are in the younger than age five. In 1999, twenty-four percent of the county's children under 18 years of age lived in poverty. The county's ethnic make-up is 60% White, 32% Hispanic/Latino, 4% African American, 2% Asian or Pacific Islander, 2% reporting more than one race, American Indian 1% and 0.3% identified as "other."

## Overview of Regional Child and Family Indicators

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An examination of child and family indicators within Cochise County sheds light on conditions impacting early childhood health and development needs and assets in various communities. The overall population in Cochise County grew at a slower rate than the rest of the state, and children birth to age five made up a smaller percentage of the population in Cochise County than in the rest of the state. Families in Cochise County are primarily White and Hispanic, with a small Native American population. While language primacy and fluency information is not available for children ages birth to five, there is a large Spanish-only speaking population due to its proximity to the U.S./Mexico border.

There are a few family patterns of note. First, almost four of ten households in Cochise County in 2006 were headed by a single parent. Secondly, teen births exceeded thirty percent in certain communities in Cochise County in 2007. Finally, grandparents in Cochise County are more likely to be the primary caregiver for their own grandchildren than in other regions of the state.

In terms of employment, income, and poverty, Cochise County unemployment numbers match state estimates closely. However, rural areas and small towns have higher unemployment rates that are not easily apparent due to low unemployment rates within the larger cities. The family median income is below the state average.

There are also important differences in Cochise County for new mothers. The rate of college-educated mothers giving birth in Cochise County is significantly higher than the state average due to the population density at Fort Huachuca and Sierra Vista. However, rural communities and small towns do not have this advantage. Prenatal care visits and the birth of low-birth weight babies in Cochise County closely



match state averages. Rural areas and certain communities have rates that are much higher than the state averages.

Health insurance coverage in Cochise County is uneven and is dependent on education, income, and the availability of insurance options of employers. It should be noted that the Chiricahua clinics in Elfrida, Bisbee and Douglas are the only full service medical facilities that are open to all residents regardless of their ability to pay. However, the County Health Department offers free immunizations year round. It should also be noted that Forty-six percent of all births in Cochise County in 2007 were paid for by public payer (Arizona Health Care Cost Containment System AHCCCS). Although there is little regional data on dental exams, dental coverage in the county is sparse and access is distributed unequally, partly due to the geographic dispersion of residents.

Child abuse and neglect is a problem in Cochise County as in the rest of Arizona. Over 1000 reports of child maltreatment are reported each year, with seven to thirteen percent of those reports substantiated. The number of foster care placements increased by fifty percent from 2000 to 2005.

Educational attainment information for children from birth to five years of age is largely unavailable. Cochise County's high school graduation rates are above the state and national averages, yet vary greatly among the county's school districts.

## Overview of Regional Quality of Early Childhood Care and Education

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There are 37 licensed early childhood facilities in Cochise County. Only one is accredited by the National Association for the Education of Young Children (NAEYC). According to the Cochise County Kindergarten teacher survey conducted in early 2008 by the Cochise County School Readiness Partnership (CCSRB), seventy-one

percent of the teachers felt that less than half of all incoming students were ready for kindergarten because they lacked basic knowledge and skills. Of these teachers, ninety-four percent agreed that developmentally appropriate preschool programs are helpful in preparing a child for school. The teachers surveyed believe that there is a disconnect between parents and educators since seventy-seven percent believe that parents are not aware of what it takes to make a child ready for school. Seventy-three percent of parents indicated that quality childcare was either a “pretty big or very big need”. There is broad consensus that more needs to be done to support quality early care and education opportunities.

## Overview of Regional Access to Early Childhood Care and Education

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There are many factors that affect access to childcare in Cochise County, such as geography, availability of services, awareness of available services, and parents ability to pay for care. Parents identified “access to a quality preschool program” as an issue of overwhelming concern in the Cochise County School Readiness Partnership report. Local childcare professionals also reported the need for early child care options for parents with special needs children.

## Overview of Regional Health Care for Young Children

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There is general consensus in the community that early intervention, child well checks, and dental visits is critical in the realm of child developmental needs, yet geographic and parent awareness barriers exist in Cochise County that may hamper these efforts. The number of children birth to five years of age without health insurance in Cochise County is unknown. The number of children that are immunized vary according to where they live within the county. Although there is no quantitative data for oral health checks in Cochise County, community level qualitative data reveal that it is a concern primarily due to lack of dentists that accept the publicly financed health insurance for low income families, Arizona Health Care Cost Containment System (AHCCCS).

Substance abuse and its subsequent impact on children is another critical community concern. The foster care system serving area children is overburdened, and there is a lack of training opportunities available within the wider community. However, some recent improvements in system coordination and integrated services within the community are promising examples of future opportunities for systemic change.

## Overview of Regional Family Support

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Parental and family support programs are unequally distributed in Cochise County. According to the parent survey conducted by the CCSRP, seventy-five percent of the parents stated that parenting classes are a pretty big/very big need in their community. Sixty percent stated that bilingual parenting classes are needed as well. There are no existing quantitative data sources that capture early literacy issues. The county has two existing programs in specific communities and nine public libraries that offer some basic literacy services to children birth to five years of age.

## Overview of Regional Professional Development for Early Childhood Professionals

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Key informant interviews and focus groups of early childhood professionals held in various parts of Cochise County reveal the need and desire for quality training and education. Although there are some training opportunities available, language barriers and geographic dispersion issues within the county need to be overcome. In order to promote and improve the professional development of early childhood professionals, educational opportunities are needed at multiple educational levels throughout the county. Compensation and benefits are equally important to retain these professionals in this field.

## Overview of Regional Public Information and Awareness related to Early Childhood

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Cochise County does not have a central repository of information related to early childhood concerns. The Cochise County School Readiness Partnership has made efforts to provide the community with information about the importance of the yearly years and quality services for children birth through age five. Continued efforts are needed to improve the awareness of the importance of early childhood care, education and health.

## Overview of Regional Early Childhood System Coordination

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There is general agreement among agencies within Cochise County that early childhood system coordination is desirable. However, geographic barriers and a lack of experience in the practical and contractual aspects of systems coordination often hamper efforts to build an effective system. Examples of actions to coordinate initiatives and systems for young children do exist in the region, yet the efforts have thus far been short-term and fragmented along geographic lines.





## Regional Child and Family Indicators— Young Children and Families in Cochise County

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The well being of children and families in a region can be explored by examining indicators or factors that describe early childhood health and development. Needs assessment data on indicators provide policy makers, service providers, and the community with an objective way to understand factors that may influence a child's healthy development and readiness for school and life. The indicators included in this section are similar to indicators highlighted in the statewide needs and assets report. Data in this report examine the following:

- Early Childhood Population – Race, ethnicity, language, and family composition
- Economic Status of Families – Employment, income, poverty and parents' education level
- Trends in Births
- Health Insurance Coverage and Utilization
- Child Safety – Abuse and neglect and child deaths
- Educational Achievement – Elementary school performance and high school graduation.

Every attempt was made to collect data for multiple years at each level of reporting (regional through national). Attempts were also made to breakdown the data by communities within Cochise County where possible. However, there are some items for which no reliable or comparable data currently exist.

### Summary of Regional Findings on Child and Family Indicators

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There are several important child and family indicators within Cochise County. There are a few family patterns of note. Population growth in the county occurred more slowly than in Arizona as a whole. In 2006, almost four of ten households in the county were headed by a single parent. Health insurance coverage in Cochise County varies greatly and is dependent on education, income, and the availability of insurance options. Although there is little county data on dental exams, dental coverage is uneven and access is distributed unequally, in part due to the geographic dispersion of residents and lack of acceptance of AHCCCS. Chiricahua Community Health Clinics have a dental program housed in Elfrida and a mobile dental unit that goes to various schools. While educational attainment information for children birth to age five is largely unavailable, high school graduation rates vary by school district within the county. These important child and family indicators within Cochise County may shed light on conditions impacting early childhood health and development needs and assets in the communities and the need for better data collection in rural areas.

## Regional Population

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From 2000 to 2006, the overall population of Cochise County increased by nine percent. The overall population increase for the same time period across Arizona was twenty-two percent. Cochise County is growing at a much slower rate than many other regions within the state (Table 1). While still slower than the state average of thirty-six percent (36%), there was growth in the number of children birth to age five, as the total number of children in this age range in the county grew by thirteen percent (Table 2).

**Table 1: Population Growth (all ages)**

|                       | 2000        | 2006        | % Change |
|-----------------------|-------------|-------------|----------|
| <b>Cochise County</b> | 117,755     | 127,866     | +9%      |
| <b>Arizona</b>        | 5,020,782   | 6,116,505   | +22%     |
| <b>U.S.</b>           | 273,648,273 | 301,621,157 | +9%      |

Source: US Census and PEP estimates (2000 & 2006)

**Table 2: Population Growth for Children Birth to Age Five**

|                       | 2000       | 2007       | % Change |
|-----------------------|------------|------------|----------|
| <b>Cochise County</b> | 7,966      | 8,975      | +13%     |
| <b>Arizona</b>        | 381,833    | 480,491    | +26%     |
| <b>U.S.</b>           | 19,137,974 | 20,724,125 | +8%      |

Sources: US Census and PEP estimates (2000 & 2007)

## Regional Race, Ethnicity and Language

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### Race and Ethnicity Characteristics

Residents in Cochise County are ethnically and racially diverse. According to the U.S. Census data from 2006, Arizona's racial make-up was sixty percent White, Non-Hispanic, thirty-two percent Hispanic/Latino, four percent Black/African American, five percent American Indian, and two percent Asian American (Table 3).

**Table 3: Racial Composition of Selected Arizona Counties**

| County     | African American | American Indian | Asian American | Hispanic/Latino | White, not Hispanic |
|------------|------------------|-----------------|----------------|-----------------|---------------------|
| Apache     | 1%               | 74%             | <1%            | 5%              | 20%                 |
| Cochise    | 4%               | 1%              | 2%             | 32%             | 60%                 |
| Coconino   | 1%               | 29%             | 1%             | 12%             | 56%                 |
| Gila       | 1%               | 14%             | 1%             | 16%             | 68%                 |
| Graham     | 2%               | 15%             | 1%             | 28%             | 55%                 |
| Greenlee   | 1%               | 2%              | <1%            | 45%             | 51%                 |
| La Paz     | 1%               | 13%             | 1%             | 23%             | 64%                 |
| Maricopa   | 5%               | 2%              | 3%             | 30%             | 60%                 |
| Mojave     | 1%               | 2%              | 1%             | 13%             | 81%                 |
| Navajo     | 1%               | 46%             | <1%            | 9%              | 43%                 |
| Pima       | 3%               | 3%              | 2%             | 33%             | 58%                 |
| Pinal      | 4%               | 6%              | 1%             | 30%             | 59%                 |
| Santa Cruz | 1%               | 1%              | 1%             | 81%             | 18%                 |
| Yavapai    | 1%               | 2%              | 1%             | 12%             | 84%                 |
| Yuma       | 3%               | 2%              | 1%             | 56%             | 40%                 |

Source: American Community Survey (2006)

The largest percentage of births in Cochise County in 2006 occurred among White, Non-Hispanic families (47%), followed by births to Hispanics/Latinos (43%). Cochise County had five percent (5%) more births to White, non-Hispanic mothers than Arizona (Table 4).

**Table 4: Births by Mother's Race/Ethnic Group (2006)**

|                | White Non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaska Native | Asian or Pacific Islander | Unknown      |
|----------------|--------------------|--------------------|---------------------------|----------------------------------|---------------------------|--------------|
| Cochise County | 47%<br>(841)       | 43%<br>(774)       | 5%<br>(94)                | 0.1%<br>(11)                     | 3%<br>(59)                | 2%<br>(29)   |
| Arizona        | 42%<br>(43,013)    | 44%<br>(44,862)    | 4%<br>(3,864)             | 6%<br>(6,364)                    | 3%<br>(3,136)             | <1%<br>(803) |

Source: ADHS Vital Statistics, 2006.

However, some communities such as Sierra Vista and Benson have a large population of White Non-Hispanic (57% and 80% respectively). Other communities such as Douglas, Bisbee and Naco have a much higher population of Hispanics/Latinos (91%, 64% and 100%) (Table 5).

**Table 5: Cochise County Births by Mother’s Race/Ethnic Group (2007)**

|                | Community     | Total Number of Births | White Non-Hispanic | Hispanic or Latino | Black or African American | American Indian or Alaskan Native | Asian or Pacific Islander | Unknown |
|----------------|---------------|------------------------|--------------------|--------------------|---------------------------|-----------------------------------|---------------------------|---------|
| <b>COCHISE</b> | Total         | 1,860                  | 869                | 804                | 94                        | 9                                 | 59                        | 25      |
|                | Benson        | 85                     | 68                 | 17                 | 0                         | 0                                 | 0                         | 0       |
|                | Bisbee        | 84                     | 25                 | 54                 | 0                         | 2                                 | 0                         | 3       |
|                | Bowie         | 5                      | 3                  | 2                  | 0                         | 0                                 | 0                         | 0       |
|                | Cochise       | 8                      | 4                  | 4                  | 0                         | 0                                 | 0                         | 0       |
|                | Douglas       | 340                    | 20                 | 308                | 1                         | 0                                 | 5                         | 6       |
|                | Dragoon       | 2                      | 2                  | 0                  | 0                         | 0                                 | 0                         | 0       |
|                | Elfrida       | 9                      | 5                  | 4                  | 0                         | 0                                 | 0                         | 0       |
|                | Fort Huachuca | 131                    | 81                 | 16                 | 24                        | 1                                 | 8                         | 1       |
|                | Hereford      | 99                     | 59                 | 37                 | 1                         | 0                                 | 2                         | 0       |
|                | Huachuca City | 81                     | 60                 | 13                 | 6                         | 1                                 | 1                         | 0       |
|                | Mcneal        | 13                     | 9                  | 4                  | 0                         | 0                                 | 0                         | 0       |
|                | Naco          | 25                     | 0                  | 25                 | 0                         | 0                                 | 0                         | 0       |
|                | Pearce        | 14                     | 12                 | 2                  | 0                         | 0                                 | 0                         | 0       |
|                | Pirtleville   | 17                     | 0                  | 17                 | 0                         | 0                                 | 0                         | 0       |
|                | Pomerene      | 10                     | 7                  | 2                  | 0                         | 1                                 | 0                         | 0       |
|                | Portal        | 1                      | 1                  | 0                  | 0                         | 0                                 | 0                         | 0       |
|                | Saint David   | 31                     | 25                 | 6                  | 0                         | 0                                 | 0                         | 0       |
|                | San Simon     | 9                      | 6                  | 3                  | 0                         | 0                                 | 0                         | 0       |
|                | Sierra Vista  | 728                    | 411                | 195                | 62                        | 3                                 | 43                        | 14      |
| Tombstone      | 15            | 10                     | 4                  | 0                  | 0                         | 0                                 | 1                         |         |
| Willcox        | 153           | 61                     | 91                 | 0                  | 1                         | 0                                 | 0                         |         |

Source: Arizona Department of Health Services, Vital Statistics, 2007

**Immigration Status**

Data reveals that the immigrant status of Cochise County residents may be higher than that of the rest of Arizona (Table 6). A contributing factor is the military families’ presence in Sierra Vista and Fort Huachuca as reflected with higher Asian or Pacific Islander births than other parts of the county. The largest factor, however, is the immigration into border towns like Douglas and Naco. Statewide, thirty percent of all children have at least one foreign-born parent. Although the precise number of children born to immigrant families is unknown in Cochise County, children born to immigrant families are themselves likely to be citizens. Citizenship status allows children to qualify for public benefits such as Arizona Health Care Cost Containment System (AHCCCS) KidsCare health care coverage that are generally off limits to non-citizens. Nonetheless, citizenship status does not guarantee that young children are able to access services. The exception is the Chiricahua Community Health System which accepts everyone regardless of documentation. Even though more young children in the county are likely to be citizens, the citizenship status of their parents may affect their access to services. National studies suggest that many eligible “citizen children” with non-citizen parents are unaware of services or afraid of the consequences of participating in public programs because of their legal status and citizenship.<sup>1</sup>

<sup>1</sup> Capps, R., Hagan, J. and Rodriguez, N. “Border Residents Manage the U.S. Immigration and Welfare Reforms.” In *Immigrants, Welfare Reform, and the Poverty of Policy*. Westport, CT: Praeger, 2004.

**Table 6: Immigration Characteristics (2006)**

|                       | Native Citizens      | Foreign Born Naturalized Citizens | Non-US Citizens    | Foreign-born        |
|-----------------------|----------------------|-----------------------------------|--------------------|---------------------|
| <b>Cochise County</b> | (85%)<br>112,851     | (6%)<br>7,480                     | (6%)<br>7,426      | (12%)<br>14,906     |
| <b>Arizona</b>        | (85%)<br>5,237,235   | (4%)<br>273,700                   | (11%)<br>655,383   | (15%)<br>929,083    |
| <b>U.S.</b>           | (87%)<br>261,850,696 | (5%)<br>15,767,731                | (7%)<br>21,780,050 | (12%)<br>37,547,789 |

Only County level is provided. Source: American Community Survey (2006)

### Children in Immigrant Families

Despite the large numbers of immigrants to the state, Arizona does not rank in the top ten for naturalizing citizens or providing permanent legal residency to individuals leading some to speculate that many of the immigrants living in Arizona do not have legal status in the state. As a result, many individuals of foreign origin may not seek the services they need for themselves or their children for fear of having their status questioned, even if they do have legal status to be living in the United States. Consequently, finding data to accurately describe the ethnic and language characteristics of these families is very difficult in Cochise County, as well as the United States as a whole.

There is some information available to help inform this report: The Annie E. Casey Foundation estimated in 2004 that Arizona ranked fifth in the nation for births to foreign-born mothers, at thirty-two percent. Two years later, in 2006, the National Center for Children in Poverty projected that seventy-eight percent of Arizona children born to low-income families had immigrant parents, consistent with recent surges in immigration trends from Mexico being reported by federal agencies.

Children of immigrants face challenges that children of native-born parents do not. Educational attainment of immigrant parents is often quite limited. Nationally, forty percent of children in immigrant families live with a mother or father who has not graduated from high school, compared to twelve percent of children in non-immigrant families. Parents who have fewer years of schooling may be less able to help their children learn to read. In addition, children of immigrants may be less prepared than their counterparts to start kindergarten. Nationally, three and four year old children in immigrant families are less likely to participate in nursery school or preschool programs than their peers.<sup>2</sup>

### Language Characteristics

Language characteristics, in terms of language primacy or fluency, are generally not measured in children until they reach their fifth year. As a result, data on these characteristics are usually limited to children over the age of five. Data from the most recent Kids Count and American Community Survey estimate that up to thirty-two percent) of Arizona children ages five to eighteen speak a language other than English. An examination of Cochise County data reveals that nine percent of families with young children speak English “less than well” (Table 7) and may be isolated because of this. Many of the children who reside in linguistically isolated families enter school with limited English proficiency.

<sup>2</sup> (Children’s Action Alliance. “Going Beyond the Immigration Hype: Children and Our Shared Destiny” Fact Sheet, 2006).

**Table 7: English Proficiency 5 years and older in Cochise County**

|             | % Speak Only English | % Speak English "less than well" |
|-------------|----------------------|----------------------------------|
| <b>2000</b> | 70                   | 9                                |
| <b>2006</b> | 74                   | 9                                |

Sources: U.S. Census (2000); American Community Survey (2006)

## Family Composition

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The majority of children in Cochise County live in households with two parents. The county is close in percentage of single parent families that is reported for state and national averages (Table 8). In addition, the number of single parent households dropped significantly from 2005 to 2006, according to the American Community Survey. However, it is premature to determine whether this is a trend.

**Table 8: Household Makeup of Families with Children Birth to 18 Years**

| Arizona         | 65%                       | 9%                                 | 24%                                     |
|-----------------|---------------------------|------------------------------------|---|
| County          | Married Couple Households | Male Headed Household without Wife | Female Headed Household without Husband |
| <b>Apache</b>   | 63%                       | 5%                                 | 31%                                     |
| <b>Cochise</b>  | 65%                       | 8%                                 | 26%                                     |
| <b>Coconino</b> | 61%                       | 4%                                 | 34%                                     |
| <b>Maricopa</b> | 67%                       | 9%                                 | 23%                                     |
| <b>Mohave</b>   | 55%                       | 15%                                | 27%                                     |
| <b>Navajo</b>   | 57%                       | 13%                                | 27%                                     |
| <b>Pima</b>     | 62%                       | 10%                                | 27%                                     |
| <b>Pinal</b>    | 63%                       | 12%                                | 23%                                     |
| <b>Yavapai</b>  | 63%                       | 8%                                 | 25%                                     |
| <b>Yuma</b>     | 66%                       | 6%                                 | 28%                                     |

Source: American Community Survey (2006)

Cochise County has an average of thirty-seven percent of births to unwed mothers in 2007 (Table 9). However, certain communities have a much higher percentage such as Willcox at forty-six percent, Bisbee at fifty-three percent, and Douglas at fifty-seven percent. These families may have higher risk for child abuse and neglect and may benefit from family preservation and family.

**Table 9: Births by Unwed Mothers by Community in Cochise County**

|                | Total Births | Unwed Mother | Percentage |
|----------------|--------------|--------------|------------|
| Portal         | 1            | 1            | 100 %      |
| Pirtleville    | 17           | 11           | 64.7 %     |
| Naco           | 25           | 16           | 64 %       |
| Douglas        | 340          | 194          | 57 %       |
| McNeal         | 13           | 7            | 53.8 %     |
| Bisbee         | 84           | 45           | 53.6 %     |
| Cochise        | 8            | 4            | 50 %       |
| Tombstone      | 15           | 7            | 46.7 %     |
| Willcox        | 153          | 71           | 46.4 %     |
| Bowie          | 5            | 2            | 40 %       |
| Benson         | 85           | 33           | 38.8 %     |
| Cochise County | 1860         | 688          | 37 %       |
| Huachuca City  | 81           | 27           | 33.3 %     |
| San Simon      | 9            | 3            | 33.3 %     |
| Hereford       | 99           | 31           | 31.3 %     |
| Sierra Vista   | 728          | 218          | 29.9 %     |
| Saint David    | 31           | 6            | 19.4 %     |
| Elfrida        | 9            | 1            | 11.1 %     |
| Pomerene       | 10           | 1            | 10 %       |
| Fort Huachuca  | 131          | 6            | 4.6 %      |
| Dragoon        | 2            | 0            | 0          |

Source: Arizona Department of Health Services, Vital Statistics, 2007

Since the year 2000, approximately one out of every three family households in Arizona has been headed by a single parent. Estimates indicate that many of these households are led by only mothers, while a few are led by only fathers. While this number of single-parent households might seem high, Arizona is actually right at the national average for this statistic and better than many states where single parent households can approach the fifty percent mark (i.e., Washington, D.C. and Mississippi).<sup>3</sup> One of the more reliable predictors of a child receiving early education and care services is whether or not the child's mother is both a single parent and needs to work to support the family. Nationally, in 1991, eighty-five percent of working mothers of 4-year olds used early childhood care and education programs, with that figure jumping to ninety-one percent (91%) in 1999.

### Teen Parent Households

Cochise County has slightly higher than state average births to teenage parents, with about three out of twenty (3 of 20) children being born to parents aged nineteen (19) years or younger in any given year since 2002 (Table 10).

<sup>3</sup> Hernandez, D. (2006). Young Children in the U.S.: a Demographic portrait based on the Census 2000 Report to the national Task Force on Early Childhood Education for Hispanics, Tempe, Arizona State University.

**Table 10: Percentage of Children Born to Teen Mothers\***

|                       | 2002 | 2003 | 2004 | 2005 | 2006  |
|-----------------------|------|------|------|------|-------|
| <b>Cochise County</b> | 14%  | 15%  | 14%  | 15%  | 12%   |
| <b>Arizona</b>        | 13%  | 12%  | 12%  | 12%  | 12%   |
| <b>U.S.</b>           | 11%  | 10%  | 10%  | 10%  | 10%** |

\*Teen defined as 19 years of age and under. Sources: American Community Survey, National Center for Health Statistics, ADHS Vital Statistics. \*\*Preliminary Data for 2006, 12/5/2006.

### Births to Teen Mothers

About ten percent of American teen girls between the ages of fifteen and nineteen become pregnant each year. In other words, one in five 14-year-old girls become pregnant before reaching the age of eighteen.<sup>4</sup> Once a young woman becomes pregnant, the risk of a second pregnancy increases. About one-third of adolescent mothers have a repeat pregnancy within two (2) years.<sup>5</sup> A repeat teen birth comes with a significant cost to the teenage mothers themselves and to society at large. Teen mothers who have repeat births, especially closely spaced births, are less likely to graduate from high school and more likely to live in poverty and receive welfare when compared with teen parents who have only one child while still a teen.<sup>6</sup> Despite a declining teen birth rate, teenage parenthood is a significant social issue in this country. Teen parents face significant obstacles in being able to raise healthy children. Teen parents are generally unprepared for the financial responsibilities and the emotional and psychological challenges of raising children.

Babies born to teen mothers are more likely than other children to be born at a low birth weight, experience health problems and developmental delays, experience abuse or neglect and perform poorly in school. The children of teenage parents are more likely to drop out of school, get into trouble, and have children in their teen years.<sup>7</sup>

According to the vital statistics from the Arizona Department of Health Services (ADHS) for 2007, fourteen percent of births for Cochise County were to teens ages 19 and younger. (Table 11). This percentage is close to the state average. However, certain communities within Cochise County have much higher percentages of teen births (Table 11).

4 Center for Disease Control, fact sheet, 2001.

5 Kaplan, P. S., *Adolescence*, Boston, MA, 2004.

6 Manlove, J., Mariner, C., & Romano, A. (1998). *Positive educational outcomes among school-age mothers*. Washington DC: Child Trends.

7 Annie E. Casey Foundation. KidsCount Indicator Brief: Preventing Teen Births, 2003.

**Table 11: Number & Percentage of Births by Teen Mothers**

|                | Total Births | Mother 19 years old or younger | Percentage |
|----------------|--------------|--------------------------------|------------|
| Naco           | 25           | 9                              | 39 %       |
| Cochise        | 8            | 3                              | 37.5 %     |
| Pirtleville    | 17           | 6                              | 35.3 %     |
| Pomerene       | 10           | 3                              | 30 %       |
| Bisbee         | 84           | 24                             | 28.6 %     |
| Bowie          | 5            | 1                              | 20 %       |
| Willcox        | 153          | 30                             | 19.6 %     |
| Hereford       | 99           | 17                             | 17.2 %     |
| Benson         | 85           | 14                             | 16.5 %     |
| Douglas        | 340          | 56                             | 16.5 %     |
| McNeal         | 13           | 2                              | 15.2 %     |
| Cochise County | 1860         | 261                            | 14 %       |
| Tombstone      | 15           | 2                              | 13 %       |
| Sierra Vista   | 728          | 84                             | 11.5 %     |
| Pearce         | 14           | 1                              | 7.1 %      |
| Huachuca City  | 81           | 5                              | 6.2 %      |
| Saint David    | 31           | 1                              | 3.2 %      |
| Fort Huachuca  | 131          | 3                              | 2 %        |
| Dragoon        | 2            | 0                              | 0          |
| Elfrida        | 9            | 0                              | 0          |
| Portal         | 1            | 0                              | 0          |
| San Simon      | 9            | 0                              | 0          |

Source: Arizona Department of Health Services, Vital Statistics, 2007

The state average for teenage births has remained relatively constant at around twelve percent for more than five years, but little progress has been made in reducing the prevalence of Arizona teen giving birth to a second child. From 2000 to 2006, approximately twenty-two percent<sup>8</sup> of births to teens were repeat births. In 2008, Arizona ranked forty-one out of the 50 states for the highest high school drop-out rates. Early and unintended births contribute to the drop-out rate. Many teen mothers are also challenged in the workforce to provide for their children because they lack a high school diploma. Ironically, dropout prevention studies consistently identify the need for high-quality early childhood education to prevent the high school drop-out problem, which in turn is cited in early childhood literature as one reason why children of teenage mothers often have poor early childhood outcomes themselves.

### Grandparent Households

Arizona has approximately four percent of grandparents residing with one or more grandchildren, which is higher than the national average (3.6 %).<sup>9</sup> Of the grandparents who live with their grandchildren in Cochise County, sixty-five percent report that they have the primary caretaking responsibilities. In other words, of the 48,718 households in Cochise County, there were 3,552 households with grandparents living

<sup>8</sup> Ibid.

<sup>9</sup>

with their own grandchildren under 18 years. Of those households, sixty-five percent or 2,312 had grandparents that were responsible for their grandchildren. Also, for many grandparent caregivers this responsibility is a long-term commitment.<sup>10</sup>

**Table 12: Percentage of Grandparents Responsible for Grandchildren**

| County   | Percent of Households with Children < 18 Years of Age led by Grandparents |
|----------|---|
| Apache   | 4   |
| Cochise  | 3   |
| Coconino | 4   |
| Maricopa | 1   |
| Mohave   | 2   |
| Navajo   | 5   |
| Pima     | 2   |
| Pinal    | 3   |
| Yavapai  | <1  |
| Yuma     | 2   |

Source: American Community Survey (2006)

It is critical to note that grandparent caregivers are more likely to be low income in comparison with parent-maintained families. Furthermore, many grandparent caregivers have functional limitations that affect their ability to respond to the needs of their grandchildren.<sup>11</sup>

## Employment, Income and Poverty

### Unemployment

Unemployment for a family impacts the home and family environment. Recent unemployment rates in Arizona have ranged from a high of six percent in 2002 to a low of nearly four percent (3.6%) in May of 2007. During the most recent twelve-month reporting period, unemployment in Arizona has mirrored the national trend where an economic downturn has led to higher unemployment rates. Data is presented in monthly increments because economic indicators such as unemployment are measured over much smaller periods of time than are more static social indicators (i.e., gender, ethnicity, etc.).

According to the Arizona Department of Commerce, the unemployment rate in Cochise County remained stable from May 2007 (3.4%) to April 2008 (3.9%). However, it increased somewhat in May 2008 (Table 13).

<sup>10</sup> Ibid.

<sup>11</sup> Grandparents Living with Grandchildren, 2000, census brief.

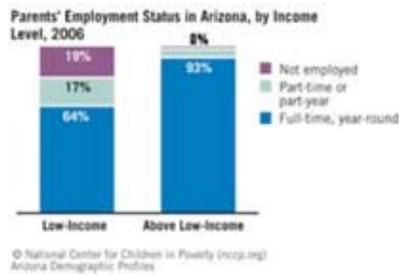
**Table 13: Unemployment Rates**

|                       | May 2007 | April 2008 | May 2008 |
|-----------------------|----------|------------|----------|
| <b>Cochise County</b> | 3.4%     | 3.9%       | 4.1%     |
| <b>Arizona</b>        | 3.6%     | 3.9%       | 4.4%     |
| <b>U.S.</b>           | 4.5%     | 5.0%       | 5.5%     |

Source: Arizona Dept. of Commerce, Research Administration (June, 2008)

It is important to note, however that according to the Arizona Department of Health Services (ADHS) Community Health Profile for 2003, unemployment in the county was 12.5 percent, which was much higher than the rate reported by the Department of Commerce.

Even Arizona parents who are employed may be struggling to make ends meet. Research indicates that almost two-thirds of these working families are living at or below the federal poverty line and are considered to be low income families.<sup>12</sup> ). The following graph shows the relationship between employment levels and categorization as low income or above low income in Arizona.



Both women and men are more likely to have higher incomes if they have greater educational success. For example, according to 2004 statistics, a woman with less than a ninth grade education could expect to earn less than \$18,000 per year, but with a high school diploma that income expectation rose to more than \$26,000 per year. With a bachelor's degree in 2004, women were reporting an income of \$41,000 per year.<sup>13[2]</sup>

**Annual Income**

Cochise County has some variation in median income. In 2003, Sierra Vista had the highest median household income in the region (\$41,700), while Douglas had the lowest (\$22,600) (Table 14). Community variation around income is partly determined by the type and availability of jobs within the county.

**Table 14: Cochise County Median Household Income by City**

| Community            | Median Household Income |
|----------------------|-------------------------|
| <b>Benson:</b>       | \$28,200                |
| <b>Bisbee</b>        | \$28,900                |
| <b>Douglas</b>       | \$22,600                |
| <b>Huachuca City</b> | \$26,400                |
| <b>Sierra Vista</b>  | \$41,700                |
| <b>Tombstone</b>     | \$27,300                |
| <b>Willcox</b>       | \$24,900                |

ADHS Community Health Profile, 2003

<sup>12</sup> National Center for Children in Poverty, nccp.org

<sup>13</sup> <sup>[2]</sup> US Census Bureau, Income by education and sex<sup>2</sup>. <sup>[2]</sup> US Census Bureau, Income by education and sex<sup>2</sup>.

<sup>[3]</sup> The median, or mid-point, is used to measure income rather than taking the average, because the high income households would skew the average income and artificially inflate the estimate. Instead, the median is used to identify income in the middle of the range, where there are an equal number of incomes above and below that point so the entire range can be represented more reliably.

The median household income in Arizona during 2006 was reported at just over \$47,000 per year, very close to the national average of \$48,000 per year. However, the median household income was significantly lower in Cochise County compared to state and national median household incomes (Table 15).

**Table 15: Median<sup>14</sup> Household Annual Income (per year – pretax)**

|                       | 2002     | 2003     | 2004     | 2005     | 2006     |
|-----------------------|----------|----------|----------|----------|----------|
| <b>Cochise County</b> | N/A      | N/A      | N/A      | \$36,027 | \$38,427 |
| <b>Arizona</b>        | \$41,172 | \$40,762 | \$41,995 | \$44,282 | \$47,265 |
| <b>U.S.</b>           | \$43,057 | \$43,564 | \$44,694 | \$46,242 | \$48,451 |

Source: American Community Survey

### Families in Poverty

Many areas in Cochise County contain households where the median annual income is at or below federal poverty guidelines. The Federal Poverty level for a family of four is \$21,200 a year (for the 48 contiguous states and D.C.).<sup>15</sup> There is a larger percentage of families in Cochise County living at or below the federal poverty level in 2006 than the national averages (Table 16).

**Table 16: Families Living in Poverty (2006)**

| <b>Arizona</b>  | <b>10%</b>   |
|-----------------|--|
| <b>County</b>   | <b>Percentage of families below 100% federal poverty level</b> |
| <b>Apache</b>   | 25%  |
| <b>Cochise</b>  | 16%  |
| <b>Coconino</b> | 11%  |
| <b>Maricopa</b> | 9%   |
| <b>Mohave</b>   | 14%  |
| <b>Navajo</b>   | 17%  |
| <b>Pima</b>     | 10%  |
| <b>Pinal</b>    | 11%  |
| <b>Yavapai</b>  | 9%   |
| <b>Yuma</b>     | 16%  |

Source: American Community Survey (2006)

Many families in Cochise County qualify for food stamps due to their low income. Table 17 below shows the number of food stamp and Children Women Infant and Children (WIC) supplemental food program recipients in cities within Cochise County in 2003.

<sup>14</sup> The median, or mid-point, is used to measure income rather than taking the average, because the high income households would skew the average income and artificially inflate the estimate. Instead, the median is used to identify income in the middle of the range, where there are an equal number of incomes above and below that point so the entire range can be represented more reliably.

<sup>15</sup> Federal Register, Volume 73, No. 15, January 23, 2008, pp. 3971-3972.

**Table 17: Food Stamp and WIC Children's Program Benefits By City in Cochise County (2003)**

|                                | Benson | Bisbee | Douglas | Huachuca City | Sierra Vista | Tombstone | Willcox |
|--------------------------------|--------|--------|---------|---------------|--------------|-----------|---------|
| <b>Food Stamps</b>             | 904    | 1,124  | 4,707   | 587           | 4,083        | 203       | 369     |
| <b>Children WIC Recipients</b> | 266    | 218    | 1,258   | 402           | 1,412        | 35        | 414     |

Source: Arizona Department of Health Services, Community Health Profile, 2003.

### Other

The impact of Fort Huachuca in Cochise County is significant. In September 2005 there were 5,511 military family members living on and off the military base. Although the total population of Huachuca City was 1,751 residents, the military base created 3,379 jobs in the county, both on and off base. Additionally, in Fiscal year 2005, Fort Huachuca spent \$830.6 million in Cochise County<sup>16</sup>. There is no question that the military base is an economic driver and a tremendous resource within the county. However, it must also be recognized that there are other impacts, including those associated with an intrinsically transient population and highly stressed families during deployment. There is a high percentage of low birth weight babies as well as high substance abuse and addiction rates among war returnees. There is also a high incidence of domestic violence and child abuse. It must also be noted that any county level data will automatically include the Fort Huachuca population. Most children on the base receive health and dental care, for example, and their comprehensive care is included in county level data, which may mask other regional trends. Also, forty percent of Sierra Vista Unified School District's 7,000 children come from Ft. Huachuca.

## Parent Educational Attainment

Studies have found consistent positive effects of parent education on different aspects of parenting such as parenting approaches, attitudes, and child rearing philosophy. Parent education can potentially impact child outcomes by providing an enhanced home environment that reinforces cognitive stimulation and increases the use of language.<sup>17</sup> Past research has demonstrated an intergenerational effect of parental educational attainment on a child's own educational success later in life and some studies have surmised that up to seventeen percent of a child's future earnings may be linked (through their own educational achievement) to whether or not their parents or primary caregivers also had successful educational outcomes.

Approximately twenty-two percent of births nationally are to mothers who do not possess a high school degree. According to data reported from 2002 to 2006, about twenty percent of mothers who gave birth in Cochise County had less than a high school diploma, which is almost identical to the state average over the same period of time (Table 18). The state rate for births to mothers with no high school degree has remained fixed at twenty percent for the past three years. However, for mothers with 1-4 years of college, the percentage of live births is higher in Cochise County than for both the state and nation primarily due to the influence of data on births reported for

<sup>16</sup> Annual Economic Impact Statement, October 1, 2004-September 30, 2005 Fort Huachuca,

<sup>17</sup> Hoff, E., Laursen, B., & Tardiff, T. (2002). Socioeconomic status and parenting. In M.H. Bornstein (Eds.), *Handbook of parenting, Volume II: Ecology & biology of parenting* (pp.161-188). Mahwah, NJ: Lawrence Erlbaum Associates.

Fort Huachuca and Sierra Vista.

**Table 18: Percentage of Live Births by Mother's Educational Attainment**

|                       |                          | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------------------|--------------------------|------|------|------|------|------|
| <b>Cochise County</b> | <b>No H.S. Degree</b>    | 23%  | 21%  | 21%  | 21%  | 19%  |
|                       | <b>H.S. Degree</b>       | 33%  | 33%  | 34%  | 35%  | 35%  |
|                       | <b>1-4 years College</b> | 38%  | 38%  | 38%  | 38%  | 40%  |
| <b>Arizona</b>        | <b>No H.S. Degree</b>    | 20%  | 21%  | 20%  | 20%  | 20%  |
|                       | <b>H.S. Degree</b>       | 29%  | 29%  | 29%  | 29%  | 30%  |
|                       | <b>1-4 years College</b> | 32%  | 32%  | 32%  | 33%  | 33%  |
| <b>U.S.</b>           | <b>No H.S. Degree</b>    | 15%  | 22%  | 22%  | N/A  | N/A  |
|                       | <b>H.S. Degree</b>       | 31%  | N/A  | N/A  | 84%  | 84%  |
|                       | <b>1-4 years College</b> | 21%  | 27%  | 27%  | 27%  | 27%  |

Source: Arizona Department of Health Services, Vital Statistics, American Community Survey

It should be noted that the educational attainment for the mothers in rural areas and smaller cities is much lower than the average for the county. This is an example of how the higher percentages of highly populated communities, such as Sierra Vista and Fort Huachuca, can skew the numbers of smaller populated areas and do not truly reflect gaps within the county.

## Healthy Births

### Prenatal Care

Adequate prenatal care is vital in ensuring the best pregnancy outcome. A healthy pregnancy leading to a healthy birth sets the stage for a healthy infancy during which in time a baby develops physically, mentally, and emotionally into a curious and energetic child. Yet in many communities, prenatal care utilization is far less than what it could be to ensure this healthy beginning. Some barriers to prenatal care in communities and neighborhoods include, the high number of non-English speaking residents, and the prevalence of inadequate literacy skills.<sup>18</sup> In addition, cultural ideas about health care practices may be contradictory and difficult to overcome, so even when health care is available, pregnant women may not understand the need for early and regular prenatal care.<sup>19</sup>

Late or no prenatal care is associated with many negative outcomes for mother and child, including:

- Postpartum complications for mothers
- A forty percent increase in the risk of neonatal death overall
- Low birth weight babies
- Future health complications for infants and children

Three percent of Cochise County's mothers in 2007 did not receive any prenatal care at all (Table 19). However, certain communities had very high percentages of mothers

<sup>18</sup> Ashford, J. , LeCroy, C. W., & Lortie, K. (2006). *Human Behavior in the Social Environment*. Belmont, CA: Thompson Brooks/Cole.

<sup>19</sup> LeCroy & Milligan Associates (2000). Why Hispanic Women fail to seek Prenatal care. Tucson, AZ.

that did not receive any prenatal care, such as Douglas, Bisbee and Elfrida (5.6%, 7.1% and 11.1% respectively).

**Table 19: Number & Percentage of Mothers with Educational Attainment**

|                       | Total Births | No Prenatal Care | Percentage |
|-----------------------|--------------|------------------|------------|
| <b>Elfrida</b>        | 9            | 1                | 11.1 %     |
| <b>Naco</b>           | 25           | 2                | 8 %        |
| <b>McNeal</b>         | 13           | 1                | 7.7 %      |
| <b>Bisbee</b>         | 84           | 6                | 7.1 %      |
| <b>Tombstone</b>      | 15           | 1                | 6.7 %      |
| <b>Douglas</b>        | 340          | 19               | 5.6 %      |
| <b>Willcox</b>        | 153          | 6                | 3.9 %      |
| <b>Benson</b>         | 85           | 3                | 3.5 %      |
| <b>Cochise County</b> | 1860         | 54               | 3 %        |
| <b>Huachuca City</b>  | 81           | 2                | 2.5 %      |
| <b>Sierra Vista</b>   | 728          | 13               | 1.8 %      |

Source: Arizona Department of Health Services, Vital Statistics, 2007

Eighty-three percent of the mothers in Cochise County received early prenatal care, slightly more than Arizona as a whole. However, there are no obstetricians or gynecologists within rural communities, and which leads mothers to go outside their community for prenatal care. According to national statistics eighty-three percent of pregnant women receive prenatal care in their first trimester, compared to seventy-seven percent in Arizona<sup>20</sup>.

One prominent indicator of whether prenatal care is obtained in the first trimester is ethnicity. In Arizona, Native American women are least likely to start prenatal care in the first trimester. According to 2005 data, 32 percent of Native American women did not start prenatal care in the first trimester, followed by Hispanic women at 30 percent, Black women at 24 percent and White women at 12 percent.<sup>21</sup> Any effort to increase prenatal care should consider these ethnic differences. There are many barriers to the use of early prenatal care, including: lack of health care insurance, transportation to clinic and doctors offices, poverty, teen-age, stress and domestic violence.<sup>22</sup>

### Low Birth-Weight Babies

Low birth weight and very low birth weight (less than 3lbs, 4 oz.) are leading causes of infant health problems and death. Many factors contribute to low birth weight, including drug use during pregnancy, smoking during pregnancy, poor health and nutrition, and multiple births. Cochise County has low birth weight rates that range greatly according to community (Table 20).

20 Child Health USA 2003, U. S. Department of Health and Human Services, Health Research and Services Administration.

21 Arizona Department of Health Services, Health disparities report, 2005.

22 <http://www.cdc.gov/reproductivehealth/products&pubs/dataaction/pdf/rhow8.pdf>

**Table 20: LBW Newborns by Community in Cochise County (2007)**

|                | Total Births | LBW Newborns <2500grams | Percentage |
|----------------|--------------|-------------------------|------------|
| Portal         | 1            | 1                       | 100 %      |
| Elfrida        | 9            | 2                       | 22.2 %     |
| Huachuca City  | 81           | 9                       | 11.1 %     |
| Benson         | 85           | 8                       | 9.4 %      |
| Hereford       | 99           | 8                       | 8.1 %      |
| Naco           | 25           | 2                       | 8 %        |
| Douglas        | 340          | 27                      | 7.9 %      |
| McNeal         | 13           | 1                       | 7.7 %      |
| Fort Huachuca  | 131          | 10                      | 7.6 %      |
| Cochise County | 1860         | 140                     | 7.5 %      |
| Sierra Vista   | 728          | 54                      | 7.4 %      |
| Willcox        | 153          | 11                      | 7.2 %      |
| Pearce         | 14           | 1                       | 7.1 %      |
| Saint David    | 31           | 2                       | 6.5 %      |
| Bisbee         | 84           | 4                       | 4.8 %      |
| Bowie          | 5            | 0                       | 0          |
| Cochise        | 8            | 0                       | 0          |
| Dragoon        | 2            | 0                       | 0          |
| Pirtleville    | 17           | 0                       | 0          |
| Pomerene       | 10           | 0                       | 0          |
| San Simon      | 15           | 0                       | 0          |
| Tombstone      | 15           | 0                       | 0          |

Source: Arizona Department of Health Services, Vital Statistics, 2007

### Pre-term Births

Pre-term births, defined as birth before 37 weeks gestation, account for nearly one-half of all congenital neurological disorders such as cerebral palsy, and more than two thirds of infant deaths.<sup>23</sup> In the previous table (Table 20), low birth weight is presented and can be considered as a proxy for pre-term births. Low birth weight has a direct link to the gestational age at which the child is born. Overall, the rates of premature birth have been rising in the U.S. over the past twenty years, with some studies pointing to advances in neonatal care capabilities, as well as a higher incidence of caesarian sections that are not medically necessary. The rate of pre-term births in the United States has increased thirty percent in the past two decades.<sup>24</sup> One half of all pre-term births have no known cause. One factor to consider is that, since 1996, the caesarean section rate has risen to thirty percent with the latest studies showing that ninety-two percent of babies delivered by C-section from 1996 to 2004 were judged after birth to be “late pre-term”, meaning they were born after thirty-four to thirty-seven weeks of pregnancy as opposed to the typical thirty-eight to forty-two weeks.<sup>25</sup>

23 Johnson, R. B., Williams, M. A., Hogue, C.J.R., & Mattison, D. R. Overview: New perspectives on the stubborn

24 Mayo Clinic. Premature births, November, 2006.

25 Preliminary births for 2005: Infant and Maternal Health National center for Health Statistics.

## Health Insurance Coverage and Utilization

### Uninsured Children

Health insurance significantly improves children's access to health care services and reduces the risk that illness or injury will go untreated or create economic hardships for families. Having a regular health care provider promotes children's engagement with appropriate care as needed. Research shows that children receiving health care insurance<sup>26</sup>:

- Are more likely to have well-child visits and childhood vaccinations than uninsured children
- Are less likely to receive their care in the emergency room
- Do better in school

When parents can't access health care services for preventive care such as immunizations, there may be delayed diagnosis of health problems, failure to prevent health problems, or the worsening of existing conditions.<sup>27</sup> Furthermore, good health promotes the academic and social development of children because healthy children can better engage in the learning process.<sup>28</sup>

From 2001 to 2005, Arizona had a higher percentage of children without health insurance coverage compared to the nation (Table 21). One reason that Arizona children may be less likely than their national counterparts to be insured is that they may be less likely to be covered by health insurance through their families' employer. In Arizona, forty-eight percent of children birth to age eighteen receive employer-based coverage, compared to fifty-six percent of children nationally.<sup>29</sup> Table Twenty-One below shows the percentage of Arizona's children without health insurance compared to the national percentage.

**Table 21: Percentage of Children Birth to Five Years Without Health Insurance Coverage**

|                | 2001 | 2002 | 2003 | 2004 | 2005 |
|----------------|------|------|------|------|------|
| <b>Arizona</b> | 14%  | 13%  | 14%  | 15%  | 10%  |
| <b>U.S.</b>    | 10%  | 10%  | 10%  | 10%  | 10%  |

Many low income families are covered by the Arizona Health Care Cost Containment System (AHCCCS) due to their low income. Forty-six percent of births in Cochise County were covered by this public health insurance (Table 22). However, certain communities have a much higher percentage of families eligible for and covered by public insurance. For example, Willcox and Douglas had over fifty-eight percent and seventy-four percent of births in 2007 paid for by AHCCCS respectively. Other communities had even higher percentages.

26 Johnson, W. & Rimaz, M. Reducing the SCHIP coverage: Saving money or shifting costs. Unpublished paper, 2005. Dubay, L., & Kenney, G. M., Health care access and use among low-income children: Who fares best? *Health Affairs*, 20, 2001, 112-121. Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2006 and 2007 Current Population Survey. Arizona Department of Health Services, Community Health Profile, Phoenix, 2003.

27 Chen, E., Matthews, K. A., & Boyce, W. T. , Socioeconomic differences in children's health: How and why do these relationships change with age? *Psychological Bulletin*, 128, 2002, 295-329.

28 National Education Goals Panel. *Reconsidering children's early developmental and learning: Toward common views and vocabulary*. Washington DC.

29 . Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2006 and 2007 Current Population Survey. Arizona Department of Health Services, Community Health Profile, Phoenix, 2003.

**Table 22: Number & Percentage of Births covered by AHCCCS**

|                       | Total Births | Public Payer for Birth | Percentage |
|-----------------------|--------------|------------------------|------------|
| <b>Dragoon</b>        | 2            | 2                      | 100 %      |
| <b>Portal</b>         | 1            | 1                      | 100 %      |
| <b>Pirtleville</b>    | 17           | 14                     | 82.4 %     |
| <b>Naco</b>           | 25           | 19                     | 76 %       |
| <b>Douglas</b>        | 340          | 253                    | 74.4 %     |
| <b>Pomerene</b>       | 10           | 7                      | 70 %       |
| <b>McNeal</b>         | 13           | 9                      | 69.2 %     |
| <b>Cochise</b>        | 8            | 5                      | 62.5 %     |
| <b>Tombstone</b>      | 15           | 9                      | 60 %       |
| <b>Willcox</b>        | 153          | 89                     | 58.2 %     |
| <b>Elfrida</b>        | 9            | 5                      | 55.6 %     |
| <b>Benson</b>         | 85           | 45                     | 52.9 %     |
| <b>Saint David</b>    | 31           | 16                     | 51.6 %     |
| <b>Bisbee</b>         | 84           | 43                     | 51.2 %     |
| <b>Cochise County</b> | 1860         | 855                    | 46 %       |
| <b>Hereford</b>       | 99           | 44                     | 44.4 %     |
| <b>Huachuca City</b>  | 81           | 35                     | 43.2 %     |
| <b>Pearce</b>         | 14           | 6                      | 42.9 %     |
| <b>Bowie</b>          | 5            | 2                      | 40 %       |
| <b>Sierra Vista</b>   | 728          | 247                    | 33.9 %     |
| <b>San Simon</b>      | 9            | 2                      | 22.2 %     |
| <b>Fort Huachuca</b>  | 131          | 2                      | 1.5 %      |

Source: Arizona Department of Health Services, Vital Statistics, 2007

Once the child is born, she may continue to be eligible for coverage through the Arizona Health Care Cost Containment Systems' KidsCare program, Arizona's publicly funded, low cost health insurance programs for children in low income families. However, Cochise County had 2,248 children under six enrolled in AHCCCS KidsCare during 2007, the fewest number in 3 years (Table 23).

**Table 23: Children Under Six Enrolled in AHCCCS KidsCare**

|                       | AHCCCS |         |        |        | KidsCare |       |       |       | Total Children Under Six Enrolled In AHCCCS or KidsCare |         |         |         |
|-----------------------|--------|---------|--------|--------|----------|-------|-------|-------|---|---------|---------|---------|
|                       | '04    | '05     | '06    | '07    | '04      | '05   | '06   | '07   | '04   | '05     | '06     | '07     |
| <b>Cochise County</b> | 2,208  | 2,382   | 2,239  | 2,127  | 72       | 108   | 105   | 121   | 2,280   | 2,490   | 2,344   | 2,248   |
| <b>Arizona</b>        | 87,751 | 102,379 | 95,776 | 96,600 | 6,029    | 7,397 | 8,699 | 9,794 | 93,780  | 109,776 | 104,475 | 106,394 |

Source: AHCCCS, Enrollment data is for calendar year, representing children enrolled at any time during the calendar year in AHCCCS KidsCare. The child is counted under the last program in which the child was enrolled.

While many children do receive public health coverage, many others who likely qualify, do not. In 2002, the Urban Institute's National Survey of America's Families estimated that one-half of uninsured children in the United States are eligible for publicly funded health insurance programs (like AHCCCS KidsCare), but are not

enrolled.<sup>30</sup> Indeed, the large percent of families who fall below two hundred percent Federal Poverty Level in the county suggest that many children are likely to qualify for public coverage. National studies suggest that these same children are unlikely to live in families who have access to employer-based coverage.<sup>31</sup>

Health coverage is not the only factor that affects whether or not children receive the care that they need to grow up healthy. Other factors include: the scope and availability of services that are privately or publicly funded; the number of health care providers including primary care providers and specialists; the geographic proximity of needed services; and the linguistic and cultural accessibility of services.

All of these factors play a role, however, this last factor may play a larger role in Cochise County than in other areas of the state, given the potential number of immigrant and linguistically isolated households in the county. While no specific evidence exists for the county, such evidence does exist statewide. For example, thirty-seven percent of 788 AHCCCS providers surveyed in 2005 (representing 98% of all AHCCCS providers) had no means of understanding their Spanish-speaking patients unless the patient's family member could translate for their relative and the medical provider.<sup>32</sup> Similarly, a 2007 Commonwealth Fund study found low rates of patient satisfaction among Arizonans, who cited lack of cultural competency as one contributing factor.<sup>33</sup>

Lack of health coverage and the other factors cited above combine to limit children's access to health services. For example, according to a 2007 report by the Commonwealth Fund, only thirty-six percent of Arizona children under the age of seventeen had a regular doctor and at least one well check visit in the last year. According to the same study, only fifty-five percent of children who needed behavioral health services received some type of mental health care in 2003.<sup>34</sup>

### **Oral Health Access and Utilization**

Access to dental care is also limited for young children in both the state and the county. According to the 2003 ADHS Community Health Profile, sixty-four percent (of Cochise County 6-8 year olds experience tooth decay compared to forty percent in the state and fifty-two percent nationally. This number is highest in Douglas where it is seventy-one percent (Table 24). Additionally forty-six percent of children in Cochise County have untreated tooth decay compared to forty percent in Arizona and twenty-nine percent nationally.

30 Genevieve Kenney, et al, "Snapshots of America's Families, Children's Insurance Coverage and Service Use Improve," Urban Institute, July 31, 2003.

31 Long, Sharon K and John A. Graves. "What Happens When Public Coverage is No Longer Available?" Kaiser Commission on Medicaid and the Uninsured, January 2006.

32

33 Commonwealth Fund. State Scorecard on Health Care System Performance, 2007.

34 Commonwealth Fund. State Scorecard on Health Care System Performance, 2007.

**Table 24: Oral Health among Children 6-8 Years in Cochise County**

| Cochise Community (2003) | Untreated Tooth Decay | Tooth Decay Experience | Urgent Treatment Needs | Sealants Present |
|--------------------------|-----------------------|------------------------|------------------------|------------------|
| Benson                   | N/A                   | N/A                    | N/A                    | N/A              |
| Bisbee                   | 37%                   | 64%                    | 9%                     | 22%              |
| Douglas                  | 56%                   | 71%                    | 4%                     | 0%               |
| Huachuca City            | 36%                   | 59%                    | 9%                     | 5%               |
| Sierra Vista             | 64%                   | 72%                    | 16%                    | 8%               |
| Tombstone                | 50%                   | 68%                    | 9%                     | 25%              |
| Willcox                  | N/A                   | N/A                    | N/A                    | N/A              |
| Arizona                  | 40%                   | 62%                    | 9%                     | 28%              |

Source: Arizona Department of Health Services, Community Health Profile 2003.

Enrollment in Head Start and Early Head Start helps ensure access to medical and dental care. Children enrolled in these programs are required to receive well child and oral health visits. Many of these visits are arranged to take place within their facility.

Access to oral health care is even more challenging for families with special needs children. According to a statewide Health Provider Survey report released in 2007, a large majority (78%) of Arizona dental providers surveyed in 2006 (N=729 or 98% of all AHCCCS providers) said they did not provide dental services to special needs children because they did not have adequate training (40%), did not feel it was compatible with the environment of their practices (38%), or did not receive enough reimbursement to treat these patients (19%). The Provider survey report recommended more training for providers to work with Special Needs Plans, collaborating with Arizona Dental Association and Arizona Department of Health Services to increase the number of providers who accept young children.

## Child Safety

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All children deserve to grow up in a safe environment. Unfortunately not all children are born into a home where they are well-nurtured and free from parental harm. Additionally, some children are exposed to conditions that can lead to preventable injury or death, such as excessive drug/alcohol use by a family member, accessible firearms, or unfenced pools. This section provides information on child abuse and neglect, and child fatalities in Cochise County.

### Child Abuse and Neglect

Child abuse and neglect can result in both short-term and long-term negative outcomes. A wide variety of difficulties have been documented for victims of abuse and neglect, including mental health difficulties such as depression, aggression, and stress. Direct negative academic outcomes such as low academic achievement, lower grades, lower test scores, learning difficulties, language deficits, poor schoolwork, and impaired verbal and motor skills have also been documented. Furthermore, child abuse and neglect have a direct relationship to physical outcomes such as ill health,

injuries, failure to thrive, and somatic complaints.<sup>35</sup>

The following data illustrates the problem of abuse and neglect in Arizona and the significant number of children that are placed at greater risk for poor school performance, frequent grade retention, juvenile delinquency and teenage pregnancy, as child abuse and neglect are strongly linked with these negative outcomes for children. The data provided in this report include state and county level data for children under age eighteen.

It is important to note that the child abuse report is not an indicator of risk and is not tied to the removal of a child. There are many cases where the specific allegation in the report cannot be proven, but it is nonetheless determined that the child is at imminent risk of harm. Thus, services and supports are put in place to keep the child safely at home, or the child is removed. The numbers of reports that are considered substantiated are a subset of the total number of reports that were received, investigated, and closed during the reporting period.

Table 25 below provides a three-year history (in six-month periods) of the child abuse reports received and the outcomes related to those reports for Cochise County. Between seven to thirteen percent of all reports were substantiated during the period 2005-2007, with between 80 to 107 children removed from the home. Despite an increasing population in the county, the number of reports has decreased slightly over the three-year period.

**Table 25: Child Abuse Reports, Substantiations, Removals, and Placements for Cochise County\***

|  | Oct. 2003<br>through<br>Mar. 2004 | Apr. 2004<br>through<br>Sep. 2004 | Oct. 2004<br>through<br>Mar. 2005 | Apr. 2005<br>through<br>Sep. 2005 | Oct. 2005<br>through<br>Mar. 2006 | Apr. 2006<br>through<br>Sep. 2006 | Oct. 2006<br>through<br>Mar. 2007 | Apr. 2007<br>through<br>Sep. 2007 |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>Number of reports received</b>      | 541                               | 536                               | 522                               | 507                               | 455                               | 387                               | 426                               | 494                               |
| <b>Number of reports Substantiated</b> | NA                                | NA                                | NA                                | NA                                | 59                                | 52                                | 49                                | 35                                |
| <b>Substantiation rate</b>             | NA                                | NA                                | NA                                | NA                                | 13%                               | 13%                               | 12%                               | 7%                                |
| <b>Number of new removals</b>          | 112                               | 115                               | 120                               | 135                               | 107                               | 80                                | 92                                | 94                                |

\*All data taken from Arizona Department of Economic Security Child Welfare Reports. Discrete data for “number of reports substantiated” not available prior to Oct. 2005-Mar. 2006. Child Welfare Reports do not provide county-level data for number of child in out-of-home care on the last day of reporting period. Data for number of reports received drawn from Child Welfare Report tables labeled “Number of Reports Responded to by Type of Maltreatment and County.”

Table 26 provides a breakdown of reports received by each county in Arizona for the six-month period: April 2007 through September 2007. Cochise County received 494

<sup>35</sup> References for this section: Augoustios, M. Developmental effects of child abuse: A number of recent findings. *Child Abuse and Neglect*, 11, 15-27; Eckenrode, J., Laird, M., & Doris, J. *Maltreatment and social adjustment of school children*. Washington DC, U. S. Department of Health and Human Services; English, D. J. The extent and consequences of child maltreatment. *The Future of Children, Protecting Children from abuse and neglect*, 8, 39-53.; Lindsey, D. *The welfare of children*, New York, Oxford University Press, 2004; National Research Council, *Understanding child abuse and neglect*. Washington DC: National Academy Press; Osofsky, J. D. The impact of violence on children. *The future of children*, 9, 33-49.

reports during that period accounting for nearly three percent (2.7%) of the reports in Arizona. Of those reports made in Cochise County, 312 were reports of neglect, 154 reports of physical abuse, 22 reports of sexual abuse, and 6 reports of emotional abuse.

**Table 26: Reports Received by Type of Maltreatment by County April 1, 2007 – September 30, 2007**

| COUNTY     | EMOTIONAL ABUSE | NEGLECT | PHYSICAL ABUSE | SEXUAL ABUSE | TOTAL  | % OF TOTAL |
|------------|-----------------|---------|----------------|--------------|--------|------------|
| APACHE     | 1               | 47      | 33             | 6            | 87     | 0.5%       |
| COCHISE    | 6               | 312     | 154            | 22           | 494    | 2.7%       |
| COCONINO   | 3               | 248     | 124            | 27           | 402    | 2.2%       |
| GILA       | 2               | 148     | 59             | 14           | 223    | 1.2%       |
| GRAHAM     | 1               | 61      | 36             | 12           | 110    | 0.6%       |
| GREENLEE   | 0               | 16      | 8              | 2            | 26     | 0.1%       |
| LA PAZ     | 2               | 35      | 17             | 8            | 62     | 0.3%       |
| MARICOPA   | 117             | 6,098   | 3,424          | 645          | 10,284 | 57.0%      |
| MOHAVE     | 4               | 417     | 197            | 34           | 652    | 3.6%       |
| NAVAJO     | 3               | 234     | 101            | 9            | 347    | 1.9%       |
| PIMA       | 50              | 1,924   | 1,045          | 181          | 3,200  | 17.7%      |
| PINAL      | 14              | 648     | 315            | 80           | 1,057  | 5.9%       |
| SANTA CRUZ | 2               | 63      | 38             | 5            | 108    | 0.6%       |
| YAVAPAI    | 4               | 381     | 181            | 35           | 601    | 3.3%       |
| YUMA       | 3               | 290     | 104            | 28           | 425    | 2.4%       |
| STATEWIDE  | 212             | 10,922  | 5,836          | 1,108        | 18,078 | 100.0%     |
| %OF TOTAL  | 1.2%            | 60.4%   | 32.3%          | 6.1%         | 100.0% |            |

\*All data taken from Arizona Department of Economic Security Child Welfare Reports, April 1, 2007 – September 30, 2007.

In any given year, more than three million child abuse and neglect reports are made across the United States, but most child welfare experts believe the actual incidence of child abuse and neglect is almost three times greater, making the number closer to ten million incidents each year. In 2006, 3.6 million referrals were made to Child Protective Service agencies (CPS) nationally, involving more than six million children. Sixty percent of these referrals were determined to be “unsubstantiated” according to CPS criteria with twenty-five percent of the cases resulting in a substantiated finding of neglect or abuse. However, research continues to show that the line between a substantiated or unsubstantiated case of abuse or neglect is too often determined by: a lack of resources to investigate all cases thoroughly; lack of training/support for CPS staff, where employee turnover rates remain high; and a strained foster care system that is already functioning beyond its capacity and would be completely overwhelmed by an increase in child removals from families.

Nationally, America’s youngest children suffer from the highest rates of neglect and abuse, as shown below:

- Birth to 1 year 24 incidents for every 1,000 children
- 1-3 years 14 incidents for every 1,000 children
- 4-7 years 14 incidents for every 1,000 children
- 8-11 years 11 incidents for every 1,000 children

According to Overall Child Well-Being Indicators, Arizona ranked thirty-sixth out of the fifty states in 2005, with child abuse and neglect a leading reason for the state's poor ranking. In the following year, Arizona's Child Fatality Review Board issued its annual report for 2005, which showed that fifty Arizona children died from abuse or neglect that year. Contributing factors in these deaths included caretaker drug/alcohol use (31%), lack of parenting skills (31%), lack of supervision (27%), a history of maltreatment (20%) and domestic violence (15%). Eleven percent of the children who died had previous CPS involvement.

### Foster Care Placements

Foster care placement is directed toward children whose parents are deemed unable to properly care for them. Foster care has increasingly become an important aspect of the child welfare system. The extent to which foster care is being used in different communities is dependent on number of families and resources available to provide needed care to vulnerable children. There were 226 foster care placements in 2004 in Cochise County. That number increased to 254 in 2005, creating a 12% increase in a one-year period (Table 27).

**Table 27: Child Placements in Foster Care**

|                | 2002   | 2003                | 2004                | 2005                | 2006                |
|----------------|--|---------------------|---------------------|---------------------|---------------------|
| <b>Cochise</b> | 2004 Cochise County: 226*<br>2005 Cochise County: 254* |                     |                     |                     |                     |
| <b>Arizona</b> | 5,049**  | 6,208**             | 7,173**             | 7,546**             | 7,388**             |
| <b>U.S.</b>    | 29%***<br>(154,000)                                    | 30%***<br>(155,000) | 31%***<br>(158,000) | 32%***<br>(164,000) | 44%***<br>(131,000) |

\*All children in out-of-home care (such as foster care) for available years.

\*\*Includes all children under the age of 18 years

\*\*\*Based on total number of children removed from the home ages 0-5 years

Sources: Kids Count (data provided by Children's Action Alliance); The AFCARS Report; Children's Bureau, Arizona Department of Economic Security.

The majority of children in out-of-home care across the state of Arizona are either White (42%) or Hispanic (35%), followed by African American (13%). The number for Cochise County is currently unavailable.

Problems with the foster care system have led to efforts at reform. Efforts have included new methods for keeping children safe in their own homes, provision of kinship care, and family foster care.<sup>36</sup> The Department of Economic Security (DES) is working to embed the Casey Foundation's Family to Family initiative into Arizona's child welfare practice. This nationwide child welfare initiative is one of the core strategies in the recruitment, development and support of resource families that focuses on finding and maintaining kinship and foster families who can support children and families in their own neighborhoods.

### Child Mortality

The infant mortality rate is an important indicator of the health of a community. Infant mortality is higher for children with mothers that began prenatal care late or had none at all, had mothers that did not complete high school, were unmarried, smoked during pregnancy, and/or were teenagers.<sup>37</sup> Furthermore, children living in poverty are more likely to die in the first year of life. For example, children living in poverty are more likely to die from health conditions such as asthma, cancer, congenital anomalies, and heart disease.<sup>38</sup> In Arizona, as well as the rest of the nation, many factors that lead to a young child's death are related to health status, such as a pre-existing health condition, inadequate prenatal care, or even the lifestyle choices of the parent. Another area of concern includes factors such as injury – in many circumstances, preventable injury. Table 28 provides information on the total number of infant and child deaths in Cochise County for children under the age of fourteen from 2002 to 2007. Note that in 2007, eighty percent of all child deaths in Cochise County occurred to children under the age of one. This table also demonstrates a percentage increase from 2002 to 2007 in child deaths under one year of age

**Table 28: Infant & Child Mortality in Cochise County (Number & Percentage)**

|                                     | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Birth to &lt;1 year</b>          | 13<br>62% | 19<br>70% | 13<br>59% | 19<br>86% | 17<br>81% | 16<br>80% |
| <b>1-14 years</b>                   | 8<br>38%  | 8<br>30%  | 9<br>41%  | 5<br>14%  | 3<br>19%  | 4<br>20%  |
| <b>Total Number of Child Deaths</b> | 21        | 27        | 22        | 24        | 20        | 20        |

Source: Arizona Department of Health Services, Vital Statistics, 2002-2007

Table 29 reveals the number of child deaths from birth to fourteen years of age in 2003 through 2006 in Cochise County, Arizona, and the United States. This table also includes the percentage of child deaths, birth through fourteen years of age, compared the mortality of the population as a whole.

**Table 29: Child Deaths Birth through Fourteen Years of Age**

|                          | 2003         | 2004             | 2005         | 2006             |
|--------------------------|--------------|------------------|--------------|------------------|
| <b>Cochise County **</b> | 27<br>2%     | 22<br>2%         | 24<br>2%     | 21<br>2%         |
| <b>Arizona</b>           | 872<br>2%    | 870<br>2%        | 938<br>2%    | 920<br>2%        |
| <b>U.S.</b>              | 32,721<br>1% | Not<br>available | 33,196<br>1% | Not<br>available |

\*\*Data available for children 0-14 years of age only.

Sources: CDC, Arizona Department of Health Services.

37 Mathews, T. J., MacDorman, M. F., & Menacker, F. Infant mortality statistics from the 1999 period linked birth/infant death data set. In *National Vital Statistics Report* (Vol. 50), National Center for Health Statistics.

38 Chen, E., Matthews, K. A., & Boyce, W. T. Socioeconomic differences in children's health: How and why do these relationships change with age? *Psychological Bulletin*, 129, 2002, 29-329; Petridou, E., Kosmidis, H., Haidas, S., Tong, D., Revinthi, K., & Flytzani, V. Survival from childhood leukemia depending on socioeconomic status in Athens. *Oncology*, 51, 1994, 391-395; Vagero, D., & Ostberg, V. Mortality among children and young persons in Sweden in relation to childhood socioeconomic group. *Journal of Epidemiology and Community Health*, 43, 1989, 280-284; Weiss, K. B., Gergen, P. J., Wagener, D. K., Breathing better or wheezing worse? The changing epidemiology of asthma morbidity and mortality. *Annual Review of Public Health*, 1993, 491-513.

There are data for years as recent as 2006 but only for numbers of deaths and not rates. For this reason, earlier years are used in Table 30. This table demonstrates that Cochise County has higher rates of infant deaths compared to Arizona and the United States during 2001 (7.3%), 2002 (7.6%) and 2003 (10.8%).

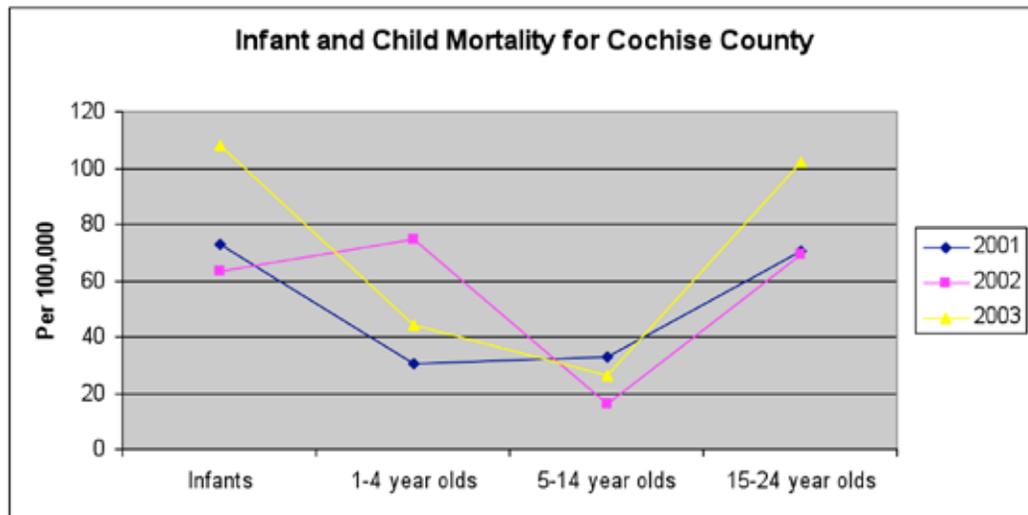
**Table 30: Mortality Number & Rate by Age**

|                                   | 2001         |               |                  | 2002         |               |                  | 2003          |               |                  |
|-----------------------------------|--------------|---------------|------------------|--------------|---------------|------------------|---------------|---------------|------------------|
|                                   | Cochise      | AZ            | National         | Cochise      | AZ            | National         | Cochise       | AZ            | National         |
| <b>Number of deaths</b>           |              |               |                  |              |               |                  |               |               |                  |
| <b>Infants (/1000 births)</b>     | 12<br>(7.3)  | 587<br>(6.9)  | 27,801<br>(6.9)  | 13<br>(7.6)  | 552<br>(6.3)  | 27,977<br>(7.0)  | 19<br>(10.8)  | 586<br>(6.5)  | 28,428<br>(6.5)  |
| <b>1-4 yr olds (/100,000)</b>     | 2<br>(30.7)  | 145<br>(45.8) | 4979<br>(32.5)   | 5<br>(74.9)  | 127<br>(38.9) | 4862<br>(31.2)   | 3<br>(44.3)   | 135<br>(40.1) | 4905<br>(31.1)   |
| <b>5-14 yr olds (/100,000)</b>    | 6<br>(33.0)  | 175<br>(22.0) | 7413<br>(18.0)   | 3<br>(16.1)  | 144<br>(17.5) | 7169<br>(17.5)   | 5<br>(26.5)   | 151<br>(17.9) | 6903<br>(16.8)   |
| <b>15-24 years olds(/100,000)</b> | 12<br>(70.7) | 728<br>(96.2) | 31,307<br>(79.3) | 12<br>(69.0) | 772<br>(99.4) | 33,075<br>(81.5) | 18<br>(102.0) | 758<br>(95.0) | 33,050<br>(80.2) |

Source: Arizona Department of Health Services, Vital Statistics, 2001-2003 and Community Health Profiles, 2001-2003

Figure One below demonstrates the trend in the infant and child mortality rate in Cochise County during 2001 through 2003 by age group.

**Figure One: Infant and Child Mortality Rate**



## Children’s Educational Attainment

### School Readiness

Quality early childhood programs can promote successful school readiness especially for children in low-income families. Research studies on programs for low income children have found that participation in quality educational programs prior to

kindergarten is related to improved school performance in the early years.<sup>39</sup> Furthermore, research indicates that when children are involved in early childhood programs over a long period of time, with additional follow up intervention in the early school years, better outcomes can emerge.<sup>40</sup> Long-term studies have documented early childhood programs with positive impact evident in the adolescent and adult years.<sup>41</sup> Lastly, research has confirmed that quality early childhood education enhances young children's social developmental outcomes such as peer relationships.<sup>42</sup>

Generally, child development experts agree that school readiness encompasses more than acquiring a set of simple skills such as counting to ten by memory or identifying the letters of the alphabet. Preparedness for school includes the ability to problem-solve, self confidence, and willingness to persist at a task. While experts identify such skills as being essential to school readiness, the difficulty comes in attempting to quantify and measure these more comprehensive ideas of school readiness. No instrument currently exists that sufficiently identifies a child's readiness for school entry. However, Arizona has a set of Early Learning Standards (an agreed upon set of concepts and skills that children can and should be ready to do at the start of kindergarten), current assessment of those learning standards have not been validated nor have the standards been applied consistently throughout the state.

One component of children's readiness for school consists of their language and literacy development. Alphabet knowledge, phonological awareness, vocabulary development, and awareness that words have meaning in print are all pieces of children's knowledge related to language and literacy. One assessment that is used frequently across Arizona schools is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). The DIBELS is used to identify children's reading skills upon entry to school and to measure their reading progress throughout the year. The DIBELS often tests only a small set of skills around letter knowledge without assessing other areas of children's language and literacy development such as vocabulary or print awareness.

The results of the DIBELS assessment should not be used to assess a child's full range of skills and understanding in the area of language and literacy. Instead, it provides a snapshot of a child's learning as they enter and exit kindergarten. Since all schools do not administer the assessment in the same manner, complete comparisons across communities cannot be made. In the specific area of language and literacy development assessed, the data in the following table indicate that only a small percentage of children entering kindergarten were meeting the benchmark standard but at the end of the year significant progress was made (Table 31).

39 Lee, V. E., Brooks-Gunn, J., Shnur, E., & Liaw, F. R. Are Head Start effects sustained? A longitudinal follow-up comparison of disadvantaged children attending Head Start, no preschool, and other preschool programs. *Child Development*, 61, 1990, 495-507; National Research Council and Institute Medicine, *From neurons to neighborhoods: The science of early childhood development*

40 Reynolds, A. J. Effects of a preschool plus follow up intervention for children at risk. *Developmental Psychology*, 30, 1994, 787-804.

41 Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 2001, 231-242

42 Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culklin, M. L., Howes, C., Kagan, S. L., et al *The children of the cost, quality, and outcomes study go to school: Technical report*, 2000, University of North Carolina

**Table 31: Basic Early Literacy as Measured by DIBELS**

| 2006-2007 Kindergarten DIBELS Instructional Support Recommendations |                       |                   |                   |                   |                   |                   |
|---|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | Beginning of the Year |                   |                   | End of the Year   |                   |                   |
|   | Percent Intensive     | Percent Strategic | Percent Benchmark | Percent Intensive | Percent Strategic | Percent Benchmark |
| <b>Arizona Reading First</b>  | 52.3                  | 35.0              | 12.7              | 10.3              | 12.2              | 77.5              |
| <b>Bisbee Unified School</b>  | 37.5                  | 53.1              | 9.4               | 37.5              | 53.1              | 9.4               |
| <b>Bowie Unified School</b>   | 14.3                  | 14.3              | 71.4              | 14.3              | 57.2              | 28.5              |
| <b>Douglas Unified Schools</b>                                      |                       |                   |                   |                   |                   |                   |
| Clawson Elem.   | 17.9                  | 28.2              | 53.8              | 8.9               | 33.3              | 57.8              |
| Joe Carison Elem.   | 29.2                  | 39.6              | 31.3              | 34.8              | 37.0              | 28.3              |
| Faras Elem.   | 64.7                  | 29.4              | 5.9               | 27.2              | 33.3              | 39.5              |
| Sarah Marley Elem.  | 63.6                  | 29.5              | 6.8               | 34.0              | 38.3              | 27.7              |
| Stevenson Elem.   | 13.5                  | 43.2              | 43.2              | 0.0               | 14.0              | 86.0              |
| <b>Naco Elementary</b>  | 78.3                  | 13.0              | 8.7               | 13.0              | 17.4              | 69.6              |
| <b>Tombstone Uni. School</b>  | 33.3                  | 42.9              | 23.8              | 14.3              | 7.1               | 78.6              |
| Walter J. Meyer Elem.   | 31.0                  | 39.0              | 31.0              | 23.0              | 8.0               | 69.0              |
| Huachuca City   | 35.0                  | 45.0              | 21.0              | 10.0              | 7.0               | 83.0              |

Sources: Cochise County School Districts

### Elementary Education

Children who cannot read well by fourth grade are more likely to miss school, experience behavior problems, and perform poorly on standardized tests. The performance of Arizona's children on standardized tests continually lags behind that of the nation. Only fifty-six percent of Arizona's 4th graders scored "at basic" or better on the 2007 National Assessment of Educational Progress (NAEP) Reading Assessment, compared with a national average rate of sixty-seven percent. The percentage of Arizona 4th graders achieving "at basic" or better on the NAEP Math Assessment increased dramatically from fifty-seven percent in 2000 to seventy-four percent in 2007, but Arizona's 4th graders still score eight percent below the national rate of eighty-two percent. The NAEP is a standardized means for measuring educational progress in the core subject areas beginning in the 4<sup>th</sup> grade. It is one of the earliest comprehensive assessments used with students all over the United States and it can provide helpful insights into how well students are progressing through the core subject areas and where groups of students (gender, ethnicity, income, geographic regions) may be systematically experiencing delays in their progress. The NAEP is administered to a sample of fourth grade students and data at the regional level was not available to include at the time of printing this report.

### AIMS DPA

Data is available for Cochise County on the Arizona's Instrument to Measure Standards Dual Purpose Assessment (AIMS DPA). The AIMS DPA is used to test Arizona students in Grades 3 through 8. This assessment measures the student's level of proficiency in Writing, Reading, and Mathematics and provides each student's national percentile rankings in Reading/Language and Mathematics. In addition, Arizona students in Grades 4 and 8 are given a Science assessment.<sup>43</sup>

43 Spring 2008 Guide to Test Interpretation, Arizona's Instrument to Measure Standards Dual Purpose Assessment, CTB McGraw Hill.

Table 32 on the following page shows the total number of students in third grade who fall far below (FFB), approach (A), meet (M), or exceed (E) the standards in reading, writing and math in the elementary school districts in Cochise County. While many students in each school district are meeting standards in writing, results for mathematics and reading vary a great deal.

**Table 32: AIMS DPA 3<sup>rd</sup> Grade Score Achievement Levels in Mathematics, Reading, and Writing in Cochise County Schools**

| School District                       | Mathematics |    |    |    | Reading |    |    |    | Writing |    |     |    |
|---------------------------------------|-------------|----|----|----|---------|----|----|----|---------|----|-----|----|
|                                       | FFB         | A  | M  | E  | FFB     | A  | M  | E  | FFB     | A  | M   | E  |
| <b>Arizona – Number Tested 75,768</b> | 9           | 17 | 54 | 20 | 6       | 23 | 59 | 13 | 5       | 13 | 66  | 16 |
| Benson Primary                        | 7           | 15 | 53 | 25 | 1       | 19 | 57 | 23 | 1       | 21 | 72  | 5  |
| Berean School                         | 10          | 20 | 60 | 10 | 5       | 20 | 70 | 5  | 15      | 25 | 55  | 5  |
| Bisbee – Greenway Primary             | 10          | 22 | 46 | 22 | 3       | 27 | 57 | 63 | 5       | 10 | 70  | 16 |
| Bowie Elementary                      | 27          | 36 | 36 | 0  | 9       | 55 | 36 | 0  | 0       | 0  | 100 | 0  |
| CASS #3                               | 9           | 9  | 65 | 17 | 4       | 26 | 61 | 9  | 0       | 22 | 74  | 4  |
| Double Adobe Elementary               | 18          | 18 | 64 | 0  | 9       | 36 | 45 | 9  | 0       | 64 | 36  | 0  |
| Douglas – Clawson School              | 15          | 25 | 54 | 5  | 10      | 37 | 39 | 0  | 5       | 25 | 65  | 5  |
| Douglas – Faras Elementary            | 11          | 25 | 57 | 7  | 4       | 57 | 39 | 0  | 18      | 36 | 39  | 7  |
| Douglas – Joe Carlson Elem.           | 9           | 17 | 62 | 13 | 13      | 27 | 56 | 4  | 3       | 18 | 76  | 4  |
| Douglas – Sarah Marley Sch.           | 2           | 23 | 61 | 14 | 2       | 39 | 55 | 5  | 2       | 27 | 66  | 5  |
| Douglas – Stevenson Elementary        | 6           | 10 | 49 | 34 | 8       | 27 | 56 | 9  | 3       | 9  | 73  | 16 |
| Elfrida Elementary                    | 0           | 29 | 50 | 21 | 0       | 50 | 36 | 14 | 0       | 29 | 71  | 0  |
| General Myer Elementary               | 7           | 13 | 56 | 23 | 4       | 13 | 67 | 16 | 3       | 20 | 74  | 3  |
| Naco Elementary                       | 23          | 30 | 45 | 3  | 13      | 25 | 63 | 0  | 0       | 23 | 75  | 3  |
| New West School                       | 10          | 20 | 60 | 10 | 10      | 0  | 80 | 10 | 0       | 40 | 60  | 0  |
| Omega Alpha Academy                   | 25          | 35 | 37 | 4  | 23      | 40 | 37 | 0  | 2       | 33 | 60  | 6  |
| Palominas – Coronado Elem.            | 4           | 4  | 61 | 31 | 0       | 12 | 65 | 22 | 4       | 10 | 71  | 14 |
| Palominas Elementary                  | 7           | 23 | 56 | 14 | 2       | 26 | 56 | 16 | 5       | 7  | 81  | 7  |
| Palominas – Valley View               | 21          | 0  | 47 | 32 | 11      | 16 | 53 | 21 | 5       | 42 | 53  | 0  |
| Pomerene Elementary                   | 17          | 6  | 61 | 17 | 11      | 28 | 28 | 33 | 17      | 33 | 44  | 6  |
| SV – Imagine Charter School           | 10          | 10 | 63 | 18 | 5       | 15 | 65 | 15 | 13      | 10 | 63  | 15 |
| SV – Bella Vista Elementary           | 7           | 11 | 67 | 15 | 0       | 18 | 75 | 7  | 0       | 9  | 80  | 11 |
| SV – Carmichael Elementary            | 11          | 6  | 68 | 15 | 6       | 15 | 66 | 13 | 2       | 15 | 60  | 23 |
| SV – Huachuca Mountain Elem.          | 5           | 13 | 51 | 32 | 2       | 26 | 58 | 14 | 1       | 5  | 88  | 5  |
| SV – Pueblo Del Sol Elementary        | 3           | 8  | 55 | 34 | 1       | 11 | 67 | 21 | 2       | 3  | 70  | 25 |
| SV – Town & Country Elementary        | 3           | 29 | 53 | 15 | 3       | 26 | 63 | 8  | 5       | 10 | 74  | 11 |
| SV – Village Meadows Elem.            | 6           | 20 | 54 | 20 | 2       | 22 | 68 | 8  | 2       | 15 | 71  | 12 |
| St. David Elementary                  | 6           | 6  | 51 | 37 | 6       | 8  | 72 | 14 | 8       | 14 | 73  | 5  |
| Tombstone – Huachuca City Sch.        | 12          | 25 | 57 | 6  | 0       | 25 | 65 | 10 | 2       | 20 | 75  | 4  |
| Tombstone – Walter D. Meyer           | 22          | 39 | 39 | 0  | 17      | 11 | 72 | 0  | 11      | 22 | 50  | 17 |
| Willcox Elementary                    | 20          | 23 | 50 | 7  | 19      | 32 | 46 | 3  | 9       | 18 | 70  | 3  |

Source: Arizona Department of Education, AIMS Spring 2008 Grade 03 Summary

\*Schools not listed did not have data available.

FFB = Falls Far Below the Standard, A = Approaches the Standard, M = Meets the Standard, E = Exceeds the Standard

## Secondary Education

The completion of high school is a critical juncture in a young adult's life. Students who stay in school and take challenging coursework tend to continue their education, stay out of jail, and earn significantly higher wages than their non-graduating counterparts.<sup>44</sup> High school graduation rates vary by school district and year of graduation in Cochise County (Table 33). Furthermore, graduation rates are likely to vary according to race and gender. Compared with the state and national data, the schools in Cochise County vary a great deal depending in part on the size of the cohort and number of graduates. The percentage of high school graduates in Arizona has been declining since 2004 compared to the national average (Table 34).

**Table 33: High School Graduation Rates in Cochise County**

| 2006                       |                   |                   |                 |
|----------------------------|-------------------|-------------------|-----------------|
| Cochise HS Districts       | Total # Graduates | Total # in Cohort | Graduation Rate |
| Benson Unified (N=2)       | 69                | 102               | 68%             |
| Bisbee Unified (N=1)       | 10                | 32                | 31%             |
| Bowie Unified (N=1)        | -                 | 8                 | -               |
| Douglas Unified (N=1)      | 224               | 294               | 76%             |
| San Simon (N=1)            | -                 | 7                 | -               |
| Sierra Vista Unified (N=1) | 506               | 634               | 80%             |
| St. David Unified (N=1)    | 34                | 39                | 87%             |
| Tombstone Unified (N=1)    | 8                 | 71                | 11%             |
| Valley Union (N=1)         | 48                | 64                | 75%             |
| Willcox Unified (N=1)      | 73                | 86                | 85%             |
| Arizona*                   | 50,355            | 71,691            | 70%             |
| United States**            | N/A               | N/A               | N/A             |
| 2005                       |                   |                   |                 |
| Cochise HS Districts       | Total # Graduates | Total # in Cohort | Graduation Rate |
| Benson Unified (N=2)       | 56                | 61                | 92%             |
| Bisbee Unified (N=1)       | 68                | 86                | 79%             |
| Bowie Unified (N=1)        | -                 | 5                 | -               |
| Douglas Unified (N=1)      | 250               | 272               | 92%             |
| San Simon (N=1)            | -                 | 6                 | -               |
| Sierra Vista Unified (N=1) | 486               | 575               | 85%             |
| St. David Unified (N=1)    | 31                | 31                | 100%            |
| Tombstone Unified (N=1)    | 80                | 83                | 96%             |
| Valley Union (N=1)         | 39                | 42                | 93%             |
| Willcox Unified (N=1)      | 71                | 91                | 78%             |
| Arizona*                   | 50,923            | 68,498            | 74%             |
| United States**            | 2,799,250         | 3,747,323         | 75%             |

(chart continued on page 42)

44 Sigelman, C. K., & Rider, E. A., *Life-span development*, 2003, Pacific Grove, CA: Wadsworth.

(continued from page 41)

**Table 33: High School Graduation Rates in Cochise County**

| 2004                       |                   |                   |                 |
|----------------------------|-------------------|-------------------|-----------------|
| Cochise HS Districts       | Total # Graduates | Total # in Cohort | Graduation Rate |
| Benson Unified (N=1)       | 76                | 96                | 79%             |
| Bisbee Unified (N=1)       | 87                | 89                | 98%             |
| Bowie Unified (N=1)        | 1                 | 13                | 8%              |
| Douglas Unified (N=1)      | 242               | 244               | 99%             |
| San Simon (N=1)            | -                 | 9                 | -               |
| Sierra Vista Unified (N=1) | 679               | 534               | 79%             |
| St. David Unified (N=1)    | 41                | 43                | 95%             |
| Tombstone Unified (N=1)    | 62                | 75                | 83%             |
| Valley Union (N=1)         | 40                | 42                | 95%             |
| Willcox Unified (N=1)      | 88                | 97                | 91%             |
| Arizona*                   | 47,071            | 61,450            | 77%             |
| United States**            | 2,753,438         | 3,705,838         | 74%             |

\* Arizona Department of Education

\*\* National Center for Education Statistics

**Table 34: High School Graduation Rates\***

|         | 2004 | 2005 | 2006 |
|---------|------|------|------|
| Arizona | 77%  | 74%  | 70%  |
| U.S.    | 74%  | 75%  | 74%  |

\*Measured using a 4 year cohort of students

Source: Arizona Department of Education; National Center for Education Statistics



# Current Regional Early Childhood Development and Health System

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## Summary of Regional Findings on Early Childhood System

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The Cochise County School Readiness Partnership (CCSRP) and key informant interview data, indicate that parents regard the quality of childcare as important, yet quality and capacity for care are uneven. There is broad consensus among parents and educators that more could be done to support quality early care options. There are many factors that make access to childcare in Cochise County a challenge. Access is related to location of services, availability of quality services, awareness of available services, and prohibitive costs. In a recent survey of parents completed by CCSR, parents identified, “access to a quality pre-school program” as an area of great concern.

The assessment additionally found that many of the region’s parents have financial difficulties in which their income level, while low, disqualifies their children from AHCCCS. Additionally, substance abuse and its subsequent impact on children is a critical community concern. The foster care system serving these children is stressed, and there is a lack of training opportunities available within the wider community. However, some recent improvements in systems coordination and integrated services within the community are promising examples of future opportunities for systemic change. Although there is a range of information available to parents in Cochise County, it tends to be issue specific and distributed unequally in the county.

Key informant interviews and focus groups held in Cochise County revealed the quality of training available for childcare providers is an area of important need. Although there are some training opportunities available, there are language barriers and geographic dispersion issues to overcome. In order to improve training provided to child care professionals, learning opportunities are needed at multiple educational levels within the county.

There is general agreement within Cochise County that early childhood system coordination is desirable. However, geographic barriers and a lack of experience on how these systems function both practically and contractually hamper coordination efforts. Examples of system coordination efforts for issues surrounding children birth to age five do exist in Cochise County, yet the efforts remain short-term and fragmented along geographic lines.

## Quality of Early Childhood Care and Education

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Arizona is in the process of creating a high quality early care and education system. Childcare needs are growing because a majority of children, birth to five years of age, participate in regular, non-parental child care. According to a national study, sixty-one percent of young children participated in some form of child care while thirty-four percent participated in center based programs. Child care is a growing industry due to increasing maternal employment rates and policies from welfare reform. Research has found that high quality child care is associated with many positive outcomes including language development and cognitive school readiness. Following is a listing of nationally accredited quality early child care and education

organizations approved by the Arizona State Board of Education:

- Association Montessori International/USA (AMI),
- American Montessori Society (AMS)
- Association of Christian Schools International (ACSI)
- National Accreditation Commission for Early Care and Education (NAC)
- National Association for the Education of Young Children (NAEYC)
- National Association for Family Child Care (NAFCC)
- National Early Childhood Program Accreditation (NECPA)

Of these organizations, Cochise County currently has a preschool in Sierra Vista that is accredited by NAEYC and a family childcare provider in Bisbee that is accredited by NAFCC.

An important indicator of quality is the staff to child ratio. The Arizona Department of Health Services (ADHS) and the Department of Economic Security (DES) have established the minimum requirements in order to be licensed or certified in Arizona. NAEYC has additionally established national recommendations to improve the quality of care and education of young children (Table 35).

**Table 35: NAEYC Staff to Child Ratio Recommendations**

| NAEYC Staff to Child Ratio Recommendations |     |     |     |     |     |     |     |      |      |      |
|--|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Group Size                                 | 6   | 8   | 10  | 12  | 14  | 16  | 18  | 20   | 22   | 24   |
| Infants (0-15 months)                      | 1:3 | 1:4 |     |     |     |     |     |      |      |      |
| Toddlers (12-28 months)                    | 1:3 | 1:4 | 1:4 | 1:4 |     |     |     |      |      |      |
| Toddlers (21-36 months)                    |     | 1:4 | 1:5 | 1:6 |     |     |     |      |      |      |
| Pre-school (2.5 to 3 years)                |     |     |     | 1:6 | 1:7 | 1:8 | 1:9 |      |      |      |
| Pre-school (4 years)                       |     |     |     |     |     | 1:8 | 1:9 | 1:10 |      |      |
| Pre-school (5 years)                       |     |     |     |     |     |     |     | 1:10 | 1:11 | 1:12 |

Source: NAEYC Accreditation Criteria

Data regarding staff to child ratios in Cochise County was gathered through telephone interviews and surveys. The results demonstrate that although Cochise County child care facilities and certified homes meet the licensing and certification requirements, they lag behind the NAEYC recommendations for quality (Table 36).

**Table 36: Staff to Child Ratios in Cochise County Child Care Facilities and Certified Homes**

|                    | < 1 year | 1 year | 2 years | 3 years | 4 years | 5 years + |
|--------------------|----------|--------|---------|---------|---------|-----------|
| Preschools         | 1:4      | 1:6    | 1:8     | 1:11    | 1:12    | 1:15      |
| Child Care Centers | 1:5      | 1:6    | 1:7     | 1:11    | 1:13    | 1:15      |
| Group Homes        | 1:5      | 1:5    | 1:5     | 1:5     | 1:6     | 1:6       |
| Head Starts        |          |        |         | 1:9     | 1:10    |           |

Source: FTF Telephone Interviews and Surveys 2008

Another important indicator of quality is the education and experience of the early childhood workforce. Thirty-two percent of the early childhood education (ECE)

workforce in Cochise County has less than a high school diploma. Thirty-three percent of this workforce has a minimum of a high school diploma or GED. Twenty-five percent have a Childhood Development Credential (CDA) or the equivalent, while nineteen percent have a four-year degree or higher (Table 37).

**Table 37: Education Level of Cochise County Early Childhood Education Workforce**

| < High School | High School/GED | CDA or equivalent | Bachelors/Masters |
|---------------|-----------------|-------------------|-------------------|
| 32%           | 33%             | 25%               | 19%               |

Source: S\*CCEEDS Registry, March 2008

It must be noted that this data only includes the workforce that has enrolled in the Statewide Child Care and Early Education Development System (S\*CCEEDS) registry. Not everyone chooses to register since it is not mandatory. Certain communities have a higher percentage of DES certified home workforce registered while others have a higher percentage of highly educated teachers registered.

Arizona does not currently have minimum early childhood education pre-service qualifications in order to work with young children. However, six hours of training per year is required in order to be certified with DES and twelve hours of training per year is required by ADHS. CPR and First Aid Certification is required by both agencies, as well as, valid fingerprint cards and Child Protective Services (CPS) clearance.

### **Additional Cochise Region indicators addressed under this priority**

According to a Cochise County kindergarten teacher survey conducted by the CCSRP seventy-one percent of the teachers felt that less than half of all incoming students were ready for kindergarten. Three-fourths (76.5%) of these teachers stated that less than a quarter of children entering kindergarten could recognize the relationship between letters and sounds. When asked about preschools, ninety-four percent of the educators agreed that developmentally appropriate preschool programs are important in preparing a child for school. However, the teachers indicated that only a minority of students actually attended a developmentally appropriate preschool prior to entering kindergarten.

The same report conducted a survey of Cochise County parents with children birth to five years of age. Seventy-three percent of the parents indicated that quality child care is a big need in their community. Some parents said there was a lack of choice, while others found the cost prohibitive. Meanwhile, early childhood educators that participated in various focus groups and in key informant interviews noted there was a lack of respect for the profession while others were grateful for the support they received from the parents they served. Some noted the low pay and demanding nature of working in the field. It is interesting to note, however, that those with more education and training emphasized the rewards and found fulfillment in the challenges.

## **Access to Early Childhood Care and Education**

### **Number of Early Care and Education Programs**

As of August 2008, Cochise County has thirty-seven ADHS licensed facilities. This number includes child care centers, private and public preschools, and Head Starts. Of these facilities, twenty-one are contracted with DES to accept families with child care subsidies. There are six ADHS group homes and ninety-seven DES certi-

fied homes. All ADHS licensed facilities and group homes, as well as, DES certified providers are included in the Child Care Resource and Referral (CCR&R) database. However, there are no CCR&R registered homes in Cochise County. Many facilities and homes take part in the Child and Adult Care Food Program (CACFP). The number of unregulated facilities and homes is unknown although they are a popular method of child care in certain communities. The type of childcare available in Cochise County depends on the community (Table 38).

**Table 38: Number of Early Child Care and Education Facilities by Communities in Cochise County**

|               | Child Care Center | Private Preschool | Public Preschool | Head Start | Group Homes | Certified Home |
|---------------|-------------------|-------------------|------------------|------------|-------------|----------------|
| Benson        | 1                 | 1                 |                  | 1          |             | 1              |
| Bisbee        | 1                 |                   |                  | 1          |             | 9              |
| Douglas       | 3                 | 1                 | 1                | 2          | 4           | 35             |
| Elfrida       |                   |                   |                  |            |             | 1              |
| Ft Huachuca   | 1                 |                   |                  |            |             |                |
| Hereford      | 1                 |                   |                  |            |             | 6              |
| Huachuca City |                   |                   |                  |            |             | 1              |
| Naco          |                   |                   |                  |            |             | 14             |
| Pearce        |                   |                   | 1                |            |             |                |
| Pirtleville   |                   |                   |                  |            |             | 3              |
| Saint David   |                   |                   |                  |            |             | 1              |
| Sierra Vista  | 7                 | 6                 | 3                | 2          | 1           | 19             |
| Tombstone     |                   |                   |                  |            | 1           |                |
| Willcox       | 1                 |                   | 1                | 2          |             | 7              |

Sources: Child Care Resource & Referral, Arizona Department of Health Services (Licensing), & DES Child Care Administration

**Cost of Care**

The cost of infant care is most expensive to parents due to lower ratios required of staff to children. When compared by settings, licensed child care centers are most expensive (Table 39). However, many families in Cochise County must determine their family choice of child care by financial concerns rather than concerns about quality due to limited income.

**Table 39: Costs of Early Care and Education in Cochise County**

| Setting Type & Age Group | Cochise County (2006) | Cochise County (2008) | U.S. (2008)        |
|--------------------------|-----------------------|-----------------------|--------------------|
| <b>Group Homes</b>       |                       |                       |                    |
| <b>Infant</b>            | \$22.33 per day       |                       | Data not available |
| <b>Toddler</b>           | \$21.90 per day       |                       |                    |
| <b>Preschooler</b>       | \$21.90 per day       |                       |                    |
| <b>Licensed Centers</b>  |                       |                       |                    |
| <b>Infant</b>            | \$26.14 per day       | Data not available    | \$9,567 per yr**   |
| <b>Toddler</b>           | \$23.86 per day       |                       |                    |
| <b>Preschooler</b>       | \$21.90 per day       |                       | \$7,084 per yr**   |
| <b>In-Home Care</b>      |                       |                       |                    |
| <b>Infant</b>            | \$24.29 per day       |                       | Data not available |
| <b>Toddler</b>           | \$24.29 per day       |                       |                    |
| <b>Preschooler</b>       | \$23.71 per day       |                       |                    |

|                                       |                    |                    |                    |
|---------------------------------------|--------------------|--------------------|--------------------|
| <b>Certified Homes</b>                |                    |                    |                    |
| <b>Infant</b>                         | \$23.26 per day    | Data not available | \$6,505 per yr.**  |
| <b>Toddler</b>                        | \$22.48 per day    |                    |                    |
| <b>Preschooler</b>                    | \$22.06 per day    |                    |                    |
| <b>Alternately Approved Homes</b>     |                    |                    |                    |
| <b>Infant</b>                         | \$16.86 per day    | Data not available |                    |
| <b>Toddler</b>                        | \$16.03 per day    |                    |                    |
| <b>Preschooler</b>                    | \$16.09 per day    |                    |                    |
| <b>Unregulated Homes</b>              | Data not available |                    |                    |
| <b>Subsidized Settings (all ages)</b> |                    |                    | Data not available |

\*\*Assumes full-time enrollment Sources: 2006 DES Market Rate Study; 2008 rates were obtained from SWI ECE Centers; survey results conducted with randomly selected ECE centers in the Cochise County

**Child Care Costs in Reference to Family Income**

The cost of child care can be a considerable burden for Arizona families. Yearly fees for child care in the state of Arizona range from almost \$8000 for an infant in a licensed center to about \$5900 for before and after school care in a family child care home (Table 40). This represents about twelve percent of the median family income of an Arizona married couple with children under eighteen. It represents twenty to thirty percent of the median income of a single parent female headed family in Arizona.

**Table 40: Child Care Costs and Family Incomes**

|   | <b>AZ</b> | <b>U.S.</b>      |
|---|-----------|------------------|
| <b>Average, annual fees paid for full-time center care for an infant</b>  | \$7,974   | \$4,542-\$14,591 |
| <b>Average, annual fees paid for full-time center care for 4-year-old</b>   | \$6,390   | \$3,380-\$10,787 |
| <b>Average, annual fees paid for full-time care for an infant in a family child-care home</b>   | \$6,249   | \$3,900-\$9,630  |
| <b>Average, annual fees paid for full-time care for a 4-year-old in a family child-care home</b>  | \$6,046   | \$3,380-\$9,164  |
| <b>Average, annual fees paid for before and after school care for a school age child in a center</b>                                    | \$6,240   | \$2,500-\$8,600  |
| <b>Average, annual fees paid for before and after school care for a school age child in a family child care home</b>                    | \$5,884   | \$2,080-\$7,648  |
| <b>Median annual family income of married-couple families with children under 18</b>  | \$66,624  | \$72,948         |
| <b>Cost of full-time care for an infant in a center, as percent of median income for married-couple families with children under 18</b> | 12%       | 7.5%-16.9%       |
| <b>Median annual family income of single parent (female headed) families with children under 18</b>                                     | \$26,201  | \$23,008         |
| <b>Cost of full-time care for an infant in a center, as percent of median income for married-couple families with children under 18</b> | 30%       | 25%-57%          |

Source: NACCRA Fact Sheet: 2008 Child Care in the State of Arizona. <http://www.naccrra.org/randd/data/docs/AZ.pdf>

**Additional Cochise County Indicators Addressed under this Priority**

There are many factors that limit families’ access to quality child care and education. The geography of Cochise County makes availability of services a challenge. Rural communities, being small and isolated, simply have limited child care options. The cost of child care is another factor. Many families cannot afford to pay the cost with their low income. Other families lose their ability to afford child care once they lose

their DES child care subsidy due to a small wage increase. Therefore, many families must rely on unregulated caregivers, such as neighbors or family members, that may not be particularly knowledgeable in developmentally appropriate practices or have CPR and first aid training. Additionally, families with special needs have an added challenge accessing appropriate child care, if at all, depending on the availability of that service within their community. These frustrations were shared by parents during focus groups held by the CCSRP.

## Health

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Children's good health is an essential element that is integrally related to their learning, social adjustment, and safety. Healthy children are ready to engage in the developmental tasks of early childhood and to achieve the physical, mental, intellectual, social and emotional well being necessary for them to succeed when they reach school age. Children's healthy development benefits from access to preventive, primary, and comprehensive health services that include screening and early identification for developmental milestones, vision, hearing, oral health, nutrition and exercise, and social-emotional health. Previous sections of this report presented some data on prenatal care, health insurance coverage, immunizations, and oral health for Cochise County. This section will continue with those discussions, as well as, include developmental screening and substance abuse.

### Developmental Screening

Early identification of developmental or health delays is crucial to ensuring children's optimal growth and development. The Arizona Chapter of the American Academy of Pediatrics recommends that all children receive a developmental screening at 9, 18, and 24 months with a valid and reliable screening instrument. Providing special needs children with supports and services early in life leads to better health, better outcomes in school, and opportunities for success and self-sufficiency into adulthood. Research has documented that early identification of and early intervention with children who have special needs can lead to enhance developmental outcomes and reduced developmental problems.<sup>45</sup> For example, children with autism, identified early and enrolled in early intervention programs, show significant improvements in their language, cognitive, social, and motor skills, as well as in their future educational placement.<sup>46</sup>

Parents' access to services is a significant issue, as parents may experience barriers to obtaining referrals for young children with special needs. This can be an issue if, for example, an early childcare provider cannot identify children with special needs correctly.<sup>47</sup>

While recommended, all Arizona children are not routinely screened for developmental delays although nearly half of parents nationally have concerns about their

45 Garland, C., Stone, N. W., Swanson, J., & Woodruff, G. (eds.). *Early intervention for children with special needs and their families: Findings and recommendations*. 1981, Westat Series Paper 11, University of Washington; Maisto, A. A., German, M. L. Variables related to progress in a parent-infant training program for high-risk infants. 1979, *Journal of Pediatric Psychology*, 4, 409-419.; Zeanah, C. H. *Handbook of infant mental health*, 2000, New York: The Guildford Press.

46 National Research Council, Committee on Educational Interventions for Children with Autism, Division of Behavioral and Social Sciences and Education. *Educating children with autism*. Washington, DC: National Academy Press; 2001.

47 Hendrickson, S., Baldwin, J. H., & Allred, K. W. Factors perceived by mothers as preventing families from obtaining early intervention services for their children with special needs, *Children's Health Care*, 2000, 29, 1-17.

young child's behavior (48 percent), speech (45 percent), or social development (42 percent)<sup>48</sup>. Children most likely to be screened include those that need neonatal intensive care at birth. These babies are all referred for screening and families receive follow-up services through Arizona's High Risk Perinatal Program administered through county Health Departments.

Every state is required to have a system in place to find and refer children with developmental delays to intervention and treatment services. The federal Individuals with Disabilities Education Act (IDEA) governs how states and public agencies provide early intervention, special education, and related services. Infants and toddlers with disabilities (birth to age three) and their families receive early intervention services under IDEA Part C. Children and youth (ages 3-21) receive special education and related services under IDEA Part B. Medically necessary intervention services may be provided through AHCCCS or the Division for Developmental Delays (DDD) within the Department of Economic Security.

In Arizona, one of the system components that serves eligible infants and toddlers includes the Arizona Early Intervention Program (AzEIP). Eligible children have not reached fifty percent of the developmental milestones expected at their chronological age in one or more of the following areas of childhood development: physical, cognitive, language/communication, social/emotional, and adaptive self-help. Identifying how many children are provided services prior to reaching kindergarten is an important first step in understanding how well a community's screening and identification process is working. Additionally, the number of children being served provides initial information as to the demand for service providers who work with young children.

There are many challenges for Arizona's early intervention and special education programs in being able to reach and serve children and parents. Speech, Physical, and Occupational Therapists are in short supply and more acutely so in some areas of the state than others. Families and health care providers are frustrated by the tangle of procedures required by both private insurers and the public system. These problems will require the combined efforts of state and regional stakeholders to arrive at appropriate solutions.

While longer-term solutions to the therapist shortage are developed, parents can be primary advocates for their children to assure that they receive appropriate and timely developmental screenings according to the schedule recommended by the Academy of Pediatrics. Also, any parent who believes their child has delays can contact the Arizona Early Intervention Program or any school district and request that their child be screened. Outreach, information and education for parents on developmental milestones for their children, how to bring concerns to their health care provider, and the early intervention system and how it works, are parent support services that each region can provide. These measures, while not solving the problem, will give parents some of the resources to increase the odds that their child will receive timely screening, referrals, and services.

According to a key informant interviewed, "Developmental and health care needs need to be identified before a child goes to school." Screening is especially important in a community that is struggling with the effects of substance exposure on its very youngest children.

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48 Inkelas, M., Regalado, M., Halfon, N. Strategies for Integrating Developmental Services and Promoting Medical Homes. Building State Early Childhood Comprehensive Systems Series, No. 10. National Center for Infant and Early Childhood Health Policy. July 2005.

Cochise County had 378 children, birth through three years of age, receive a comprehensive developmental screening through AzEIP between July 1, 2006 and June 31, 2007. Of this number, forty-two (were for children who had been removed from their homes by CPS. Many children who have been substance exposed in-vitro are not being made eligible until they show signs and in many cases this may be too late for early intervention strategies to be implemented. If there is sufficient history, then a case can be made for a referral based on informed clinical opinion; however, this introduces an extra step in the process.

Barriers faced by rural communities like those in Cochise County in being able to identify and treat developmental delays include: a low capacity for diagnosis and treatment, parent awareness, distances that must be traveled for diagnosis and treatment and the fact that many children are in informal care settings or cared for at home. Additionally, it appears that a proportion of children are slipping through the cracks of the well-check system.

**Table 41: Children Birth to Three Years that Received Developmental Screenings in Cochise County in 2005 & 2006**

| Service Received According to Age Group | 2005       | 2006       |
|---|------------|------------|
| AzEIP Screening 0-12 months             | 7 (0.40%)  | 7 (0.40%)  |
| AzEIP Screening 13-36 months            | 82 (1.58%) | 79 (1.44%) |

The AzEIP data are only available at the county level.

Source: Arizona Early Intervention Program, Arizona Department of Health Services

There are many challenges for AzEIP in being able to reach and serve children and parents. Speech, Physical, and Occupational Therapists are in short supply and more acutely so in some areas of the state than others. Families and health care providers are frustrated by the tangle of procedures required by both private insurers and the public system. These problems require the combined efforts of state and regional stakeholders to arrive at appropriate solutions.

While longer-term solutions to the therapist shortage are developed, parents can be primary advocates for their children to assure that they receive appropriate and timely developmental screenings according to the schedule recommended by the Academy of Pediatrics. Also, any parent who believes their child has delays can contact AzEIP or any school district and request that their child be screened. Parent support services need to include information and education for parents on developmental milestones for their children, how to bring concerns to their health care provider, and knowledge on how the early intervention system works. These measures, while not solving the problem, will give parents some of the resources to increase the odds that their child will receive timely screening, referrals, and services.

### **Insurance Coverage**

Table 42 below compares the percent of children receiving no medical care for those insured all year versus those uninsured all or part of the year. Over thirty-eight percent of children in Arizona who are uninsured all or part of the year, are not receiving medical care compared to fifteen percent (15%) of children who are insured throughout the year.

**Table 42: Percent of Children (0-17) Not Receiving Any Medical Care, 2003**

|                | Insured All Year                   |                                   | Uninsured All or Part of the Year  |                                   |
|----------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|
|                | Percent not receiving medical care | Number not receiving medical care | Percent not receiving medical care | Number not receiving medical care |
| <b>Arizona</b> | 14.8                               | 171,303                           | 38.1                               | 134,259                           |
| <b>US</b>      | 12.3                               | 7,635,605                         | 25.6                               | 2,787,711                         |

Source: Robert Wood Johnson Foundation. Protecting America's Future: A State-By-State Look at SCHIP and Uninsured Kids, August 2007.

While the number of children having access to medical care or well child visits in Cochise County could not be determined for this report, the high rate of uninsured children in the county would suggest that access to medical care and well child visits is limited. As described in the section on Health Coverage and Utilization, children who are covered by private insurance, or covered by AHCCCS are very likely to receive well child visits during the year, as are children who are enrolled in Head Start.

### Immunizations

Immunization of young children is known to be one of the most cost-effective health services available and is essential to prevent early childhood diseases and protect children from life threatening diseases and disability. A Healthy People 2010 goal for the United States is to reach and sustain full immunization of ninety percent of children two years of age.

Although there is general consensus in Cochise County that preventative medicine is better and that early intervention is very important, it is clear that there is some concern around access to well child checks and ongoing care (CCSRP Parent Focus Groups and Key Informant Interviews). Focus group participants noted that they are concerned that local doctors do not listen to families when they come in with their children. A number of parents felt that although they were sure that their child needed medical attention, the attitude of the doctors, far too often was that the child would “outgrow” it.

Key informants also spoke of the success of some programs, especially in the rural communities, that bring services to the home or community. One such initiative is currently in the process of being launched by Chiricahua Community Health System, which has received funding for a Mobile Pediatric Clinic that will serve Hereford, Bisbee, Naco, and Douglas. Key informants noted that in rural areas, where the capacity to serve families is a challenge in terms of cost and time, initiatives that bring services into the community, home or schools are especially valuable.

Although recent data was unavailable for this report, data from 2003 suggest that several communities in particular lagged behind the state and nation in percent of immunized two year olds, including Bisbee, Huachuca City, and Sierra Vista. For example, in 2003, about forty-four percent (44.3%) of Bisbee two year olds were immunized according to the 4:3:1:3 immunization schedule (Table 43). Cochise County as a whole lagged behind the state and nation by twenty percent

**Table 43: Percent of Immunized Two Year Olds by Communities**

|                       | <b>2003</b> |
|-----------------------|-------------|
| <b>Benson</b>         | 83.1        |
| <b>Bisbee</b>         | 44.3        |
| <b>Douglas</b>        | >90.0       |
| <b>Huachuca City</b>  | 45.8        |
| <b>Sierra Vista</b>   | 48.8        |
| <b>Tombstone</b>      | 79.1        |
| <b>Willcox</b>        | >90.0       |
| <b>Cochise County</b> | 58.8        |
| <b>Arizona</b>        | 79.8        |
| <b>US</b>             | 80.3        |

Source: ADHS Community Health Profile, Phoenix, 2003. ADHS National Immunization Survey, Comparison of 2007 to 2008 Results.

### Oral Health Status

Although there is no data that lists the percentage of children receiving regular oral health checks in the county, there are other data sources available that give an indication of the oral health of the county's youngest children. Key informants noted that oral health has been neglected in Cochise County, and that it is a huge issue in schools. One key informant noted that for many, this is an awareness issue, and it is difficult, as a parent, to access information on when dental visits should begin. According to the parent key informant interviewed, many children are not seen by a dentist until they are between 3 and 4 years old.

This data is echoed by the results of the CCSRP focus groups conducted earlier in the year. Parents spoke of issues around limited acceptance of insurance and limited providers. Additionally, there are many families who are not covered by dental insurance. In the words of one key informant, "Many people can't afford dental care. Dentists want the money up front." It was noted by one parent that it is easy to access dental services for those covered by AHCCCS; however, they are forced to travel out of their community. Additionally, some parents mentioned the long time that it takes to schedule appointments and a lack of orthodontists in the county.

**Table 44: Dental Health Status of Infants 6-12 months**

| <b>Oral Health Indicators</b>      | <b>Cochise County</b> | <b>Arizona</b> |
|------------------------------------|-----------------------|----------------|
| <b>With Decay Experience</b>       | 11%                   | 5%             |
| <b>With Untreated Tooth Decay</b>  | 11%                   | 5%             |
| <b>With Urgent Treatment Needs</b> | 5%                    | 3%             |

**Table 45: Dental Health Status of Toddlers 2-4 years**

| <b>Oral Health Indicators</b>      | <b>Cochise County</b> | <b>Arizona</b> |
|------------------------------------|-----------------------|----------------|
| <b>With Decay Experience</b>       | 38%                   | 37%            |
| <b>With Untreated Tooth Decay</b>  | 35%                   | 33%            |
| <b>With Urgent Treatment Needs</b> | 2%                    | 4%             |

Source: Cochise County Oral Health Assessment

### Substance Abuse

Substance abuse is a critical concern in Cochise County. According to key informant interviews, systems that serve substance affected children and their families, especially the foster system, are stressed. There are issues of capacity, a lack of specialized services, and additional issues about how best to serve families and children with substance abuse needs. In many cases, the children have a range of disabilities so that no single approach can be recommended.

Key informants stated that training needs are not being covered. However, some of the trainings that are available in Cochise County include the following:

- Mother Child Addiction Services program (MCAS) that targets pregnant and post-partum mothers with children up to 1 year old (Medicaid eligible mothers only – 104 mothers served in last fiscal year)
- Arizona Families First program that targets families impacted by substance abuse with a focus on providing services and keeping the family intact (184 clients in 2007)
- Arizona Statewide Traumatic Brain Injury Resource Team trainings

There are also some examples of system coordination and integrated services in this area. An example in Cochise County currently includes the Drug Court, in Sierra Vista, Benson, and Douglas, which focuses on integrating services for children, and Best for Babies, launched in 2007, which has a case approach to children birth to five years of age who come into court. However, although there are promising practices, there is still agreement within the community that greater attention is needed on how to ensure the best outcomes for these children. Key informants also believe that there is a need to put resources into prevention, involving families and communities. Parents concur, stating a need for more drug awareness and treatment options.

## Family Support

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Family support is the foundation for enhancing children's positive social and emotional development. Children who experience sensitive, responsive care from a parent perform better academically and emotionally. Beyond the basics of care and parenting skills, children benefit from positive interactions with their parents (e.g. physical touch, early reading experiences, as well as verbal, visual, and audio communications). Children depend on their parents to ensure they live in safe and stimulating environments where they can explore and learn.

Many research studies have examined the relationship between parent-child interactions, family support, and parenting skills.<sup>49</sup> Much of the literature addresses effective parenting as a result of two broad dimensions: discipline and structure, and warmth and support.<sup>50</sup> Strategies for promoting enhanced development often

49 Brooks-Gunn, J., Klebanov, P.K., & Liaw, F. R. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. *Children and Youth Services Review*, 1994, 17, 251-276; Hair, E., C., Cochran, S. W., & Jager, J. Parent-child relationship. In E. Hair, K. Moore, D. Hunter, & J. W. Kaye (Eds.), *Youth Development Outcomes Compendium*. Washington DC, Child Trends; Maccoby, E. E. Parenting and its effects on children: On reading and misreading behavior genetics, 2000, *Annual Review of Psychology*, 51, 1-27.

50 Baumrind, D. Parenting styles and adolescent development. In J. Brooks-Gunn, R., Lerner, & A. C. Peterson (Eds.), *The encyclopedia of adolescence* (pp. 749-758). New York: Garland; Maccoby, E. E. Parenting and its effects on children: On reading and misreading behavior genetics, 2000, *Annual Review of Psychology*, 51, 1-27.

stress parent-child attachment, especially in infancy, and parenting skills.<sup>51</sup> Parenting behaviors have been shown to impact language stimulation, cognitive stimulation, and promotion of play behaviors, all of which enhance child well being.<sup>52</sup>

Parent-child relationships that are secure and emotionally close have been found to promote children's social competence, pro-social behaviors, and empathic communication.<sup>53</sup>

The new economy has brought changes in the workforce and family life. These changes are causing financial, physical, and emotional stresses in families, particularly low-income families. Increasing numbers of new immigrant families are challenged to raise their children in the face of language and cultural barriers. Regardless of home language and cultural perspective, every family should have access to information and services and should fully understand their role as their child's first teacher.

Supporting families is a unique challenge that demands collaboration between parents, service providers, educators and policy makers to promote the health and well being of young children. Every family needs and deserves support and access to resources. Effective family support programs will build upon family assets which are essential to creating self-sufficiency in all families. Family support programs play a part in strengthening communities so that families benefit from "belonging". Success is dependent on families being solid partners at the table, with access to information and resources. Activities and services must be provided in a way that best meet family needs.

Family support is a holistic approach to improving young children's health and early literacy outcomes. In addition to a list of services like the licensed child care professionals, preschool programs, food programs, and recreational programs available to families, Regional Partnership Councils will want to work with their neighborhoods to identify informal networks of people – associations – that families can join and utilize to build a web of social support.

There is a range of information and resources available to parents in various communities within Cochise County. However, it tends to be issue specific and have a patchy geographical dispersion. Additionally, some programs have eligibility criteria. There is no central clearinghouse for information and as a result, families access information from a variety of sources. According to recent data collected through parent surveys and focus groups (CCSRP), when asked where they find helpful information, parents noted: other family members, doctors' offices, church, libraries, Head Start, schools, childcare professionals, WIC and various agencies. Family members and doctors' offices were the most common sources of information. As one parent noted, "because Cochise County is filled with small towns, it seems like available information does not get out to everyone." A number of parents commented on the

51 Sroufe, L. A. *Emotional development: The organization of emotional life in the early years*. Cambridge: Cambridge University Press; Tronick, E. Emotions and emotional communication in infants, 1989, *American Psychologist*, 44, 112-119.

52 Brooks-Gunn, J., Klebanov, P.K., & Liaw, F. R. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. *Children and Youth Services Review*, 1994, 17, 251-276; Snow, C. W., Barnes, W. S., Chandler, J., Goodman, I. F., & Hemphill, J., *Unfulfilled expectations: Home and school influences on literacy*. Cambridge, MA: Harvard University Press.

53 ; Hair, E., C., Cochran, S. W., & Jager, J. Parent-child relationship. In E. Hair, K. Moore, D. Hunter, & J. W. Kaye (Eds.), *Youth Development Outcomes Compendium*. Washington DC, Child Trends; Sroufe, L. A. *Emotional development: The organization of emotional life in the early years*. Cambridge: Cambridge University Press; Tronick, E. Emotions and emotional communication in infants, 1989, *American Psychologist*, 44, 112-119.



role that schools play in disseminating information, “The local schools are doing the best they can. They should be a central location for families to access information.”

Some parenting classes in Cochise County are offered by:

- Choices program (“Strengthening Families” curriculum)
- Parent Resource Network (“Love & Logic” curriculum & “Happiest Baby on the Block” curriculum)
- Cooperative Extension (nutrition and brain development)
- County Health Department (asthma and nutrition)
- School Districts
- Cochise College

Other programs that support parents in their role as caregivers include:

- In-Home Services (child birth to <18 yrs referred by CPS)
- Artisans Program (child birth-10 yrs with placement issues)
- Healthy Families (deemed at risk)
- First Steps
- Prenatal/Lamaze Classes
- Parent Kits
- New Visions
- AzEIP
- Early Head Start

Access to these classes and supports is limited, yet there is a general consensus that parent education and support is needed. In focus groups (CCSRP) child care professionals stated that parents need to know what is developmentally appropriate. Health care key informants echoed this sentiment stressing the need for education for both parents and child care professionals.

### **Daily reading to children**

The fourth grade AIMS reading scores for spring 2006 and 2007 in Cochise County show that there is a large discrepancy in the test scores for children who are English proficient and those who are not fully proficient. Sixty-nine percent of the county's Fully English Proficient fourth grade students achieved the "Met" or "Exceeded" level of the AIMS Standards in 2006 and 2007. Meanwhile, twenty-seven percent and twenty-eight percent of the fourth grade students who were English Learners met or exceeded Standards in 2006 and 2007 respectively.

Parents' attitudes to learning can play a key role in establishing patterns of early literacy, as can daily reading to children. However, there is no existing survey that captures parent knowledge, family literacy and daily reading to children. Programs that seek to promote family literacy in Cochise County include:

- Reach Out and Read (700-800 books distributed Oct. 1, 2006 – Sept. 30, 2007)
- Adult Education Family Literacy Program (15 families/yr)
- Local Library Programs

Parents in focus group conversations (CCSRP) commented that although their libraries offer some programs (preschool reading hour, for example), they do not have enough preschool resources, and some parents felt that their local libraries were not young child friendly. They also saw a need for separate rooms for young children at each library, to encourage parents to bring their children. Although these programs are an asset, they are scattered and do not serve the entire county.

## **Professional Development**

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Professionals providing early childhood services can improve their knowledge and skills through professional education and certification. This training includes developmental theory, as well as practical skills in areas such as child health, child safety, parent/child relationships, and professional child care service delivery. The professional capacity of the early childhood workforce and the resources available to support it affect the development of young children.

### **Childcare Professionals' Certification and Education**

Research on caregiver training has found a relationship between the quality of child care provided and child development outcomes<sup>54</sup>. Furthermore, formal training is related to increased quality care; however, experience without formal training has not been found to be related to quality care.<sup>55</sup>

54 NICHD Early Child Care Research Network. The relation of child care to cognitive and language development, 2000, *Child Development*, 71, 960-980.

55 Galinsky, E. C., Howes, S., & Shinn, M. *The study of children in family care and relative care*. 1994, New York: Families and Work Institute; Kagan, S. L., & Newton, J. W. Public policy report: For-profit and non-profit child care: Similarities and differences. *Young Children*, 1989, 45, 4-10; Whitebook, M., Howes, C., & Phillips, D. *Who cares? Child care teachers and the quality of care in America*, 1989,

A pressing concern is the preparation of early childhood educators. Professional training and credentialing of professionals is lacking in Cochise County. There is a higher percentage of teachers and assistants with no degree in Cochise County than state averages (Table 46).

**Table 46: Educational Background of Early Childhood Professionals**

| Degree Type | Cochise 2007 |            | Arizona* 2007 |            | U.S.** 2002 |            |
|-------------|--------------|------------|---------------|------------|-------------|------------|
|             | Teachers     | Assistants | Teachers      | Assistants | Teachers    | Assistants |
| No degree   | 75%          | 85%        | 61%           | 82%        | 20%         | 12%        |
| CDA         | 13%          | 0%         | 9%            | 7%         | N/A         | N/A        |
| Associates  | 13%          | 11%        | 15%           | 8%         | 47%         | 45%        |
| Bachelors   | 10%          | 3%         | 19%           | 7%         | 33%         | 43%        |
| Masters     | 2%           | 3%         | 6%            | <1%        |             |            |

Source: Compensation and Credentials report, Center for the Child Care Workforce – Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population report, 2002.

\* Arizona figures were determined by using the statewide average from the Compensation and Credentials report.

\*\*U.S. figures had slightly different categories: High school or less was used for no degree, Some college was used for Associates degree, and Bachelors degree or more was used for Bachelors and Masters degree

According to results of key informant interviews conducted earlier in the year (CCSRP), one of the most important things that could be done to improve the quality of care for children is to educate the early childhood educator. Course work opportunities in Cochise County include:

- Care Courses (distance learning)
- Central Arizona College
- Child Care Education Institute (CCEI online)
- Cochise College

Focus groups of early childhood educators stressed the importance of accessibility to education, noting, “If scholarships were available, we all would be interested.” When asked what would motivate them to receive a CDA certificate or an ECE degree, corresponding salary increases, dynamic instructors, benefits and a team approach to training/education were stated.

- Training hours as required by ADHS and DES can be acquired through:
  - Arizona Infant & Toddler Institute (AITI)
  - Child Care Resource & Referral (CCR&R)
  - Developmentally Appropriate Practices (DAP)
  - Family to Family
  - Project “Me, Too!”
  - Other S\*CCEEDS registered trainings (Cooperative Extension, Cochise County Health Department, etc.)

One hundred S\*CCEEDS trainings were offered in Cochise County between June 1, 2007 and May 31, 2008. Despite these efforts, there is still a great need for professional development opportunities at all levels. It was noted that well over sixty-five percent of DES Certified Family Child Care Providers are monolingual Spanish speaking. The average has a high school education.

**Employee Retention**

Providing families with high quality child care is an important goal for promoting child development. Research has shown that child care professionals who are highly qualified and remain employed at their facility for longer periods of time result with more positive outcomes for children.<sup>56</sup> More specifically, research has shown that child care professionals with more job stability are more attentive to children and promote more child engagement in activities.<sup>57</sup>

The average length of employment has remained steady with teachers employed more than five (5) years and assistant teachers employed more than two (2) years in many child care centers (Table 47).

**Table 47: Average Length of Employment for Child Care Professionals**

|                                 | 6 Months or Less | 7-11 Months | One Year | Two Years | Three Years | Four Years | Five Years or More | Not applicable | "Don't Know/Refused" |
|---------------------------------|------------------|-------------|----------|-----------|-------------|------------|--------------------|----------------|----------------------|
| <b>Teachers</b>                 | 0%               | 0%          | 0%       | 0%        | 0%          | 20%        | 80%                | 0%             | 0%                   |
| <b>Assistant Teachers</b>       | 8%               | 8%          | 8%       | 24%       | 0%          | 0%         | 12%                | 36%            | 4%                   |
| <b>Teacher Directors</b>        | 0%               | 4%          | 12%      | 8%        | 8%          | 4%         | 28%                | 32%            | 4%                   |
| <b>Administrative Directors</b> | 0%               | 0%          | 0%       | 0%        | 0%          | 0%         | 80%                | 20%            | 0%                   |

Source: Compensation and Credentials Survey.

**Compensation and Benefits**

Higher compensation and benefits are associated with quality child care. Research studies have found that salaries of child care professionals are related to quality child care<sup>58</sup>. Furthermore, higher wages have been found to reduce turnover, all of which is associated with better quality child care<sup>59</sup>. Better quality care translates to child care professionals routinely promoting cognitive and verbal abilities in children, and social and emotional competencies.<sup>60</sup>

According to the Bureau of Labor Statistics in 2006, the mean hourly wage for

56 Raikes, H. Relationship duration in infant care: Time with a high ability teacher and infant-teacher attachment. 1993, *Early Childhood Research Quarterly*, 8, 309-325.

57 Stremmel, A., Benson, M., & Powell, D. Communication, satisfaction, and emotional exhaustion among child care center staff: Directors, teachers, and assistant teachers, 1993, *Early Childhood Research Quarterly*, 8, 221-233; Whitbook, M., Sakai, L., Gerber, E., & Howes, C. *Then and now: Changes in child care staffing, 1994-2000*. Washington DC: Center for Child Care Workforce.

58 Lamb, M. E. Nonparental child care: Context, quality, correlates. In W. Damon, I. E. Sigel, & K. A. Renninger (Eds.), *Handbook of Child Psychology*(5<sup>th</sup> ed.), 1998, pp. 73-134. New York: Wiley & Sons; National Research Council and Institute of Medicine. *From neurons to neighborhoods: The science of each childhood development*. Washington DC: National Academy Press.

59 Schorr, Lisbeth B. Pathway to Children Ready for School and Succeeding at Third Grade. Project on Effective Interventions at Harvard University, June 2007.

60 Ibid.

preschool teachers nationwide was \$12.45 and for teacher assistants the average rate was \$9.05/hr. One year later, in 2007, the median wage for teacher assistants in Arizona was \$9.00 and for teachers the rate was reported at \$11.80/hr. or five percent below the national average. In 2004, administrative directors in Arizona were being paid an average hourly rate of \$19.03, while at the national level in 2006 the average rate of this profession was reported as \$20.88/hr. (9% higher than in Arizona).

Hourly wages for teachers vary by location in Cochise County. Head Start teachers earn more than the national average and other settings pay teachers well below the state and national averages (Table 48).

**Table 48: Average Wages for Child Care Professionals – Cochise County**

|                                 | Cochise            |              |                    | Arizona      |              | U.S.         |
|---------------------------------|--------------------|--------------|--------------------|--------------|--------------|--------------|
|                                 | 2008               |              |                    | 2004         | 2007         | 2006         |
|                                 | Head Start/<br>EHS | Group Homes  | Private<br>Centers |              |              |              |
| <b>Assistant Teachers</b>       | Not reported       | Not reported | Not reported       | \$8.02/hr    | \$9.00/hr.   | \$9.05/hr.   |
| <b>Teachers</b>                 | \$16.11/hr         | \$7.18/hr    | \$8.33/hr          | \$11.62/hr.  | \$11.80/hr.  | \$12.45/hr.  |
| <b>Administrative Directors</b> | Not reported       | Not reported | Not reported       | \$19.03/hr.  | Not reported | \$20.88/hr.  |
| <b>Teacher Directors</b>        | Not reported       | Not reported | \$13.35/hr         | Not reported | \$14.84/hr.  | Not reported |

Sources: Arizona Compensation and Credentials Report (2007); U.S. Dept. of Labor (2008); Survey with local centers

## Public Information and Awareness

Public interest in early childhood is growing. Recent research in early childhood development has increased families’ attention on the lasting impact that children’s environments have on their development. The passage of Proposition 203 – First Things First – in November 2006, as well as previous efforts lead by the United Way, the Arizona Community Foundation, and the Arizona Early Education Funds (AEEF), has elevated early childhood issues to a new level in our state.

Increasingly, families and caregivers are seeking information on how best to care for young children. National studies suggest that more than half of American parents of young children do not receive guidance about important developmental topics, and want more information on how to help their child learn, behave appropriately, and be ready for school. Many of the most needy, low-income, and ethnic minority children are even less likely to receive appropriate information.<sup>61</sup>

Families and caregivers also seek information on how families can connect with and navigate the myriad of public and private programs that exist in their communities that offer services and support to young children and their families. Few connections exist between such public and private resources, and information that is

61 Halfon, Nel, et al. “Building Bridges: A Comprehensive System for Healthy Development and School Readiness.” National Center for Infant and early Childhood Health Policy, January 2004.

available on how to access various services and supports can be confusing or intimidating. Information provided to families needs to be understandable, culturally and geographically relevant, and easily accessible.

Cochise County has organizations that currently play a role in providing information on child development, resources and supports to families. Across each community in Arizona the following resources provide important early childhood services:

- **School Districts** They disseminate information to parents and the community at large through a number of events throughout the school year that include open house nights, PTO monthly meetings, and information fairs. School districts also use federal funding to keep parents aware of important issues such as health care and child nutrition through information campaigns. School districts have also created a network of information for parents through weekly or monthly newsletters, health bulletins, and Web site updates.
- **Public Libraries** Many libraries offer parent workshops to families on how to raise young readers. Many offer story times for young children where best practices in early literacy are modeled. The libraries may also conduct outreach story times at a limited number of child care centers in the community, where they also train child care professionals and families on best practices in early literacy.
- **Community Organizations** A variety of community organizations provide education, social services, education, and other forms of assistance, resources and referrals related to early childhood. Each community has unique agencies that can foster the goals of promoting early childhood development.
- **Head Start** Cochise County has Head Start Programs to inform low income families about issues related to child growth and development, as well as, school readiness, issues around parent involvement, children's health, and available community social services.

Additionally, a number of organizations, hospitals, and businesses collaborate to educate parents on child development by providing resources and referrals.

Public awareness and information efforts also need to go beyond informing parents and caregivers of information needed to raise an individual child or support a family in care giving. Increased public awareness around the needs of children and their families is also needed. Policy leaders must better understand the link between early childhood efforts and the broader community's future success. Broader public support must be gleaned to build the infrastructure needed to help every Arizona child succeed in school and life. Success in building a comprehensive system of services for young children requires a shift in public perceptions and public will.<sup>62</sup>

While there is a range of opportunities for parents in Cochise County, there is no central repository for information, access is ad hoc, availability is limited by the rural context and there are questions about many parents' awareness of these resources. The Cochise County School Readiness Partnership undertook data collection regarding parents' awareness of services, resources and support, and satisfaction with resources locally.

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62 Clifford, Dean, PhD. Practical Considerations and Strategies in Building Public Will to Support Early Childhood Services.

## System Coordination

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Throughout Arizona, programs and services exist that are aimed at helping young children and their families succeed. However, many such programs and services operate in isolation of one another, compromising their optimal effectiveness. A coordinated and efficient systems-level approach to improving early childhood services and programs is needed.

System coordination can help communities produce higher quality services and obtain better outcomes. For example, one study found that families who were provided enhanced system coordination benefited more from services than did a comparison group that did not receive service coordination.<sup>63</sup> Effective system coordination can promote First Things First's goals and enhance families' abilities to access and use services.

Partnerships are needed across the spectrum of organizations that touch young children and their families. Organizations and individuals must work together to establish a coordinated service network. Improved coordination of public and private human resources and funding could help maximize effective outcomes for young children.

A wide array of opportunities exist for connecting services and programs that touch children and families. Early childhood education professionals could be better connected to schools in their community. Services and programs that help families care for their young children could be better connected to enhance service delivery and efficiency. Public programs that help low income families could be better coordinated so that redundancies as well as gaps in services are eliminated. Faith-based organizations could increase awareness among families of child development and family resources and services. Connections between early education and health providers could be forged.

### **Parent and Community Awareness of Services, Resources or Support**

*Building Bright Futures*, the 2007 Statewide Assessment, noted that the passage of First Things First by majority vote demonstrates that Arizonans are clearly concerned about the well-being of young children in Arizona. However, when asked "how well informed are you about children's issues in Arizona," more than one in three respondents say they are not informed.

Key informants for the Cochise County's regional needs and assets assessment report, were asked to comment on "system coordination" in the county, with a particular emphasis on promising examples, needs and challenges. There is general agreement that system coordination is desirable, however, many efforts are limited geographically, or are still in infancy. Additionally, there is a lack of vision and models for how this could be accomplished among large systems. There are concrete barriers to coordination, notably contractual stipulations, funneled funding streams and the rural context.

There are numerous examples of system coordination efforts underway in the county, including: Best for Babies, SEABHS Community Networking Breakfasts, the

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63 Gennetian, L. A., & Miller, C. *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Effects on Children*, 2000, New York: Manpower Demonstration Research Corporation; Miller, C., Knox, V., Gennetian, L. A., Dodoo, M., Hunter, J. A., & Redcross, C. *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Vol. 1: Effects on Adults*, 2000, New York: Manpower Demonstration Research Corp.

Community Network Teams, the Cochise County School Readiness Partnership, monthly meetings of the Committee for the Prevention of Child Abuse, Community Partnership of Southern Arizona and CARES. However, the efforts are still fragmented. There are lots of groups meeting regularly, but each coordination effort focuses on a specific type of service or on childhood/families in general, and does not necessarily have an integrated approach to early care, education and health for children birth through age five. However, within the community there is good will and a history of successful collaboration.



## Conclusion

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### Synthesis of Findings on Regional Child and Family Indicators and Early Childhood System.

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Cochise County is comprised of small towns and rural areas geographically distributed over a large area (6,219 square miles). The needs and assets of small towns and rural communities are sometimes masked by data only available at the county level. While much data does exist at only the county level, an effort and emphasis was made in this report to collect community level data, where available. Overall, the greatest early childhood needs and gaps facing this region include access to and availability of resources. The region's size and rural character make it difficult for many parents to access early childhood education resources for their children. Area child care centers were finding it difficult to survive economically and to find qualified teachers. The assessment additionally found that many of the county's parents are caught in limbo in which their income level, while low, disqualifies their children from AHCCCS and/or child care subsidies.

Quality and access to early childhood and family support services are inconsistent and fragmented throughout Cochise County. Professional development, public information and awareness, and early childhood system coordination efforts are hampered by geographic dispersion, and less than perfect systemic integration. However, agencies within communities have attempted with some success to gather important community information on early childhood education and health through the Cochise County School Readiness Partnership (CCSRP).

### Identification of Greatest Regional Assets

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The greatest regional assets for Cochise County are the people who are deeply concerned and committed to early childhood care, education, and health issues for children ages birth to five years of age. Also, previous efforts by CCSR to identify community level reading and literacy concerns within the communities have been extremely helpful in establishing baseline community level data. Work done by the CCSR has also contributed to some system coordination efforts in the county. While some professional development and system coordination efforts are currently underway, this Needs and Assets Assessment will pave the way for future work impacting the care, health, and educational needs of children birth to five years of age in Cochise County.

### Identification of Greatest Regional Needs

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The greatest regional needs for Cochise County are based in part on the geographical dispersion of population within the county. Early childhood care, education, and health services continue to be a challenge based on regional geography, differences in funding streams, cycles for various programs and agencies, and system coordination. In order to overcome these challenges in the future, continued active participation of people and local community agencies in the development of early childhood priorities, capacities, and efforts aimed at systemic change for quality early childhood care, education, and health will be needed.

# Appendix

## Citations for resources used and extant data referenced

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- Annie E. Casey Foundation Kids Count Data Center <http://www.kidscount.org/datacenter/compare>
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## Description of Methodologies Employed for Data Collection

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The needs and assets assessment commenced on May 1, 2008 and all data were collected by June 30, 2008. For existing data, collection methods included the review of published reports, utilization of available databases, and completion of environmental scans that resulted in asset inventories as well as listings for licensed and accredited childcare settings.

Primary data, otherwise defined as newly collected data that did not previously exist, were collected in the most rapid fashion available given the short time horizon in which to complete the assessment. For the Cochise Region, this rapid needs and assets assessment approach consisted of consultants working with the Regional Partnership Council to create a survey to collect information on early care and education centers in the region (Cochise Regional Partnership Council Key Informant Interviews, Focus Groups, and Surveys). Data was also used from the previously completed Cochise County School Readiness Project (CCSHP) to answer questions relevant to early childhood education and health for communities within the Cochise Region.

As made plain in the state's 2007 *Bright Futures* report, gaps in data capacity infrastructure are more than evident when looking for evidence of how well young children are doing in Arizona with regard to early childhood health and education efforts. Data were not always available at the regional level of analysis, particularly for the more common social and economic demographic variables that are measured collectively as part of the larger Cochise County region overall. In particular, data for children 0-5 years were especially difficult to unearth and in many cases indicators are shown that include all children under the age of 18 years, or school age children beginning at age six. One exception to this case is the Head Start data that are reported which do pertain to children under the age of five years; however, these data also represent all Head Start children receiving services in the County and do not zero in on those children residing only within the community boundaries of the Cochise Region. Compounding this problem are additional barriers that limit the sharing of data between communities, organizations, and other entities due to concerns over privacy and other obstacles that impede the dissemination of information.

It is also important to note that even when data are available for this population of children (0-5 years), or even the adult population of caregivers or professionals, there are multiple manners in which data are collected and indicators are measured, depending on agency perspectives, understanding in the field, and the sources from which data are mined. These indicators, approaches, and methods of data collection also change over time, sometimes even yearly, and these inconsistencies can lead to different data representations or interpretations of the numbers presented in this and other reports where data capacity infrastructure efforts are still in their infancy as they are in Arizona and nationally, with regard to young children ages 0-5 years.

Given the limitations with Arizona's current data capacity infrastructure, data presented here should be interpreted carefully; yet, also be seen as one step in the right direction towards building this capacity at the local level by conducting regular community assessments on a biennial basis.





**FIRST THINGS FIRST**

**Cochise Regional Partnership Council**

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