State Title V Block Grant Narrative

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Sections 5.4 – 5.7, containing standard forms and detailed descriptions of national and State performance and outcome measures, are not included in this PDF. Data from these sections can be viewed in interactive formats on the Title V Information System Web site (http://www.mchdata.net).

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1.4 Overview of the State

Arizona continues to be one of the fastest growing states in the U.S. The Arizona Department of Commerce reports that Arizona is the second fastest growing state in the nation. Arizona's estimated 1998 population was 4,722,097 compared to 270,299,000 for the US as a whole. The state population grew by approximately 740,000, an increase of 15.7 percent during the 1990s. The total population growth within in the U.S. from 1993 to 1998 was only 4.87 percent.

"Among the 50 states and District of Columbia, Arizona is the sixth largest of the 50 states and ranks as the 21st most populated. Over the three decades (1995 - 2025) Arizona's total population is expected to increase 2.2 million people. Among the 50 states and District of Columbia, the state's net gain ranks as the 6th largest. Its rate of population change, at 52 percent, ranks as the 4th largest. From 1995 to 2000, the state would have a net increase of 580 thousand people, which would rank as the 6th largest net gain in the nation" (www.census.gov, 2000). The U.S. Census Bureau reports that the population density in 1998 was 41.1 persons per square mile.

The table below shows a significant population increase in all MCH subgroups from 1993 to 1998. The MCH population accounts for approximately 50.75 percent of the total Arizona population.

Table 1. Maternal and Child Health Target Groups

Group	1998	1993	% Change	Percent of Total Population 1998
Total: All People/All Ages	**4,722,097**	**3,946,974**	**+19.64**	
MCH Subgroups				
Women of Childbearing Years (15-44)	1,010,667	882,148	+14.57	21.4
Pregnant Women	93,148	81,445	+14.37	
Births	77,940	69,037	+12.90	
Infants Under 1 Year	73,533	69,312	+6.09	1.56
Children and Adolescents (1-19)	1,312,241	1,110,486	+18.17	27.79
Children (1 - 14)	984,314	854,976	+15.13	20.85
Adolescents (15 - 19)	327,927	255,510	+28.34	6.94

"Despite its reputation as a retirement center, Arizona's population is slightly younger than the national average. The state's median age is 34.4 while the nation's is 34.9 years. The proportion of people younger than 25, as well as those over 65, is roughly the same as the United States as a whole" (www.azcommerce.com, 2000).

There are 15 counties in Arizona, each of which has seen a significant growth in total population from 1993 to 1998. Seventy-seven percent (77 percent) of the state's population reside in either Maricopa or Pima Counties. Maricopa County, with the largest population, experienced a growth of 22.47 percent between 1993 and 1998, with a growth of 77,674 during 1999 alone. Only Los Angeles County growth outpaced Maricopa County in

1999.

1.4.1 Racial/Ethnic Composition

Arizona is one of four states that borders Mexico (four of the 15 counties border Sonora, Mexico), resulting in an increasing population of Hispanic heritage, the majority reporting that they are of Mexican descent. In 1996 the highest population growth rates in Arizona were among Hispanics of any race (3.4 percent) and Asian and Pacific Islanders (3.6 percent). The largest numeric increases of any group will be among the Hispanic-origin population which will double its 1995 size by 2020. The following table displays the composition of the population of Arizona compared to the entire United States. (Source: U.S. Department of Commerce, Bureau of Census)

Table 2. Racial and Ethnic Composition of Arizona and United States

Race/Ethnicity	Arizona %	United States %
White	88.91	82.72
Black	3.40	12.67
American Indian	5.85	0.87
Asian	1.84	3.7
Hispanic Origin[1]	20.21	10.86

The primary caregiver of 86 percent of children in Arizona said that English was the primary language spoken in their home, while twelve percent primarily spoke Spanish, less than one percent each spoke some American Indian or Asian language, or some other language. (Children 2000)

1.4.2 American Indian Tribes

Based on 1990 U.S. Census, of the 25 largest tribes, there are a total of 1,937,391 American Indians living in the U.S. primarily concentrated in the West (45.6 percent) and South (30.2 percent). The projected American Indian population for the year 2005 is 2,635,000. There are 21 American Indian tribes in the state (see Figure 1). American Indians are relatively younger with a median age of 27.0 years compared to the U.S. population of 33.0 years.

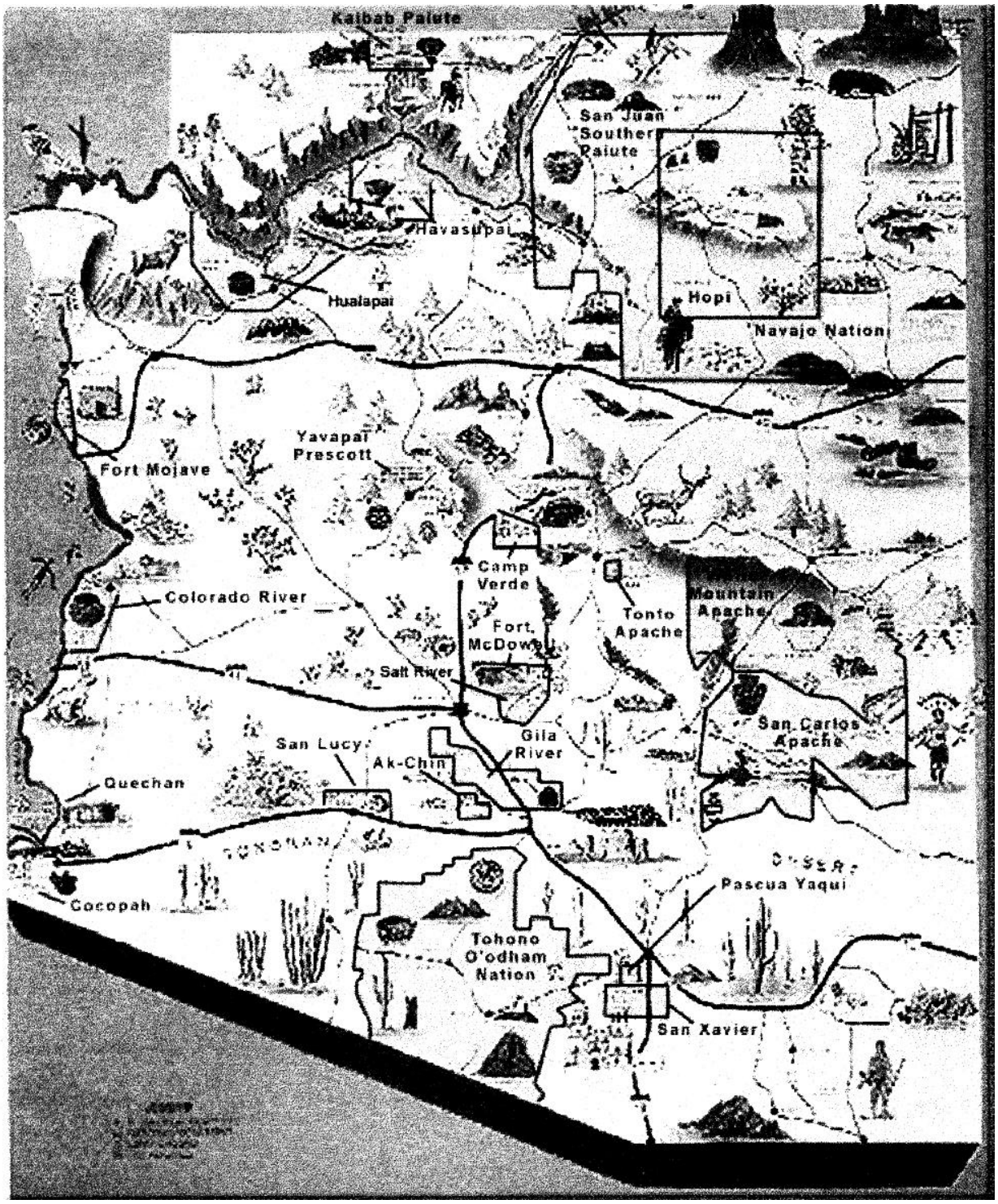
1.4.3 Undocumented Immigrants

According to the Immigration and Naturalization Service, approximately 5.0 million undocumented immigrants lived in the U.S. in October 1996 and comprised 1.9 percent of the total U.S. population. The largest estimated numbers of undocumented immigrants reside in California (2.0 million), Texas (700,000), New York (540,000), Florida (350,000), Illinois (290,000), New Jersey (135,000) and Arizona

[1]Persons of Hispanic Origin may be of any race.

(115,000). Undocumented immigrants primarily originate from Mexico. Nearly 2.7 million undocumented

Figure 1. Location of American Indian Tribes in Arizona



immigrants from Mexico established residence in the U.S., comprising 54 percent of the total undocumented

population.

According to the U.S. Department of Justice, the southern Arizona Douglas-Naco area is the busiest illegal immigration corridor in Arizona. Nogales had previously been the busiest. Apprehensions by the Border Patrol in the Nogales are down 70 percent since 1998. "During this same period, the crime rate in Nogales declined by more than 40 percent." Those attempting to enter Arizona illegally from Mexico are at risk for injury and death from exposure to the intense desert sun and unavailability of water. The concerns for public safety and security have resulted in a cooperative effort between Mexico and the U.S. to combat migrant smuggling "Across the U.S.-Mexico border, INS reported that the number of migration-related deaths in the U.S. declined by 14 percent between fiscal year 1998 and 1999. This reduction resulted in part from preventive action by authorities on both sides of the border to protect migrants from being led astray by smugglers. On a local level during 1999, Border Patrol agents in southern Arizona have rescued more than 500 migrants.

1.4.4 Economy

The Arizona Department of Economic Security, Research Administration, expects more than 127,000 jobs to be added over the 1999-2000 period within Arizona. All industries, with the exception of mining, are expected to expand their workforces. Arizona's main economic sectors include services, trade and manufacturing. The single largest economic sector is services, employing almost 615,538 people. Arizona has been particularly successful in attracting high-technology industries, which have a total economic impact of $33 billion in the state. Nearly 56 percent of all manufacturing employment is in this sector.

According to the U.S. Bureau of Labor Statistics, the unemployment rate of Arizona, 4.1 percent, was well below the national unemployment rate of 4.5 percent in 1998. Specifically, the metropolitan area of Phoenix-Mesa, Arizona had a 2.7 percent unemployment rate. However, 88 percent of the fastest growing jobs in Arizona pay below a livable wage. Table 3 shows the current employment status of the primary caregiver of children in Arizona according to a recent telephone survey (Children 2000).

Table 3. Current Employment Status

	Percent
Employed for wages - part time	12
Employed for wages - full time	47
Self-employed - part time	3
Self-employed - full time	7
Homemaker	22
Student	1

Out of work for less than 1 year	1
Out of work for more than 1 year	2
Unable to work	3
Retired	2
Total	100

Between 1997 and 1998, the real national median household income increased by 3.5 percent to its highest recorded level. Based on comparisons of 2-years moving averages (1996-1997 and 1997-1998), Arizona was one of 16 states whose real median household income rose significantly. In 1998 Arizona's median household income level was $37,090 compared to $38,885 nationally. Non-Hispanic Whites were the only racial group nationally (+3.0 percent) to have significant increases in median household income level between 1997 and 1998.

The U.S. average per capita personal income was $26,482 in 1998 compared to $23,152 in Arizona (U.S. Bureau of Economic Analysis). Arizona ranked 36th among the 50 states with a per capita personal disposable income of $19,777 in 1998 (8.9 percent below the national average of $22,424).

1.4.5 Poverty

According to the U.S. Census Bureau, the U.S. poverty rate decreased from 13.3 percent in 1997 to 12.7 percent in 1998. The poverty rate among Hispanics also decreased between 1997 and 1998 from 27.1 percent to 25.6 percent respectively. Similarly, the poverty rate among Whites not of Hispanic origin declined from 8.6 percent to 8.2 percent. The poverty rate did not change for Blacks between 1997 and 1998 remaining at 26.1 percent, its lowest level since 1959.

Families with a female householder are particularly vulnerable having the highest poverty rate in 1998 (29.9 percent) and representing the majority of poor families (53 percent). In contrast, married couples had the lowest poverty rate of 5.3 percent but still comprised a large proportion of poor families (40 percent).

Based on 1998 U.S. Census estimates, 16.6 percent of Arizona's population, or 812,000 persons have incomes below the federal poverty line (decrease of 3.9 percent since 1996). Approximately 21.7 percent or 103,000 persons had incomes below 125 percent of the poverty level.

Nationally 18.3 percent of children under the age of 18 years lived in poverty relative to 25.4 percent of Arizona children in 1998. The national child poverty rate was significantly below 20 percent for the first time since 1980. However, children continue to constitute a large proportion of the poor population (39 percent) while representing only 26 percent of the total population.

Poor economic indicators also are described for American Indians in the last U.S. census. Nearly 31 percent of American Indians lived in poverty compared 13 percent of the U.S. as a whole. In addition, the 1989 median household income among American Indians was $19,900, well below the U.S. average of $30,056 (U.S. Census, 1995).

1.4.6 Welfare Reform

The impact of welfare reform on the Title V population continues to be a serious concern.

Changes to social services programs in Arizona, including mandatory work requirements, time limits for participation and sanctions for non-compliance, began in November 1995. In addition to challenges related to finding adequate, affordable child care, many families struggle to obtain health care for both adults and children.

Until recently, no data source was available to directly evaluate the impact of welfare reform on Arizona families. Then in September 1998 the Arizona Department of Economic Security (DES) was awarded a U.S. Department of Health and Human Services grant to conduct research on the status of individuals and families who had left the state's Temporary Assistance for Needy Families (TANF) program. A report of the preliminary study was published in January 2000. Several findings related directly to the Title V population including:

- The two largest barriers to employment, for those unemployed at the time of the study, were health issues (23% of respondents) and child care (22% of respondents).
- 24% of respondents said that they were unable to get needed medical attention after leaving TANF versus only 14% having that problem while on the program.
- 23% of respondents reported having one or more children with a chronic health condition in their home.
- 26% of the children and 40% of the adults in respondent families had no health insurance.

Among other things, the study was designed to examine differences between TANF participants who had left the program voluntarily and those who had been terminated as a result of sanctions. Key findings are that the adults from sanctioned cases are less likely to have completed high school or to have ever been married, and more likely to be African American or Hispanic origin, to have reached the 24-month time limit; and to live in Maricopa County.

Families that left the TANF due to sanctions had a higher recidivism rate. Income levels for sanctioned families were, on average, 20 percent lower than for non-sanctioned families. Only 55 percent of sanctioned individuals reported improved situations after leaving TANF versus 71 percent of non-sanctioned persons. The only measure of well-being in which sanctioned families fared better than their non-sanctioned counterparts was in their ability to obtain needed medical care. Table 4 is data excerpted from Table 4 of the study final report, and shows the differences in the percent of TANF families that were unable to get needed medical attention prior to and after exit.

Table 4. Percent TANF Families Unable to Get Needed Medical Attention

	Prior to Exit	**After Exit**
Sanctioned	12%	17%
Non-Sanctioned	15%	25%
All participants	14%	24%

This DES study provides valuable information about the status of people who left the cash assistance

program. The Arizona Department of Health Services will be working with the DES to further explore the findings related to the Title V population to better understand the needs and beliefs of families who leave welfare. Particular attention will be paid to those families with children with chronic health conditions.

A recent study by Families USA found that 945,880 adults with children were dropped from the Medicaid rolls from 1996 to 1999 and charged that many were mistakenly knocked out of the program after getting jobs due to welfare reform. Arizona's enrollment in Medicaid's Temporary Assistance for Needy Families (TANF) fell to 47,829 in December 1999 from 60,031 in January 1996, the month welfare reform took effect.[2] It is unknown how many of these people are actually uninsured, since some many be covered by employers. However, other studies have found that adults in such families typically take low-paying jobs that do not offer health benefits or cannot afford the premiums.

1.4.7 Schools

The Arizona Department of Education is the governing agency for primary and secondary education within the state. The Superintendent of Public Education is a state-elected position who reports to the State Board of Education rather than the Governor. There are 307 school districts in Arizona (1384 schools) with an average daily attendance of approximately 762,000 students. School districts range greatly in size, as measured by the number of enrolled students. During the early 1990s, alternative forms of schooling gained momentum in the U.S. Twenty-eight states, the District of Columbia and Puerto Rico have passed charter school legislation since 1991. In 1995 legislation was passed allowing for the establishment of and state financial assistance for charter schools. A.R.S. § 15-181 defines a charter school as "a public school established by contract with a district governing board, the State Board of Education or the State Board for Charter Schools" to provide learning that will improve pupil achievement. Charter school statutes support flexibility and innovation in key areas of operations and organizational structures, including governance, scheduling, curriculum and instructional methodologies. Arizona leads the nation in the movement to establish charter schools with 164 currently operating.

"Nearly 250 post-secondary institutions operate within Arizona state, including: three state universities, 19 community colleges, roughly 20 accredited degree-granting private colleges and universities, and approximately 180 trade and technical schools offering programs such as business, cosmetology, health, flying and technology training" (www.azcommerce.com).

1.4.8 Student Enrollment

Enrollment in U.S. elementary and secondary schools began to decline between 1970 and the early 1980s, reflecting a decrease in the school age population. After this period, enrollment in elementary and secondary schools started increasing in the fall of 1985, and began hitting record enrollment levels in the mid 1990s. Between 1990 to 1998, enrollment grew by approximately 16 percent. Arizona's total student enrollment on October 1, 1998 was 847,762.

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[2]Source: Arizona Republic, 1 Million Have Lost Medicaid, June 20, 2000.

The primary caregivers of 56 percent of the children in Arizona said that they had completed some kind of education beyond high school. Table 5 shows the highest grades completed of primary caregivers of children under age 21 in Arizona.

Table 5. Educational Attainment of Adults Caring for Children

Highest Grade Completed	Percent	Cumulative Percent
Primary (K-6)	3	3
Middle School (7-8)	4	7
High School (9-12)	38	45
Post secondary/vocational	13	57
University/College	37	94
Graduate School	6	100

1.4.9 Teachers

Arizona requires certification of individuals wanting to teach in the public school setting. The certification requirements vary by the type of teaching an individual wishes to provide (e.g. elementary, music, deaf education, etc.). An example of the requirements would be the Elementary Education Certification K-8 which allows for a provisional elementary certificate as well as a standard elementary certificate. The provisional certificate is valid for two years and is not renewable. The requirements for the Standard Certificate must be met within two years. The Standard Elementary Certificate is valid for six years and is renewable. Examples of the requirements include bachelor's degree from an accredited institution, passing score on the professional knowledge portion of the Arizona Educator Proficiency Assessment (AEPA), passing score on the elementary education subject knowledge portion of AEPA and additional requirements.

In Arizona, Charter school personnel are exempt from certification requirements except with regard to providing educational services for children with disabilities. The majority of public school teaching positions were filled in 1993-1994. Less than 1 percent of teaching positions were left vacant or temporarily filled by substitute teachers because suitable candidates could not be found.

The average salary of public elementary and secondary school teachers nationally was $39,385 in the 1997-1998 school year. According to a December 22, 1999 article in the *Arizona Republic* Arizona was listed 34th in the nation for teacher salaries. The average teacher salary in Arizona is $35,025. The National Education Association reported that "while public school enrollment has increased dramatically, per-pupil education spending and teacher salaries have remained stagnant during the last decade. Low salaries in addition to the quickly growing number of students has resulted in a serious shortage of teachers in the state. On average, public school teachers earn from 25 percent to 119 percent more than private school teachers state by state. In 1993-94, private school teachers earned an average salary overall which was 34 percent lower than public school teachers ($24,053

compared to $36,498).

1.4.10 Drop-out rates

Arizona has one of the highest dropout rates in the nation, and while the national average dropout rate has remained around 5 percent for the past ten years, Arizona's dropout rate has been rising.

The 1997 national percentage of high school drop-outs for 16- and 17- year olds was 4.8 percent for all races. Males (5.0 percent) were more likely than females (4.7 percent) to drop out. Individuals of Hispanic origin (7.3 percent) had the highest high school drop out rates relative to Whites (4.3 percent) and Blacks (5.5 percent). Among Hispanics ages 16-24, the drop out rate for individuals born outside of the U.S.(39 percent) was significantly higher than first (15 percent) and later generation Hispanics (18 percent). Similarly, first and later generation Hispanics were two to three times as likely to drop-out than their non-Hispanic counterparts (National Center for Educational Statistics, 1999).

Arizona's 1998/99 high school dropout rate was 12.2 and the dropout rate for 7th and 8th graders was 2.7, for a total dropout rate of 8.9. Arizona high school males were more likely than females (13.5 percent compared to 10.8 percent) to drop out. The high school dropout rate was highest among American Indians (19.1 percent) followed by Hispanics (17.6). Two of Arizona's rural counties reported the highest dropout rates: Pinal with a rate of 16.8 and Gila with a rate of 16.5. Charter schools and district alternative schools had the highest dropout rates in 1998/99. Arizona's truancy is reported to be the worst in the nation (12 percent in Arizona compared to 10 percent nationally).

1.4.11 Juvenile delinquency

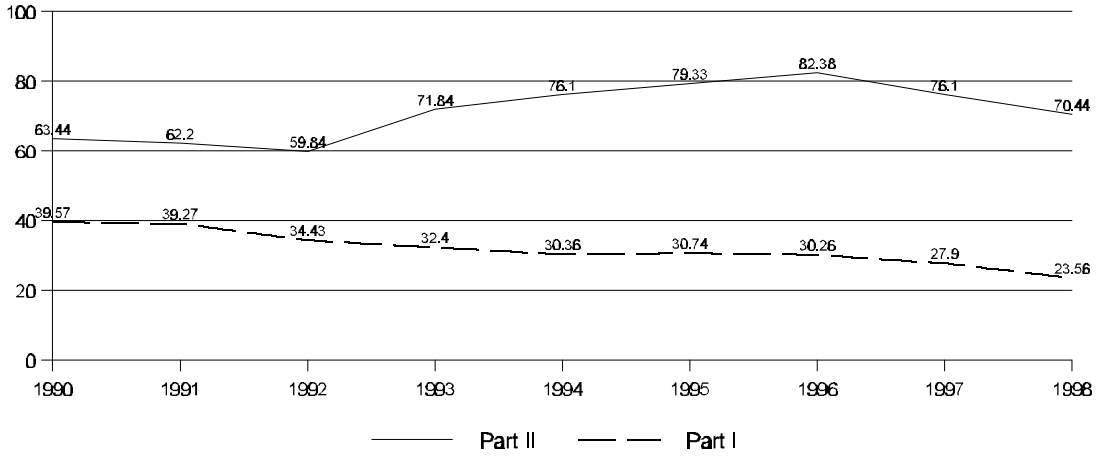
One in 5 arrests by U.S. law enforcement agencies in 1997 involved a juvenile, approximately 2.8 million arrests of individuals under age 18. According to The National Longitudinal Survey of Youth 1997, an estimated 8 percent of youth between the ages of 12 and 16 stated they had been arrested, 40 percent reported of those two or more arrests. A little less than a quarter (21 percent) of 16 year-olds who had been arrested were first arrested by the age of 12. Youth who are known to the juvenile justice system by age 13 have a disproportionate share of the serious and the violent delinquent careers.

Nationally, the rate of serious violent crime perpetrated by juveniles is lower today than a decade ago but still remains 21 percent above the average of 1980s. Approximately 12 percent of all murders involved at least one juvenile offender in 1997. Juvenile murders were mainly committed by males (93 percent) and by offenders 15 years of age and older (88 percent) (Juvenile Offenders and Victims: 1999 National Report).

In Arizona, data are presented for juveniles ages 8 through 17 years of age. Uniform Crime Reports divide offenses into two major classifications: Part I and Part II offenses. Part I offenses include violent crimes such as criminal homicide, forcible rape, robbery and aggravated assault, as well as property crimes such as burglary, larceny-theft, motor vehicle theft and arson. Part II offenses include a range of offenses such as simple assaults, forgery, counterfeiting, fraud, embezzlement, stolen property and drug/liquor offenses, vandalism, weapons, sex offenses, gambling, disorderly conduct, vagrancy, curfew violations and running away. The method of counting offenses varies with the type of crime committed, and the number of offenders does not equal the

number of offenses. For multiple offenses that occur in one crime incident, only the most serious offense is counted, with the exception of arson. When arson occurs in conjunction with another Part I crime, both are counted. Figure 2 presents the rates per 1,000 juveniles for Part I and Part II Offenses from 1990 through 1998.

Figure 2. Juvenile Arrest Rates per 1,000



Although the rates for Part I Offenses have decreased steadily during this period of time, the rates for Part II Offenses increased significantly from 1992 through 1996. In 1997 and 1998, the rate of Part II Offenses decreased. Part II Offenses consistently account for the majority of juvenile offenses. Males account for two thirds of all juvenile offenses.

1.4.12 Mobility

Arizona has a rapidly growing population with a relatively high degree of mobility. Primary caregivers of eight percent of children underage 21 had lived in the city or area that they live in now for less than one year, and another 11 percent had lived in that area for 1-3 years. Twenty percent of primary caregivers of children under age 21 said that they had lived at their current address for less than one year and another 23 percent had lived at their current address for 1-3 years.

Table 6. Length of Time Lived in Current Area and Address

	Current City or Area		Current Address	
	Percent	Cumulative Percent	Percent	Cumulative Percent
3 or more years	81	81	58	58
2 years lt 3 years	7	88	13	71
1 year lt 2	4	92	10	81
Less than 1 year	8	100	19	100

1.4.13 Homelessness

The federal definition of a homeless person according to the Stewart B. McKinney Act, 42 U.S.C. § 11301, *et seq.* (1994), is one who "lacks a fixed, regular, and adequate night-time residence and; and... has a primary night time residency that is: (A) a supervised publicly or privately operated shelter designed to provide temporary living accommodations... (B) an institution that provides a temporary residence for individuals intended to be institutionalized, or (C) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings." In Arizona, "homeless" means the participant has no permanent place of residence where a lease or mortgage agreement between participant and the owner exists.

Determining the number of homeless individuals is a significant challenge because they are difficult to locate and/or identify. According to the National Coalition for the Homeless (NCH), February, 1999 the national estimate of homeless individuals was 700,000 per night compared to 500,000 to 600,000 in 1998. In Arizona, according to a point-in-time survey, approximately 26,670 people are homeless on any given day.

The Arizona Department of Economic Security (DES) publishes and annual report entitled, " The Current Status of Homelessness in Arizona and Efforts to Prevent or Alleviate Homelessness". There are over 160 emergency shelter and transitional housing programs in Arizona with approximately 2600 emergency shelter beds and 4200 transitional housing beds. The demand for shelter far outweighs what is available.

The 1999 report indicates that homeless single people are still the largest single group of homeless persons. The majority of homeless adults are males and alcoholism is seen in 40% of these adults. It is estimated that 10 to 25 percent are addicted to drugs. Chronic psychiatric disorders are seen in 30 percent and approximately fifty percent are homeless less than one year. Families are the fastest growing segment of the homeless, comprising 35 to 50 percent of homeless depending on geographic area. Eighty percent of homeless families are headed by young single mothers.

In the 1999 statewide survey of shelters in Arizona, it was found that 273 families were in emergency shelter and 488 families were in transitional housing programs on a given day. In addition, is was estimated that 168 families were turned away from these programs. The Children's Action Alliance estimates that in 1998 between 5000 and 7000 Arizona youth lived on the streets and shelters turned away homeless youth 4,300 times due to a lack of bed space. A homeless youth intervention program was established in 1999 by SB1180 to combat this problem.

There are many factors that contribute to homeless, including poverty, domestic violence, substance abuse, mental illness, lack of affordable housing, decreases in public assistance, low wages and lack of affordable health care. "In spite of an overall positive economic picture in the state, the large number of households earning less than a livable wage and a disproportionate rise in housing costs versus incomes point to increasing numbers of homeless persons" (DES, 1999).

The medical director of one of Arizona's medical clinics serving the homeless identified the following general healthcare issues for homeless children: lack of continuity of medical care, crisis medical care, enrollment

in the state Medicaid program does not guarantee that the children receive healthcare, and barriers to healthcare such as transportation and lack of medical insurance. The identified acute healthcare issues of homeless children include infections (most commonly tooth abscess, skin infections, pink eye, intestinal and ear infections), injuries and nutrition.

1.4.14 Top Priorities

The top priorities of the Arizona Department of Health Services (ADHS) include developing the infrastructure for systems of care at the community level including the development of telemedicine resources, reducing disparities in health service delivery in the state, increasing access to health insurance, particularly for working low-income families, implementation of quality management initiatives and performance measurement throughout ADHS and its contractors, reducing the rate of adolescent suicide, improving birth outcomes, increasing pediatric immunization rate, information-based decision-making and implementing a universal application process.

Infrastructure Development. The Bureau of Community and Health Services has been working on a strategic plan which emphasizes five functional areas: health education, health screening, health care coordination, health systems development and data collection and analysis. All offices in CFHS will be modifying the way they do business to bring programs into alignment with these strategies.

In OCSHCN, the Children's Rehabilitative Services is using the strategies to develop a delivery system that is more community-based, less fragmented, and that will reduce the number of agencies families have to deal with in order to obtain services for their children (one-stop shopping). The goal is to develop a single point of entry, for services related to CRS, from the Divisions of Behavioral Health Services and Developmental Disabilities, AHCCCS, and, as appropriate, other DES programs.

Both OCSHCN and OWCH are incorporating "natural environment" policies into programs. The goal is to ensure that children and families receive services in the setting that is most appropriate for their needs. The Arizona Early Intervention Program has prepared a document that clearly delineates this policy for providers.

Historically, OWCH and OCSHCN have collaborated with local communities on needs assessment, strategic planning, service delivery, program development and evaluation. Under the leadership of the Bureau of Community and Health Services, significant strides have been made in exploring the feasibility of implementing telemedicine in rural areas.

Disparities in Health Service Delivery. OWCH and OCHCN coordinate with other programs within ADHS and collaborate with other state agencies and service providers to identify underserved geographic areas and populations. Through the OCSHCN community needs/resource assessment process, areas of disparity as well as strengths are identified within communities and residents, providers, elected officials and other interested individuals are invited to prioritize and work on issues they deem important to the lives of CSHCN and their families. As work continues with communities on these disparities, strategies are being developed to equalize services.

Increasing Access to Health Insurance. The implementation of Kids Care in Arizona has presented the

state with a challenge in terms of providing adequate outreach to eligible children. Through the CRS program OCSHCN is working with AHCCCS to ensure that CSHCN who may be eligible for coverage are identified. In addition, Community and Health Services (CFHS) is working with a group of the state's top business leaders, faith leaders, philanthropic organizations and government to craft solutions to the problem of lack of access to health insurance for working families. Strategies being discussed include: development of risk retention strategies, utilizing the community connections of the faith community to promote outreach and education campaigns, and working with employers to educate their personnel about all their insurance options. Through the OWCH efforts with school-based health centers, school nursing and the AzAAP Medical Home Project, nurses are assessing potential eligibility for AHCCCS and KidsCare and making referrals for application.

Quality Improvement All OWCH and OCSHCN program managers are developing quality improvement plans which include performance indicators. As part of this process, data quality issues are being identified and addressed.

Adolescent Suicide. OWCH is participating in the Inter-Departmental Steering Committee for Adolescent Suicide Prevention that has developed a statewide action plan. A Suicide Prevention Coalition was developed by EMPACT and OWCH representatives serve on the Coalition. OWCH has provided data to statewide efforts addressing this issue. The Adolescent Health Program updated the "Talking with Teens" curriculum to include information on depression and suicide.

Birth Outcomes. Several OWCH programs focus on improving birth outcomes through prenatal research, outreach and education. Both OWCH and OCSHCN have programs to mitigate the effects of low birth weight beginning with programs to ensure that high-risk babies are born at appropriate facilities through the provision of developmental clinic services and support programs. In the Spring of 1998, the Arizona Legislature cut funding for the Health Start Program. OWCH used carryover funds to continue serving women who had been enrolled in the Health Start Program through the Prenatal Outreach Program. It was recognized that this program was critical to facilitate entry of the highest risk women into prenatal care. OWCH and advocacy groups successfully worked to reinstate Health Start in fiscal year 2000 and the number of sites has been expanded.

Well Child Care. For all children, the ideal is to have a medical home. According to the American Academy of Pediatrics, a medical home is care that is accessible, family-centered, comprehensive, continuous, coordinated, compassionate and culturally competent. The concept of a medical home is probably best thought of as a functional unit, rather than a physical structure. For example, a case manager or multiple people may provide the components of a medical home, ensuring that care is comprehensive and coordinated. Measures that are presented in this and the previous block grant application are far removed from the comprehensive definition of a medical home. Arizona is exploring the possibility of measuring the concept of a medical home in terms of its component parts. A benefit of measuring the model in terms of its component parts is that it enables an evaluation of progress according to different aspects of medical home. For example, it is possible that a relatively high proportion of the population has access to family-centered care, but that the care is not coordinated.

An important part of a medical home is the provision of well child care and preventive services as well as

specialty services. The KareBook, a hand held medical record for children birth through age five promotes well child care based on the periodicity schedule of the American Academy of Pediatrics (AAP). A similar product, All About Me was developed for children with special health care needs. OWCH and OCSHCN also support the efforts of the Office of Immunization in its goal to ensure that children are age-appropriately immunized through education and promoting the goal of a medical home for every child.

Information-Based Decision-making. Generating information and getting it out to people, programs and providers to enhance decision-making is a major priority for the department. Through the implementation of the Client Automated Tracking System, OWCH and OCSHCN will increase the capacity to collect and disseminate relevant, timely information. The Client Automated Tracking System used by the Newborn Intensive Care Program, OCSHCN and AzEIP was implemented. System enhancements were made during the year to make the system more efficient. OCSHCN has developed and implemented an agreement with the AHCCCS to share data.

Universal Application Process. Elsie Eyer, CFHS Bureau Chief, has been the ADHS representative to Governor Hull's "No Wrong Door" initiative. Ms. Eyer has brought forward the work that has been done to date on the universal application process to the Governor's work group.

1.5 The State Title V Agency

1.5.1 State Agency Capacity

1.5.1.1 Organizational Structure

The Arizona Department of Health Services (ADHS) is one of the executive agencies that report to the Governor. The ADHS was established as the State Public Health Agency in 1973 under A.R.S. Title 36 and is designated as Arizona's Title V Agency. There are five divisions within ADHS that report to one of two Deputy Directors (Division of Assurance and Licensure Services, Division of Behavioral Health Services, Division of Business and Financial Services, Division of Information Technology Services, and Division of Public Health Services). The Bureau of Community and Family Health Services (CFHS), Division of Public Health Services administers Title V funds through the Office of Women's and Children's Health (OWCH) and Office of Children with Special Health Care Needs (OCSHCN). The proposed mission of the Division of Public Health Services is: To promote and protect the public health through information-based decision, leadership and collaboration. The proposed vision is: People enjoying the highest quality of life in safe and healthy communities.

CFHS coordinates Title V and related activities. See organizational charts in Appendix A. The mission of CFHS is to provide leadership to improve the lives of Arizona families in their communities through the building of quality health care systems for people of all ages. Included in the office of the CFHS Bureau Chief are the Medical Director, Business Operations, Preventive Health Block Grant, Healthy Communities Initiative, MCH Epidemiologist, Child Fatality Review Program, and Sudden Infant Death Syndrome Training. Other offices within CFHS include: Office of Nutrition Services (including WIC), Office of Oral Health (OOH), and Office of Prevention and Health Promotion (including Older Adult Health). Title V funding is used to support many activities within the various offices within the Division of Public Health Services as well as other bureaus.

In addition to the Bureau of CFHS within the Division of Public Health Services are the following

bureaus: Emergency Medical Services, Epidemiology and Disease Control Services, Health Systems Development, Tobacco Education and Prevention Program, Border Health, Local and Minority Health, State Laboratory Services, Public Health Statistics, and Vital Records.

1.5.1.2 Program Capacity

The capacity of the State Title V agency to meet all of the needs of the Title V population is limited by both financial and programmatic restrictions. The OWCH provides services and facilitates systems development to improve the health of all women of childbearing age, infants, children and adolescents. The OCSHCN has policy and program development responsibilities for children to age 21 who have any one of a broad range of disabilities or chronic illnesses diagnosed at any time during childhood, including the prenatal period. The Core Public Health Pyramid is used as a model for program planning and evaluation. This is accomplished by use of needs assessment, technical assistance and coalition building.

Program Capacity within the Core Public Health Pyramid

Arizona's MCH programs have components in each level of the Core Public Health Services Pyramid. However, the agency has moved towards allocating resources at the infrastructure level. Program capacity is described below for each level of the pyramid.

Direct Health Care

The OWCH funds programs based upon various criteria of need (financial, risk factors, health status, etc.). The High Risk Perinatal Program provides direct health care services in three of its four components: maternal ransport in which the program authorizes and funds the transport of high risk pregnant women to appropriate medical centers for delivery, the community nursing component provides in home nursing consultation to enrolled families, and the developmental services component provides assessment and services in specialty areas (e.g. physical therapy, occupational therapy, etc.)

The OWCH Reproductive Health/Family Planning Program, through contracts with the county health departments, provides direct services to Title V women of childbearing age. In addition, the Health Start Program provides in-home prenatal outreach services through lay health workers, to at-risk women.

OCSHCN provides the following direct health care services:

Regional/Outreach Clinics. Through the system of four regional clinics providing Children's Rehabilitative Services (CRS), children with special health care needs with specified medical conditions are provided multispecialty, interdisciplinary care. Last fiscal year CRS again provided services for approximately 16,000 clients with a variety of diagnoses and levels of functional disability. CRS is the primary referral source for families seeking SSI eligibility for their disabled children. Of the 10,590 SSI-eligible children under age 16 last year, 6,583 or 62.2%, received services through CRS.

Developmental Clinics. Through a statewide system of developmental clinics, children receive assessment, evaluations and early intervention services. OCSCHN and OWCH serve about 4,000 children each year through these clinics.

High Risk Community Nursing. Through contracts with private agencies and county public health

departments, public health nurses provide follow-up nursing services to children with special health care needs and infants discharged from newborn intensive care units This program serves approximately 4,000 families each year.

Enabling Services

Service Coordination. The activities of service coordination represent the hub of OCSHCN's capacity to promote family-centered, community-based, coordinated care for children with special health care needs. This service emphasizes and supports family-centered and culturally appropriate practices through ADHS partnerships with local management teams. Parent/professional partnership and family-centered practice is modeled through the participation of service coordinators with a five-agency coordinating council and associated committees and workgroups. Parents attend meetings as paid experts and partners to offer direction and energy in order to influence other state programs to adopt family-centered, culturally appropriate practices.

It has been documented in the statewide needs assessment that coordination of health services for this population is desperately needed. Ideally, ADHS/OCSHCN would become the umbrella agency for service coordination for these children.

A preliminary attempt to assess the system revealed numerous challenges to addressing medical, psychological, and rehabilitative needs of all children who could be at risk. While service coordination could address some of these challenges, state and federal statutes limit eligibility for services by covering only certain diagnosis categories or certain age groups. As a result, many children and families who could benefit from service coordination are not offered this service. OCSHCN is in the process of trying to quantify the unmet need for service coordination among Arizona's children with special health care needs.

Enabling services such as outreach, health education, family support services, coordination with Medicaid, and case management are provided through numerous OWCH programs. The Health Start Program is a neighborhood outreach program that works with women who are pregnant, or think they may be pregnant, and their families to help them improve their health and the health of their families. The Children's Information Center, and the Pregnancy and Breastfeeding Hotline make referrals to AHCCCS, Kids Care and other community health resources. The Pregnancy and Breastfeeding Hotline serves as the referral source for the Baby Arizona Project which links callers with prenatal care services. The Children's Information Center Hotline supports the Traumatic Brain Injury Project. The AZAAP Medical Home Project, funded by OWCH, links uninsured and underinsured children with a primary and specialty care provider.

Population-Based Services

OWCH manages a number of programs that provide population based services. The Newborn Screening Program screens all newborns for seven conditions prior to hospital discharge. Screening results for all children are reported to the child's physician of record. Follow up is provided to ensure that second screenings are conducted. In 1999, 77,606 first screenings and 52,718 second screenings were completed. Forty-seven (47) infants were confirmed with one of the screened disorder among which 25 were diagnosed with congenital hypothyroidism, seven (7) with PKU, and seven (7) with hemoglobin disorder. The Sensory Program facilitates the implementation of newborn hearing screenings prior to hospital discharge through the provision of technical

assistance, data collection and collaboration to provide screening equipment to Arizona hospitals. Arizona schools provide hearing and vision screenings in compliance with the State Statute and submit results to the Sensory Program.

Infrastructure-Building Services

OWCH facilitates infrastructure development through coalition building to enhance service delivery and address issues of the Title V population. Examples of OWCH coalition building efforts include: the Adolescent Health Coalition that addresses adolescent health status issues; the Safe Kids Coalition, a forum for sharing ideas and resources; and the Arizona Perinatal Trust that works to improve perinatal outcomes through professional and public education, voluntary hospital certification and data for participants in the regional certification process.

Many OWCH contractors have been required to conduct comprehensive needs assessments as a contract deliverable. Examples include: The County Prenatal Block Grant requires each of the fifteen counties to develop a needs assessment of the prenatal population and the Child Health Program planning contracts require completion of a comprehensive community needs assessment that addresses health needs of the Title V population.

OWCH provides technical assistance to entities serving the Title V population (i.e. communities, contractors, coalitions, schools, county health departments, other state agencies, etc.). For example, the Child Health Program provides technical assistance to communities interested in establishing and/or maintaining school-based of school-linked centers; the Adolescent Health Program provides technical assistance on adolescent growth and development, dealing with adolescents, and adolescent risk behaviors; the Early Childhood Program provides technical assistance in the areas of health and safety in child care settings; and the Sensory Program provides technical assistance to hospitals interested in implementing universal hearing screening.

Children's Rehabilitative Services. Over the past year, CRS has continued to review its eligibility criteria to allow for changes that would improve efficiency in the care delivered through the CRS family centered multidisciplinary team approach. CRS has completed the review on all eight conditions not requiring financial eligibility, including the major body systems. CRS field clinics offer another source of information in assessing health status, particularly for children in remote communities. CRS has developed new standards and guidelines concerning field clinics.

Community-Based Systems of Services. Through its community development initiative, OCSHCN continues to seek to improve family access to information and understanding of the eligibility and service delivery system through parent leadership and the development of local community action teams in selected communities. Working in partnership with community parent leaders, providers and citizens, OCSHCN staff provide information, technical assistance and support services to create healthy environments within which organized community initiatives can grow and be nurtured.

Community development strategies are implemented and enhanced through participation within community infrastructures. Community resources are further linked with research findings to impact policy, planning and program development at local, state and national levels.

Community parent leaders are placed under contract to reimburse them for their time and expertise in

facilitating and supporting the work of their local community action teams. In addition, parents are integral members of CFHS and participate in developing budgets, planning and facilitating retreats and conferences, working on teams and developing strategic plans. Partnership with both parents and professionals is one way to ensure that the development of community-based systems of services addresses the needs of the population served.

A number of OWCH programs have community development as a major focus. The County Prenatal Block Grant Program established IGAs with each county for efforts focused on enhancing the health of women of childbearing age, infants, children and adolescents through a systems development approach. The School-based/School-linked Health Center Program through Child Health provides technical assistance and small planning grants to communities interested in establishing such centers. The manual, Together We Care: How to Establish and Maintain a Community-Based Center in Your Arizona Community was written to assist communities in their efforts to establish school-based centers and will be updated this next year. The TA Network was established by OWCH through a CISS grant. This project resulted in the creation of a self-sustaining technical assistance network to communities in their efforts to increase their capacity and effectiveness to improve the health system in Arizona. By linking communities with qualified coordinated training, skill building and learning experiences, communities can develop and use their enhanced skills in directing health systems development at the local level.

1.5.1.3 Other Capacity

The Bureau of CFHS is located at the central ADHS office. All staff from the OWCH (currently 62 employees) are out-stationed to a location approximately four miles from the central ADHS office. ADHS hopes to relocate CFHS by early Fall, 2000. As of this submission, OWCH is organized in four sections: Administration/Budget, Children and Adolescents, Women and Infants, and Data. The OCSHCN Office Chief and approximately half of the 30 OCSHCN staff are located at the central office, with the remaining staff located at the same site as OWCH. OCSHCN is organized around four functional units: Administration, Quality Assurance, Community Development and Finance and Contracting. All staff are located in state offices near downtown Phoenix. However, due to the nature of the business, employees of CFHS travel regularly to local communities throughout the state.

There are barriers related to coordination and collaboration of programs as a result of having OWCH and a portion of OCSHCN out-stationed. Program planning, evaluation and data analysis functions are served by designated OWCH and OCSHCN staff, as well as the CFHS epidemiologist, Emma Viera-Negron. Contracts are awarded to consultants on an as-needed basis for particular projects related to planning, evaluation, data analysis and data system design.

Dr. James R. Allen resigned his position as Director of ADHS in September, 1999, at which time Dr. James Schamadan was appointed Acting Director and Ms. Leslie Schwalbe was appointed Deputy Director. Catherine Eden, Ph.D. was appointed permanent Director in June, 2000. Dr. Eden served as County Manager of Coconino County and as Associate Director for the Arizona Association of Counties, lobbying on behalf of Arizona's fifteen counties and was instrumental in establishing AHCCCS. From 1990 to 1994, she represented

District 25 in the House of Representatives. Dr. Eden has an extensive background in health issues facing communities and the state (e.g. serves on the Board of Directors for the Dougherty Foundation, Women in Health and the National Head Injury Foundation, and the City of Phoenix Public Defender Review Committee). She is Faculty Chair of the Public Administration Department, Rio Salado College and is a consultant specializing in jails and criminal justice issues.

Elsie E. Eyer, M.S., is the Bureau Chief for CFHS. She had served as the Director of the Coconino County Health Department prior to joining ADHS in 1997, and served a full term on Flagstaff Unified School District. She is also an active member of the American Public Health Association, serving on the national Governing Council, and as a member of the Executive Board, Chair of the Action Board Committee, and Co-Chair of the Joint Policy Committee. In addition, she is a Board President of the Arizona Family Planing Council and a member of the Board of Trustees for Arizona Perinatal Trust.

Marianna D. Bridge resigned as OWCH Office Chief in June, 2000. Ms. Jeanette Shea-Ramirez was appointed Acting Office Chief. Ms. Shea-Ramirez has served in many public health leadership positions, most recently serving as the Manager of the Women's and Infant's Section for OWCH. A Master's Degree in Social Work with specialization in planning, administration and community development, combined with professional experience in case management and as a Medicaid policy specialist brought Ms. Shea-Ramirez to public health in 1990 as manager of the Teen Prenatal Express Program. She has served on numerous state and national boards, most recently including seven years as a member of the Executive Board for the Association of State and Territorial Public Health Social Workers. She has provided consultation to the ASTHO Policy Committee and serves as a consultant to the Arizona Perinatal Trust Board of Directors. Her presentations at the national conference for the American Public Health Association have included "Team Management in a Public Health Environment", 1995; "Promoting a Family Focus in Public Health Case Management Programs Through Skills Training", 1993; and "Coalition Building with Public Health Social Workers", 1992.

Susan Burke is the OCSHCN Office Chief. Marriage and Family Life Sciences for undergraduate work provided the framework for Dr. Burke's doctorate in Early Childhood Education. She has been immersed in MCH public health since the early 1970s. Dr. Burke provides a diverse array of technical assistance to national and state advisory groups and organizations, including assisting states in the development and implementation of needs assessment, issues related to managed care; research and presentations on vulnerable infants; and grant reviews. She serves on numerous boards and advisory groups, including the ACF-MCH TAG, MCHB Steering Committee on Cultural Competence, and the AMCHP Program & Policy Committee. Dr. Burke served as the Program Chair for the 1999 AMCHP Conference and is in her third year of a four-year term on a very large local school board.

Margaret Tate, M.S., R.D., joined CFHS in June, 1999 as the Chief of the Office of Nutrition Services. Ms. Tate is very active in numerous nutrition organizations. She has served as President of the Association of State and Territorial Public Health Nutrition Directors and is active in the American Dietetic Association, currently serving as Director-at-Large.

Merrill Krenitz resigned in October, 1999 at which time Dorothy Cooper, M.S., R.N. was appointed

Acting Chief of the Office of Prevention and Health Promotion. Ms. Cooper has been employed with ADHS since 1990, originally as the School Health Consultant. Subsequently she served as the OWCH Primary Care Nurse Consultant and Manager of the Child Health Section of OWCH. Prior to her association with ADHS, Ms. Cooper was employed as a district nurse for a Phoenix school district for thirteen years. She served as Principal Investigator of the "Study of the Nature, Incidence and Consequences of School Playground-Related Injuries". Ms. Cooper has made numerous presentations nationally and internationally on child health, school injury surveillance and primary care, served as President of the National Association of State School Nurse Consultants from October 1997 to October 1999, and was a member of many advisory boards on child health.

Donald Altman, D.D.S., resigned as Chief of the Office of Oral Health in April, 2000. Ms. Kneka Hayward, R.D.H., B.S. was appointed Acting Chief at that time. Prior to her tenure at ADHS as a Health Planning Consultant and as a Program and Project Specialist II in 1999, Ms. Hayward was a public health educator for the Maine Department of Health Services. She has experience in water fluoridation campaigns, grant writing, data collection management and reporting, fiscal management and community development. Interviews are underway for a permanent Chief of Oral Health.

Role of Parents of Children with Special Health Care Needs

The OCSHCN has, since its inception, accepted parents and other caretakers as integral members of the team. Parents are included as partners in all phases of program development, implementation, and policy making. Block grant funds are used to pay parents for consultant services, travel expenses, and child care. Of particular interest for the past two years is parent participation in the needs assessment project. They have assisted with data collection and prioritization of system issues. Parents have also been, and will continue to be, members of the team working on the Utah State University Monitoring and Measuring Project to develop indicators for CSHCN system performance outcome measures.

1.5.2 State Agency Coordination

1.5.2.1 Coordination With Other Human Service Resources

ADHS receives assistance from the following agencies/advisory boards:

Adolescent Health Coalition (AAHC) is a statewide multi disciplinary group of 400 members, including parents and adolescents. The focus of the group is improved adolescent health status .

Alliance for Children and Families of Southern Apache County collaborates on issues relevant to families of children with special health care needs, involving the medical, public health, social services, local business and local government sectors.

American Academy of Pediatrics, Arizona Chapter manages the Medical Home program which is supported and funded in part by OWCH.

Arizona Child Fatality Review Team has thirty members and oversees the authorization and operation of 13 local child fatality review teams.

Arizona County Health Officers Association includes the participation of all county health department directors. The association collaborates with ADHS to address all public health issues.

Arizona Family Planning Council receives Title X funds and disperses them throughout Arizona counties for family planning services. OWCH collaborates with them and assists in addressing data collection methodology.

Arizona Medical Association, Maternal and Child Health Committee.

Arizona School Health Association established a school health committee to address issues related to the provision of services through school-based health programs. This committee has assumed the functions formerly coordinated by the OWCH Technical Assistance Group.

Building A Healthier Mesa, Inc. is working to develop a framework for a community-based needs assessment and community action teams, partnering with the City of Mesa, Mesa Community College, Mesa Chamber of Commerce, Mesa United Way, Mesa Public Schools, ASU East and the Salt River Pima Indian Community.

Coconino Coalition for Children collaborates across medical, public health, social services and local community sectors to address issues pertinent to families of children with special health care needs in Coconino County.

County Health Department Directors of Nursing collaborate with ADHS to address issues impacting residents at the county level.

Emergency Medical Services for Children Advisory Committee assists OWCH with implementation of the EMSC initiatives.

Genetics Advisory Committee has 33 professional members who provide direction on definition of the service system and strategies required to accomplish this system.

Never Too Young Advisory Committee has nine members appointed by the ADHS Director who make recommendations on data collection, practice standards, the public education and awareness plan and provide a link to the medical community and other agencies.

Newborn Screening Advisory Committee is a legislatively mandated six member committee. These professionals provide guidance on the operation of the Newborn Screening program. The Director of ADHS serves as chair.

Partnership for People with Special Needs-Page, Arizona is a collaboration of LeChee, Kaibeto and surrounding communities serving people with disabilities in Northern Coconino County, involving the medical, public health, social services, local business and government sectors.

Perinatal Nutrition Network, consisting of hospital dieticians and the MCH Nutritionist, assist in the implementation of Perinatal Nutrition Guidelines in their respective hospitals.

Perinatal Social Worker Network, consisting of social workers from hospitals and community organizations address current issues.

Prescott Children's Council collaborates across medical, public health, social services and local community sectors to address issues pertinent to families of children with special health care needs in Yavapai County.

Project Tsunami is a group of parents with children with special health care needs who contract or volunteer to work with OCSHCN teams to ensure that the program is community and family focused. Advisory members review documents, participate on committees, facilitate community development efforts and/or work with other agencies. By working as partners with health professionals, Project Tsunami parents assist in building a family-centered heath care system..

St. Luke's Charitable Health Trust is a local foundation whose target funding priorities are in health-related issues.

SAFE KIDS Coalition advises the ADHS Injury Program and is a forum for sharing ideas and resources. Members include parents, health professionals/agencies, business, and community members.

School Nurse Task Force has a membership of school nurse supervisors from throughout Arizona. The Task Force collaborates with OWCH on school health issues.

SIDS Advisory Council has 11 members and advises staff on mandated training activities.

1.5.2.2 Coordination with Other State Agencies

The Bureau maintains several interagency/operational linkages as evidenced by the following IGA's and working partnerships with other state agencies:

Administrative Office of the Courts, Arizona Supreme Court - this judicial agency for the state partners with OCSHCN in the monitoring of children with special health care needs in the state foster care system.

Arizona Department of Economic Security (DES) - the social service agency, partners with ADHS, AHCCCS, ADE and ASDB on the following projects: the Arizona Early Intervention Program (AzEIP), provides for diagnostic, evaluation, treatment, rehabilitative and service coordination services for children with special health care needs (OCSHCN staff serve on governor-appointed interagency coordinating council); Arizona Long Term Care Services (AHCCCS ALTCS), a Title XIX funded program of evaluation and treatment services for children with functional impairments; Eligibility Determination and referral for children eligible for Title XVI and XIX for CRS clients; and the Arizona Early Childhood Self Study Program; and the Governor's Council on Spinal and Head Injuries, a division of Vocational Rehabilitation, for systems development for children with traumatic brain injury; Interagency Agreements between these partners are on file.

Arizona Department of Education (ADE) collaborates with OWCH and OCSHCN through special education, school health and school nutrition programs. ADE collaborates with DES and OWCH for the Arizona Early Childhood Self Study Program, and an Interagency Agreement is currently on file. ADE staff is involved in OCSHCN teams, OCSHCN community forums, and the Child Health Team.

Arizona Department of Juvenile Corrections collaborates with OWCH, AHCCCS, and DES on the development of a plan for access to care for juveniles transitioning from an institution to parole.

ADHS State Laboratory. Under contract, the State Laboratory performs laboratory testing of newborn screeing samples, testing for phenylketonuria, galactosemia, homocystinuria, maple syrup urine disease, biotinidase deficiency, congenital hypothyroidism and hemoglobinopathies. The laboratory also screens the specimens for acceptability, keeps records of tests performed, and conducts qualtiy control studies of laboratory

methods and practices.

Arizona Health Care Cost Containment System (AHCCCS) is Arizona's Title XIX Medicaid agency. OWCH and OCSHCN work with AHCCCS on standards and policies to improve access to and appropriate use of services for enrolled people and to advocate on behalf of local providers for reimbursement. CRS, OWCH and OOH have formal Inter-Agency Service Agreements with AHCCCS.

Arizona State School for the Deaf and Blind (ASDB) coordinates education and support services for children with visual and hearing impairments. Issues relevant to children with special health care needs families have been shared and ASDB staff is active in helping resolve them. The OWCH Sensory program manager works closely with this organization.

ADHS Office of Local and Minority Health. OWCH and OCSHCN work closely with this office on issues related to health services delivered by counties.

Governor's Office for Women and Children - CFHS is working with the Head Start Coordination Committee on ensuring that Head Start children can access services through all state agencies.

Shriner's Choices - Through a MOU with OCSHCN, Choices provides options for parents for site-based hospital care for children with special health care needs who have no other source of financing for care or may find family support more readily in Shriner's locations.

University Affiliated Programs, housed at NAU, is a collaborative with the three state universities to provide training and resources around children with special health care needs and genetic issues.

University of Arizona - OWCH High Risk Perinatal, Injury Prevention, and Genetics Program collaborate with University of Arizona to provide program services to their particular populations as evidenced by the Interagency Agreements.

1.5.2.3 Resources Focusing on the Needs of Special Populations

Arizona Association of Community Health Centers supports its members through advocacy, shared services and information, and technical assistance. Members include nonprofit and public primary health centers that serve about 250,000 people in 60 medically undeserved locations.

Arizona Coalition Against Domestic Violence, in coordination with other organizations, is developing a statewide plan to prevent and address problems related to domestic violence.

Arizona Consortium for Children with Chronic Illnesses (ACCCI) is a nonprofit organization that offers individual and legislative advocacy, training and support for families of children with chronic illnesses.

Arizona Family Resource Guide is published by the OWCH Health Start Program and identifies agencies and programs with their respective telephone numbers that are considered resources for families with young children and children with special health care needs.

Arizona Perinatal Trust (APT) is a private nonprofit organization formed in 1980 to improve perinatal outcomes through professional and public education, voluntary hospital certification, and data for participants in the regional certification process.

Baby Arizona is a statewide effort to improve access and utilization of prenatal services and streamline

Medicaid eligibility by use of presumptive eligibility for AHCCCS. Providers volunteer to accept pregnant women. Physicians' office staff are trained to initiate the AHCCCS application process at the first appointment. The OWCH Pregnancy and Breastfeeding Hotline at 1-800-833-4642 is the primary contact number for Baby Arizona and is publicized in all Baby Arizona media campaign materials.

Child Development and Dietary Education Program at Central Arizona College provides instruction in curriculum and special dietary issues for child development specialist and child care providers.

Children's Action Alliance (CAA) is a nonprofit child advocacy organization focusing on increasing the awareness of children's issues among Arizona policy makers, business, media and the general public.

Children's Information Center is a statewide bilingual/bicultural toll free number (1-800-232-1676) that provides referral, support, education, and advocacy to family and health care professionals statewide.

Collaborations for a New Century is an alliance of business, faith, philanthropic, government and service providers who have joined together in efforts to strengthen vulnerable families around issues of health insurance, housing, livable wage employment, and safe, healthy environments for kids. Chaired by one the state's top business leaders, Collaborations seeks to make a significant impact on the quality of life for working poor families. OCSHCN provides leadership in working with businesses, the faith community and philanthropic organizations to develop strategies that will increase access to health insurance among working poor families.

Governor's Council on Developmental Disabilities is an advisory and advocacy council for consumers and providers of services to the adult and child disabled population in Arizona.

Governor's Council Against Domestic Violence is an advisory and advocacy council for prevention of and treatment of victims of domestic violence.

High Risk Perinatal Transport Program provides high risk obstetrical and neonatal medical consultation and case management through a toll free phone line with available air or ground transport services statewide (Phoenix - 1-800-552-5252; Tucson - 1-800-852-6616; and Flagstaff - 1-800-773-2421).

Institute for Human Development/NAU provides training to providers and families of children with special health care needs.

Inter-Tribal Council of Arizona is an association of 19 of the 21 tribal governments in the state of Arizona and California. ITCA obtains, analyzes and disseminates information vital to Native American community self-development. CFHS organizes and conducts seminars, workshops, conferences and public hearings to facilitate participation of tribal leaders in the formulation of public policy at all levels.

OWCH Newborn Screening maintains a collaboration of specialists in the area of endocrinology, metabolic genetics and pediatric hematology. These specialists act as consultants to physicians and other health providers, to parents of children and to the NBS Program. NBS also maintains a 1-800 # which parents can call with questions or concerns. Parents of children with abnormal test results are informed of this number in letters telling them of the abnormal result.

Phoenix Birthing Project is a nonprofit project funded by the Kellogg Foundation which partners pregnant African American women with community "sister-friends" who mentor them. The purpose is to help women

obtain necessary services and to provide emotional and other types of support.

Raising Special Kids (formerly known as Pilot Parent Partnership) is a nonprofit organization funded through a combination of private governmental sources to provide support for families of children with special health care needs and to train providers.

U.S. Public Health Service, Indian Health Service - ADHS has a history of coordination with IHS. Through an OWCH/Arizona State University Partnership, training was offered in the area of pediatric physical assessment through six day courses offered to public health nurses, including IHS employees.

Toll-Free Phone Numbers and Other Modes of Public Communication. ADHS maintains a 1-800 phone number, the Children's Information Center (CIC) line (1-800-232-1676), which can be accessed by families and providers across the state. Bilingual personnel on this line are trained to direct callers to available resources around the state for children with special health care needs. Information on the CIC is updated annually. In addition, each CRS clinic maintains 1-800 numbers as follows: In Phoenix 1-800-392-2222, Tucson 1-800-231-8261, Flagstaff 1-800,232-1018, Yuma 1-800-837-7309. The OWCH/OCSHCN Family Resource Guide lists all the 800 numbers families have available to them from state programs.

World Wide Web Site ADHS now has a World Wide Web page which includes information about CFHS, its offices and programs, as well as teen pregnancy statistics and the Arizona Food Pyramid. Information specific to children with special health care needs and the state programs is expected to be included by FY'98. The address is: http://www.hs.state.az.us.

II. REQUIREMENTS FOR THE ANNUAL REPORT

2.1 Annual Expenditures

The state's match and overmatch continues to exceed the 1989 maintenance of effort.

2.2 Annual Number of Individuals Served

See form 6, 7, 8 and 9.

2.3 State Summary Profile

See form 10.

2.4 Progress on Annual Performance Measures

Program accomplishments are described related to annual performance measures for each level of service and population group in the sections below. Program activities which do not specifically focus on the performance indicator, but are related to the issue which the indicator addresses are also presented here. For descriptions of OWCH and OCSHCN programs and projects, please see Appendix B, which organizes programs alphabetically by name and identifies the level of service into which its activities primarily fall, as well as identifying the primary population group served by the program. Appendix C is a matrix organized by level of service and then by performance measure. It provides more detail on specific program objectives, accomplishments and planned activities related to each measure, as well as identifying relevant population groups affected by the activities.

In preparing the 1999 block grant application, a working group was formed to evaluate available historical and comparative data and project targets to the year 2002 for each performance measure. In setting targets, the assumption was made that unless a strong trend had already developed, the next data point projections would be very similar to the last actual rate. Incremental increases or decreases towards goals were projected. For some measures, the target eventually merged with year 2000 goals. For other measures, the working group foresaw forces which could impede progress and set targets more modestly.

This block grant application represents the second opportunity to evaluate progress against targets which were set in the first performance and outcomes based application. It is important to understand, however, that the most recently available data for most measures still covers a time period which preceded the setting of those targets. The 1999 block grant application (which was submitted in 1998) described program accomplishments for 1998. However, performance measures based on 1998 data are available in many cases for the first time this year.

The most recently available status for each indicator is presented in Appendix D for core performance measures and Appendix E for state negotiated performance measures. These appendices provide a one-page illustration for each measure which show Arizona's progress in relation to the targets set as well as available data on historical trends in Arizona and the United States and other relevant subgroup comparisons.

There are a number of issues or circumstances which may affect the State's ability to achieve targets. Among them are Arizona's continued significant population growth, the affects of welfare reform and the influx of undocumented residents. Although the Title V population continues to grow, MCH funding level from both State and Federal sources have not increased since 1994. Each of these factors poses a significant challenge in

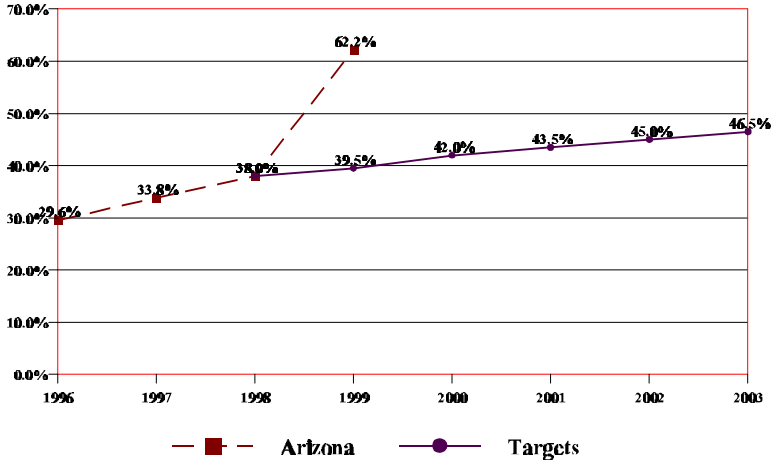
delivering preventive care and other health management initiatives to a relatively transient, poor, and uninsured population. Morbidity and mortality related to these at-risk populations will be reflected in Arizona's performance measures.

2.4.1 Direct Health Care Performance Measures

Performance Measure #01: The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from CSHCN Program. The OCSHCN has continued to improve its capacity to provide accurate data on services provided. In previous years, the number of children less than 16 years of age was estimated from Children's Rehabilitative Services Program enrollment data. This year the data system permits us to make an actual count of children 15 years of age or younger who are enrolled.

For the period, January 1, 1999 to December 31, 1999, 6,583 CRS participants 15 years of age or younger were enrolled in SSI. According to Social Security Administration data, in December 1999, 10,590 children 15 years of age or younger received SSI payments. Thus, 62% of beneficiaries received rehabilitative services from the CSHCN Program. This is a considerable increase from previous years but the rates are not truly comparable as different methodologies were used to determine the number of children participating in CRS.

Figure 3. Percent of SSI Beneficiaries <16 Receiving Services



Several activities were undertaken to enhance access to services. Procedures were developed to streamline the KidsCare (SCHIP), Title XIX and CRS applications to make enrollment easier. Also, a Process Improvement Team with representatives from CRS, DES and AHCCCS worked to develop eligibility policies and procedures for the CRS transition to capitation.

Performance Measure #02: The degree to which the State CSHCN Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients. The State of Arizona provides or pays for at least a portion of need in all nine of the specialty and subspecialty services related to performance measure #02. Several funding sources such as Title XIX, State, Part C of ADA and Title V are used to pay for the services. OCSHCN chose to address this performance measure based on what is delivered directly by the state (that is, direct health care) because there is currently no way to measure the extent to which all services are provided by all public sources.

Findings from various state and local studies have had practical applications. In 1996, the OCSHCN CRS received a mandate from the (then) Governor to examine the feasibility of transitioning its target population to the state Medicaid program (AHCCCS) which is a managed care system. A two-year study, including analysis of

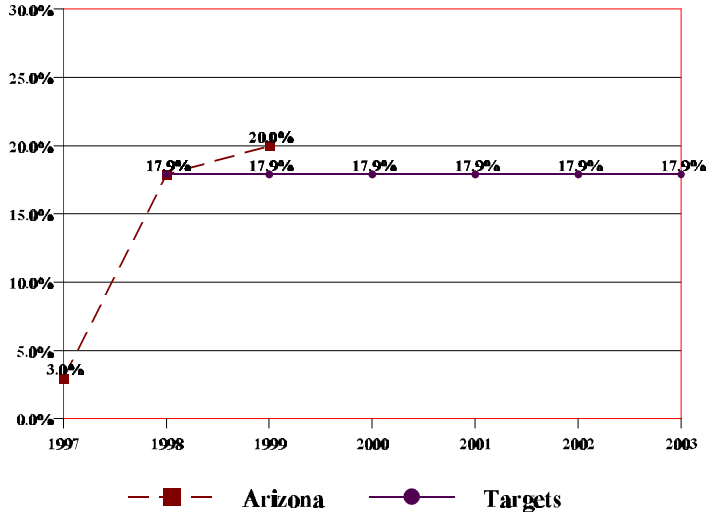
models from other states as well as Arizona data, concluded that CRS services were best provided independently of health care for those with general needs. Another key finding was that CRS clients needed better access to primary care.

In Arizona, the OCSHCN CRS Program uses a multi-specialty, inter-disciplinary approach to manage specialty care for its clients. Over the past ten years, the delivery of services has been modified to better address the issues of CSHCN and their families. The ultimate goal now is to incorporate primary care into the system so that it will truly be comprehensive. As part of this process, and to align CRS more closely with the manner in which AHCCCS is financed, the program will begin using capitated rates in coming specialty care contracts.

The development of the rates to be used was an extensive and intensive process. Initially, models used in other states were examined to determine their feasibility for Arizona. Given the unique natures of the CRS and AHCCCS programs, it was concluded that none of those models would be efficacious. It was then decided to conduct a review of the four regional program providers to ascertain their costs for treating different conditions. From this review, a system of rates was developed such that based on local costs, each regional provider will be capitated based on their populations of people with low, medium, and high cost conditions. As experience is gained with this system, and as other administrative issues are resolved, primary care services will be added.

The OWCH Newborn Screening Program serves as a payer of last report for special formulas for children with metabolic disorders and works closely with CRS to assure that children diagnosed through the newborn screening program are referred for appropriate medical and development evaluations. The Newborn Screening Program, in conjunction with the OWCH Sensory Program submitted a grant application to the Centers for Disease Control and Prevention for early hearing detection and Intervention Tracking, Research and Integration with other newborn screening programs. The purpose of this effort is to improve early identification of children with hearing impairments resulting from certain genetic disorders and to track service provision to these children. If the grant is awarded, OWCH will be coordinating this effort with the OCSHCN as well as the Arizona State Schools for the Deaf and Blind.

Figure 4. Proportion of low-income women who receive reproductive health/family planning services.



State Performance Measure #01: Proportion of low-income women who receive reproductive health/family planning services. Approximately 20 percent of the 279,770 women age 15-44 estimated to be living in Arizona below 150 percent of the federal poverty level received a reproductive health/family planning service through Title V and/or Title X in 1999, representing a twelve percent increase over the proportion receiving services in 1998. The large apparent increase from three percent in 1997

to 17.9 percent in 1998 is due in part to the addition of Family Planning Council Data, which had not been used in the 1997 measure. Targets were reset last year to reflect the addition of this data source, and the 1999 target of 17.9 percent was exceeded.

The OWCH Reproductive Health/Family Planning Program collaborated with the Arizona Family Planning Council and other ADHS programs to address the needs of women for these services. The OWCH data collection methodology changed to a paper reporting system because the previous database was not Y2K compliant. The Arizona Family Planning Council developed a database that they have made available to OWCH for use by contractors.

The OWCH Genetics Program, in conjunction with OCSHCN, developed and implemented a quality assurance tool for evaluation of Genetics Clinics. The program continued activities to increase folate awareness and implemented a Teratogen Information Program. A fax broadcasting network was designed and implemented to share information on genetics to health professionals and insurance companies.

2.4.2 Enabling Performance Measures

Performance Measure #03: The percent of Children with Special Health Care Needs in the State who have a "medical/health home." In the 1999 application it was reported that 71% of CSHCN in the state had a medical home in 1997. This number was based on the findings in a survey that asked the question: "Has your child seen a doctor in the last year?" There are no updates to that data to date, but a new survey will be undertaken in the Fall of 2000. In this new survey an attempt will be made to include all of the components of the definition of medical home espoused by the AAP.

The OCSHCN has worked to promote the concept of medical home within many venues. Support of Parent Leader groups has lead to the establishment of Family Information Centers in two communities. These centers are used by families and community agencies to facilitate the delivery of services. Also, the Arizona Early Intervention Program (AzEIP) has developed a model for referral and initial evaluation/assessment to enhance entry into comprehensive care. The CRS Program uses its quality assurance system to monitor services for compliance with medical home attributes.

Although this measure is specific to children with special health care needs, CFHS believes that a medical/health home is a critical feature of the health care system for all children and families. All OWCH programs recognize the need for and promote awareness of a medical home with the populations they serve. Some of the OWCH accomplishments related to promotion of medical home included the identification of the medical/health home for infants identified with abnormal results through the Newborn Screening Program. The program educated parents about the need for and how to establish a medical home and worked with physicians to help assure that children were referred to appropriate intervention services. In addition, through discussions with physicians and office staff, as well as through initiating contact with a consulting specialist, the program the program continued to increase interaction between primary care physicians and specialists for children with an abnormal NBS and those with a diagnosed disorder.

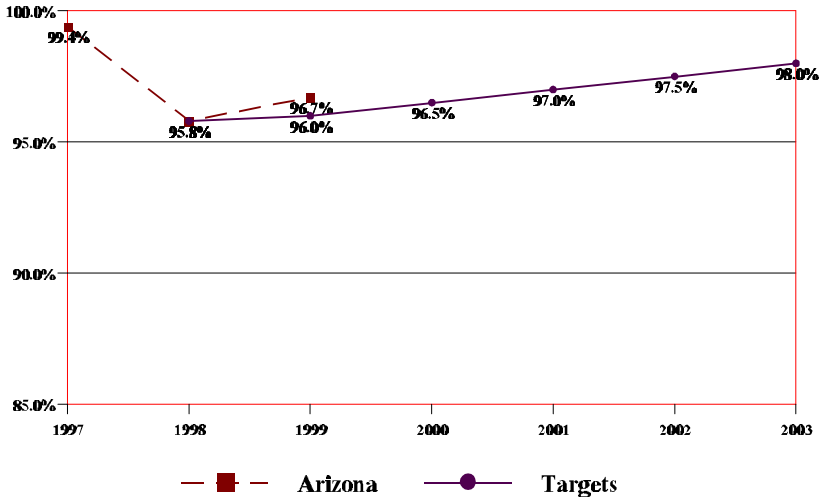
Through various initiatives of the Child Health Program (School Based Health Care and the Medical

Home Project), the need for a medical home for children without health insurance was addressed. The Health Start Program assessed, educated families and monitored the use of a medical home by program participants during home visits. Through each component of the High Risk Perinatal Program, the medical home for program participants was identified and those families without a designated medical home were educated about the concept and assistance was provided to link families with an appropriate health care provider. The program developed a periodicity schedule for home visits using identified risk criteria. The Children's Information Center provided referrals to community health resources for the provision of a medical home for uninsured callers.

2.4.3 Population Based Services Performance Measures

Performance Measure #04: Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, hemoglobinopathies ([e.g. the sickle cell disease) (combined)]. In 1999, 96.7 percent of newborns were screened for each of PKU, hypothyroidism, galactosemia, and hemoglobinopathies (see Figure 5), a small increase over the 1998 rate of 95.8 percent. Although the past two reported rates appear to be reductions from the 1997 rate, they reflect an improved methodology that was implemented to improve reliability of identifying initial specimens. Targets were reset with last year's block grant application to reflect the improved estimate and the 1999 target of 96 percent was exceeded.

Figure 5. Percent of newborns screened (estimated)

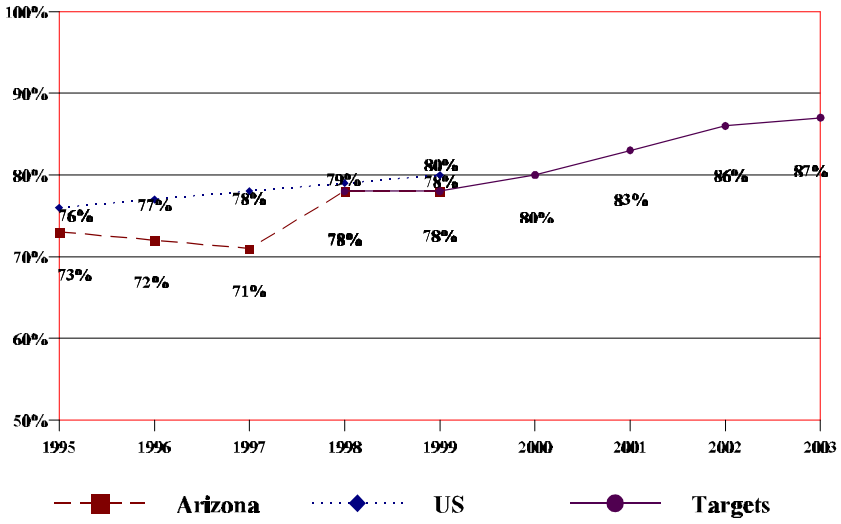


In FY 2000, unsatisfactory specimens remained at less than 1 percent. The Newborn Screening Program continued efforts to educate health care professionals and the general public about the program, testing, obtaining samples and the addition of another test. Two training videos were developed, one for professionals on NBS and the other to enrich on-site training sessions. The program worked with legislators to change the NBS legislation which is inhibiting the ability of the program to require a second test, a prerequisite for adding congenital adrenal hyperplasia to the screening panel. The legislative changes were not made during the legislative session. The program was awarded a SPRANS grant to conduct a feasibility study on linking public health databases and the coordinating committee has been meeting. The Newborn Screening Program worked closely with the Genetics Program and genetics' providers to strengthen coordination and facilitate appropriate and timely follow-up. The Children's Information Center within OWCH is identified in NBS correspondence as the number to call if the client is Spanish speaking and the hotline staff

provided bilingual support services to the program. Community nursing services were available in each county and repeat blood tests were provided as needed.

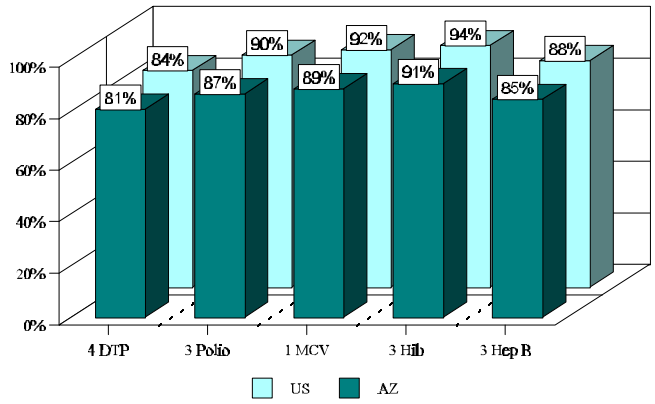
Performance Measure #05: Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diptheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B. The CDC National Immunization Survey (NIS) estimated that in 1997, 55 percent of Arizona's two-year old population completed the combined recommended series of immunizations including at least four doses of diptheria, polio and tetanus (4 DPT), three doses of polio (3 OPV/IPV), one dose of measles, mumps and rubella (1 MMR), three doses of haemophilus influenza type B (3 HiB) and three doses of Hepatitis B (3 Hep B) before their second birthday. Based on that information, Arizona set target rates for the complete series in the 1999 block grant application.

Figure 6. Percent of children completing immunization series through age two



The 1998 NIS report did not include statistics on the combined series for all recommended immunizations including HiB and Hep B and in the 2000 application the measure was changed to reflect the percent of two year olds completing the recommended doses of 4 DPT, 3 OPV/IPV and 1 MMR and targets were reset accordingly (see figure 6). The target of 78 percent for 1999 was met, compared to 80 percent of children in the nation for the same time period.[1]

Figure 7. Coverage levels for individual vaccinations



Estimates for the percent of children receiving the recommended doses of each individual series of immunizations were also available for 1999. Figure 7 shows the percent of children in Arizona and in the United States completing each recommended series of immunizations by age two for both the United States and Arizona.

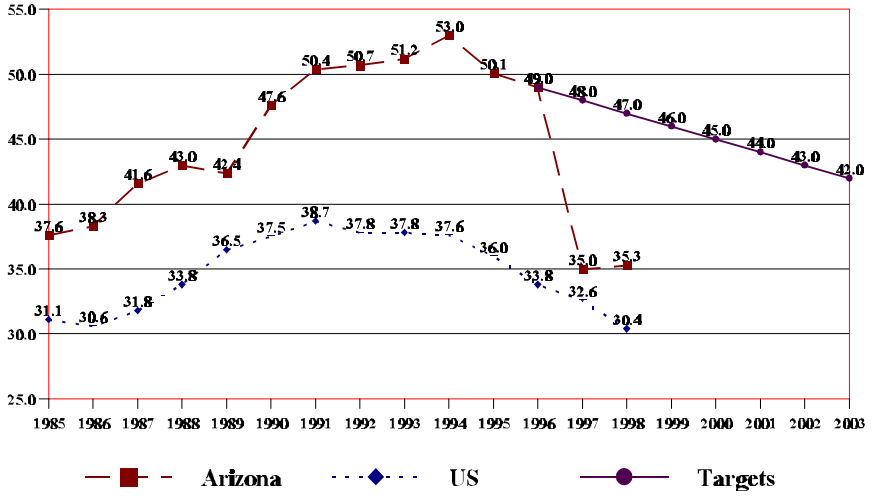
The Child Health Program continued distribution of the revised KareBook for pregnant

[1]The estimated rate is for the third quarter of 1998 through the second quarter of 1999 and in Arizona has a sampling error of ±4.2; the rate for the United States has a sampling error of ±0.9.

women and children through age five. KareBook promotes prenatal and well child care and provides anticipatory guidance. Immunizations are a key component of that document and the official state Immunization Card is included in KareBook. Block Grant funding in the amount of $50,000 was provided to the Office of Immunization to fund TAPII, a public/private partnership focused on improving pediatric immunization coverage levels in Arizona. The manager of the Children's Information Center served as a member of the TAPII steering committee and TAPII public awareness materials were mailed to hotline callers and were distributed at public events and community health fairs by program staff. The Health Start Program operated in eight sites throughout the State. Lay health workers with the program provided education on immunizations at home visits and monitored immunization status of participants. Analysis of data verified that 93 percent of the Health Start children were age appropriately immunized. Through the other OWCH programs such as Licensed Midwife, EMSC, High Risk Perinatal, County Prenatal Block Grant, and Newborn Screening, immunizations were promoted and educational materials regarding immunization schedules and administration sites were provided to program participants and the public.

Performance Measure #06: The rate of birth (per 1,000) for teenagers aged 15 through 17 years. The birth rate to teens ages 15-17 in Arizona climbed fairly steadily in the decade leading to 1994, and had remained well above national averages in recent years. In 1995 and 1996 teen births began to decline in Arizona; and in 1997, a dramatic drop brought teen births to 35 per 1,000 teens age 15-17, a rate approaching the national level of 32.6 (see Figure 8). In 1998 the rate remained near the 1997 level at 35.3 pregnancies per 1,000 teens. For the second year, the actual rate is well below the targeted rate for teen pregnancies.

Figure 8. Teenage birth rate per 1,000 Age 15 - 17



The drop in teen births is due to a decrease in teen pregnancies within each racial and ethnic group, as shown in Figure 8, and with no increase in the abortion rate. Several potential explanations have been suggested to account for this unexpected drop. Since the drop in pregnancies predated the implementation of DHS-sponsored abstinence-based programs, they could not yet have had an effect. It is possible that the flourishing economy may have given teenage girls more hope for future opportunities and/or that public health messages warning of the risks associated with unprotected sexual activity may have finally reached teen girls. Improvements in birth control technology and practices may have played a role. Even welfare reform may have had some impact on teen

pregnancy rates. Without data to evaluate these alternative hypotheses, there is no way to know which of these or which combination of these explanations is more likely than another.

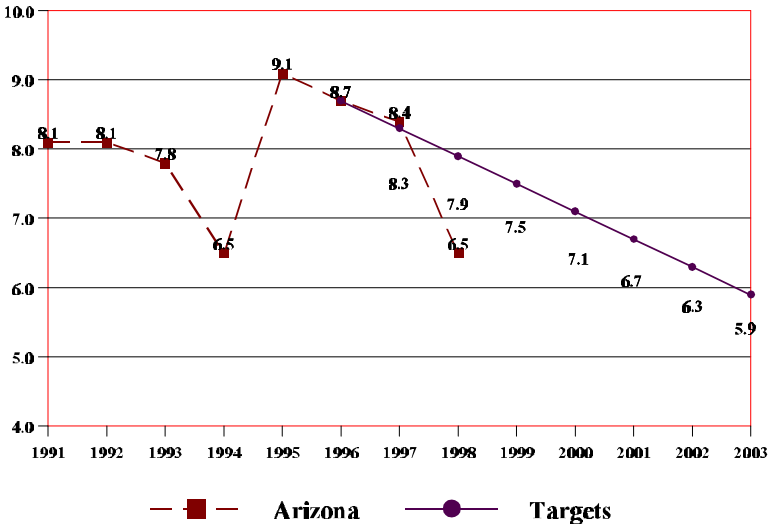
The Abstinence Only Until Marriage Program launched media message to target males. Local education programs were available in 12 of the 15 counties. The Program funded seven projects to provide abstinence only education projects primarily in areas of the state that were not being serviced. The projects were funded to cover the three counties that do not have ongoing programs. The program completed and distributed the evaluation report of the first year. The OWCH Community Development effort continued to collaborate with other state agencies and the CDC to explore implementation of the YRBS in Arizona. The Health Mothers/Healthy Babies effort produced and distributed educational materials on risks associated with teenage pregnancy. In addition, seven HM/HB coalitions sponsored Teen Maze's in which educational materials on risks associated with teenage pregnancy were distributed. Three sessions on Abstinence were presented at the Adolescent Health Coalition Conference.

Performance Measure #07: Percent of third grade children who have received protective sealants on at least one permanent molar tooth. No data are yet available specifically on the percent of third grade children who received protective sealants on at least one permanent molar tooth. Although the Office of Oral Health collects relevant dental information, a representative sample of third graders had not been a part of previous sampling plans. The best estimate is based on a 1990 survey which found that 8% of children age 6 to 8 had dental sealants. This estimate was increased by 3% to account for efforts in recent years to make sealants more accessible, resulting in an estimate of 11% for 1997.

In FY 2000, the Office of Oral Health provided dental sealants to over 4000 high risk, uninsured children. Other preventive and educational services were not directly related to the performance indicator, but to larger dental health issues. Additional funding from HRSA was obtained for the expansion of school-based dental sealant programs in rural areas of Arizona. The Office of Oral Health continued its efforts to improve the infrastructure for oral health services throughout the state. Consultation and technical assistance was provided to eight prepaid plans serving 537,036 members and to 15 agencies and communities. The oral health needs assessment that was initiated in 1999, continued. The oral health status of approximately 3,500 children was assessed through this effort. The Oral Health curriculum was piloted to 40 trainers through the T3 system. Foundation funding was obtained to support early childhood education of health professionals. School-based fluoride mouthrinse was provided to 46,868 children in 126 schools. Additional funding was received from the CDC for water fluoridation efforts. Four communities were loaned mobile dental units to provide treatment to underserved residents. Technical assistance was provided to six communities to develop community-based dental care delivery systems. In addition, the Office collaborated with the Arizona Dairy Council to develop a nutrition and oral health education curriculum for all public elementary schools and developed an oral health resource library for professionals and consumer.

Performance Measure #08: The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children. Motor vehicle deaths to children age 1-14 appeared to be declining in Arizona during the early 1990's, reaching a low of 6.5 deaths per 100,000 children age 1-14 in 1994 before an increase to 9.1 in 1995. The rate appears to be declining again in recent years. In 1997, the rate was 8.4 deaths per 100,000 children, slightly higher than the target of 8.3. For 1998 the actual rate of 6.5 is below target of 7.9 (see Figure 9).

Figure 9. Deaths caused by motor vehicle crashes per 100,000 children

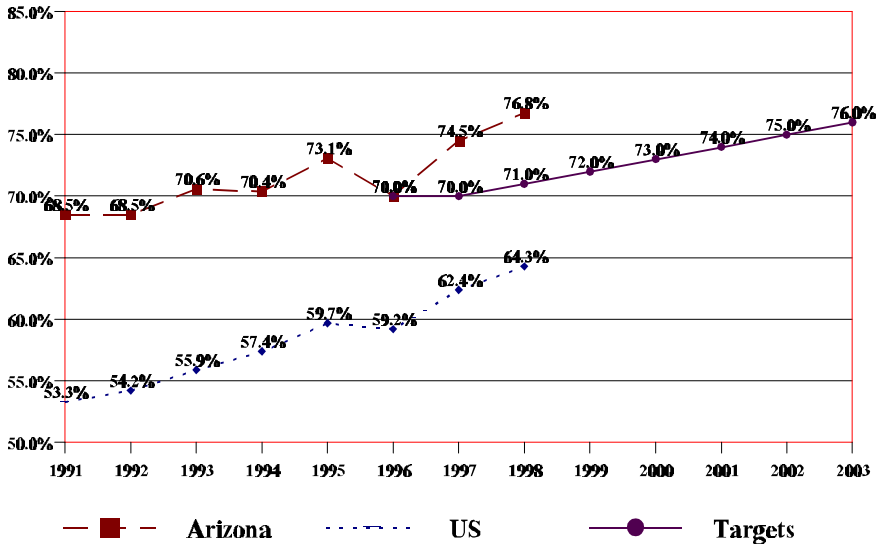


In FY 2000 the Emergency Medical Services for Children (EMSC) Program established a relationship with the Emily Center at Phoenix Children's Hospital to serve as the state resource center for information regarding EMSC. Training and educational materials were distributed to the EMSC National Resource Center and Arizona EMS providers. EMSC training for school nurses was provided. An EMSC exhibit was developed and displayed at 12 community events.

The Injury Prevention Program distributed educational information on prevention and safety to ADHS programs, individuals, child care centers, schools, community-based organizations and County Health Departments. In addition, the program supported NHTSA Child Passenger Safety Technician Training and conducted and/or co-sponsored seven educational campaigns to increase public awareness for injury prevention in Arizona. Funding was provided for four Safe Communities Projects throughout Arizona. The High Risk Perinatal Program provided guidance to families on the use of car seats and other general safety issues. The program increased car seat education and training to 69 percent of Level II, II EQ and III hospitals. Fifty-five percent of infants discharged from Level II, II EQ and III hospitals were placed in car seats for the trip home. The CIC and the Pregnancy and Breastfeeding Hotline provided information and referrals for car seats to callers. Information about how to access loaned car seats was also provided to County Health Departments and midwives through the County Prenatal Block Grant Program and the Midwife Licensing Program.

Performance Measure #09: Percentage of mothers who breastfeed their infants at hospital discharge. In 1991, 68.5 percent of mothers in Arizona breastfed upon hospital discharge. By 1995, the percent had risen to 73 percent and by 1996, it had fallen back to 70 percent. In 1997, the Arizona rate for all infants rose to 74.5 percent and to 76.8 percent in 1998. Arizona relies on the Ross Mothers' Survey (RMS) as the data source for estimates of the percent of mothers breastfeeding upon hospital discharge, and the RMS provides additional data regarding breastfeeding at six months and breastfeeding among WIC participants. In 1998, 33.1 percent of women in Arizona were breastfeeding at 6 months compared to 28.6 percent nationally. Among WIC participants interviewed, 69.9 percent of those in Arizona were breastfeeding at hospital discharge compared to 52.6 percent nationally. Arizona's rates have remained consistently higher than the national averages.

Figure 10. Percent of mothers who breastfeed at hospital discharge

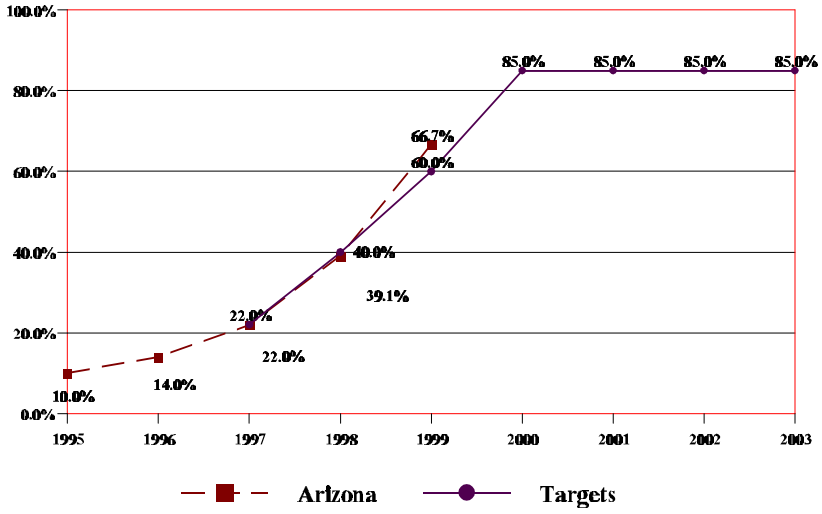


In FY 2000, the Child Health Program and the Health Start Program continued to distribute The KareBook , which promotes breastfeeding, to program participants. Health Start provided education and techniques on breastfeeding to lay health workers and collected data on breastfeeding from program participants. Nutrition Services printed and distributed the Model Breastfeeding Hospital Policy and Breastfeeding Education Protocol to WIC programs and APT certified hospitals. The DEP Lactation Course was revised to a five day intensive course. The Pump Loan Program and breastfeeding incentives were offered to mothers and babies on WIC. An Employee Breastfeeding Policy was developed and a pilot project at ADHS was implemented.

The Pregnancy and Breastfeeding Hotline handled 10,900 calls in fiscal year 2000. Two Hotline staff completed the Central Arizona College Human Lactation and Breastfeeding Course to enhance their skills in providing counseling to callers. The Hotline remained as the initial point of contact for the "Baby Arizona" campaign. Information about breastfeeding was also distributed through the Licensed Midwife Program, Healthy Mothers/Healthy Babies, and County Prenatal Block Grant.

Performance Measure #10: Percentage of newborns who have been screened for hearing impairment before hospital discharge. In 1999, 66.7 percent of newborns were screened for hearing impairment before hospital discharge, representing a 71 percent increase over 1998. The 1998 rate had increased by 78 percent over the rate in 1997. These increases are the result of a grant by the EAR Foundation that funded equipment and technical assistance for an additional 16 hospitals to implement newborn hearing screening. Thirty-six hospitals have universal newborn hearing screening programs.

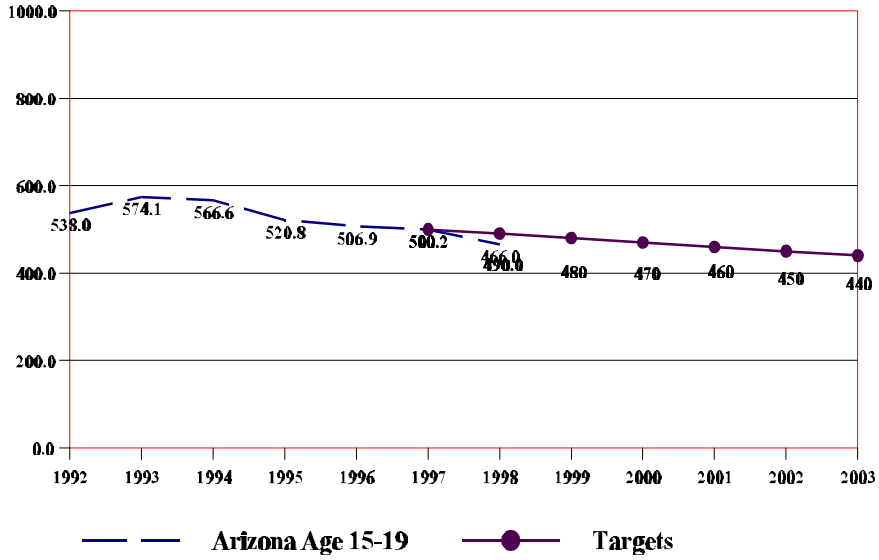
Figure 11. Percent of newborns screened for hearing impairment



A number of other activities undertaken by the OWCH Sensory Program have addressed the broader issue of identifying hearing impairment among children as early as possible and providing appropriate treatment and/or remediation. The Sensory Program held one Train the Trainer workshop using the newly developed curriculum in the areas of: prescreening, notification and referral, pure tone screening, otoacoustic emissions screening, tympanometry and otitis media. Eighteen people completed the program and were certified, making a total of 48 active trainers statewide. Schools, child care centers and Head Start programs were educated about the availability of hearing screening training. Data analysis showed that 92 percent of students in the mandatory grades requiring hearing screening, were screened for hearing. Universal hearing screening issues were addressed in the hospital component of the High Risk Perinatal Program at site visits and by ADHS site reviewers for the Arizona Perinatal Trust.

State Performance Measure #02: Hospitalizations for nonfatal injuries and poisonings per 100,000 adolescents age 15 through 19. In the 1999 grant application, this measure was based on all children age 1-19. Since the 15-19 age group appears to be at a much higher risk level for hospitalizations for injury and poisoning, this measure has been refined to focus on that age group. Historical rates and performance objectives were revised in the 2000 application to reflect this change in focus. The 1-14 age group will also be monitored on an annual basis.

Figure 12. Hospitalizations for nonfatal injury and poisoning per 100,000 population age 15-19.



After rising to a level of 574.6 per 100,000 adolescents in 1994, the nonfatal injury and poisoning level has declined in each year since to a low of 466 in 1998, well below the targeted rate of 490 per 100,000 adolescents.

The Injury Prevention Program co-sponsored Fire Prevention Week with the Arizona Fire and Burn Educator's Association, distributed Firearm Safety Brochures and provided training and education on the dangers of firearms. The program distributed over 2,200 bicycle helmets and over 80 child safety seats throughout the state. Staff participated in five child safety seat inspections. In addition, the program conducted one NHTSA Child Passenger Safety Technician Training and provided support for CPSS Check-up Events statewide. In addition, the Program co-sponsored seven educational campaigns to increase public awareness for Injury Prevention in Arizona. The Program continued its involvement with SAFE KIDS. One new SAFE KIDS Chapter was established in Santa Cruz County. The Program co-sponsored Arizona SAFE KIDS conference with Phoenix Children's Hospital.

The EMSC Program continued to provide funding to the Emily Center at Phoenix Children's Hospital that serves as the resource center. Two CD Roms were distributed by EMSC that addressed emergency care in the Special Needs Population. AHDS established an inter-departmental steering committee for adolescent suicide prevention and many OWCH programs served on it. An action plan was developed and is awaiting departmental approval prior to implementation. The Adolescent Health Program Manager served on the Suicide Prevention Coalition. The coalition developed its mission, vision committees, and data and research committee. Hospital discharge data and vital stats data were analyzed and an action plan was developed based on analysis results. Collaboration with the OWCH Adolescent Health Program and Injury Prevention Program occurred related to the efforts to address adolescent suicide attempts and other injury prevention efforts.

Through Community Health Nursing, CHN's provided in-home safety education to all NICP/OCSHCN families during home visits. Issues addressed included correct use of car seats, and home and pool safety for children 0 - 3 years. NICP also provided educational opportunities for providers and other community professionals on the importance of infant mental health and the risk factors that contribute to child abuse and neglect among medically and socially high risk infants and children. The Program designed and implemented the

use of new data collection forms that will assist providers in identifying children who may be at risk for abuse and neglect.

The Student Injury Surveillance Program began to transition from a paper reporting system to an automated encounter-based system. The Child Health Program funded the enhancement of the CHIP automated system used by school nurses to include injury reporting. One hundred fifty schools reported injury data to OWCH through CHIP and an additional 120 schools submitted hard copy injury reports.

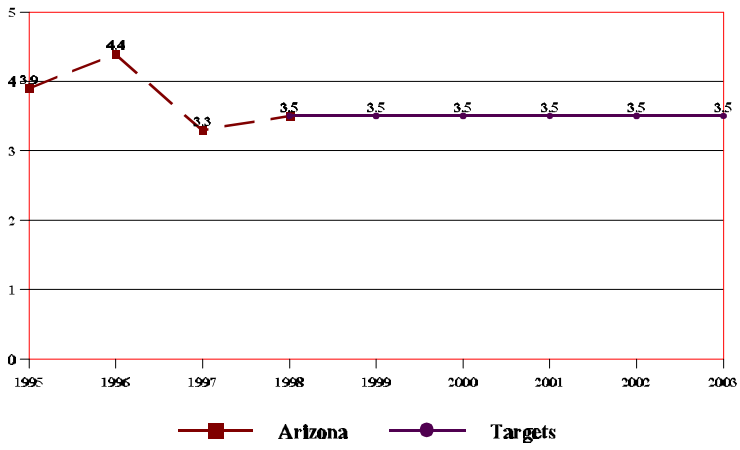
The OWCH-funded School Nurse Emergency Medical Services for Children Training was held in the summer of 2000. Approximately 260 school nurses throughout the state have completed the course over the six years that OWCH has coordinated the training effort.

In addition, information about recognizing and preventing child abuse, use of car seats, and home and pool safety was distributed by various OWCH programs, including Healthy Mothers/Healthy Babies, Licensed Midwife Program, Abstinence Only Education, EMSC, High Risk Perinatal Program, Health Start, Perinatal Substance Abuse, Social Work Services, County Prenatal Block Grant and Child Health.

State Performance Measure #08: Percent of women of childbearing age (18 - 44) who take a vitamin with the recommended 0.4 mg. of folic acid daily. In 1997, the BRFSS for Arizona found that 40.5% of women take a multivitamin. This performance measure has been discontinued and replaced by performance measure #09 below:

State Performance Measure #09: The number of babies born with spina bifida per 1,000 live births. There were 3.5 neural tube defects per 1,000 live births in 1998. Because there is evidence that a diet with adequate folic acid before conception and during early pregnancy can reduce the number of children born with neural tube defects, programmatic efforts have focused on activities to promote the intake of folic acid by women of childbearing years. AHDS established a Folate Committee two years ago to coordinate efforts to increase folate consumption. A strategic plan was developed.

Figure 13. Babies born with spina bifida per 1,000 live births.



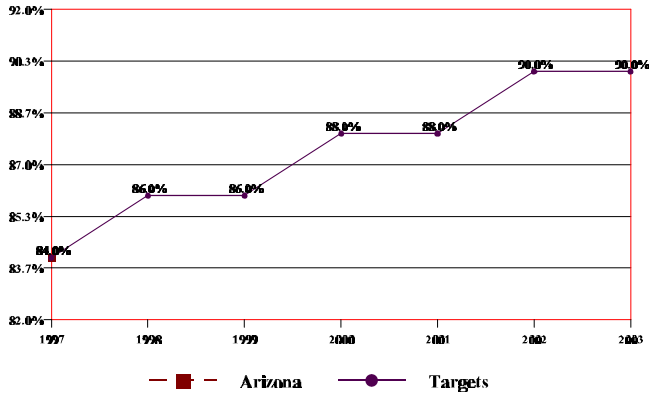
The OWCH nutritionist collaborated with the AzMOD and Spina Bifida Association of Arizona to educate both the public and health professionals on the role of folate. A “Folate for Health” exhibit was developed and was presented at 14 conferences across the state. Two folate articles were published in the ADHS Prevention Bulletin which was mailed to health professionals statewide. Folate brochures and order sheets were mailed to over 1000 physicians and nurse practitioners. The OWCH Pregnancy and Breastfeeding Hotline conducted surveys and provided statistical information about the findings to the folate subcommittee. In addition, various OWCH

programs (Prenatal Outreach, High Risk Perinatal Program, County Prenatal Block Grant, Pregnancy and Breastfeeding Hotline, Child Health, Family Planning/Reproductive Health, Healthy Mothers/Healthy Babies, and the Licensed Midwife Program) distributed educational materials to the public and providers promoting good nutrition including the use of folate.

2.4.4 Infrastructure Building Performance Measures

Performance Measure #11: Percent of Children with Special Health Care Needs in the State CSHCN program with a source of insurance for primary and specialty care. In 1997, 84 percent of children with special health care needs had a source of insurance. There are no updates to this data to date, but a new survey will be undertaken in the Fall of 1999 and questions to ascertain insurance coverage for CSHCN will be included. Figure 14 shows targets for this measure.

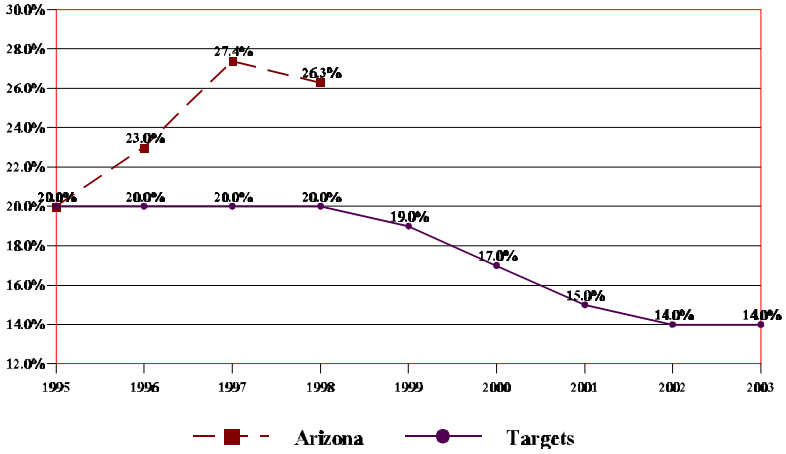
Figure 14. Targets for Percent of CSHCN with Insurance



A number of OWCH efforts during the year addressed this measure. The Sensory Program assisted the EAR Foundation with a grant application that resulted in funding being provided for the provision of medical services, audiological services, hearing aids and related supplies to children who have limited financial resources and are not eligible for AHCCCS or KidsCare. To assure that there are no delays in obtaining services, the grant also provides a bank of loaner hearing aids for any child under six months of age diagnosed with a hearing loss. The High Risk Perinatal Program modified the program data collection tool to improve collection of information regarding the source of insurance coverage.

Performance Measure #12: Percent of children without health insurance. In 1998, 26.3 percent of children in Arizona were estimated to have no health insurance, compared to 24 percent in 1996.

Figure 15. Percent of children without health insurance.

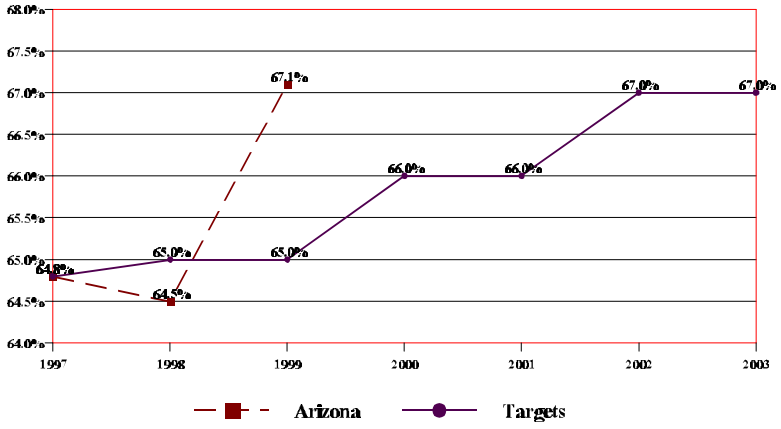


Various OWCH programs include efforts to facilitate referral of children/families to either AHCCCS or KidsCare. During FY 2000, the Health Start Program facilitated referrals to enroll eligible children into AHCCCS and KidsCare. The Office of Oral Health provided information about the AHCCCS program to an estimated

3,000 uninsured families participating in the Arizona Dental Sealant Program. The Children's Information Center (CIC) provided information regarding health care services for children to over 1000 callers. In addition, CIC facilitated referrals to Kids Care and AHCCCS for callers with uninsured children. The High Risk Perinatal Program analyzed program data to determine potential number of infants eligible for Kids Care and facilitated referrals for same. Within the County Prenatal Block Grant Program outreach activities to identify uninsured children and refer them to AHCCCS and KidsCare were a high priority. Information packets on access to care were distributed to clients enrolled in case management programs, prenatal classes, teen support groups and at health fairs.

Performance Measure #13: Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program. During fiscal year 1998-1999, 67.1 percent of the children eligible for Medicaid actually received a paid service, representing a four percent increase over the previous year and exceeding the target of 65 percent. The Health Start Program, County Prenatal Block Grant Program and The Pregnancy and Breastfeeding Hotline, as a collaborator under the Baby Arizona Project, facilitated referrals of pregnant women to Medicaid. All OCSHCN contracts continue to require coordination with Medicaid. The Client Automated Tracking System (CATS) tracks referrals to Medicaid for the HRPP, AzEIP and OCSHCN Programs. All clients served by the program are provided assistance to enroll with and access care through AHCCCS and KidsCare. The Child Health Program through its involvement with the AzAAP Medical Home Program and School-Based Health Centers, assists families in applying for AHCCCS and KidsCare.

Figure 16. Percent of Medicaid eligible children who received a Medicaid service.



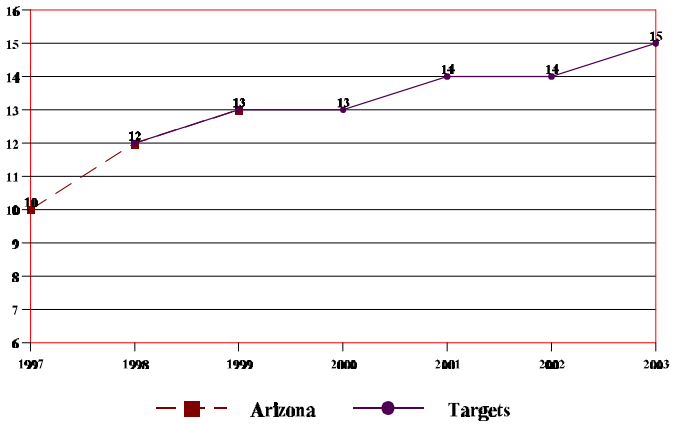
Performance Measure #14: The degree to which the State assures family participation in program and policy activities in the State CSHCN program. Out of a possible total of 18 points, OCSHCN scored 12 points for 1998. OCSHCN mostly met (score = 2) the characteristics on all six factors, with improvements in the areas of families participating on advisory councils and families participating in the development and review of the MCH Block Grant. OCSHCN added for the first time this year, families with children with traumatic brain injury to its Tsunami contractors list. In addition, families were more integrally involved in block grant work groups.

Project Tsunami continued to provide reimbursement to families for participation on policy and planning committees. A major accomplishment was the publication of the Helpful Hints Guide for Families with CSHCN. This guide has been well-received by both parents and providers statewide, and we are currently in our third printing. Community Development continued to facilitate the growth and influence of community parent leaders

and OCSHCN's has implemented the All About Me Project.

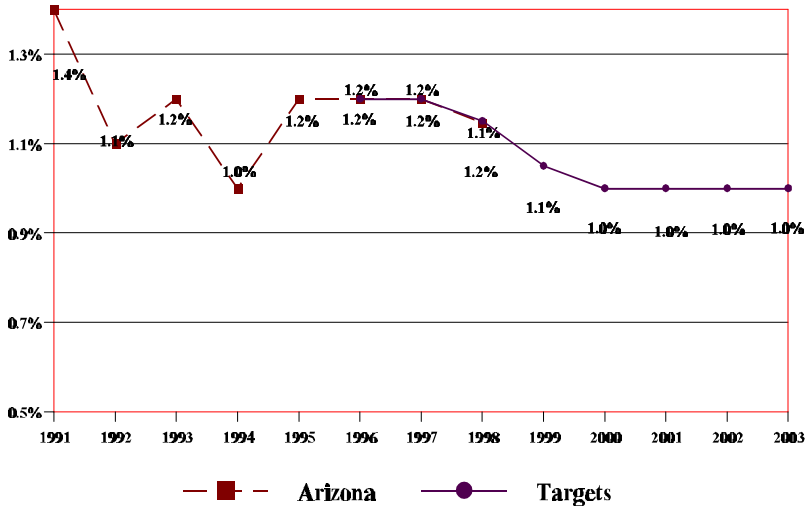
OCSHCN has made significant progress in moving toward the implementation of a universal application for service across programs. An interagency team was established, including representatives from families, ADHS, AHCCCS, DES, ADE and Corrections. This team, covering five of the major state agencies serving children and families, collectively represents over 100 programs. This project is now in the Governor's Office as part of her "No Wrong Door" initiative.

Figure 17. Degree to which State assures family participation.



Family involvement in OWCH policy development, program planning and evaluation is also an office priority. OWCH established the Community Involvement Committee. The purpose of the committee is to support the office's ongoing efforts to institutionalize policies and procedures to include partners in OWCH activities. The original concept of parents representing families was broadened to a more all-encompassing approach to partners. The use of community partners, including family members, in OWCH activities continues to evolve. The number of community parent leaders has grown throughout FY 2000. The "Protocol for Community Development" was published and is used to guide family involvement is program planning, development and evaluation. Parent participation was secured for the EMSC Advisory Board. The HRPP included parents and other community agencies in the development of the RFP for Developmental Services and parent satisfaction surveys are an on-going component of HRPP evaluation.

Figure 18. Percent of very low birth weight live births.



Performance Measure #15: Percent of very low birth weight live births. The very low birth weight rate has been relatively constant from 1992 through 1997 as shown in Figure 18. In 1997, the objective was met to hold the rate of babies in Arizona born weighing less than or equal to 1,500 grams to 1.2 percent of live births.

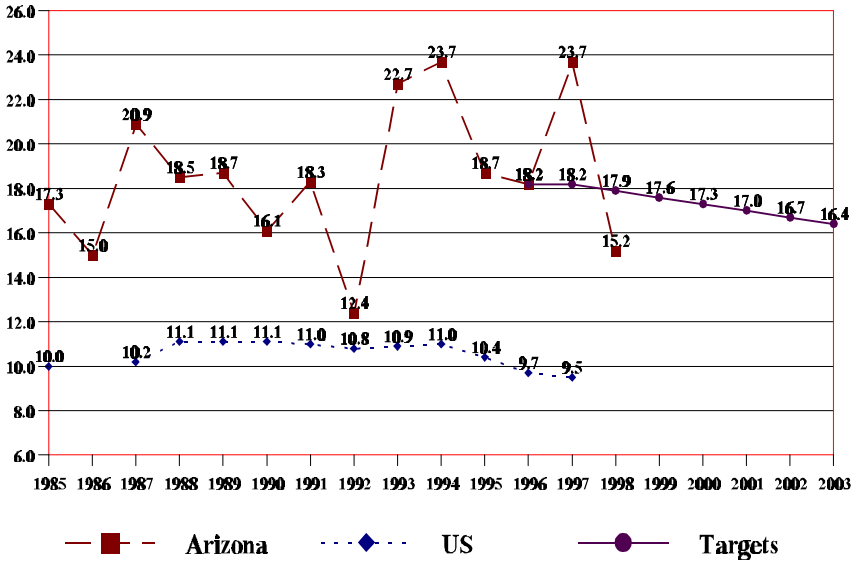
The Health Start Program, through its lay health workers,

provided monthly prenatal and postpartum in-home visits and/or class education. The Program assisted in establishing community college certification for Community Health Workers, including lay health workers. The Healthy Mothers, Healthy Babies (HMHB) project held its annual conference. Support was provided to local coalitions for projects and fund raising activities. In addition, HMHB planning sessions were held that produced new strategies for increasing visibility, viability and support from local communities. The County Prenatal Block Grant provided training to county health departments on systems development that will aid in better service delivery for clients. Several Advisory Councils joined other groups within their counties that have programs under contact to OWCH to improve collaboration and service delivery. The Program screened women receiving case management services and provided risk appropriate services. Home visits were provided in some counties to women that were identified as high risk. The Child Health Program continued year three of its project funded by St. Luke's Charitable Health Trust to evaluate the effectiveness of a hand-held medical record for pregnant women. Results of the project will be available next year.

The Perinatal Substance Abuse Program extended the mini-grant awards for three years. The awards fund HMHB Coalitions, county health departments and non-profit organizations to conduct perinatal substance abuse projects to increase awareness of the risks associated with the use of drugs by pregnant women. Over 7,000 brochures and pamphlets on perinatal substance abuse and a number of videos were distributed at conferences, workshops, and health fairs. The Midwife Licensing Program provided education programs for midwives and others on subjects pertaining to preventing low birth weight and interfaced with Child Fatality Review Office to identify preventable causes of fetal and neonatal deaths when they occur with Licensed Midwife clients. The Social Work Services Program provided educational opportunities to social work professionals.

Performance Measure #16: The rate per 100,000 of suicide deaths among youths aged 15-19. During the time period from 1985 to 1998, the adolescent suicide rate has fluctuated from a low of 15.0 per 100,000 adolescents in 1986 to a high of 23.7 in 1994 and again in 1997. In 1998 the rate was 15.2 deaths per 100,000 adolescents, the lowest rate observed in recent years and below the targeted rate of 17.9. Figure 19 shows that the suicide rates in Arizona are consistently higher than national statistics on adolescent suicides.

Figure 19. Rate of suicides per 100,000 adolescents age 15 - 19



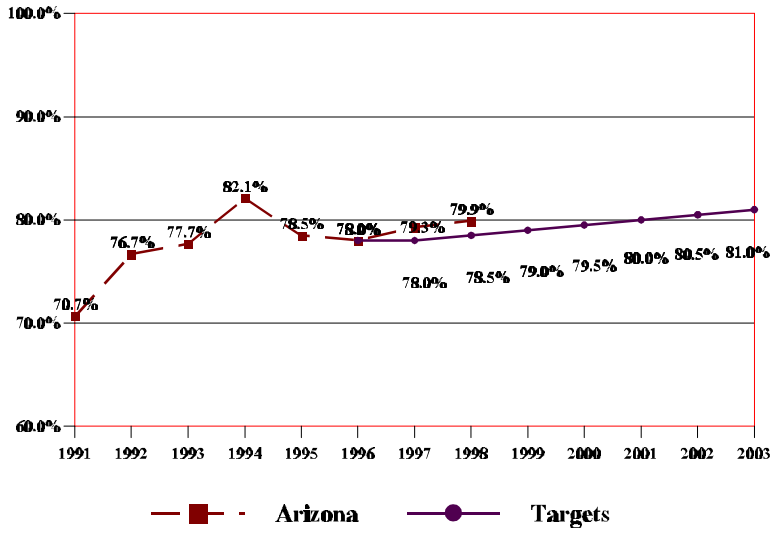
In FY 2000, the Adolescent Health Program administered follow up surveys

to all attenders of the first "Talking With Teens" training. They identified information about depression/suicide as their greatest need. The "Talking With Teens" curriculum was modified to include training on adolescent depression and suicide. The Adolescent Health Coalition completed and distributed a fact sheet on adolescent depression and suicide prevention for parents and one for teens. A session on "Teen Suicide: Assessing the Risk" was presented at the AAHC Conference. AHDS established an inter-departmental steering committee for adolescent suicide prevention and many OWCH programs served on it. An action plan was developed and is awaiting departmental approval prior to implementation. The Adolescent Health Program Manager served on the Suicide Prevention Coalition. The coalition developed its mission, vision committees, and data and research committee. Hospital discharge data and vital stats data were analyzed and an action plan was developed based on analysis results. Collaboration with the OWCH Adolescent Health Program and Injury Prevention Program occurred related to the efforts to address adolescent suicide attempts and other injury prevention efforts. The Program initiated a process to develop pre-screening protocols for adolescent health care providers with the Adolescent sub-committee of ARMA. In addition, a process was initiated to address EPSDT anticipatory guidance that includes depression and suicide.

The manager of the OWCH Community Development Project met with the CDC and other state agencies to discuss possible options regarding implementation of the YRBS in Arizona for FY 2001. The issue is being pursued with ADHS administration.

Performance Measure #17: Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates. In 1998 79.9 percent of very low birth weight babies were born at facilities with Level III neonatal intensive care units, exceeding the target set of 78.5 percent.

Figure 20. Percent of VLBW infants delivered at Level III Facility



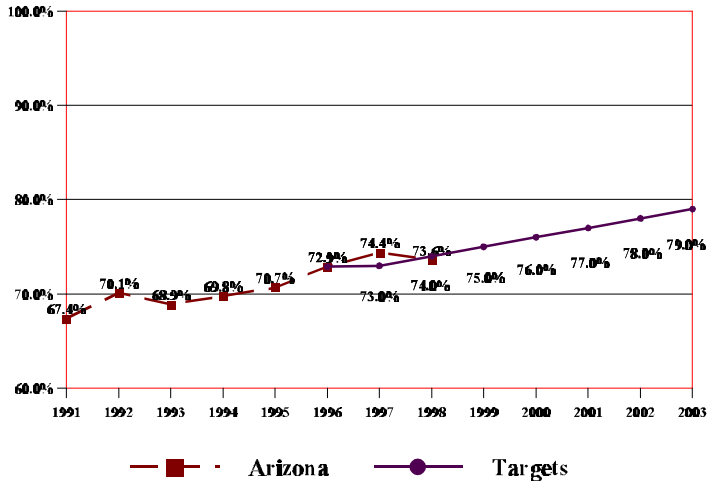
The High Risk Perinatal Program collected, analyzed and distributed perinatal statistical data, comparing each APT Certified Hospital's perinatal activity with Arizona and national perinatal data. Technical assistance regarding resuscitation, stabilization and transport of high risk maternal and sick neonatal patients was given to hospitals throughout the state. Policies and procedures, recommendations and guidelines were distributed to hospitals throughout the state to enhance the standard of medical care for high risk mothers and sick babies. The program also provided facilitation of transport flight services to perform only the highest standard of care based on a regional system of perinatal emergency

transport services. The perinatal emergency transport system in Southern Arizona was refined, organized and implemented. Developmentally supportive care was incorporated into certification guidelines for the APT and in the transport portion of the program. Developmental services provided training to two additional evaluators who will be able to provide home based services in remote areas of Arizona. The Hospital Program began providing formal site visits with continued provision of technical training and assistance as indicated. Collaboration with the APT and AHCCCS has continued for the purpose of monitoring the perinatal system and to promote the highest quality of care in perinatal care centers. An on-call system, available 24 hours/day was established to provide high risk maternal and neonatal consultation and case management by physicians on a statewide basis.

Arizona has become a national center for multiple births, and has decreased mortality among very early babies. Although there has also been an increase in the percent of women entering early prenatal care, Arizona has been unable to reduce the rate of early and small babies. OWCH participates on a task force convened by the March of Dimes to address the persistent very low birth weight rate in Arizona. The task force is investigating medical and psycho-social factors influencing low birth weight deliveries.

Performance Measure #18: Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. In recent years, there has been a steady upward trend in the percent of women receiving early prenatal care, culminating in 74.4 percent by 1997. In 1998 the percent dipped to 73.6 percent, slightly below the targeted rate of 74 percent.

Figure 21. Infants born to women receiving prenatal care first trimester.

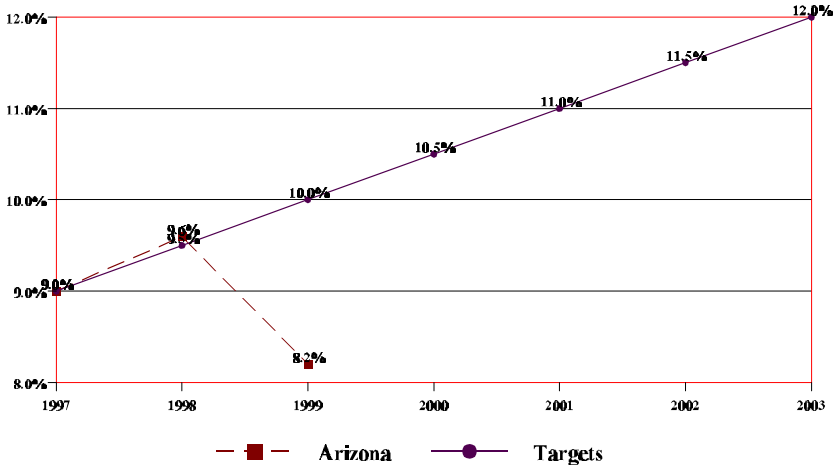


During FY 2000, the High Risk Perinatal Program continued to monitor the percent of women who received care in their first trimester of pregnancy and who have a source of payment for their prenatal care through the electronic birth certificate. The Pregnancy and Breastfeeding Hotline continued to be the initial point of contact for the "Baby Arizona" campaign to facilitate early entry into prenatal care. The Hotline collected data regarding calls received and provided statistics to the Baby Arizona evaluation subcommittee which measures outcomes, costs and entry into care. The Midwife Licensing Program monitored the gestational age at entry into care and the number of prenatal visits for pregnant women in the care of licensed midwives. The Healthy Mother/Healthy Baby coalitions increased distribution of educational materials on the importance of prenatal care by coordinating activities with local county health departments and libraries. The coalitions began activities for increasing knowledge of men regarding the importance of prenatal care by planning training on male involvement. Through the Prenatal Block Grant Program, pregnant women were identified and given information about the case management program. The case managers linked women on AHCCCS or Baby

Arizona with prenatal care providers.

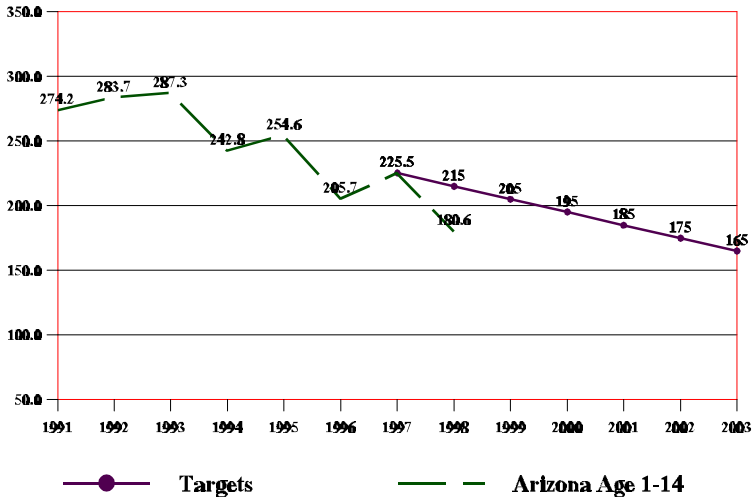
State Performance Measure #03: The percent of licensed child care centers which meet national quality standards for health and safety. In 1999 8.2 percent of the licensed day care centers in Arizona were accredited, less than the 10 percent target set for 1999. Seven child care centers became accredited with assistance from the Arizona Self-Study Project (ASSP). The Early Childhood Program assisted 52 early childhood facilities and small group homes through the ASSP. The Program awarded contracts to the University of Arizona, and the Maricopa County Cooperative Extension for train-the-trainer. This represents the final step in making T3 self-sustaining. The program hosted a T3 institute in Phoenix for 50 new trainers that included adult learning, hearing and vision screening, special needs and nutrition curricula. A strategic plan for career ladder development for the early childhood child care worker in collaboration with DES. The CISS grant has successfully completed five health education products to link health services with parents through the child care provider.

Figure 22. Percent of child care centers meeting national quality standards for health and safety.



State Performance Measure #04: Asthma hospitalizations per 100,000 children age 1 through 14. In the 1999 grant application, this measure was based on all children age 1-19. Since the 1-14 age group appears to be at a much higher risk level for hospitalizations for asthma, this measure was refined in the 2000 application to focus on that age group and performance objectives were revised to reflect this change in focus. The 15-19 age group will also be monitored on an annual basis.

Figure 23. Asthma hospitalization per 100,000 children age 1-14



Asthma hospitalization rates in 1998 dropped by 20 percent for children age 1-14 from the previous year to 180.6 per 100,000 children, which was the lowest rate observed during the period from 1991 through 1998, and far below

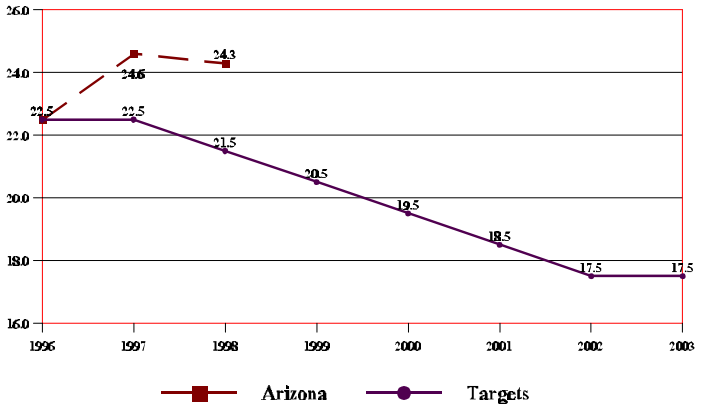
the target rate of 215. In 2000, the Child Health Program provided software and technical assistance to 150 school nurses to track asthma diagnoses and services. OWCH staff have attended the Asthma Coalition Steering Committee meetings and have participated on various committees. The Arizona Asthma Coalition (AAC) is a partnership that was established to address asthma as a significant health concern in Arizona and to create a model for future prevention activities. Coalition membership is extensive and includes numerous agencies and health care providers, such as: Az. Academy of Family Physicians, American Academy of Pediatrics, Arizona Chapter; ADHS, HMOs, AHCCCS, Arizona Public Health Association, health plans, as well as many others. The committees include: steering, asthma management, school health, advocacy and legislation, community awareness, group support, marketing, fund raising and data sharing.

A representative of the OCSHCN Planning and Evaluation Program was appointed to be the ADHS representative to the Arizona Asthma Coalition (AAC) Steering Committee and the CDC Asthma Program. The representative facilitated efforts of a Maricopa County coalition to obtain a Robert Wood Johnson Foundation asthma grant, supported the Phoenix Children's Hospital's development of a mobile asthma screening and treatment program (Breathmobile) and presented information on Arizona programs at the annual CDC asthma conference. Additionally the representative managed state tobacco-tax funds for lay and professional asthma education which were used to develop and pilot test a curriculum for training school nurses, create a school nurse asthma kit which included an asthma manual and assorted asthma related medical equipment, develop and pilot test a curriculum for training pharmacists, develop and pilot test an asthma brochure to be distributed by pharmacists, conduct a survey of osteopaths on their clinical approaches to asthma management, distribute education materials to osteopaths on asthma management best practices, and provide screening and education to over 700 children in four counties.

State Performance Measure #05: Preventable child deaths per 100,000 children under age 18. In 1998, there were 305 deaths determined to have been preventable, representing a rate of 24.3 per 100,000 children under the age of 18 and for the second year the preventable death rate exceeded its target rate which was set at 21.5 for 1998.

During 2000, the Child Fatality Review program coordinated a Maternal/Fetal work group to develop a mechanism for coordination of efforts for maternal reviews, fetal/infant reviews, SIDS reviews and child fatality reviews. The Program has begun implementation of a new Arizona Citizen Review Panel Program to provide oversight of the Child Protective Service system. A health and spinal injury prevention project was funded and implemented in three counties.

Figure 24. Preventable child deaths per 100,000 children age 0 - 17.



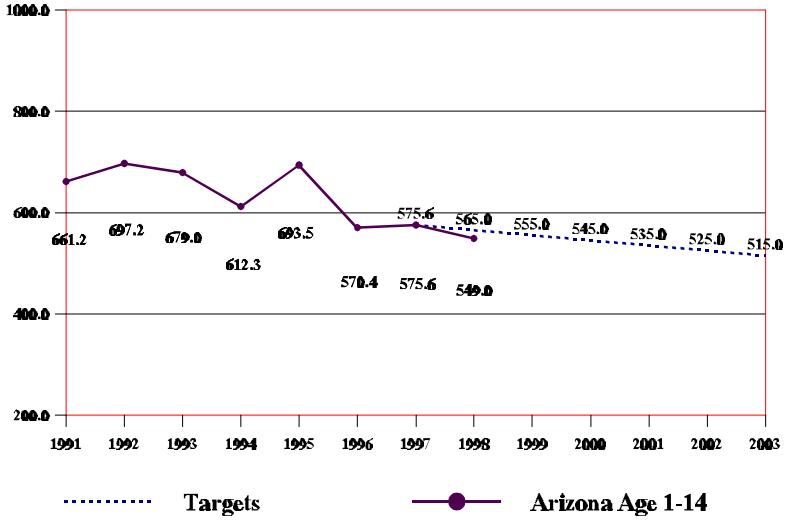
The High Risk Perinatal Program participated in parent and community education on prevention of intentional injuries, child abuse and neglect. The Community Health Nurses provided SIDS education at every home visit and monitored the use of apnea monitors used by their clients.

The SIDS Program provided Spanish translation of documents such as the SIDS Newsletters, grief pamphlets, etc., and distributed them in partnership with the SIDS Alliance. The program co-sponsored the 4th Annual SIDS Conference with the SIDS Alliance. Through the Early Childhood Program, a SIDS curriculum was completed, piloted and disseminated to 50 T3 trainers.

The OWCH Social Work Services Program co-sponsored and participated on the conference planning committee for Child Abuse Prevention and the Family Centered Practice Conferences. Child abuse and domestic violence issues are included in the Standards for the Provision of Perinatal Social Work Services.

State Performance Measure #06: The rate of children 1 through 19 hospitalized for ambulatory care sensitive conditions per 100,000. Ambulatory care sensitive conditions are those conditions which would not likely require hospitalization if adequate primary care services had been provided. In the 1999 grant application, this measure was based on all children age 1-19. However, since the 1-14 age group appeared to be at a much higher risk level for hospitalizations for ambulatory care sensitive conditions, this measure was refined in the 2000 application to focus on that age group and objectives were revised to reflect this change in focus. The 15-19 age group will also be monitored on an annual basis. In 1998 there were 549 hospitalizations per 100,000 children age 1-14, a rate approximately five percent lower than the previous year and below the target which was set for 1998at 565 hospitalizations per 100,000 children.

Figure 25. Hospitalizations for ambulatory sensitive conditions per 100,000 population age 1 - 14.



In 2000, Community Health Nurses with the High Risk Perinatal Program monitored all families for use or assignment of a primary care provider. If no PCP was being used, the CHN made the linkage by referral to a PCP. The nurses assist families without insurance, in applying for AHCCCS and KidsCare. The nurses continued to provide home education to participating families. The program continued the expansion of developmental services to rural communities by providing support for training of new professionals. Program staff collaborated with community agencies to perpetuate a system of referral and data exchange. All program fact sheets were updated and distributed.

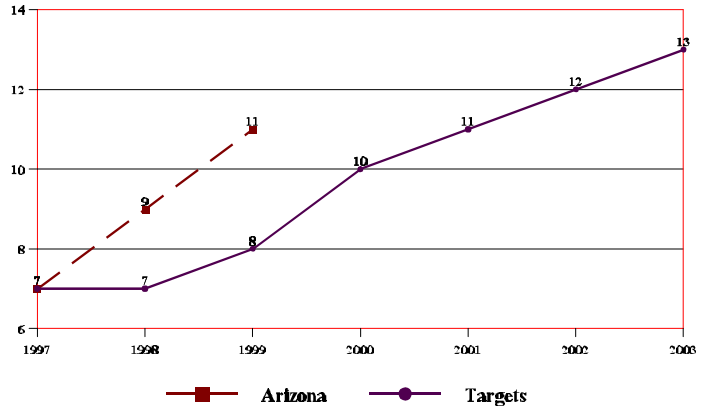
Information was provided to perinatal social workers throughout Arizona to assist them in educating and

supporting families about community intervention and health care resources available to them.

The Child Health Program continued to fund the Medical Home project (MHP) in conjunction with the American Academy of Pediatrics, Arizona Chapter. This project provides the safety net for uninsured children to access health care while pursuing enrollment with AHCCCS or KidsCare. A manual on quality assurance and improvement for school-based health care was completed and is in the process of being approved for printing and distribution. The number of school-based/school-linked centers continued to grow to approximately 200 during the year. These centers provide necessary preventive and acute care services to uninsured and underinsured children. In addition, the Children's Information Center facilitated referrals for primary care services for children to callers without health insurance.

State Performance Measure #07: The State Title V program has adopted and recommended a set of quality standards for the health care of the MCH population. The current status of efforts to adopt quality standards for the MCH population is a score of 11 on a 21 point scale, which is an increase of two points since last year's application (see Attachment 07 to Form 11). CRS continued to implement the CRS Standards Eligibility Project.

Figure 26. State adoption of quality standards/guidelines.



A new data system linking HRPP, AzEIP and OCSHCN was implemented and the backlog of data has been brought up to date. The Sensory Program published and distributed Pediatric Audiology Guidelines. The High Risk Perinatal Program, Developmental Clinics, conducted contract monitoring visits to each of the clinic sites. The Program completed the implementation of General Evaluator Competencies. The training guidelines and a training manual were distributed. The Program collaborated with OCSHCN and AzEIP to develop an RFP which addresses enhancements to service delivery: services in natural environment, AzEIP program and individual assessment, development, hearing screening, team conferencing and collaboration with community resources.

The Nutrition Services program continued to offer various training opportunities on a statewide basis and training and technical assistance was provided by regional and national experts on nutritional issues related to children with special health care needs. Quality assurance monitoring of nutrition services was conducted at all CRS clinics. The special needs component to the Train-the-Trainer (T3) curriculum continued to be provided and the T3 curriculum was offered as part of the summer program at Central Arizona College (CAC).

2.4.5 Other Accomplishments Not Related to Performance Indicators

In Community Development, elements for successful community development were identified and agreed upon at the 1997 Parent Leader Retreat. Parent leaders now report monthly progress on

successes. Resource/needs assessment initiated in first urban community.

OCSHCN expanded service delivery to 393 AzEIP eligible children with Pediatric Undernourished (failure to thrive), Expressive Language Delay and survivors of traumatic brain injury. CRS drafted guidelines for the Coordination of Care project. In addition, the CRS parent advisory councils were restructured to ensure optimal family participation in regional clinic policy and planning. The ADHS/OCSHCN Internet Home Pages were developed and coordinated among CFHS offices. A state strategic plan for emergency medical services was developed.

The Arizona Legislature reinstated funding for the Health Start Program during the 1999 legislative session. The appropriation for FY2000 enabled the expansion of Health Start to eight centers. Additional sites will be added in FY 2001 because of an increase in the state appropriation.

The Client Automated Tracking System (CATS) was implemented during this fiscal year as the data system for the High Risk Perinatal Program, AzEIP and TBI program. Throughout the year, system enhancements were made to facilitate ease of data entry and automated reporting. The system provides a more universal family health information system. Other client-based programs will be added to the system in future years.

Child Health Indicator Project (CHIP) software was developed for school nurses to capture encounters with students. The project was originally funded under a federal SSDI grant, while CHIP enhancements (e.g., medication monitoring sheet, school injury reporting, and medical care plan) have been funded with Title V MCH Block Grant funds. The CHIP Project gives nurses automated student records which become a source for aggregated data reported to OWCH. One of the most significant benefits of this system is that CHIP facilitates the reporting of prevalence data for specific conditions (e.g., asthma, anorexia, bulimia, diabetes, hearing impairment). OWCH is seeking a funding source to implement and institutionalize CHIP throughout Arizona schools.

The Arizona Legislature established a pilot project that will be coordinated by OWCH for the fiscal years 1999-2000 and 2000-2001. The pilot program is modeled after the Olds prenatal and infancy nurse home visitation program for single women under the age of thirty who are eligible for or who are receiving temporary assistance for needy families or Arizona works assistance. The program will provide participants with nursing and other home visitation and transportation services relating to pregnancy, childbirth, child injuries and child neglect. The program also will provide health related behavior services and assistance after childbirth including proper child care, education completion, work force entrance and help for women making childbearing and other decisions about their future.

OWCH is working with the Arizona chapter of the March of Dimes and other perinatal leaders to examine the problem of prematurity. The work group is focusing on two main areas: the content of clinical care and the broader socio-economic and behavioral factors impacting birth outcomes. A position paper is being developed and recommendations for statewide action are expected.

2.5 Progress on Outcome Measures

This block grant application represents the second opportunity to evaluate progress against targets which were set in the previous application. It is expected that there will be a cumulative positive impact on

outcomes in the future as progress is made on individual performance measures. It is important to understand, however, that the most recently available data for most measures covers a time period which preceded the setting of those targets. The 1999 block grant application (which was submitted in 1998) established baseline measures for 1996 for core outcomes indicators. With this application, data for 1998 will be presented. For the state-defined outcome measure, 1997 data were presented as the baseline and no new data are yet available. The most recently available status for each outcome indicator is presented in Appendix G, which provides a one-page illustration for each measure and shows Arizona's progress in relation to the targets set as well as available data on historical trends in Arizona and the United States and other relevant subgroup comparisons.

Infant Outcomes

Providing reproductive health/family planning services to low-income women (State Performance Measure #01) and lowering the birth rate for young teenagers (Performance Measure #06) should increase the likelihood that all babies are wanted and that women of reproductive age are healthy when they conceive. Outreach efforts should increase the likelihood that women will enter prenatal care early (Performance Measure #18) and that risk factors are identified and treated during pregnancy, leading to a decrease in the percent of very low birth weight live births (Performance Measure #15). When high-risk babies are born, ensuring that they are born at an appropriate facility (Performance Measure #17) will enhance the likelihood that the baby will survive birth and thrive. Appropriate newborn screening (Performance Measure #04) will identify threats to an infants health. Finally, increasing the percentage of mothers who breastfeed (Performance Measure #10) will lead to healthier infants. All of these improvements should ultimately result in fewer deaths during infancy.

Birth outcomes generally improved from 1996 to 1997, with the exception of the perinatal mortality rate. However, 1998 showed a reversal of this progress for several measures. The relationships between birth-related performance and outcomes measures is mixed. While there had been a dramatic decrease in teen pregnancies from 1996 to 1997, there was no new progress in this measure in 1998 (Performance Measure #06). The percent of women entering prenatal care early (Performance Measure #18) had increased from 1996 to 1997, but declined again in 1998.

The percentage of high-risk babies born at a level III perinatal center (Performance Measure #17) increased again, as did the percentage of mothers who breastfeed at hospital discharge (Performance Measure #10). There was an increase in the percent of low-income women receiving family planning services in 1998 (State Performance Measure #01and in the percent of newborn screenings (Performance Measure #04) as well as a decrease in the percent of very low birth weight live births (Performance Measure #15).

Despite aggressive programmatic efforts focusing on high-risk pregnancies and behaviors, prenatal outreach, and nutritional education, infant mortality rates targets for improvement were set modestly because of the recognition that Arizona faces a rapidly growing population and during 1998, an effective program, "Health Start," was eliminated from the maternal child health budget.

<u>Outcome Measure #01: Infant mortality rate per 1,000 live births.</u> Figure 27 shows that Arizona's infant mortality rate has been at or below the national levels for most of the decade for which data are available, with the

exception of 1996, when Arizona's infant mortality rate was seven percent higher than the United States rate. The 1998 infant mortality rate of 7.6 in Arizona is above the national rate. Targets were set to hold the infant mortality rate at 7.7 per 1,000 births in 1997, and begin to decrease mortality by 0.15 (fifteen-hundredths of one) death per 1,000 live births per year beginning in 1998. The actual infant mortality rate for 1998 was 7.6, just below the set target of 7.7.

Figure 27. Infant Mortality Rate

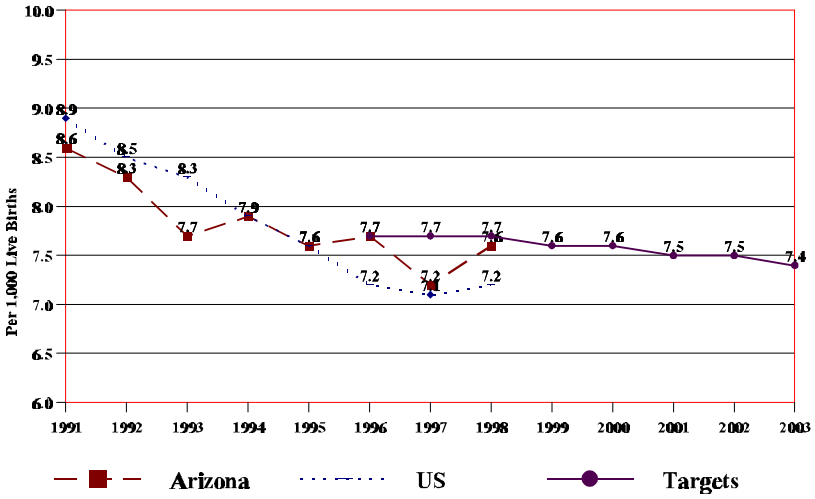
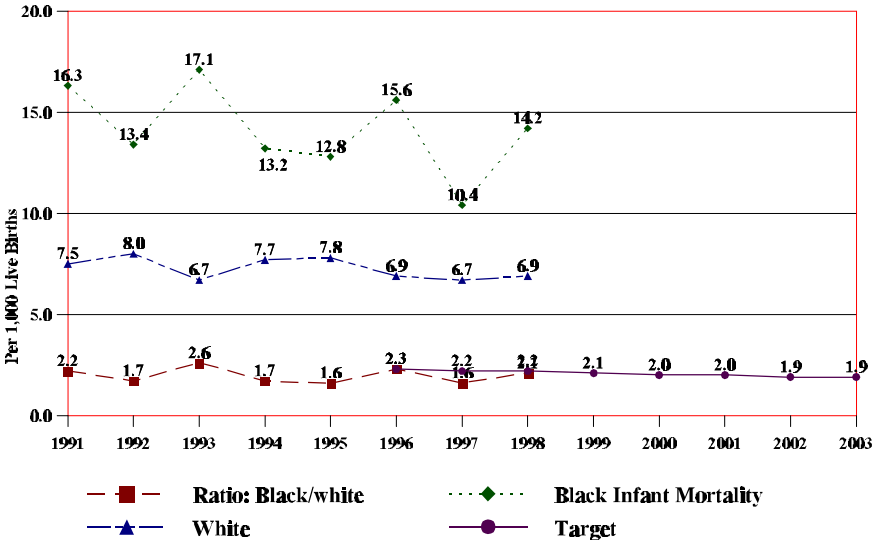


Figure 28. Black/White Infant Mortality Rate



Outcome Measure

#02: The ratio of the black

infant mortality rate to the white infant mortality rate. In 1996, the white infant mortality rate was 6.9 and the rate for black infants was 15.6 per 1,000 live births, representing a ratio of black to white infant mortality of 2.3. Targets were set to incrementally decrease the black infant mortality while holding the white infant mortality to its 1996 rate. A 33 percent drop in Black infant mortality in 1997 lead to a reduction in the disparity between black and white infant mortality to a ratio of 1.6, well below the targeted ratio of 2.2 for that year. In 1998, the Black infant mortality rate climbed back to 14.2 per 1,000 births and the disparity increased to 2.1, just below the level targeted for 1998 (see Figure 28.) (See also Appendix G for infant mortality rates for other racial and ethnic groups.

Outcome Measure #03: The neonatal mortality rate per 1,000 live births. The neonatal mortality rate in the first 28 days of life mirrors the trends for infant mortality in both the United States and in Arizona. A decrease in Arizona neonatal mortality from 5.0 in 1996 to 4.5 in 1997 put the rate well below the target set of 4.9 per 1,000 births and, in fact, met the Healthy People 2000 objective. In 1998, neonatal mortality increased to 4.8 per 1,000 live births, still it was just below the target of 4.9 set for 1998.

Figure 29. Neonatal Mortality Rate

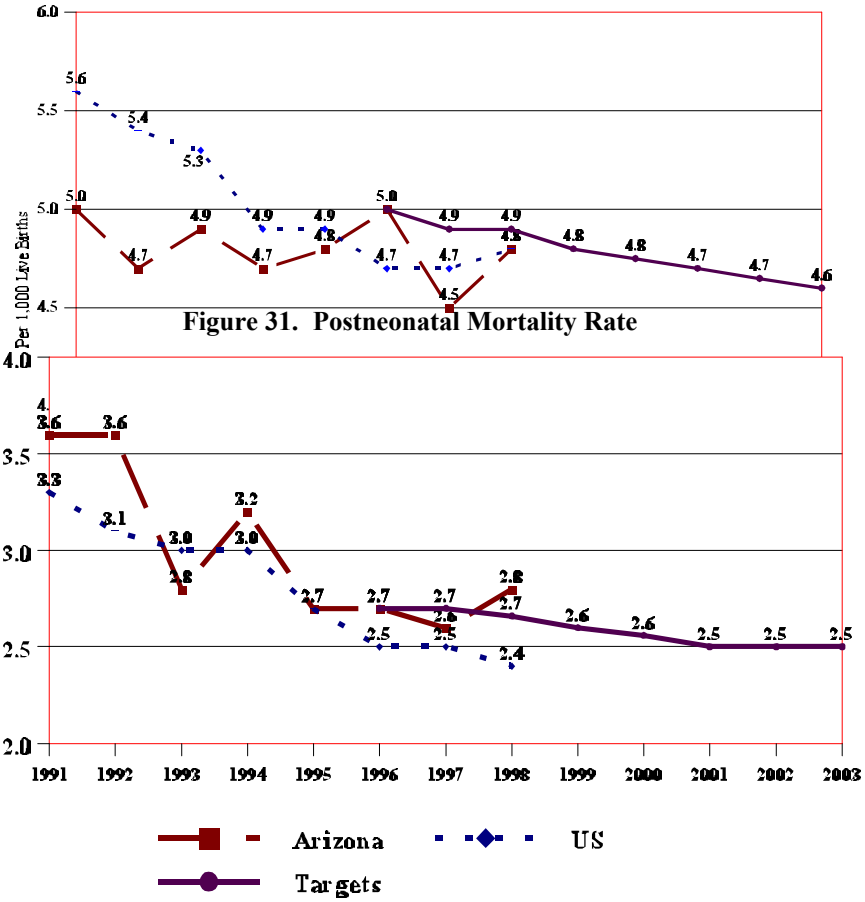


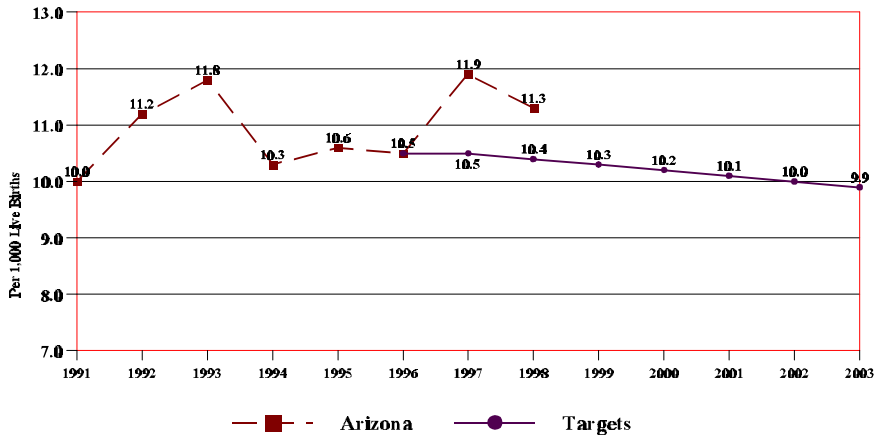
Figure 31. Postneonatal Mortality Rate

Outcome Measure #04: The postneonatal mortality rate per 1,000 live births. Postneonatal mortality rates represent the

number of infant deaths from the 28th day of life through the end of the first year of life per 1,000 live births. A drop from 2.7 deaths in 1996 to 2.6 per 1,000 in 1997 put Arizona's postneonatal mortality rate below the targeted rate, which had been set to hold mortality to no more than 2.7 deaths per 1,000 live births in 1997. In 1998 the rate increased to 2.8, which was just above the target set at 2.7, and above the US rate of 2.4.

Outcome Measure #05: The perinatal mortality rate per 1,000 live births. The perinatal mortality rate is the number of infant deaths in the first 7 days of life plus the number of fetal deaths divided by the number of live births plus the number of fetal deaths. In 1996, the rate was 10.5, and the target was set to hold the rate to no more than 10.5 for 1997. In fact, the perinatal mortality rate rose to 11.9 in 1997, the highest rate observed during the decade, and in 1998 it declined to 11.3, still above the targeted rate of 10.5.

Figure 31. Perinatal Mortality Rate



Childhood Mortality

Improvement on several performance measures should lead to reductions in childhood mortality rates. State Performance Measure #05, the rate of preventable child deaths, has the most direct impact on the overall childhood fatality rate. Unintentional injuries are the leading cause of death to children age 1-14 in Arizona, and among unintentional injuries, motor vehicle accidents are responsible for the greatest share of deaths. Reducing mortality due to motor vehicle crashes (Performance Measure #08) would have the largest single effect on the mortality rate. Programs aimed at reducing the hospitalization rate for nonfatal injury and poisoning (State Performance Measure #02), asthma (State Performance Measure #04) and ambulatory care sensitive conditions (State Performance Measure #06) should ultimately lead to a decrease in child deaths, as well. Although few children die from immunization preventable diseases in the United States, increasing pediatric immunization levels (Performance Measure #05) has the potential to decrease childhood mortality, as does ensuring that children do not go without health insurance, ensuring that those who are eligible for Medicaid actually receive services, and ensuring that children with special health care needs have a medical home (Performance Measures #12, #13, and #03, respectively). Finally, ensuring that child care centers meet quality standards for health and safety (State Performance Measure #03) will decrease the likelihood of childhood fatality in day care centers.

In 1998, the rate of preventable child deaths (State Performance Measure #05) decreased very slightly

from the 1997 rate, but still did not meet the target set. The rate of nonfatal injury and poisonings decreased more substantially and the target set for this measure was met (State Performance Measure #02), as was the decrease in mortality due to motor vehicle crashes (Performance Measure #08). Hospitalizations for asthma and ambulatory care sensitive conditions (State Performance Measures #04 and #06) both decreased to target levels and immunization levels for two-year olds (Performance Measure #05) increased to target levels. Data related to changes in other performance measures from 1997 to 1998 which may impact childhood mortality were not available to evaluate.

Outcome Measure #06: Child death rate per 100,000 children aged 1-14. The childhood mortality rate for children age 1-14 in Arizona has been consistently higher than the national rate, although the rate has been generally declining in recent years in Arizona. The childhood mortality rate in 1998 was 31.0 deaths per 100,000 children, below the targeted rate of 32.1 which was set for 1998. (See Appendix G for mortality rates for racial and ethnic groups within this age group.)

Disparity in Out-of-Pocket Medical Expenses for Families With and Without CSHCN

The disparity between the amount of out-of-pocket medical expenses for families of children with special health care needs compared to other families should be reduced through the provision of direct care and the accessibility of insurance to families of children with special health care needs. To the degree that the CSHCN program pays for specialty and subspecialty services not otherwise accessible or affordable to its clients (Performance Measure #02) and provides rehabilitative services to SSI beneficiaries (Performance Measure #01), the likelihood that families of children with special health care needs will find themselves in this predicament will be lowered. In addition, having a source of insurance for both primary and specialty care (Performance Measure #11) should decrease the likelihood that a family with special needs would have to pay over five percent of their income on medical expenses. Together, improving on these performance measures will contribute to a lessening of the disparity between the ability of families of children with special needs and other families to bear the burden of medical expenses.

State-Defined Outcome Measure #07. In 1997, it was estimated that seven percent of families of children with special health care needs and four percent of other families with children paid over five percent of their family income on medical expenses. No new data is available to evaluate progress on this measure.

The CSHCN program continues to pay for all nine specialty and subspecialty services listed in Performance Measure #02, and the percent of SSI beneficiaries under age 16 receiving services has continually increased from 1995 through 1998 (Performance Measure #01). No new information is available to determine whether there has been a change in the percent of families with children with special health care needs having a source of insurance for both primary and specialty care (Performance Measure #11).

III. REQUIREMENTS FOR THE APPLICATION [Section 505]

3.1 Needs Assessment of the Maternal and Child Health Population

3.1.1 Needs Assessment Process

The beginning point for the needs assessment was a description of the current state of health and the health care system. Descriptive data on the current state of mortality and morbidity in Arizona were gathered and need was assessed in three ways when data were relevant and available:

- Historical trends within Arizona
- Comparison of Arizona status to the U.S.
- Comparison of Arizona status to defined standards of care.

Need was identified through identifying trends within Arizona moving in an undesirable direction, deviated from national statistics in an undesirable direction, or falling short of a defined standard of care. When possible, disparities in health and health care within the state were examined to identify strategic opportunities to improve the health status and health care of segments of the population at higher risk. In addition to mortality and morbidity data, survey data were examined to identify unmet need, barriers to care and population risk factors. Finally, less formalized input from program managers, health experts in the community and families were taken into account in evaluating need.

Each month a team of office chiefs within the Bureau of Community and Family Health and key staff meet to discuss emerging issues and priority needs. Depending upon the topic under review, invitations are extended to experts in the areas outside of the Bureau. Information gathered through the needs assessment process has been continually presented to interested parties through the community such as the Arizona Perinatal Trust, community nurses, county prenatal block grant coordinators, AHCCCS Administration, county health directors and directors of nursing.

Vital Statistics

Arizona Health Status and Vital Statistics is compiled every year by the ADHS Bureau of Public Health Statistics. This document contains birth and death statistics, reported diseases, and data on birth outcomes such as complications in labor and delivery, preterm delivery rates and low birth weight rates, as well as information on certain maternal risk factors and prenatal care. Statistics are presented by various racial and ethnic groups as well as by county.

The major strength of vital statistics data is that they are comprehensive population-based statewide data, and therefore there are sufficient cases to break the data down by geographic region, ethnicity, or other subcategories and retain reliability. Some weaknesses have been noted with birth data as it relates to identifying risk factors and some diagnostic information because short hospital stays make it difficult to identify conditions before mothers and babies are discharged. Some problems may not emerge until after hospital discharge, such as certain complications or birth defects.

Hospital Discharge Data Base

Hospital discharge data identify those health threats which are sufficiently serious to result in a child being admitted to the hospital as an inpatient. Discharge data are useful both to identify major health issues and to monitor progress in combating morbidity associated with specific diseases and conditions. These data are population based for acute-care non-Federal and non-IHS hospitals. A weakness of this source is that the population served by certain military facilities, the state mental hospital and IHS facilities are not represented in this database. While this database is a rich source of data, there are problems with coding that have lead to problems with reliability of data.

Children 2000 Survey

A telephone survey was conducted in the Spring of 2000 to learn about aspects of health and health care which are not available through any other source. Several offices within the Bureau of Community and Family Health - Office of Women's and Children's Health, Office of Children with Special Health Care Needs, Office of Nutrition, Office of Oral Health - collaborated to develop a questionnaire. The final questionnaire contained over 100 items covering topics such as health status, chronic conditions and special health care needs, health service utilization (including preventive care), barriers to health care, unmet need and health insurance. Whenever possible questions were used which had been previously validated through other research and had points of comparison with other populations. However, a battery of questions were developed to measure the components of a medical home which had not been previously validated.

A random digit dialing methodology was used to identify households containing at least one Arizona resident under the age of 21. When more than one household member met the criteria for inclusion, a subject was randomly selected from among qualifying members and the caregiver of that child was interviewed. During analysis, results were weighted to compensate for the lower likelihood that a child in a larger family would be selected as the subject of an interview. (For example, an only child would have a one in one chance of being selected as the interview subject, while in a family with five children a child would have a one in five chance of being selected.)

Data from this survey with 649 cases were reported throughout the needs assessment content, but it should be understood that the survey was still in progress at the time of this writing. Estimates reported from these data should tolerate no more than four percent sampling error for the group as a whole at a 95 percent confidence level. A major strength of this survey is that it is virtually the only way to discover unmet need and is important in understanding how consumers experience health care. This survey provides data on services which are not tracked in any other database.

A weakness of any telephone survey is that it is biased against children living in households with no telephones. They are likely to be in the lowest income categories. Estimates of unmet need and barriers to care may understate the actual burden felt by these families. In addition, there may be a social acceptance bias in

responses. Respondents may not want to reveal things to an interviewer that are unpleasant or embarrassing. Finally, these data are expensive to obtain compared to other data sources which may restrict the number of cases that can be examined and limit the potential for subgroup comparisons and cross-tabulations.

Behavior Risk Factor Survey

The Behavior Risk Factor Survey (BRFS) is a random-digit dialed telephone survey of health risk behaviors administered in all 50 states and the District of Columbia. The survey is designed through a cooperative agreement between the Centers for Disease Control and the ADHS. The survey is broken into three sections: The first section contains questions on health-risk behaviors, the second section contains demographic information and the third section contains optional modules. A sample size of nearly 2000 interviews over a twelve month period are selected to achieved a sampling error of no more than three at a 95 percent confidence level for risk factor prevalence estimates of the adult population. The strength of the survey is that data is population based and allows state and national comparisons. Since it is done annually, it is possible to generate historical trends. The survey overestimates socially desirable behaviors and underestimates socially unacceptable behavior. Households without telephones are not captured by the survey

Health System Development Database

The ADHS Bureau of Health Systems maintains a database based on primary care areas. This database contains information on population size, geographic area, demographics, and on primary and specialty health care providers. Analysis of these data allows an evaluation of underserved areas and provides a picture of resource distribution among the population.

Monitoring and Measuring Community-based Integrated Systems

The Office for Children with Special Health Care Needs (OCSHCN) has been working with researchers from Utah State University, Early Intervention Research Institute, since February 1999 on the federally funded Monitoring and Measuring Community-based Integrated Systems for CSHCN (M&M) Project. At that time, a team composed of parents, data analysis professionals, and representatives from government health, education and social service agencies, community-based organizations, and advocacy groups was formed to work on assessing need and measuring progress.

Since the initial meeting, the team has worked on a variety of projects. In December 1999, the group met to review the findings of a survey on policy issues that affect the delivery of services to CSHCN. The survey tool addressed policies, identified by team members, in six core areas (service delivery, transitions, integrative medicine, family participation, financial resources, education of families and professionals, cultural competence). Respondents were asked to score each of 55 items for the following: passion for the issue; ease of resolution; impact on families; causes worry; and causes frustration.

In June 2000 the team convened to work on indicators for six Performance Outcome Measures. The group reviewed indicators that had been developed by select team members from the various states participating in

the project. Following vigorous discussion, five indicators for each outcome measure were selected using a consensus process.

Community Needs Assessment

In 1993 that the Office of Children with Special Health Care Needs (OCSHCN) started a series of Community Needs Assessments in Arizona. The Community Needs Assessment covers populations located in the border area with Mexico, tribal reservations, urban, and rural communities. Four major sources of data were used to carry out the community needs assessment. The first source consisted of all previously collected relevant data. This information was initially analyzed to estimate the minimum number of persons and area in need of services. Databases used included those measuring children with special health care needs (CSHCN), and number of children in Children's Rehabilitation Services (CRS). New primary data were compiled from three additional sources: a Family Survey completed by 481 members of 11 different communities, a Family Forum and Key Informant Interviews.

Family Survey

A questionnaire was designed to assess the attitude, beliefs and behavior of the families and children with special health care needs. The instrument was divided into sections covering demographic data, medical conditions, supplemental services, special equipment, care arrangement, child's ability to function in several areas, and the impact of the child's condition on family functioning. Eleven communities were selected based on self-selection or community needs determined by secondary data. The survey sampled one percent of families who have at least one child with special health care needs. The OCSHCN identified one contact person in each community and the contact person recruited their interviewers and defined the geographic boundary of their community.

Family Forum and Key Informant Interviews

There was a total of five to six sessions of family forum and key informant interviews. Each session had between 4 to 30 participants per community. The family forum was for families with CSHCN to identify strengths and barriers to the current system, and to develop a work plan to eliminate the barriers and build the strengths.

The family forum had four main areas of interest: medical/dental issues, education issues, social services issues, and public health issues. Availability, accessibility, affordability, quality and coordination of the services for CSHCN within each area it was examined. Although the information obtained from the forum varied from community to community, there are similarities between geographic areas. Some of the needs or issues mentioned by all communities are summarized in Table 3. Other community specific issues are mentioned in Table 4.

The key informant interviews were conducted with providers to identify the strengths and weakness of the current system. Key informants were defined as public health/medical care, education, business, community leaders/elected officials, social service providers, and advocacy groups. The three main issues address by the key informants were: the need for parenting classes, the lack of local resources/funds for services, and language

barriers with their clients.

3.1.2 Needs Assessment Content

3.1.2.1 Overview of the Maternal and Child Health Population's Health Status

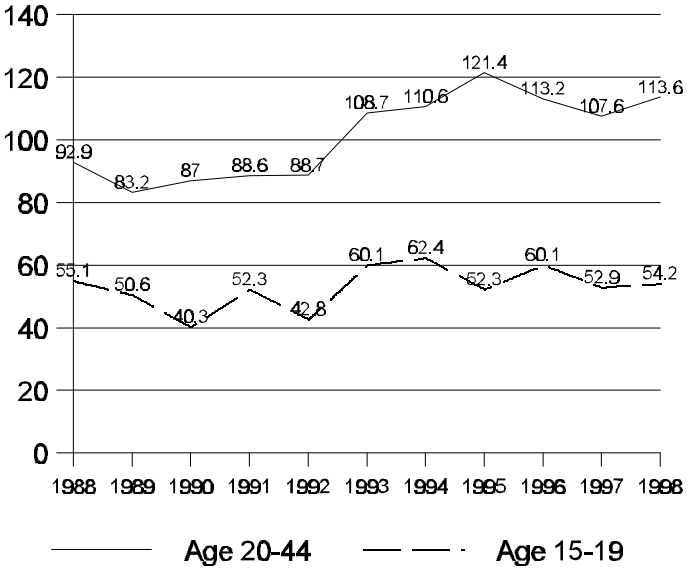
The following sections will separately provide an overview of the following populations: women of childbearing years, the perinatal period, children and adolescents.

3.1.2.1.1 Women of Childbearing Years

Mortality Rates and Major Causes of Death

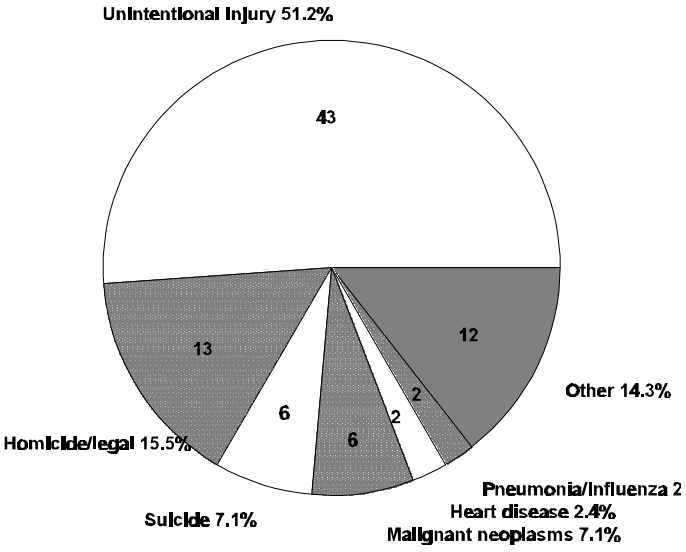
In 1998 there were a total of 1,056 deaths of women age 15-44, representing a mortality rate of 104.5 per 100,000 women of childbearing age. Eighty-four of the deaths were among adolescent females age 15-19, representing a mortality rate of 54.2 deaths per 100,000 adolescent females; and 972 deaths were among young-adult women age 20-44, representing a death rate of 113.6 deaths per 100,000 young-adult women.

Figure 32. Mortality Rates Women of Childbearing Years (Age 15-44)



Mortality Among Adolescent Females

Figure 33. 1998 Causes of Death Females Age 15-19



More than half of the deaths among adolescent females were caused by unintentional injuries with most of these (n=35) due to motor vehicle accidents. Homicide/legal interventions and suicide caused the deaths of another 23 percent. Figure 33 shows the number and percent of deaths due to each of the leading causes of death within the 15-19 age group in 1998.

Over the ten-year period from 1988 through 1998, five causes most frequently claimed the lives of adolescents age 15-19: unintentional injuries, homicide, suicide, malignant neoplasms and heart disease. Table 7 below shows the death rate for each of these causes from 1988 through 1998.

Table 7. Leading Causes of Death per 100,000 Women Age 15-19 1988 through 1998											
Rates per 100,000	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Unintentional injuries	**29.9**	**21.8**	**19.7**	**24.6**	**22.5**	**30.5**	**25.8**	**26.5**	**28.3**	**21.4**	**27.7**
- Motor vehicle-related	25.2	20.2	18.2	20.6	20.3	25.6	24.2	23.6	24.9	18.1	22.6
Suicide	7.1	6.2	5.5	6.9	1.5	8.0	5.5	3.7	3.5	8.0	3.9
Malignant neoplasms	6.3	3.9	2.4	3.1	3.8	3.2	7.8	2.9	2.8	2.0	3.9
Homicide	3.9	3.1	3.2	6.9	4.5	9.6	7.8	8.8	4.8	6.7	8.4
Heart disease	0.8	1.6	- -	0.8	0.8	3.2	1.6	- -	3.5	2.0	1.3
Total mortality rates All causes	**55.1**	**50.6**	**40.3**	**52.3**	**42.8**	**60.1**	**62.4**	**52.3**	**60.1**	**52.9**	**54.2**
Total deaths All causes	**70**	**65**	**51**	**68**	**57**	**75**	**80**	**71**	**87**	**79**	**84**

Women Age 20-44

In 1998, malignant neoplasms accounted for 22 percent of deaths among women age 20-44. Unintentional injuries accounted for 209 deaths (21.5 percent) with 133 of these (64 percent) related to motor vehicles. Suicide (8.5 percent), and homicide/legal intervention (6.3 percent) accounted for an additional 14.8 percent of deaths. Figure 34 shows a breakdown of causes of death for young adult women in 1998.

Table 8 below shows the mortality rates for the leading causes of death for women age 20-44 over the ten year period from 1988 through 1998.

Figure 34. 1998 Causes of Death Among Women Age 20-44

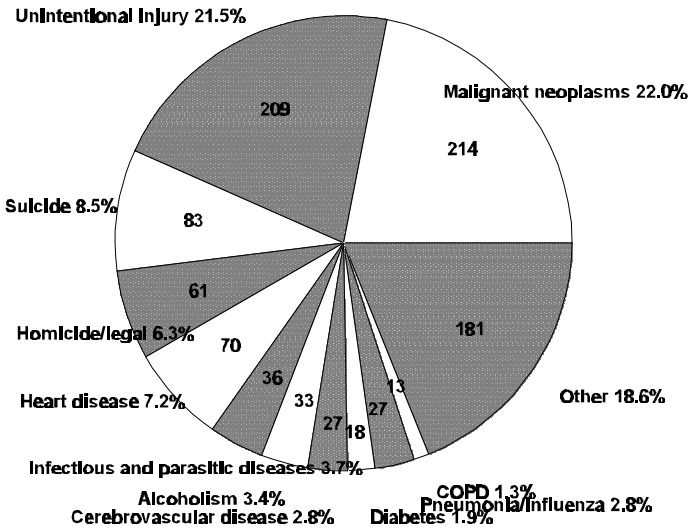
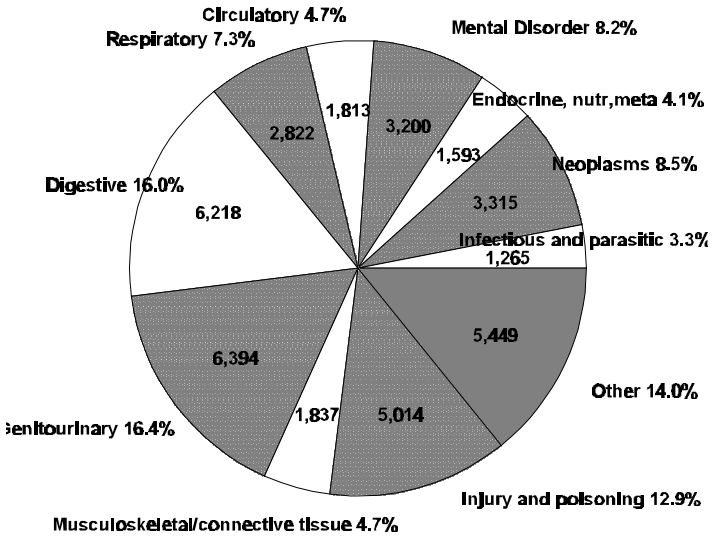


Table 8. Leading Causes of Death per 100,000 Women Age 20-44 1988 through 1998											
Rates per 100,000	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Unintentional injuries	22.0	17.3	20.2	18.5	17.8	20.3	22.9	23.0	24.7	22.4	24.4
- Motor vehicle-related	53.3	45.9	54.2	56.1	49.0	48.3	47.8	49.3	62.4	51.4	50.7
Malignant Neoplasms	20.6	17.7	21.7	20.7	19.1	25.9	22.4	23.1	22.9	22.8	25.0
Suicide	10.3	8.0	7.2	7.4	7.5	8.6	9.0	11.8	9.6	8.7	9.7
Homicide	7.3	7.5	6.0	6.2	5.7	7.4	6.8	8.0	5.6	6.6	7.1
Diseases of heart	6.6	7.6	5.8	8.0	6.0	7.4	9.0	9.2	8.7	8.4	8.2.
Total mortality rate All causes	**92.9**	**83.2**	**87.0**	**88.6**	**88.7**	**108.7**	**110.6**	**121.4**	**113.2**	**107.6**	**113.6**
Total deaths All causes	**650**	**602**	**619**	**647**	**664**	**823**	**849**	**936**	**936**	**908**	**972**

Hospitalized Conditions

More than one in five of the 538,585 hospital discharges from non-federal facilities in Arizona during 1998 were for women between the ages of 15 to 44. Of them pregnancy and childbirth accounted for 67 percent of the hospitalizations.[1] After childbirth, injury and poisoning and ailments related to the digestive system and genitourinary system were identified as the most common diagnoses requiring hospitalization among this population. Figure 35 shows the non-pregnancy and childbirth related causes of hospitalizations for women age 15-44 in 1998. The primary causes of hospitalization among those with digestive system diagnoses were appendicitis, diseases of the pancreas, cholelithiasis and noninfectious digestive enteritis and colitis. The most common diagnoses for those with genitourinary diagnoses were kidney infections and calculus, endometriosis, disorders of menstruation and other

Figure 35. 1998 Non-Pregnancy and Childbirth Related Hospitalizations for Women Age 15-44



[1]Primary diagnoses were classified according to the following codes: infectious and parasitic diseases: 001-139; malignant neoplasms: 140-239; endocrine, nutritional and metabolic disease: 240-279; disease of the blood: 280-289; mental disorder: 290-319; nervous system: 320-389; circulatory system: 390-459; respiratory system: 460-519; digestive system: 520-579; genitourinary system: 580-629; childbirth: 630-677; skin and subcutaneous: 680-709; musculoskeletal system and connective tissue: 710-739; congenital anomalies: 740-759; symptoms, signs and ill defined conditions: 780-799; and injury and poisoning: 800-999.

abnormal bleeding. Injury and poisoning hospitalizations resulted mainly from unintentional falls, unintentional motor vehicle accidents, self-inflicted poisoning, and other adverse event /effects such as misadventures to patients during surgical and medical care or drugs, medicinal and biological substance causing adverse effects in therapeutic use.

Table 9 shows the rate of hospitalizations per 100,000 women of childbearing ages for 1996 through 1998 for some of the more common diagnostic categories excluding pregnancy and childbirth.

Table 9. Hospitalizations per 100,000 Women Age 15-44 for Non-Pregnancy and Childbirth-Related Leading Causes

Primary Diagnosis of Hospital Discharge	1996	1997	1998
Genitourinary System	665.3	628.8	632.7
Digestive System	558.7	573.5	615.2
Injury and Poisoning	503.3	494.3	496.1
Neoplasms	305.8	328.2	328.0
Mental Disorder	328.5	301.9	316.6
Endocrine, Nutritional and Metabolic Disease	137.6	142.0	157.6
Respiratory System	274.4	284.9	279.2
Musculoskeletal System and Connective Tissue	173.1	173.2	181.8
Circulatory	151.1	162.8	179.4
Infectious and Parasitic	104.2	115.3	125.2
Total population of women age 15-44	971,606	992,919	1,010,667

Hospitalizations for Non-Fatal Injury and Poisoning

Focusing specifically at hospitalizations for non-fatal injuries and poisonings for women age 15-44, it is interesting to note that only 62.8 percent of them could be determined to be unintentional; 18.5 percent were self-inflicted and approximately another five percent were the result of assaults. For 37 percent of non-fatal injuries and poisonings, the intent was either undetermined or was not classifiable within this scheme. The most common incidents causing hospitalizations for non-fatal injuries related to motor vehicles, poisonings and falls which together accounted for 64 percent of all hospitalizations for injuries.

Table 10. Hospitalizations for Non-Fatal Injuries and Poisonings Women Age 15-44						
Mechanism	**Unintentional**	**Self-Inflicted**	**Assault**	**Undetermined /Other**	**Total**	**Percent**
Cut/pierce	72	83	30		185	3.0%
Drowning/submersion	9				9	0.1%
Fall	867	2		1	870	14.2%
Fire/hot objects or substance	43	4			47	0.8%
Firearm	18	11	48	5	82	1.3%
Machinery	11				11	0.2%
Motor vehicle traffic	1,711	1	1		1,713	28.0%
Pedacyclist, other	35				35	0.6%
Pedestrian, other	7				7	0.1%
Transport	187				187	3.1%
Natural/environment	138				138	2.3%
Overexertion	82				82	1.3%
Poisoning	302	1,003	1	47	1,353	22.1%
Struck by, against	105		109	1	215	3.5%
Suffocation	8	6			14	0.2%
Other and unspecified	251	21	93	2,225	2,590	42.3%
Total	**3,846**	**1,131**	**282**	**2,279**	**7,538**	**100.0%**
Percent	**62.8%**	**18.5%**	**4.6%**	**37.2%**	**100.0%**	

Sexually Transmitted Diseases (STD)

The Arizona Behavioral Risk Factors Survey (BRFS) collects health information on Arizona residents 18 years of age and older using a random sample. This telephone survey traditionally assesses overall characteristics and health risk behaviors of its respondents.

According to the 1998 BRFS, 17.9 percent of women ages 18-44 had been asked about their sexual practices by a health care provider; only 7.4% of women had received STD prevention counseling in the past year, and 6.5% received counseling in the last three years.

Based on the Office of HIV/STD from the Arizona Department of Health Services, during 1999 there were 10,929 reported cases of sexually transmitted diseases among women 15 to 44 years of age. Of the 10,929 reported cases the race/ethnicity distribution was as follow, 35% Hispanics, 26% White non-Hispanic, 15% American

Indian, 9.4% Black, 0.6% Asian, and 24% were not specified.

HIV/AIDS

In addition to the sexually transmitted diseases mentioned above, there were 949 females age 15 to 44 reported as of February 2000 infected with Human Immunodeficiency Virus (HIV). Of the 949 females, 245 (26%) have died from the complications of Acquired Immuno Deficiency Syndrome (AIDS). In terms of race/ethnicity distribution, 591 (62%) were White, 204 (21%) Hispanics and 131 (14%) Black. The most common risk of transmission among this group was heterosexual contact (39%) followed by intravenous drug use (37%).

Gonorrhea

Gonorrhea rates have been declining for women age 15-44 during the 1990s, and the decline is primarily due to a decrease in the rate of cases among women within the youngest age groups who had especially high rates in the early 1990s. The risk for gonorrhea is highest among the youngest women and is lower for each successive age group. Figure 36 shows the trends in gonorrhea rates for women age 15-44 within five-year groupings. Table 11 below shows the actual rates for each of these same groups.

Figure 36. Gonorrhea Rates per 100,000 Women Age 15-44

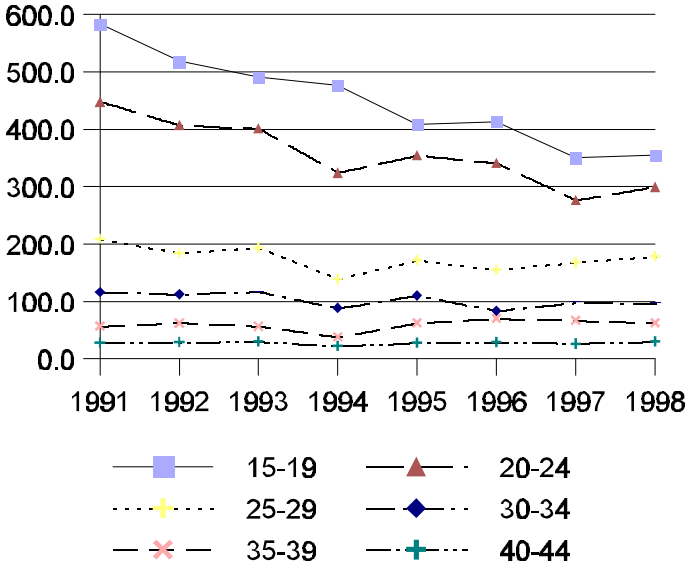


Table 11. Gonorrhea Rates per 100,000 Women Age 15-44								
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
15-19	583.5	518.9	491.2	477.3	409.0	413.7	350.3	355.5
20-24	448.2	407.4	401.9	324.7	355.4	341.8	277.0	300.0
25-29	209.0	184.6	193.8	139.3	172.4	155.1	168.5	179.3
30-34	116.6	112.7	117.5	88.9	110.5	83.5	98.8	97.7
35-39	57.5	62.4	56.9	38.4	62.7	70.9	67.6	62.9
40-44	28.5	29.3	30.7	22.7	28.6	29.6	26.6	30.3
Total 15-44		529.5	431.2	393.3	401.8	369.4	357.6	360.6

Chlamydia

Chlamydia rates were high in the early 1990s among women age 15-44 and then declined for a few years until the lowest rate of 1,037.5 per 100,000 women was reached in 1994. Since then, no lasting progress has been made in reducing the overall rate.

The risk for chlamydia is especially high among women in the age groups 15-19 and 20-24 and is lower for each successive age group after that. Figure 37 shows the trends in chlamydia rates for women age 15-44 within five-year groupings. Table 12 below shows the actual rates for each of these same groups.

Figure 37. Chlamydia Rates Per 100,000 Women Age 15-44

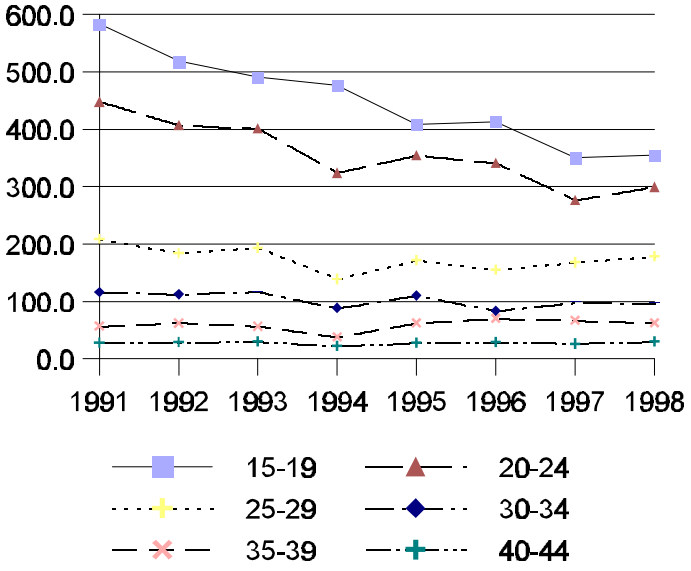


Table 12. Chlamydia Rates Per 100,000 Women Age 15-44

	1991	1992	1993	1994	1995	1996	1997	1998
15-19	2,753.5	2,412.6	2,648.4	2,293.8	2,396.2	2,318.0	2,330.2	2,338.1
20-24	2,503.0	2,140.0	2,112.1	1,789.4	2,056.1	2,226.9	1,889.9	2,000.0
25-29	921.8	759.0	791.3	673.3	748.0	738.0	726.8	697.0
30-34	426.8	343.3	331.7	294.2	277.3	311.8	314.0	277.9
35-39	204.3	156.7	162.4	136.0	142.6	126.9	109.9	121.5
40-44	91.9	65.9	79.0	59.6	64.6	63.8	51.5	57.9
Total 15-44		1,392.8	1,183.6	1,037.5	1,101.7	1,065.4	1,039.0	1,051.5

Early Syphilis

Early syphilis rates were high in the early 1990s among women age 15-44 and have been steadily declining throughout the 1990s for the group as a whole. However, the decline has been the greatest within the youngest age groups who began the 1990s with the highest rates and trends within certain age groups are not consistently declining. Figure 38 shows the trends in syphilis rates for women age 15-44 within five-year groupings. Table 13 below shows the actual rates for each of these same groups.

Figure 38. Early Syphilis Rates per 100,000 Women Age 15-44

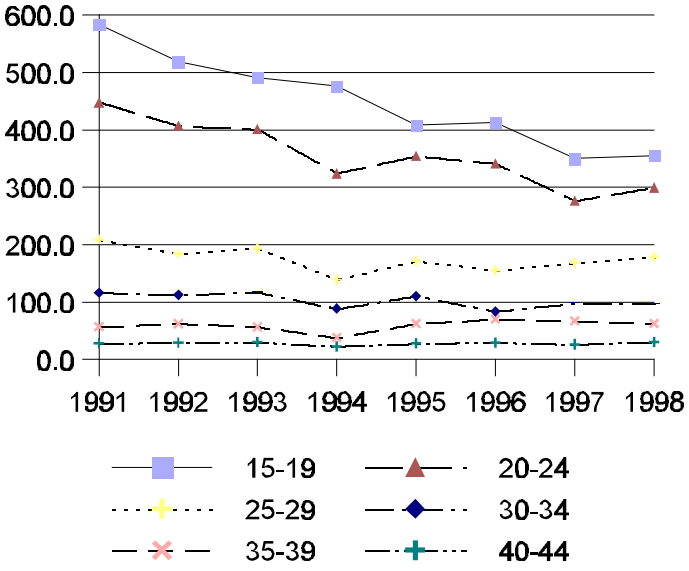


Table 13. Early Syphilis Rates Per 100,000 Women Age 15-44								
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
15-19	37.0	18.1	12.0	4.7	5.3	13.0	8.7	9.7
20-24	50.4	27.4	19.5	12.6	8.6	15.7	15.5	22.5
25-29	43.0	12.2	9.3	9.6	7.9	13.9	17.9	19.5
30-34	24.8	12.1	7.7	9.6	6.4	8.8	15.1	19.2
35-39	16.3	7.1	8.8	5.0	4.1	10.3	14.8	15.6
40-44	11.4	4.9	4.3	1.6	3.4	5.3	8.1	7.9
Total 15-44		294.2	236.1	229.6	226.0	215.9	214.5	213.3

Genital Herpes

In 1998 there were 651 reported cases of genital herpes among women age 15-44 representing a rate of 64.4 per 100,000 women. The highest rate was reported for women age 20-24 (125.2 per 100,000), followed by women age 25-29 (82.8 per 100,000) age 15-19 (74.2 per 100,000) age 30-34 (54.7 per 100,000) age 35-39 (37.6 per 100,000) and 40-44 (24.2 per 100,000).

General Health

BRFS respondents were asked to rate their general health. Over 90 percent of Arizonan women 18-44 years stated that their health was good, very good or excellent. Only 5.6 percent rated their health as fair, and 0.5% rated their health as poor. Also according to the 1998 BRFS, approximately 10% of women 18-44 years were

ever told that they have diabetes by their health care provider.

Physical Activity, Nutrition and Risk Behaviors

Approximately two-thirds of Americans die from chronic disease, specifically cardiovascular disease and cancer. Sedentary lifestyle is a major risk factor for both these diseases. According to the 1998 BRFS, Arizona ranks first in the nation for adults who report no leisure-time physical activity (51.3%). No leisure-time physical activity is defined as no exercise, recreation, or physical activity other than regular job duties during the previous month. Fifty-three percent of women ages 18-44 engaged in no leisure-time physical activity, and 22.2% engage in irregular physical activity. Only 14% of women 18-44 were involved in regular physical activity.

Respondents were asked if a doctor or other health professional ever talked about physical activity or exercise. Approximately 80% of women 18-44 years stated they had not ever discussed physical activity with a health professional. Only 8.7% of women had received physical activity counseling within 1 year.

"Diseases of dietary excess and imbalance rank among the leading causes of illness and death in the United States, touch the lives of most Americans, and generate substantial health care cost" (1988 Surgeon General's Report on Nutrition and Health). Several questions on fruits and vegetables consumption were asked on the BRFS to determine how many of these are eaten per day. Nationally, 23.8% of all adults consumed five or more fruits and vegetables daily. Among women in Arizona ages 18-44 years, only 6.9% consumed five or more fruits and vegetables per day. Over a quarter of women in this age group (26.9%) consumed 3-4 fruits and vegetables per day, 60.8% consumed 1-2 per day, and 5.5% consumed less than 1 fruit or vegetable per day. An overwhelming 82.3% of women had not been counseled about their diet or eating habits by a health care provider.

Overweight and obesity reached epidemic proportions during the1990s affecting all regions and demographic groups in the U.S. "Recent estimates suggest that 1 in 2 adults in the United States is overweight or obese, an increase of more than 25% over the past three decades" (JAMA, vol. 282, no. 16, 1999). According to the 1997 National Health Interview Survey, nearly half (46.6%) of women are considered overweight. The 1998 BRFS indicates that 18.7% of women in Arizona 18-44 years of age are overweight (BMI:>=27.3). It is important to note that individuals are more likely to under-report their weight, and the BRFS may underestimate the prevalence of overweight.

In 1997 BRFS respondents were asked about cholesterol and blood pressure screening. Over half (56.6 percent) of women 18-44 years had ever had their blood cholesterol checked. More than a third (37.3 percent) of women reported receiving a cholesterol screening in the last year. Only 3.9 percent of women had their cholesterol checked 5 or more years ago.

A large proportion of women (91.2 percent) ages 18-44 reported having a blood pressure screening in the past 2 years. Approximately 5 percent of women had ever been told that they have high blood pressure, and 3.4% had been told that they have high blood pressure on more than one occasion. When women 18-44 years were asked if a health care provider advised them to eat foods lower in fat and cholesterol to reduce the risk of cardiovascular disease and stroke, the majority (71.1 percent) of women responded that they had not been advised.

Annually, over 20,000 alcohol related deaths occur in the U.S. excluding motor vehicle fatalities (Monthly

Vital Statistics Report, Vol. 45, no. 11, Supplement 2, 1995). The 1997 BRFS asked respondents a number of drinking behavior questions. Acute or binge drinking is defined as having five or more drinks on one or more occasions during the previous month. Nationally 14.9 percent of U.S. adults report engaging in binge drinking. An estimated 6.8 percent of Arizonan women ages 18-44 reported binge drinking one or more times on one occasion during the past month.

Chronic alcohol abuse has been linked to cirrhosis, anorexia, and osteoporosis, and increases the risk to cancers of the esophagus, liver, larynx, and breast (Western Journal Nursing Research, vol. 19, no.1, 1997). Chronic drinking is defined as having two or more drinks per day. According to the 1997 BRFS, 1.3 percent of Arizonan women 18-44 years engaged in chronic drinking in the past month. Women were asked how many times they drove when they had too much to drink, 0.7 percent of women had driven intoxicated on one or more occasions.

Smoking is the single most preventable cause of death and disease in the United States. Smoking is a major contributor to lung cancer, oral cancer and heart disease and has been causally linked to respiratory illness among non-smokers. The CDC reports that during 1990-1994, there were an average of 430,741 individuals who died annually of smoking related illnesses. Of those deaths, 5,912 were Arizonans. It is estimated that costs associated with tobacco use in Arizona totaled $659 million in 1993. According to the Arizona Adult Tobacco Survey conducted in 1999, the prevalence of current adult female smokers was 17.4 percent, a 26.4 percent decrease from the 1996 baseline estimate of 22.0 percent.

On average, female smokers in Arizona smoked 16.2 cigarettes daily in 1999 compared to the state average of 18.6 cigarettes. The number of cigarettes smoked daily increases with age among women 18-44 years. Women ages 18-24 smoked 13.3 cigarettes in 1999 compared to 15.4 cigarettes among women ages 25-34 and 15.9 cigarettes among women ages 35-44. When asked if they expect to be smoking one year from now, 26.1 percent of women stated they do not expect to be smoking in 1999 compared to 23.7 percent in 1996. Among BRFS female respondents who were current smokers and ages18-44 years, over a quarter (29.2%) had not been counseled to quit smoking by their health care provider. A little less than half (46.9%) of women had been counseled in the last year.

In the U.S. approximately 4000 pregnancies annually are affected by neural tube defects. Studies have shown that up to 50% of neural tube defects such as spina bifida and anencephaly are preventable through intake of folic acid. The U.S. Public Health Service recommended in 1992 that all women of child bearing years should consume 400 micrograms of the B vitamin folic acid to reduce the risk of neural tube defects during pregnancy. According to the March of Dimes Report on Folic acid, 1995-2000, 34% of all women and 32% of non-pregnant women took daily vitamin supplements containing folic acid. In Arizona, 53.6% of women ages 18-44 currently took a vitamin or supplement in 1998. A little less than half (48.8%) indicated that the vitamin or supplement was a multivitamin.

Women's knowledge of the benefits of folic acid is increasing. The March of Dimes report indicated that 14% of women knew folic acid played a role in preventing birth defects, and a tenth of women knew they should

take folic acid before becoming pregnant. The 1998 BRFS asked women why health experts recommend taking folic acid. Sixteen percent of respondents 18-44 years indicated that folic acid makes strong bones, 29.2% indicated that it prevents birth defects, and 3.1% indicated that it prevents high blood pressure. An estimated 5% indicated some other reason, and 49.7% did not know why folic acid is recommended.

BRFS respondents were queried about their seat belt use, a large proportion of women 18-44 years reported wearing their seat belt always (72.9%) or nearly always (21.9%). Only 3.5% of Arizonan women reported wearing their seat belt sometimes, and 1.4% wear it seldom or never. In addition, when asked if they had received injury prevention counseling, 89.0% stated that they had not, and 5.4% had received counseling in the past year.

Mental Health and Quality of Life

According to the 1998 BRFS, 15.6 percent of Arizonan women 18-44 years stated their mental health was not good for 2 or more days during the past 30 days. In addition, 14 percent of women responded that they had felt sad, depressed or blue for 1-2 days, and a tenth felt depressed for 3-7 days in the past month.

The 1998 BRFS asked respondents a series of quality of life questions. The majority (83.8 percent) of women felt healthy and full of energy for 15-30 days during the past month. Five percent of women stated that they were limited in their activities because of an impairment or health problem. An estimated 3.3 percent of women stated that they were limited by pain for 3-7 days during the past month. In addition, 15.5 percent of women responded that they did not get enough rest or sleep for15-30 days during the past month. Similarly, 21 percent of women felt tense, worried, or anxious for 1-2 days in the past month, and 9 percent felt this way for 15-30 days.

Oral Health

Research findings suggest that chronic oral infections may be associated with diabetes, heart and lung diseases, stroke, and low-birthweight, premature births. According to the 2000 Report of the Surgeon General on Oral Health in America, a little below two thirds of adults report visiting a dentist in the past year. In Arizona, 55.3% of women ages 18-44 indicated visiting a dentist in the past year, 29.3% in past 1-2 years, 5.6% in the past 2-5 years, and 8.9% in 5 or more years. Over two-thirds (68.8%) of women who had not visited a dentist in the past year stated cost as the deterrent. Other reasons for not visiting a dentist in the past year include no reason to go (14.0%), fear or pain (5.7%) , and other priorities (4.8%).

Women 18-44 years were asked how many permanent teeth had been removed due to tooth decay or gum disease. A little less than half (47.3%) of women stated that they had no teeth removed. However, a large proportion of women (46.4%) reported that they had between 1-5 teeth removed. When asked about dental coverage, 46.6% of BRFS respondents stated they had dental insurance to cover some or all routine dental care.

Access and Barriers to Care

Adequate access to health care services is a major determinant to health care use and outcomes. In today's health care environment, lack of health insurance is a significant barrier to receiving clinical and preventive services. Approximately 16% of the U.S. population in 1997 did not have health insurance. Arizona falls below the national average with nearly a quarter (24.5%) of its population without health care coverage.(U.S. Bureau of the Census: Household Economic Studies, Current Population Reports, series P-60, no. 190, 1998).

According to the 1998 BRFS, 20.8% of women in Arizona ages 18-44 years did not have health care coverage. Among women who had health care coverage, only 16.3% had health insurance for five or more years. Over a quarter of respondents (28.2%) had health insurance coverage for less than one year.

Individuals without health care coverage are less likely to have a regular source of health care. An estimated 83 percent of Arizona women had one place that they usually go to if they are sick or need health advice, and nearly 10 percent did not. Among women who had a place to go when sick, nearly two-thirds (66.3%) identified one health care professional that they usually go to for routine medical care. Approximately half (51 percent) of women had visited a physician for a routine health check-up in the past year. Nearly 22 percent of women responded that it had been 2 or more years since their last routine check-up, and over a quarter (28.6 percent) of women had changed doctors within the last two years.

The majority (67.7 percent) of Arizonan women 18-44 years rated their overall health care satisfaction as excellent, very good, or good, and 12.4% rated it as fair or poor. An estimated 38 percent of women responded that cost was a barrier to accessing care. Among women who had to a place to go when sick, an estimated 14 percent rated the convenience of their health care facility as fair or poor.

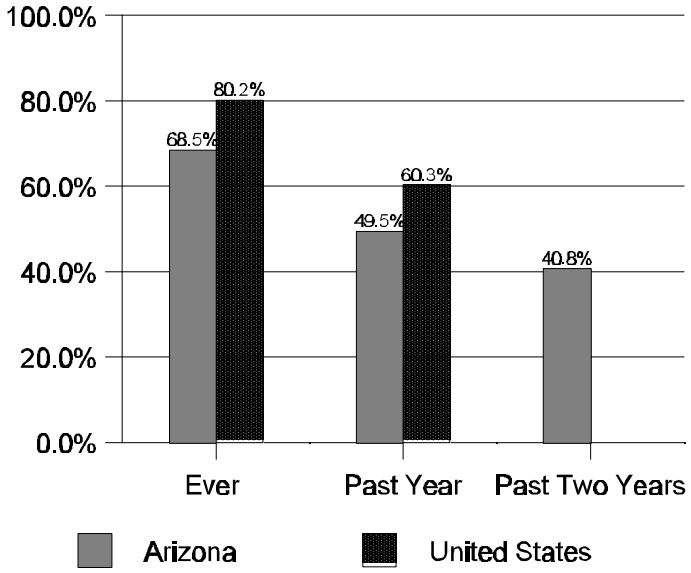
Preventive Health Care

Breast cancer is the most commonly diagnosed cancer among women excluding skin cancer and is the second leading cause of cancer related death following lung cancer. According to the American Cancer Society (ACS), approximately 182,800 new cases will be diagnosed, and 40,800 women will die of breast cancer in the year 2000. In Arizona, 2,600 new cases of breast cancer will be diagnosed among women, and 600 women will die of the disease in the year 2000. A review of Arizona Vital Statistics indicates that in fact 644 women died of breast cancer in Arizona in 1998, representing 27.2 deaths from breast cancer per 100,000 women in Arizona. Although the national breast cancer mortality rate is not available for 1998, Arizona falls below the 1997 national breast cancer mortality rate of 30.7 per 100,000 women. When breast cancer is diagnosed at an early stage, the 5 year survival rate is 96%. This rate drops considerably to 21% when the disease has spread to other body sites.

The American Cancer Society recommends a combined approach to detect breast cancer early: mammography, clinical breast exam, and breast self-examination. Mammography is the best method to detect breast cancer at its earliest and most treatable stage. A mammography can detect breast cancer approximately 1.7 years before a woman can palpate a lump. A screening mammogram is recommended every year for women 40 and older. Women between the ages of 20 and 39 should have a clinical breast exam (CBE) every 3 years. Women 40 and older should have a clinical breast exam done by health professional every year. ACS recommends performing a breast self-examination every month for women 20 and older.

In 1998 80.2% of women in the nation ages 40-49 reported ever having received a mammogram. Arizona falls well below the national median with only 68.5% of BRFS respondents reporting ever receiving a mammogram. Although guidelines recommend an annual screening mammogram, only half (49.5%) of Arizonan women reported obtaining a mammogram in the past year as compared to 60.3% of women nationwide. In addition, only 40.8% of women in Arizona reported receiving a mammogram in the past 2 years. AHCCCS Administration does an annual review of its claims and encounters for health care services and determined that for the two-year period ending September 30, 1998, 57 percent of the women age 50 through 64 (who were continuously enrolled with AHCCCS during that time period) had a mammography.

Figure 39. Mammography Women Age 40-49



Similarly, women were asked if they had received a breast exam by a health care professional. Over three-quarters of women ages 18-49 (77.0 percent) reported ever receiving a clinical breast exam. Arizona's prevalence of ever receiving a clinical breast exam is below the national median of 87.7% for women ages 18-39 and 93.4% for ages 40-49. In Arizona, an estimated 78.7 percent of women ages 18-49 report having a clinical breast exam in the past year.

In the last four decades, the incidence of invasive cervical cancer has decreased considerably due to early detection efforts. However, the American Cancer Society estimates that 12,800 new cases will be diagnosed in the year 2000 and 4,600 women will die of cervical cancer. Two hundred new cases are likely to be diagnosed in Arizona (American Cancer Society Facts and Figures, 2000). A review of Arizona vital statistics found 46 women died from cervical cancer in 1998, representing 1.9 deaths per 100,000 women. Although national figures are not available for 1998, Arizona is below the 1997 U.S. cervical cancer mortality rate of 3.3.

The majority of cervical cancers can be prevented because they usually begin with easily detectable precancerous changes. The single most effective cervical cancer screening tool is the Papanicolaou (Pap) test. The American Cancer Society recommends a Pap test annually for all women beginning at the age of 18 or when a woman becomes sexually active, whichever occurs first. When a woman has had three consecutive negative annual Pap tests, screening may occur less often at the discretion of the health care provider.

According to the 1998 Arizona BRFS, 83.9% of women ages 18-44 reported ever having a Pap test compared to the United States levels of 93.2% of women ages 18-39 and 98.4 % of women ages 40-49. An estimated 80% of Arizona women ages 18-44 reported having a Pap test in the last year, and 95.7 percent reported

having a Pap test in the last three years.

AHCCCS Administration does an annual review of its claims and encounters for health care services and determined that for the one-year period ending September 30, 1998, 32 percent of the women age 16 through 64 (who were continuously enrolled with AHCCCS during that time period) had a Pap test.

In order to increase screening rates among women, Arizona established the Well Woman Healthcheck in1992 and began screening in 1995. From 1991 to 1995, there were 2,939 breast cancer deaths and 289 cervical cancer deaths. The state's average annual age-adjusted mortality rate for breast cancer for this period was 23.3 per 100,000 women, below the national median of 26.0 per 100,000. The average annual age-adjusted cervical cancer mortality rate (2.8 per 100,000) also was below the national median (2.4 per 100,000) (Arizona Minimum Data Elements, 1998). From its inception through January 2000, Arizona's program has enrolled 7,000 women who are uninsured or under-insured, 200 percent below the Federal Poverty Level, and provided 10,000 mammograms and 9,000 Pap tests. The Well Woman Healthcheck operates in seven counties and ten Native American sites. It is estimated that over 240,000 Arizonan women are eligible for this public health program.

Family Planning

The Arizona Family Planning Council (AFPL) conducted a needs assessment in an effort to determine unmet need for family planning services in Arizona. The AFPL reports that of the more than 100,000 females of reproductive age in Arizona, 70 percent lived in Maricopa and Pima counties, approximately 172,545 were between 15-19 years of age and more than 15 percent had income at or below the 100 percent of the FPL. The FPL for a family of three in 1998 was $13,363. The following publicly funded sources for family planning services were identified:

- Title V of the Social Security Act- MCHB/OWCH
- Title X of the Public Health Services Act - AZFPL and the Navajo and Gila River Indian Tribes
- Title XIX of the Social Security Act - AHCCCS / SOBRA Family Planning Services Extension Program (eligibility extends to 140% FPL)
- Indian Health Services centers
- State Tobacco Tax Primary Health Care Programs
- Federal Programs, Section 330/340, Community Health Centers, Seasonal Migrant Farm Worker and Health Care for the Homeless.
- Local governments contributed to the provision of some uncompensated health care.

Unmet need was assessed by analyzing data from public resources to estimate the number and proportion of the population of women age between the ages of 14 and 45 with an income status at or below 200 percent of the Federal Poverty Level (FPL) who lacked access to an available publicly funded family planning provider. This estimate included women who are pregnant as well as those who are fecund, sterile, infertile or sexually inactive. The Council estimated the unmet need in 1998 at 44 percent or in excess of 170,000 women.

Three major factors were identified as barriers to women accessing family planning services: 1) Financial. For low-income women, the cost of services and prescriptions can serve as a deterrent to accessing

health care. 2) Cultural. Arizona has a very diverse population and some women may receive conflicting messages regarding reproductive health issues. 3) Geographic. While the majority of Arizonans live in urban areas, approximately 24 percent live in rural or frontier areas. The distance or lack of transportation can restrict access to an affordable health care provider.

The OWCH Reproductive Health Program provided 6,298 client visits, 5,741 pregnancy tests for non-Family Planning clients and 1,251 injections of Depo Provera through contracts with county health departments. In fiscal year 1997, the OWCH Reproductive Health Program experienced the elimination of $200,000 in Title XX funds for family planning services which resulted in a decrease of 1,739 clients in FY 97 and an additional decrease of 1,094 clients receiving services in fiscal year 1998.

Other unmet needs related to reproductive health include a lack of low cost colposcopy, cryosurgury and other treatments when low-income, uninsured women have abnormal Pap tests. The state also needs to examine possible methods of measuring the rate of unintended pregnancies. Women who have planned pregnancies are more likely to seek early prenatal care and are less likely to abuse or neglect their children.

3.1.2.1.2 The Perinatal Period

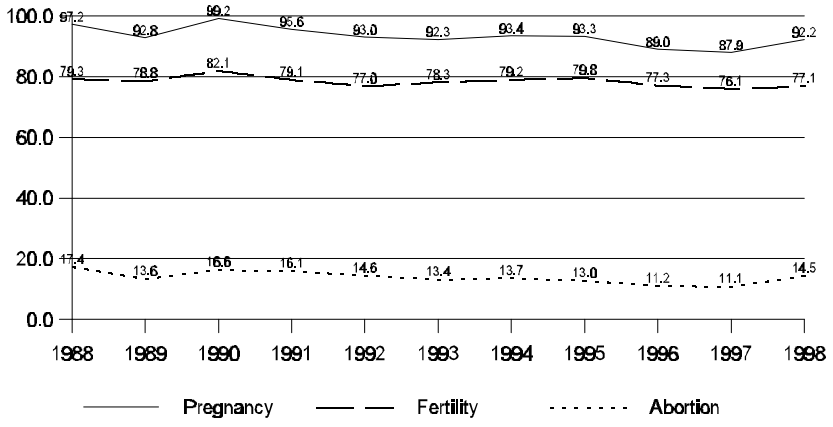
While the population of women of childbearing years (15-44) increased by only 1.8 percent from 1997 to 1998, the number of pregnancies increased by 6.8 percent to a total of 93,148 pregnancies in Arizona in 1998, resulting in 77,940 live births. From 1993 through 1998, the percent of births to unmarried mothers has remained at approximately 38 percent, while the percent of births to adolescent girls (age 15-19) has decreased somewhat in recent years as shown in Table 14 below.[1]

Table 14. Births to Adolescent Girls and Unmarried Women

Number of births	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	69,037	70,896	72,386	75,094	75,563	77,940
To Adolescents age 15-19	10,438	10,858	10,973	11,247	9,314	9,793
To Unmarried	26,069	27,115	27,627	29,157	28,472	29,924
Births as a Percent of Total	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
% of births to teens	15.1%	15.3%	15.2%	15.0%	12.3%	12.6%
To Adolescents age 15-19	37.8%	38.2%	38.2%	38.8%	37.7%	38.4%

In addition to the 77,940 live births reported, there were also14,606 abortions and 602 fetal deaths in 1998. Figure 40 shows Arizona pregnancy, fertility (live births) and abortion rates over a ten-year period. Raw frequencies for each of these measures as well as the percent of pregnancies resulting in each of the three outcomes (births, abortions and fetal deaths) are presented in Table 15 on the following page.

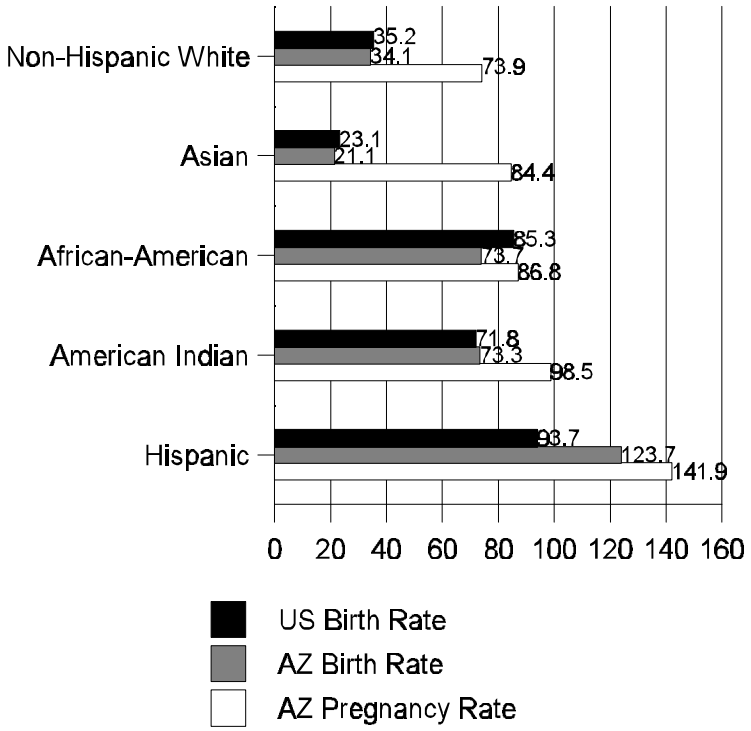
Figure 40. Pregnancy, Fertility and Abortion Rates per 1,000 Women of Childbearing Age (15-44) in Arizona



[1]For information on teenage pregnancy rates, see section XXX.

Table 15. Pregnancies by Outcome: 1988 through 1998											
Total #	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancy	80,313	79,078	83,105	82,279	82,095	81,445	83,663	84,621	86,445	87,256	93,148
Births	64,544	67,128	68,814	68,040	68,675	69,037	70,896	72,386	75,094	75,563	77,940
Abortions	14,350	11,575	13,890	13,882	12,893	11,852	12,260	11,738	10,868	11,056	14,606
Fetal Deaths	419	375	401	357	527	556	507	497	483	637	602
As a Percent of Pregnancies	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Births	80%	85%	83%	83%	84%	85%	85%	86%	87%	87%	84%
Abortions	22%	17%	20%	20%	19%	17%	17%	16%	14%	15%	19%
Fetal deaths	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Rates	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancy	97.2	92.8	99.2	95.6	93.0	92.3	93.4	93.3	89.0	87.9	92.2
Fertility	79.3	78.8	82.1	79.1	77.0	78.3	79.2	79.8	77.3	76.1	77.1
Abortion	17.4	13.6	16.6	16.1	14.6	13.4	13.7	13.0	11.2	11.1	14.5

Figure 41. 1998 Pregnancy and Birth Rates Arizona and United States by Ethnicity



While the overall pregnancy rate for Arizona women was 92.2 in 1998, the rate for Hispanic women was 44 percent higher. American Indian women also had a higher pregnancy rate than African-American, non-Hispanic White and Asian women, as shown in Figure 41.

Place Of Delivery and Attendant at Birth

Ninety-nine percent of births in 1998 were reported to have occurred in hospitals, clinics, medical centers or maternity homes. Nine percent of births were delivered by midwives. Table 17 shows the percent of births occurring in hospitals and attended by midwives from 1988 through 1998.

Arizona has made steady progress over the years in directing its high-risk deliveries to appropriate facilities as shown in Table 16.

Table 16. Percent of Very Low Birth weight Infants Delivered at Level III (High-Risk) Perinatal Care Centers

	1991	1992	1993	1994	1995	1996	1997	1998
Born at Level III	653	589	650	611	673	691	708	714
VLBW Babies	923	768	837	744	857	886	893	894
Percent born at Level III	70.7%	76.7%	77.7%	82.1%	78.5%	78.0%	79.3%	79.9%

Party Paying For Delivery

The share of deliveries paid for by private insurance increased from 46.7 in 1996 to 47.8 in 1997, and 49.9 in 1998. In 1998 as in the 1989-1997 period, private insurance paid for the majority (68.7 percent) of deliveries to White non-Hispanic mothers. The Arizona Health Care Cost Containment System (AHCCCS) paid for 41.6 percent of the deliveries in 1998, a decline from the 44 percent in 1997. Among maternal ethnic groups, American Indian had the largest share of deliveries paid for by public sources (AHCCCS or Indian Health Service) at 76.9 percent, followed by Hispanic deliveries at 60.0 percent, Black deliveries at 54.2 percent, White non-Hispanic deliveries at 26.5 percent and Asian deliveries at 19.3 percent. The Indian Health Service paid for 1.8 percent of the births in 1998, with 94.8 percent of those births to American Indian mothers. The payment source was the mothers themselves and/or their families (i.e., self-pay) in 4.4 percent of the deliveries, and the payment source was unknown for 2.3 percent of the deliveries. Among teenage mothers under the age 20, 70 out of every 100 deliveries were paid for by AHCCCS. More than 62 percent of AHCCCS mothers were unwed compared to 16 percent of women giving birth in 1998 who had private insurance coverage.

Since 1990, women who report self payment for delivery compared to AHCCCS enrollees and those with private insurance have experienced a decrease in the rates of early entry into care and an increase in reporting 4 or less prenatal visits. These women also had increases in the rates of births with reported risk factors, births with complications, births with congenital anomalies, LBW and admissions into Newborn Intensive Care Units.

Entry Into Prenatal Care and Number of Prenatal Visits

The percent of mothers who received early prenatal care (i.e., in the first trimester of pregnancy) declined from 74.4 in 1997 to 73.6 percent in 1998. The percent of women giving birth with no prenatal care increased from 1.6 percent both in 1995 and 1996 to 2.1 percent in 1998 (see Table 17). In each year from 1988 to 1998, the percent of women giving birth who had received prenatal care in the first trimester was lower in Arizona compared

to the nation. While each ethnic group has experienced gains during the past ten years in the rate of entry into prenatal care during the first trimester, Hispanics (62.6%) and American Indians (61.2%) lag behind Blacks (71.4%) and Non- Hispanic Whites (83.5%) in this category. Hispanics and American Indians also reported fewer prenatal visits, 10.5 and 9.5 respectively.

Maternal Weight Gain

Maternal weight gain during pregnancy is an important determinant of both fetal growth and birthweight. In 1990, the National Academy of Sciences recommended that weight gain be geared to the mother's weight and height, and that for an optimum pregnancy outcome, an average size mother should gain 21-35 pounds during a normal pregnancy. In 1998, 18.2 percent of Arizona's women giving birth gained less than 21 pounds. Compared to Asian and White non-Hispanic mothers, Black, Hispanic and American Indian mothers were less likely to gain at least 21 pounds during pregnancy. The proportion of low-birthweight births was 10.4 percent among mothers who gained less than 21 pounds, compared with 4.7 percent of LBW among mothers who gained at least 21 pounds.

Medical Risk Factors

The presence of medical risk factors during pregnancy is often indicative of the potential for adverse pregnancy outcome, such as low-birthweight and some congenital anomalies (birth defects). Low-birthweight and congenital anomalies in turn are among the leading causes of infant death. The most frequently reported risk factors in 1998 were pregnancy-associated hypertension with a rate of 27.7 cases per 1,000 live births, diabetes (23.5 per 1,000 live births), followed by anemia (18.6 per 1,000). American Indian mothers were at substantially elevated risk of having each of the three above medical conditions. The rate of diabetes was elevated to 67.6/1,000, the rate of pregnancy-associated hypertension was 56.0/1,000, and the rate of anemia was elevated to 43 cases per 1,000 live births. White non-Hispanic and Black mothers had lower rates of diabetes (19.1/1,000 and 19.8/1,000 respectively) than did Hispanic (21.3), and Asian mothers (28.6). Many of the medical risk factors are associated with elevated risk for low-birthweight. These include hydramnios (25.9 percent of babies born to mothers with an excess of amniotic fluid were LBW), chronic and pregnancy-associated hypertension (14.8 percent were LBW), eclampsia (32.6 percent), and previous small-for-gestational-age (SGA) infant (21.8 percent). In contrast, mothers who have previously given birth to an infant weighing 4,000 grams or more, were at substantially lower risk of giving birth to an LBW infant (only 3.5 percent of babies born to mothers in this group were LBW).

Substance Use During Pregnancy

Cigarette smoking during pregnancy has been associated with reduced infant birthweight, intrauterine growth retardation and preterm births. Smoking during pregnancy was reported by 7.5 percent of women giving birth in 1998, compared to 15.2 percent in 1989 when these data first became available from birth certificates. It is unclear, whether this decline means that women giving birth in Arizona are less likely to use tobacco during pregnancy or, perhaps, less likely to report it when they use. White non-Hispanic mothers were more likely to report smoking (11.8 percent) than Black (9.8 percent), American Indian (3.7 percent), Asian (3.0 percent) and Hispanic (2.6 percent).

The most notable effect of heavy maternal drinking during pregnancy is fetal alcohol syndrome, which is characterized by growth retardation, facial malformations and dysfunctions of the central nervous system. In 1998, one percent of all live births were to mothers who reported alcohol use. American Indian and Black mothers were more likely than Asian, Hispanic and non-Hispanic White mothers to report the use of alcohol (2.5 and 1.7 percent compared with 0.3, 0.5 and 0.6 percent, respectively). The rates of babies born with fetal alcohol syndrome were substantially higher among American Indian and Asian mothers (5.5 cases per 10,000 births) than they were among non-Hispanic White (1.3/10,000), and Hispanics (0.3/10,000). No cases of fetal alcohol syndrome were reported in 1998 among Blacks.

Complications Of Labor and Delivery

Two complications were reported at a rate greater than 25 per 1,000 live births: meconium, moderate/heavy (38 per 1,000 births) and breech malpresentation (35.2/1,000). Of the 15 complications, 11 had higher rates for low-birthweight infants, and 5 among those (abruptio placenta, placenta previa, seizures, rupture of the membrane and breech malpresentation) had the proportion of LBW births of at least 25 percent.

Multiple Births

The number of babies born in multiple deliveries increased by 51.1 percent from 1,335 in 1988 to 2,017 in 1998, the latter being the highest number ever reported. In contrast, the number of single births increased by 18.1 percent over this period. The number of twins increased by 45.5 percent, from 1,310 in 1988 to 1,906 in 1998. The number of live births in triplet and other higher order multiple deliveries rose from an average of 56 per year in 1988-1992 to the annual average of about 110 in 1995-1998.

The rise in the multiple-birth ratio has been associated with the increased childbearing among older women and expanded use of fertility drugs. Among mothers 45 years and older in 1998, twins accounted for almost ten percent of all births.

Plurality is associated with low-birthweight (LBW) and 57.8 percent of all babies born in multiple deliveries in 1998 weighed less than 2,500 grams or 5 pounds 8 ounces. Among singleton births, only 5.5 percent were LBW, while all quadruplets were.

Pre-term Delivery and Low Birth Weight Rates

The incidence of births through the end of the last day of the 37th week of gestation (259th day) increased by 36.7 percent, from 12.8 percent of total births in 1988, to 17.5 percent both in 1997 and 1998. Most of the rise in preterm births can be attributed to increases in multiple deliveries.

In 1998, 6.8 percent of the resident live births were classified as low-birthweight (under 2,500 grams or 5 pounds 8 ounces (see Table 17). In absolute numbers, 1,200 more newborns were placed at risk of poorer medical and developmental outcomes in 1998 than in 1988. Compared to 1988, the LBW babies in 1998 were more likely to be born in multiple deliveries and to have older, unmarried mothers. In Arizona and elsewhere, low birth weight rates have not been decreasing in recent years, despite decreasing rates of inadequate prenatal care.

In each year from 1988 to 1998, the annual incidence of LBW babies was lower in Arizona compared to the nation. The incidence of very low-birthweight births (VLBW, less than 1,500 grams or 3 pounds 4 ounces)

decreased from 1.2 percent in 1995-1997 to 1.1 percent in 1998 (see Table 17).

Newborn Intensive Care

The number of newborns admitted to newborn intensive care units (NICUs) increased by 92.6 percent from 2,576 in 1989 (3.8 percent of total births) to 5,237 in 1998 (6.7 percent of all newborns). Gestational age of 37 or less completed weeks of gestation, captured more NICU admissions than did low-birthweight (62.2 and 45.6 percent, respectively. Differences in NICU admissions by maternal ethnic group ranged from a low of 4.7 percent for newborns of American Indian mothers, to a high of 9.7 percent among Black newborns.

Maternal Deaths

It has been shown that there are many more pregnancy associated deaths occurring than are found through analysis of vital statistics records. By analyzing Diagnostic Related Group (DRG) records submitted by hospitals to the Arizona Department of Health Services (ADHS) many more pregnancy associated deaths are found. The following is an analysis of pregnancy associated deaths in Arizona for 1996, 1997 and 1998 matched to the DRG record with the death certificate.

Deaths by race/ethnicity were analyzed and the analysis showed deaths of Blacks to be over represented as compared to the number of Blacks giving birth, 12% of deaths vs 3% of births. Native Americans are also over represented, accounting for 12% of deaths and 7% of births. Hispanics appear to be represented proportionately, with 36% of deaths and 37% of births. Non-Hispanic Caucasians are under represented with 42% of deaths and 50% of births.

Age at time of death shows a high number of deaths occurring to women over 30 years of age. Of the 26 deaths, 16 (62%) were more than 30 years old. Seven (7)(27%) were 35, while nine (9)(35%) were 35 or older; the oldest was 39. Five (5)(19%) were less than 20 years old, the youngest being 16.

Being Black, Native American or of increased age (>30) appears to increase the chances of maternal mortality. The three major problems with the highest number of deaths are infection, hypertensive problems and pulmonary embolism. Other major problems include hemorrhage, abruptio placenta, CVA, cardiovascular, drug abuse, retained products of conception, placenta previa and inhalation pneumonitis. Lack of prenatal care may also have been contributory.

Vital records in the form of death certificates cannot be relied upon as the sole data source to determine rates of pregnancy associated deaths. There were 25 deaths found by DRG analysis and confirmed by matching a death certificate as compared with 15 reported by Vital Statistics from only death certificates. There was one death shown by death certificate only because the patient was never hospitalized. The problem of under identification of pregnancy related deaths is a national one. No single source of data can be relied on for complete identification. A combination of DRG, death certificate and searching death certificate files using names from birth certificates for 12 to 15 months after birth will come closest to full identification, but may still miss some who died without hospitalization or without a live birth.

Death certificates alone do not capture all pregnancy associated deaths, nor do they reveal many of the problems leading to death. Reviewing DRG records adds both to the number of deaths and the reasons for the

deaths.

TABLE 17. TO SELECTED MATERNAL, PRENATAL CARE

AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX,

BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1988-1998

Characteristic	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
NUMBER OF BIRTHS	65,544	67,128	68,814	68,040	68,675	69,037	70,896	72,386	75,094	75,563	77,940
					PERCENT OF LIVE BIRTHS						
AGE OF MOTHER											
≤19 years	13.8	14.0	14.2	14.9	15.0	15.1	15.2	15.2	15.0	12.3	12.6
≥30 years	25.4	26.4	27.4	27.7	28.6	28.9	30.1	30.3	30.2	32.7	32.6
MARITAL STATUS											
Unmarried	28.6	30.7	32.6	35.0	36.2	37.8	38.2	38.2	38.8	37.7	38.4
MOTHER'S EDUCATION											
<9 years	6.9	8.4	8.3	8.8	11.7	8.8	8.8	8.9	9.3	9.0	8.8
MOTHER'S ETHNIC GROUP											
White[1]	60.8	58.8	57.7	56.2	54.9	54.1	53.3	53.2	51.3	50.1	49.5
Hispanic	24.3	26.3	28.1	29.7	31.4	32.2	33.5	34.7	36.5	37.0	37.0
Black	3.7	3.8	3.7	3.7	3.6	3.5	3.5	3.1	3.2	3.3	3.4
American Indian	9.5	9.4	9.1	8.9	8.6	8.4	7.8	7.0	7.1	7.0	7.0
Other	1.7	1.6	1.4	1.5	1.6	1.8	2.0	2.0	2.1	2.6	3.1
PRENATAL CARE BEGIN											
1st Trimester	66.2	64.5	66.2	67.4	70.1	68.9	69.8	70.7	72.9	74.4	73.6
3rd Trimester	7.2	8.2	7.2	6.9	5.8	6.0	6.0	6.4	5.7	4.8	4.9
No Care	2.6	3.6	2.7	2.3	2.2	2.4	1.8	1.6	1.6	1.8	2.1
PRENATAL VISITS											
1-4	7.2	7.4	7.1	7.1	5.5	5.6	5.6	5.4	5.1	4.8	5.0
≥5	87.9	86.3	88.1	88.6	90.2	89.8	88.6	87.3	90.6	91.6	89.4
≥9	70.2	68.0	70.6	70.6	74.6	72.2	66.9	71.0	74.3	75.6	74.4
≥13	28.0	27.6	28.9	30.6	31.9	28.8	26.9	26.5	28.8	29.9	29.2
MEDICAL RISK/ COMPLICATIONS	52.1	46.6	46.1	48.5	46.4	46.7	47.4	45.5	46.2	47.6	45.9
GESTATIONAL AGE[3]											
≤37 weeks	12.8	12.6	13.4	13.7	14.3	15.3	15.6	16.0	17.0	17.5	17.5
BIRTH WEIGHT											
<2,500 grams	6.3	6.4	6.5	6.7	6.5	6.7	6.8	6.8	6.8	6.9	6.8
<1,500 grams	1.0	1.0	1.3	1.4	1.1	1.2	1.0	1.2	1.2	1.2	1.1
CHILD'S SEX											
Male	51.2	51.4	51.0	51.3	51.5	50.7	51.0	51.2	50.9	51.8	51.2
Female	48.8	48.6	49.0	48.7	48.9	49.3	49.0	48.8	49.1	48.2	48.8
PLURALITY											
Multiple births	2.0	2.0	2.3	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6
CAESAREAN DELIVERY	17.0	18.8	18.6	18.4	17.9	17.0	17.0	16.9	16.2	17.0	17.3
PLACE OF DELIVERY											
Hospital[4]	97.2	98.4	98.7	98.9	99.0	99.0	99.1	99.2	99.2	99.1	99.2
ATTENDANT AT BIRTH											
Midwife[5]	7.3	7.8	6.3	7.2	7.9	9.1	8.5	8.5	9.0	9.5	9.1
PREVIOUS LIVE BIRTHS											
1 or more	62.2	61.8	62.1	61.7	61.8	61.7	61.0	60.2	61.0	61.1	61.3

[1] Non-Hispanic.

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate since 1989. For 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses".

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

Infant Mortality

Infant mortality is the number of deaths within the first 365 days of life. There were 592 such deaths in 1998, representing a rate of 7.6 infant deaths per 1,000 live births. In 1998 there were 375 deaths within the neonatal period before the 28th day of life, representing a neonatal mortality rate of 4.8 neonatal deaths per 1,000 live births. The perinatal mortality rate is calculated by adding together the number of neonatal deaths before the seventh day plus fetal deaths, and dividing that quantity by the number of live births plus fetal deaths. In 1998 there were 288 deaths before the seventh day and 602 fetal deaths, representing a perinatal mortality rate of 11.3 per 1,000 births. Figure 42 shows the total infant, neonatal and perinatal mortality rates for 1991 through 1998. Table 18 is a summary of statistics related to each of these measures.

Figure 42. Infant, Neonatal and Perinatal Mortality

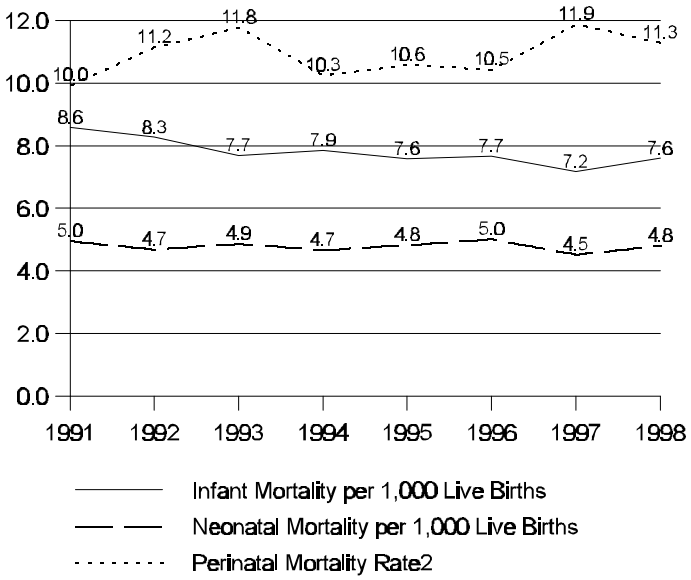


Table 18. Infant, Neonatal and Perinatal Mortality Rates

Frequency	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Live Births	68,040	68,675	69,037	70,896	72,386	75,094	75,563	77,940
Infant Mortality (Deaths in First 365 Days)	584	568	531	557	549	576	542	592
Neonatal Mortality (Deaths < 28 Days)	338	323	337	331	350	377	342	375
Deaths < 7 Days	260	246	265	226	276	307	270	288
Fetal Deaths	422	527	556	507	497	483	637	602
Deaths < 7 Days + Fetal Deaths	682	773	821	733	773	790	907	890
Live Births + Fetal Deaths	68,462	69,202	69,593	71,403	72,883	75,577	76,200	78,542
Mortality Rates	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Infant Mortality per 1,000 Live Births	8.6	8.3	7.7	7.9	7.6	7.7	7.2	7.6
Neonatal Mortality per 1,000 Live Births	5.0	4.7	4.9	4.7	4.8	5.0	4.5	4.8
Perinatal Mortality Rate[2]	10.0	11.2	11.8	10.3	10.6	10.5	11.9	11.3

[2] $\text{PerinatalMortalityRate} = \frac{\text{Deaths<7 days+ fetaldeaths}}{\text{livebirths+ fetaldeaths}}$

Race/Ethnicity and Birth Outcomes

The association of race/ethnicity and birth outcomes, particularly birth weight, has been known and examined for some considerable time, particularly the differences noted between White (Caucasian) and Black (Afro-American) infants. More recently studies have begun to look at Hispanic ethnicity and birth weight, driven in no small part by the influx of Hispanic immigrants to the United States. As noted previously, in 1996, 37.1% of Arizona births were to Hispanics, 20.2% to foreign born and 16.9% to U.S. born. Paradoxically, these foreign born women have good birth outcomes despite poor prenatal care.

The process of changing language, dietary habits, sometimes religion, jobs or work patterns, family values, health attitudes and values, family support systems and other cultural attributes to the ones found in the new country and culture is called acculturation. Acculturation or in this case Americanization appears to be at the heart of the differences noted between pregnancy outcomes for Arizona's foreign born and U.S. born Hispanics. What factors or changes occur in acculturation that result in lower birth weight infants are for the most part unknown. Guendelman and Abrams have noted a distinct dietary change for the worse as these women become americanized. In their study foreign born Hispanic women had a higher intake of protein, vitamins A, C and folic acid and calcium than U.S. born Hispanics or Whites. Other studies have shown that acculturation leads to an increase in smoking, illicit drug use, alcohol consumption, loss of family support, an increase in prenatal stress and an increase in unwed births.

The effect of religiosity or spirituality on positive pregnancy outcomes in Hispanic women is discussed in an article by Magana and Clark. Religiosity refers to attitudinal dimensions such as belief in god, religious orthodoxy, commitment to a faith and seeing one's religion as a source of strength, according to these authors. Non-denominational spirituality may also be involved. Religiosity seems to favor positive health behaviors in these women. They are more likely to not smoke or drink, be more modest and careful in sexual relationships, more likely to breast feed and have a better diet based on traditional foods. They also have a great deal of social support and care from other women who share their beliefs. These beliefs include putting their family and children at the top of their priorities. Based on their study, they concluded that religiosity lead to more positive pregnancy outcomes. However, religiosity has been shown to decline with acculturation.

It is unclear how long the process of acculturation takes to result in a loss of protection for the pregnancy outcome. Foreign born is used as a marker for birth certificate data because it is the only way of ascertaining immigrant status from vital statistics data. There is no entry on the birth certificate for length of residence in the U.S. Guendelman and English studied Mexican born mothers and U.S. born mothers of Mexican origin from two California counties in 1992-1993. In this study, immigrants who had been in the U.S. more than 5 years were more likely to deliver preterm low-birthweight infants, have higher parity, more pregnancy complications, smoke, and have fewer planned pregnancies. The increase in low- birthweight infants is due to a decrease in gestational age, not intrauterine growth retardation.

One other hypothesis is that infant deaths for this (Mexican immigrant) population have been under reported, due to returning the dead infant to Mexico for burial, hiding the death due to fear, or misclassification on

birth/death certificates. Two large studies have shown this to be very unlikely.

The high rate of low-birthweight infants for Black mothers continues to be a puzzle. Studies that have controlled for socioeconomic differences, prenatal care and other confounding differences except race continue to show a higher rate for Blacks than Whites. It is unlikely that genetic differences are the cause. American Blacks are a diverse group with an estimated 25% of their genetic makeup from Northern Europeans and an unknown amount from other groups such as Native Americans. The fact that immigrant Black women deliver infants whose birth weights are closer to U.S. born Whites than U.S. born Blacks is also very damning to the genetic hypothesis; if genetics were the major factor, the reverse should be true. Finally, the few studies of birth weights from 100 years ago indicate that Black infants born at that time were heavier than White infants.

Other hypotheses include intergenerational accumulative changes due to poverty, stress, poor diet, lack of care, etc. This view appears to be gaining currency, but a great deal of research needs to be done before it can be accepted with certainty and appropriate changes made where possible.

Between 1990 and 1996 considerable effort was spent on increasing the availability and utilization of prenatal care. AHCCCS eligibility was increased, the Baby Arizona Project for streamlining AHCCCS eligibility and awareness of the need for prenatal care was initiated. Health Start, a system of outreach to pregnant women to see that they receive prenatal care came into being. Baby Arizona and Health Start, although available to all, had a special emphasis on the Hispanic community, with many projects and media awareness campaigns directed toward the Hispanic community. The result has been an increase in prenatal care given and a drop in LBW and VLBW births. The decrease in VLBW and LBW births is minimal, however. The most likely explanation for this lies in the population that received the most of this increased care--foreign born Hispanics. Because of the relatively good outcomes of this population without any prenatal care, increasing the number of women in this group who receive adequate prenatal care has little effect on the overall statistics of LBW and VLBW births. This should not be interpreted as meaning that these women do not benefit from prenatal care.

By providing more prenatal care to the foreign born Hispanic women in 1996, an estimated 23 fewer VLBW infants were born than if these women had received prenatal at the 1990 rate. Based on 1991 costs, these infants would have cost $2.8 million dollars. Further, if foreign born Hispanic women had received no prenatal care, an additional 178 VLBW babies would have been born, at a cost of $21.9 million dollars. Of these babies, approximately 20% would be expected to die.

Prenatal care, care provided by a physician or other health care provider, can not totally eliminate low-birthweight. With our current state of knowledge, it appears that providing early adequate care can reduce the incidence of low-birthweight to about 109/1000 for Blacks, 51/1000 for foreign born Hispanics and overall 62.8/1000 for all Arizonans. As is amply demonstrated by births to foreign born Hispanics, many other factors largely unknown are at least as important as medical prenatal care. A great deal of emphasis needs to be placed in this area for future research. As we move into the next century prenatal care needs to be provided to all women, including dietary and psycho-social support; the other largely unknown factors can be dealt with best hand in hand with quality prenatal care.

C-sections

The overall caesarean delivery rate rose for the second consecutive year from 16.2/100 births in 1996 to 17/100 births in 1997, and 17.3/100 births in 1998. This latest rise in the total caesarean rates is the result of both a slight increase in rate of primary (or first) caesarean deliveries (from 10.9 percent in 1997 to 11.2 percent in 1998), and an increase in the rate of repeat caesareans from 73.6 per 100 live births to women who had a previous caesarean in 1997, to 76.2 in 1998.

The rate of caesarean deliveries for low-birthweight infants increased from 28.1/100 in 1996 to 35.6/100 in 1998, the latter being the highest rate of the 11-year period 1988-1998. Over the years of the study the rate of C-Section with complications has not changed, while the rate of C-Section without complications has dropped appreciably. This matches the fall in total C-section rates noted in vital statistics data, and is generally thought to be a good thing. During this same time the rate of Vaginal Deliveries with Complications, DRG 372, has risen from 55.5/1000 to 80.4/1000. It is not known if the fall in C-section rates is related to the rise in complicated vaginal deliveries, but it certainly raises the issue if the fall in C-section rates is a good thing. The rate of vaginal deliveries without complications has risen slightly during this time period, from 585.5/1000 to 623.1/1000.

Neonatal Rates

A study of Arizona DRG Codes reflect an increase in premature, immature neonates. This matches the findings of Arizona vital statistics, which show a steady increase in low birth weight (<2500 gm) rates, from 60/1000 in 1981 to 64/1000 live births in 1989 to 68/1000 in 1996. Thus it appears that Arizona newborns are becoming smaller and more premature over time. This is happening despite increases in the proportion of women receiving statistically adequate prenatal care and may be the result of fundamental societal changes such as diet, stress, smoking, drug use and loss of family structure. It is entirely possible, perhaps even probable, that prematurity and low-birthweight are only the visible indicators of more extensive damage to the organism.

The rate for full term newborns with major problems has fallen somewhat during this period, as the premature/immature rates have risen. The rate for normal newborns has decreased during this time period, from 725.1/1000 in 1989 to 718.8/1000 in 1996.

Hospital Charges

The study of DRG codes revealed two major findings regarding hospital charges. With one exception (DRG: neonate died or transferred) the average charge for each perinatal DRG has approximately doubled from 1989 to 1996. Perinatal care in Arizona is big business, with total hospital charges of over $600 million dollars. This does not include physician charges, outpatient treatments, outpatient drugs or any other non-hospital admittance charges.

Data Needs

The ability to analyze the perinatal health issues in Arizona is limited by the availability of population-based data. Vital records data provides the foundation for studies of perinatal health, however, much of the data retrieved from birth records is questionable, such as smoking, alcohol use, substance abuse, admission to the NICU. There is limited data available regarding critical topics such as breastfeeding (ethnic breakdowns), payor

for prenatal care, reproductive history, and well and ill infant care. There is no source for collection of data on the content of prenatal care, barriers to care, stress/mental health issues, unintended pregnancies, nutrition, paternal factors, preconceptual care, mother's work history and physical and emotional abuse.

The Office of Women's and Children's Health is supporting the development of three approaches to improve the quality and scope of information available to assess and address these issues.

1) The Periods of Risk model utilizes vital records information including fetal death, birth weight and age at time of death. This model divides perinatal health into four periods of risk; maternal health, maternal care, newborn care and infant health. It allows for comparison of different populations, determination of the period of greatest perinatal risk, and the design of appropriate interventions to combat the greatest period of risk.

2) Maricopa County Health Department (MCHD) has launched its PRAMS pilot funded by CityMatch. The Office of Women's and Children's Health is currently in discussion with MCHD to determine the feasibility of partnering with the State to expand the study to the rest of Arizona. The need for a State perinatal survey is clear. We are hopeful that we will be able to build on the work already accomplished by Maricopa County rather than creating a separate infrastructure for obtaining this data.

3) A study of pregnancy-associated morbidity based on pregnancy associated mortality findings should be undertaken. Educational and other interventions should be based on morbidity and mortality findings. The Office of Women's and Children's Health is working with the Child Fatality Review Program to expand the scope of their review to include maternal/fetal review.

A complete evaluation of pregnancy associated deaths cannot be done without access to medical records. This has become problematic because of legal constraints. The Maternal Child Health Committee of the Arizona Medical Association reviewed all maternal deaths in Arizona until the early 1980's. Since then there has been no review except by individual hospitals as part of their internal quality of care processes. Such a review is meant to be educational not punitive. Expanding the scope of the Child Fatality Review Board would have the advantage of building on a process that is already in place to access medical records and has operated with immunity from discovery in the legal sense .

The Risk Stages Model of Analysis

Infant mortality rate, that is, the number of babies from birth through the first year of life that die per 1000 live births is a useful but limited measure of perinatal health. The infant mortality rate by itself does not explain where in the perinatal health continuum that risk to the infant is occurring. For example, the risk of death for a 25 week gestational age fetus is maternal health or maternal care, either through fetal death or death of the resultant infant if premature delivery occurs. The risk of death for a 3000 gm 39 week gestational age live born infant is in neonatal care or infant health, and is not dependent on the maternal side of the equation. The Centers for Disease Control (CDC) has developed a useful model for determining period of risk, utilizing fetal deaths, birth weight and age at time of death. This methodology divides perinatal health into four periods of risk: maternal care, maternal health, newborn care and infant health. This model allows for comparisons of different

populations, determination of the period of greatest perinatal risk, and the design of appropriate interventions to combat the greatest periods of risk.

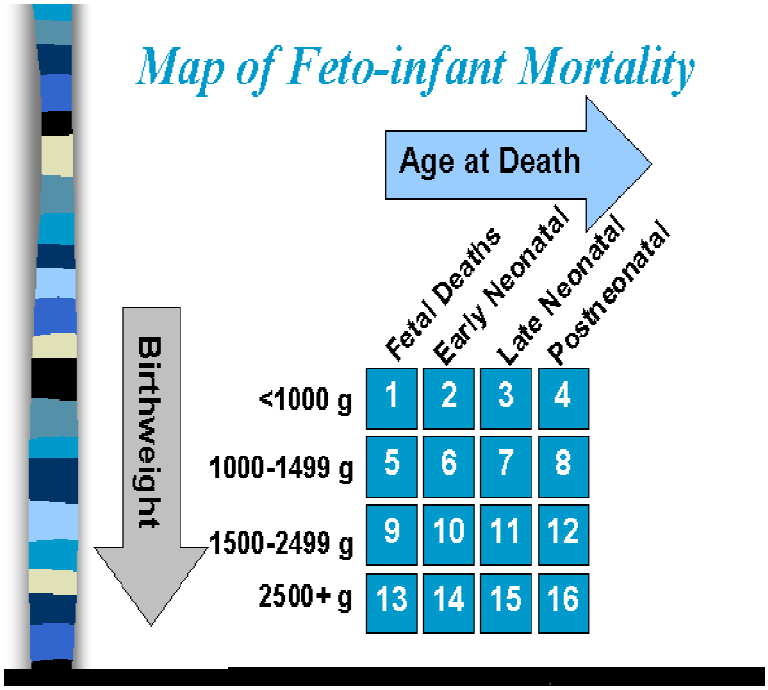
Because Arizona does not report gestational age or ethnicity beyond Caucasian, Black or Indian (Native American) on the fetal death tape, fetal deaths have a more limited usefulness in this analysis than is desired.

The birth weight proportion rate (BWPR) is determined by dividing the number of deaths in a given birth weight group by the total live births multiplied by 1000. Periods of risk are assigned as shown on Figures 43, and 44. All infants with a birth weight below 1500 grams are in the maternal health period of risk. Infants with a birth weight of 1500 to 2499 grams who die in less than 28 days of age are assigned to the newborn care period of risk; if they die at 28 days or later they are assigned to infant health period of risk. Infants 2500 grams or more who die at less than seven days of life are assigned to the newborn care period of risk, and at seven or more days of life to the infant health period of risk.

The CDC model assigns fetal deaths to maternal health or maternal care periods of risk according to gestational age and weight. Since Arizona does not supply this information for analysis, where fetal deaths are available they are assigned to a catchall category, maternal health/care. Feto-infant mortality rate is determined by adding the fetal death rate and the infant mortality rate where appropriate. The CDC model currently utilizes only fetal deaths of 28 weeks or greater to determine feto-infant mortality rates and fetal death rates. For the Arizona analysis where fetal deaths are used they are all gestational ages, since Arizona does not make the gestational age available for analysis from the fetal death certificates.

The results of this analysis are displayed on a 16 cell map (Figures 43 and 44). Cells may be added together to get the results for a total group. Adding cells one (1) through eight (8) provides the total maternal health period of risk. The maternal care period of risk is determined by adding cells nine (9) and 13. Newborn care period of risk results from adding cells 10, 11 and 14. The infant health period of risk is found by adding cells 12, 15 and 16.

Figure 43

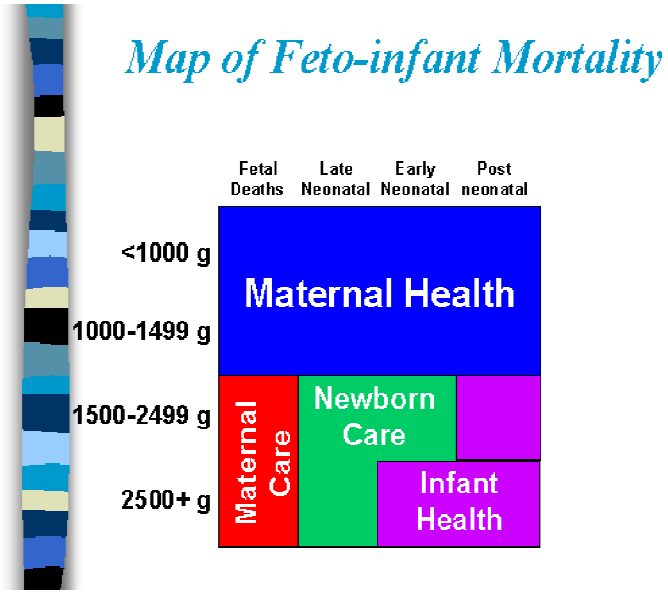


The groups are all Arizonans, Caucasian non-Hispanic, Caucasian Hispanic, foreign born Hispanic, U.S. born Hispanic, Caucasian non-Hispanic mother's age 20-34 years with more than 12 years of education, Black, Native American and Caucasian including

Hispanic.

The infant mortality for all Arizonans is 7.0/1000 live births. The rate for Caucasian non-Hispanic 20 to 34 years of age with greater than 12 years of education is 5.0/1000. The worst rate is for Blacks, 12.5/1000, followed by Native Americans at 8.4/1000, U.S. born Hispanics, 8.2/1000, Caucasian non-Hispanics at 6.5/1000 and foreign born Hispanics at 5.6/1000.

Figure 44



The Native American group has the best maternal health risk, 2.3/1000, while the Blacks have the worst, 8.1/1000. The group usually considered the standard against which the others are measured, Caucasians, non-Hispanic, 20 to 34 years of age with over 12 years of education, were at 2.8/1000 as were foreign born Hispanics and Caucasian non-Hispanics. U.S. born Hispanics were at 3.9/1000, and all Arizonans at 3.2/1000. The maternal health period of risk is also shown on Figure 44.

For the newborn care period of risk the Caucasians 20 to 34 years of age with over 12 years of education had the lowest rate, 0.7/1000. The highest rate was U.S. born Hispanics, 1.4/1000. Blacks were 0.8/1000, foreign born Hispanics 1.0/1000, Caucasian non-Hispanics 1.1/1000, Native Americans 1.3/1000 and all Arizonans 1.1/1000. The newborn care period of risk is also shown on Figure 44.

The lowest rate for the infant health period of risk was Caucasians 20 to 34 years of age with greater than 12 years of education at 1.5/1000, followed closely by foreign born Hispanics at 1.8/1000. The group with the worst rate was Native Americans, at 4.8/1000, followed by Blacks at 3.6/1000, U.S. born Hispanics at 2.9/1000 and Caucasian non-Hispanics at 2.6/1000. All Arizonans come in at 2.7/1000. The infant health period of risk is also shown on Figure 44.

Because of lack of information on the fetal death tape there are only four groups that can be separated out- all Arizonans, Caucasian including Hispanic, Native Americans and Blacks. The only data not shown elsewhere is the maternal health/care. The best group is Native Americans, at 8.9/1000. The worst is the Blacks at 24.7/1000; Caucasians including Hispanic come in at 10.7/1000 and all Arizonans at 11.0/1000.

The combined feto-infant mortality rate for these four groups. This combines the total fetal death rate with the infant mortality rate. The best rate is Caucasian including Hispanic at 14.3/1000, with Blacks having the worst rate of 29.1/1000. Native Americans had a rate of 15.0/1000 and all Arizonans 14.8/1000.

The perinatal periods of risk approach to infant mortality was developed by Dr. Brian McCarthy and has been used by the World Health Organization (WHO) in developing countries. It is a simple approach that permits

a better understanding of the factors that are involved in perinatal mortality. By breaking down overall infant mortality into component parts or periods of risk it is possible to tell where major problems of infant mortality lie and makes it easier to explain to the community and easier to devise strategies to deal with the problem. For example, a high rate of infant health deaths, which largely occur to full term infants takes a very different strategy to deal with than a high rate of infant deaths to babies born with a birth weight of 1200 gms. The first one involves medical care of the infant, access to care, knowledge of infant care needs by parents, etc; infants born at 1200 gms are due to maternal health factors, such as prenatal care, smoking and nutrition. The perinatal periods of risk helps to prioritize prevention efforts. This method has a strong conceptual basis. It can be used to establish on-going surveillance of perinatal risk. In addition to use in developing countries it is being used in the CityMatch program, sponsored by CDC and the March of Dimes to examine and reduce feto-infant mortality in certain cities in the United States. South Phoenix is one of the urban areas under study in the CityMatch Program.

One of the greatest strengths to the periods of risk approach is to compare different groups to a standard and thus discover differences that provide opportunities to improve outcomes to the appropriate segment of the population and the appropriate period of risk. The "gold standard" suggested by the CDC is Caucasian non-Hispanics, mother's age greater than 20 years of age and mother's education greater than 12 years. Because of known increased risk beyond age 34 in Arizona, for this study the mother's age range is 20 through 34 years. This standard in Arizona is 2.8/1000 for maternal health, 0.7/1000 for newborn care and 1.5/1000 for infant health, with a total infant mortality rate of 5.0/1000. The only subgroup that has a better rate than this is maternal health for Native Americans, 2.3/1000.

The maternal health period of risk is shown on Figure 44. The biggest opportunity gap in this period of risk is that between Blacks and the standard. The difference is 5.3/1000. The next greatest is U.S. born Hispanics, a gap of 0.9/1000. The appalling gap for Blacks is further emphasized when fetal death rates are added to the maternal health rates. Although the gold standard for this cannot be calculated in Arizona, the rate for Blacks is 24.7/1000, 8.9/1000 for Native Americans and 10.7/1000 for Caucasians including Hispanics. The feto-infant mortality rates show this same gap, with Blacks having a feto-infant mortality rate of 29.1/1000, and Caucasians including Hispanics 14.3/1000. This means that approximately 3% of all Black pregnancies end in fetal or infant death, twice the rate for Caucasians. If we are to do anything about this, the emphasis must be put on maternal health and maternal care during the pregnancy. Maternal health means the health of the woman before the pregnancy as well as during; maternal care refers to care during the pregnancy, especially in the later stages.

The standard for newborn care is a rate of 0.7/1000. The greatest gap is for U.S. born Hispanics, 1.4/1000, followed by Native Americans, 1.3/1000. Blacks have a rate of 0.8/1000, and foreign-born Hispanics 1.0/1000. Non-Hispanic Caucasians have a rate of 1.1/1000. The major opportunity gaps in newborn care are for U.S. born Hispanics and Native Americans, both of whose rates are approximately twice that of the standard.

The standard for infant health is 1.5/1000. The best rate for the other groups is for foreign born Hispanics, 1.8/1000. By far the biggest gap is for Native Americans, 4.8/1000. The next largest is for Blacks, 3.6/1000, followed by U.S. born Hispanics at 2.9/1000. Caucasian non-Hispanics are at 2.6/1000. The rate for

Native Americans is more than three times the standard, Blacks 2.5 times the standard and U.S. born Hispanics two times the standard.

For all groups except Native Americans, the greatest period of risk for infant mortality is the maternal health period of risk. This finding is consistent with other findings of increasing rates of prematurity, low-birthweight and very low- birthweight. Little is known about the causes for these increasing rates and even less is known about what things might be done to prevent prematurity and low-birthweight. There are some clues provided by immigrant women. It is known that immigrant women of all ethnic groups who deliver in the U.S. have better outcomes than their U.S. born counterparts. It has also been shown that immigrant Hispanic women have better nutrition, smoke less, use illicit drugs less, work less, have better family support, have greater religiosity, fewer unwed births and less stress compared to their U.S. born counterparts. It is not known for certain if all of these factors are operative; the causation of prematurity is probably multifactorial. Successful prevention efforts have been limited to smoking, with nutrition and reducing infections during pregnancy showing promise but not yet proven. Most if not all these factors are societal in nature, and thus probably subject to change only with great effort and difficulty.

The foreign born Hispanics present a marked contrast to U.S. born Hispanics. In 1998 there were 16,023 live births to foreign born Hispanic women, 20% of all Arizona births and 13,051 to U.S. born Hispanic women, 16.6% of all Arizona births. The overall infant mortality rate for foreign born Hispanics is 5.6/1000, the closest of any group to the standard of 5.0/1000, while that for infants of U.S. born Hispanics is high, 8.2/1000. The difference between the two Hispanic groups is highly statistically significant, $p<.0001$. The foreign born Hispanics match the standard for maternal health, 2.8/1000. At a rate of 1.0/1000 they come close to the standard for newborn care of 0.7/1000, and have the lowest of any group for infant health at 1.8/1000, compared to the standard of 1.5/1000.

The U.S. born Hispanic rate for newborn care was 1.4/1000, twice the standard and 40% higher than the foreign born rate. Their rate for infant health was 2.9/1000, almost twice the rate of the standard and 60% higher than the foreign born rate. Their rate for the maternal health period of risk was 3.9/1000, 60% higher than the standard and the foreign born rate.

The reasons for the differences between the two Hispanic groups are not at all clear. The differences in maternal characteristics have been noted above. What the differences are that are operative in the other periods of risk is not known. The other question is how long these differences may last. Grundelman and English in a report from the Los Angeles area indicated that the “protective effect” in terms of pregnancy outcome for foreign born Hispanics lasts approximately five (5) years. As these women become acculturated, or Americanized, they begin to have perinatal experiences that are the same as their American born counterparts. With the large number of immigrant Hispanic women coming into Arizona, we can expect to see increasing perinatal problems as they acculturate. It would be very useful if it could be determined exactly why they have better perinatal outcomes and not only apply that knowledge to them but to the rest of the population as well.

3.1.2.1.3 Children and Adolescents

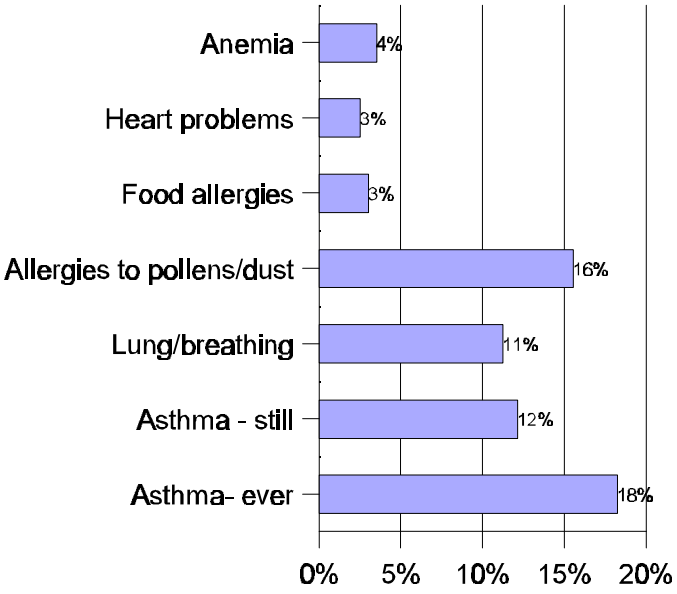
General Health

Eighty-seven percent of children's health was described as either excellent (61.6 percent) or very good (25.2 percent) by the person responsible for their care. Another 10 percent had health described as good. Three percent of children had health described as either fair or poor.

Chronic Conditions

Primary caregivers of children under age 21were asked whether a doctor had ever told them that their children had certain chronic conditions. The most commonly reported conditions were asthma, allergies to pollens and dust, and lung and breathing problems in general. Eighteen percent of children had been told by a doctor that they had asthma at some time and twelve percent of children were reported to still have it. Sixteen percent of children had allergies to pollens and dust, and eleven percent had conditions which were described as lung or breathing problems. Thirty percent of children live in a household with a smoker.

Figure 45. Prevalence of Chronic Conditions



Approximately four percent of children in Arizona have been diagnosed with anemia at some time, three percent have food allergies, three percent had heart problems; and fewer than one percent of the population of children had ever been told by a doctor that they had diabetes, cancer, arthritis/rheumatism, high blood pressure, or a stroke problem.

Special Health Care Needs

Children with special health care needs were identified through a survey designed to assess their functionality as opposed to relying on diagnostic information (Children 2000). Through this assessment, 22.9 percent of households with children had at least one child with a special health care need. Overall, 13.5 percent of children were determined to have a special health care need

Family surveys are an ongoing way for OCSHCN to learn about its population. A survey of 481 members of 11 different communities found that 38 percent had received one or more of the following services on a regular basis: physical therapy 44 percent, speech or language therapy 77 percent, occupational therapy 37 percent, orientation and mobility training 14 percent, and vocational rehabilitation 8 percent. These services are expected to continue for at least one year. During the last year, families had an average of two hospitalizations and three emergency room visits. Seventy-four percent of the families reported that their child needed medical, health-

related, or mental health services and were **not** able to get the needed care.

A majority (68 percent) of children with a condition or symptoms were diagnosed within the same year of symptom onset or before, but 32 percent of the children were diagnosed at least one year after symptoms began. Of the 481 participants, 255 (54 percent) have at least one condition that limits their daily activities. Of the 255 children, 67 percent reported to have a medical, behavioral or other health condition that prevents or restricts them from activities that other children his/her age usually perform, 27 percent reported difficulty eating without assistance, 44 percent difficulty seeing without assistance, 19 percent difficulty hearing without assistance, and 49 percent have a serious delay in mental or emotional growth. Cerebral palsy was the most common condition reported (15 percent) among the last community surveyed.

Thirty-six percent of the children needed at least one piece of special equipment to help them in their daily activities, and 7 percent of them were unable to get the equipment they needed. The most common need was equipment to help them see.

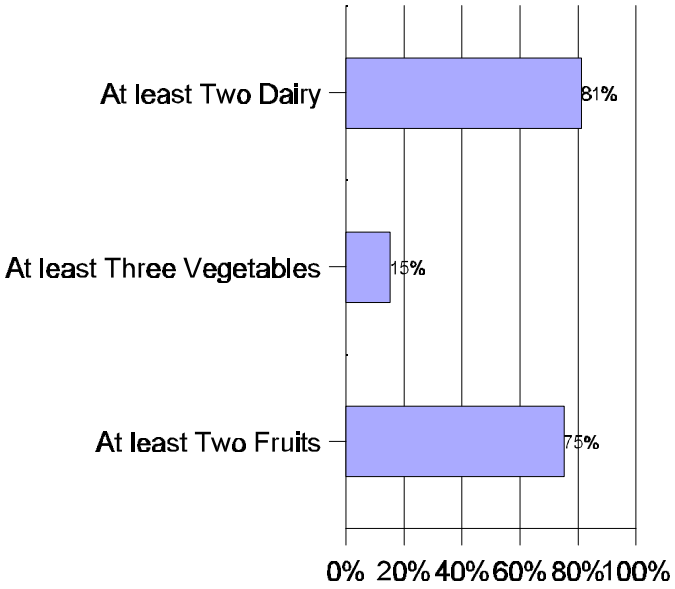
Nutrition

Doctors had told caregivers that approximately seven percent of the children were overweight, while caregivers worried that ten percent were overweight. Doctors had told caregivers that two percent of the children had eating disorders, while caregivers worried that three percent of the children may have an eating disorder. Three percent also reported that someone other than a doctor had expressed concern that the child had an eating disorder.

Survey respondents were asked how often children eat breakfast, drink milk and fruit juices and eat fruits, vegetables, and other dairy products. Most children (88 percent) eat breakfast every day, while nine percent eat breakfast only on some days. Only three percent of the children eat breakfast either rarely, never, or on weekends only.

A relatively high proportion of children consume adequate amounts of dairy and fruits. Eighty-one percent of children had at least two servings of milk and other dairy products per day, and 75 percent of children consumed at least two servings of fruits and/or fruit juices each day. Although it is important that children get at least two servings of fruit per day, excessive intake of fruit juices in particular may replace other foods in a child's diet and lead to nutritional deficits. Seven percent of children were reported to drink more than four servings of fruit juices daily. Only 15 percent of children

Figure 46. Percent of Children Receiving Recommended Fruits, Vegetables and Dairy



were reported to consume at least three vegetables per day.

Head Start Nutritional Information

Head Start has provided comprehensive services for children and their families in Arizona for 35 years. Health Start enrollment is non-compulsory and includes children from age 3-5 with Early Head Start serving children from birth to 3 years old. In 1998 over 18,500 children were served through 20 grantees (agencies-public/private). Of the 20, seven were Regional Head Starts, twelve were Tribal, and one was a Migrant Program.

In 1996 the Research and Evaluation Committee of the Arizona Head Start Association designed a long term research program, with the goal of each agency to determine its impact, program strengths and needs, and provide a state picture of Head Start. The concerns of anemia, overweight and underweight were identified through the project. The 1998 Head Start Factbook indicates that approximately five percent of the enrollees had received treatment for anemia, six percent had received treatment for being overweight and two percent received treatment for being underweight.

Heights and weights are measured at least two times a year and marked on a growth chart in the child's file. WIC and Head Start use the same percentiles to define overweight, underweight, and short stature. Hemoglobin or hematocrit is measured and noted in the chart once a year. If the hemoglobin is less than 11 they are referred to WIC for evaluation and followup. If this does not improve, the Health Coordinator works with the mother and may refer them to the Nutrition Consultant for that Head Start program. There is limited nutrition consultation available through the program.

Many of the programs are in schools and the food served comes from that school kitchen with snacks provided by the program. There are requirement for the cycle menus and those are reviewed by the nutrition consultant once or twice a year.

School Lunch Program

The Arizona Department of Education receives data regarding those eligible for free and reduced meals on the National School Lunch Program (NSLP). The NSLP provides nutritious lunches to all children and adolescents attending schools that participate in this program. Reduced price lunches are available if the family income is within 130-185 percent of the federal poverty level; free lunches are available if income is at or below 130 percent of poverty. School breakfast programs with the same guidelines for free and reduced meals are provided at some but not all schools on the NSLP. Unfortunately very few high schools participate in the program as they have open schools where the students go out for lunch and/or have fast food type programs on the campus. This lessens the opportunity for healthy eating on campus unless effort is made for inclusion of these foods.

Physical Activity

According to the World Health Organization (Arizona Republic, February 1, 2000), students in the United States exercise less and eat a less healthful diet than kids in most other countries. Two-thirds of American students reported exercising for more than two hours a week.

Physical inactivity has been the number two preventable cause of death because of its role as a primary risk factor for cardiovascular disease. Between children and teens, lack of physical activity is considered to be the primary cause of the rising childhood obesity rates. In January 1997 ADHS developed and implemented the Promoting Lifetime Activity for Youth (PLAY) program, targeting physical activity to the young. The PLAY program focuses on youth in fourth through eight grades. As of May 1999 there were 13 counties participating in the program, 159 schools and 900 teachers trained for a total of approximately 24,000 participants.

From the analysis of these data it was determined that 81.6 percent of the students are physically active for 30 minutes or more during the school day and 88 percent of the students reported physical activity during the weekend for 30 minutes or more. Eighty-two percent of the 4th graders agreed that they had become more active as a result of PLAY. Even though the percent of students in 8th grade was lower (52 percent) than for other grades, the majority of students (more than 50 percent) in all grades agreed that they have become more physically active through the PLAY program.

Measures of both activity and inactivity were included in the survey battery for Children 2000. Thirty-six percent of the children were described as being very active in organized/team sports and another 27 percent were reported to sometimes participate. Thirty-seven percent do not usually participate. Forty-four percent of children were physically active for more than two hours each school day, and another 21 percent were active for one to two hours. On weekends, 77 percent of children were physically active for more than two hours, with an additional 9 percent being physically active for one to two hours. Of concern, however, are the nine percent of children who engage in no physical activity during the week, and no physical activity on the weekend.

Table 19. Hours Active Each Week

	Each School Day	Each Weekend
> 2 hours	44%	77%
1-2 hours	21%	9%
30-59 minutes	11%	2%
< 30 minutes	4%	2%
None	21%	11%
Total	100%	100%

Approximately 13 percent of children spend more than 20 hours per week watching television while sitting or lying down and two percent use a home computer for more than 20 hours per week. Nine percent of children spend more than 30 hours per week in come combination of TV viewing and home computer use.

Table 20. Hours Inactive Each Week				
	Watching TV	**Using Home Computer**	**Total Inactive (Either TV or Computer)**	**Inactive Cumulative Percent**
More than 30	2%	0%	9%	9%
21-30	11%	2%	16%	26%
11-20	28%	6%	28%	53%
1-10	46%	41%	35%	88%
None	13%	50%	12%	100%

Well-Being and Threats to Well-Being in Home Environment

Approximately two percent of children in Arizona live in a household where some child has been treated in a way that the survey respondent considered abusive by an adult they had lived with. Seven percent of children live in a house with no working smoke detector, and 36 percent of children live in a house with firearms in or around it. In the United States, 35 percent of U. S. homes with children have at least one firearm, and nearly half of them keep the weapons unsecured [1]

Thirty-seven percent of households with children under age five say that some child in their household is cared for regularly by someone who lives outside of their home. Eighty-five percent of them are very satisfied with the quality of their daycare arrangements. Thirteen percent are somewhat satisfied, and two percent are not at all satisfied.

Sixty percent of the children are cared for by people who say that they are always able to get the help that they need with their kids. Another 24 percent are cared for by adults who say that they are able to get the help that they need most of the time, and fourteen percent say that they get the help they need sometimes or rarely. Only two percent said that they are never able to get the help they need. On the other hand, only eleven percent of children are cared for by people who say that they always have enough time for themselves, with another 26 percent saying that they most of the time have enough time for themselves. Thirty-four percent of children are cared for by adults who sometimes have enough time for themselves. Twenty-nine percent of children are cared for by people who say that they rarely or never have enough time for themselves.

Fifty-four percent of children live with caregivers who said that during the past thirty days they never felt sad, blue or depressed and another 29 percent lived with caregivers who said that they felt that way from 1-5 days. Six percent of children live with caregivers who felt sad, blue or depressed for at least 26 of the last 30 days.

Six percent of children live with caregivers who say that they have been treated in a way they considered physically or emotionally abusive by their family or someone they lived with. Most often, the abuser was their

[1]Schuster, Todd M. Franke, Amy M. Bastian, Sinaroth Sor and Neal Halfon, "Firearm Storage Patterns in US Homes with Children" American Journal of Public Health 90:4, April 2000.

spouse (52 percent of the time). Four percent of children live with caregivers who have been subject to physical violence from someone other than a person living with them

Twenty-six percent of children live with a caregiver that said that in the past 12 months they had a problem that they would have liked to talk to a mental health professional about. Two percent seriously considered attempting suicice and one percent said that they actually did attempt suicide.

Usual Source of Health Care

Ninety-three percent of children have a place to which they usually go for health care. Of those that do not have a usual place, the reason for 43 percent of the children was that they either have no insurance or cannot afford health care. Another 39.5 percent were reported to have not needed a doctor.

Seventy-one percent of the children most often get their care in a doctor's office or HMO, and an additional 20 percent go to a clinic or health center. Approximately six percent of children most often go to the hospital most often for health care to either the emergency department or as a hospital outpatient. Three percent of children go to some other place most often. Respondents were asked where the children go for routine preventive care. Ninety-four percent went to the same place for routine preventive care as the place they went most often.

During the past year, 16 percent of children had changed where they went for health care. For those who changed, the reason cited most often was that they had moved (44 percent). Thirty-six percent cited health insurance as the reason, and 15 percent cited dissatisfaction with provider. Two percent of children changed where they went for health care because of family problems, and three percent changed because of transportation issues.

Sixty-five percent of children have been seeing their current provider for at least one year. Ninety-four percent would like to continue to see the same provider.

Table 21. How Long Seeing Current Provider

	Percent	Cumulative Percent
More than 5 years	21%	21%
3-5 years	22%	43%
>1 < 3 years	22%	65%
6 months - 1 year	17%	82%
Less than six months	18%	100%

Service Utilization

According to the report of children's caregivers in a recent survey (Children 2000), 78 percent of children had at least one visit to a health care provider, and 77 percent had a routine checkup within the past twelve months. Sixty-five percent of children had a well-child visit which was described as a visit where the doctor does a physical examination, measures the child's height and weight, and talks to the caregiver about nutrition and the child's behaviors.

AHCCCS Administration publishes several performance indicators measuring its progress against standards for well-baby and well-child visits. The measures focus on continuously enrolled members during defined review periods and use AHCCCS claims and encounters to assess the number of well-child visits.

On October 1, 1997 AHCCCS adopted a new pediatric wellness schedule for well-child visits requiring six well-child visits in a child's first year of life. (Previously, the periodicity schedule had required five visits.) An annual visit is required for children ages 3, 4, 5 and 6. For adolescents, the periodicity schedule requires a well-care visit every two years for adolescents who are age 11 through 20. However, the AHCCCS membership within this age group is not stable. Consequently, AHCCCS monitors the percent enrolled for one year who received at least one visit within the past year as well as the percent enrolled for two years who received at least one visit within the past two years. AHCCCS reports these measures for the group as a whole as well as separately for ages 11 through 15 and ages 16 through 20. Table 22 below shows the percent of infants, children and adolescents of various ages that met AHCCCS standards for well care among the continuously enrolled population.

Table 22. AHCCCS Well-Care Measures

Age	Number of Visits	1998	1997	Percent Increase
First 15 months of life	$5 in 1st 15 months	61.21	56.64	8.1%
First 15 months of life	$6 in 1st 15 months	42.46	38.34	10.7%
3-6 Years	$1 during year	45.96	47.05	-2.3%
11-20 years (enrolled for 1 year)	$1 during year	27.53	na	
11-20 years (enrolled for 2 years)	$1 past two years	45.4	na	
11-15 (enrolled for 1 year)	$1 during year	31.02	na	
11-15 (enrolled for 2 years)	$1 past two years	48.61	na	
16-20 (enrolled for 1 year)	$1 during year	16.76	na	
16-20 (enrolled for 2 years)	$1 past two years	33.26	na	

Twenty-four percent of the children had been treated in the emergency room during the past year, and six percent had been hospitalized. Questions were asked about the use of treatments which may be described as alternative to the type of treatments that are most commonly used by medical doctors. During the past year, two percent of the children had received massage, three percent had seen a chiropractor, one percent had seen a naturopath/homeopath, and one percent had been treated by an herbalist. Fewer than one percent of children had been treated by acupuncture/accupressure, aroma therapy, psychic massage, or a curandero/medicine man/faith healer.

Newborn Screening

The Newborn Screening (NBS) Program within ADHS/OWCH is responsible for identifying babies who

have some types of serious medical conditions. Finding these babies and giving them early treatment can prevent serious problems such as mental retardation or even death. The NBS Program contacts with the Arizona State Laboratory to perform testing of newborn screening specimens for Phenylketonuria (PKU), Biotinidase Deficiency, Maple Syrup Urine Disease, Galactosemia, Congenital Hypothyroidism (CH), Hemoglobinopathies, and Homocystinuria. Congenital Adrenal Hyperplasia (CAH) may be added in 2001. Additional program activities include coordination with consulting specialists, physicians, and hospitals; follow-up of abnormal test results; education of health professionals and the general public; and monitoring of data associated with testing, billing for tests, follow-up and educational activities.

There continues to be an impact of early discharge (less than 24 hours) on the reliability of first specimen test results. The plan is to mandate a second specimen, with a combined fee for both tests, through a revision to the rules/statute. An identified program priority is to interface the NBS data management system with Electronic Birth Certificates to more accurately determine the percentage of newborns who receive a newborn screen and the compliance of participating hospitals.

Medical Home

There has been much interest in the concept of a medical home in Arizona, and significant attempts have been made to begin to define and measure it. The American Academy of Pediatrics states that medical care should be

- Accessible, continuous, and compassionate,
- Delivered or directed by well-trained physicians who are able to manage or facilitate essentially all aspects of pediatric care, and
- The physician should be known to the child and family and should be able to develop a relationship of mutual responsibility and trust with them.

Survey items were developed which correspond to various aspects of medical home in the form of statements to which respondents were asked to indicate the extent of agreement. Table 23 is a summary of the valid and missing cases for these items. The “percent of valid cases” indicates what percent of respondents answered “very much,” “somewhat,” or “not at all” to each item as a percent of those who gave one of these responses. In other words, percents are calculated leaving the “don’t know” and “not applicable” responses out. “Not applicable” and “don’t know” responses are considered to be missing cases. The percent of cases which were missing is shown in the final column and gives an indication of which items were more difficult for people to relate to for some reason.

Table 23. Components of Medical Home	Percent of Valid Cases			Missing Cases as % of Total
	Agree Very Much	Agree Some-what	Agree Not at all	
1. Child's health care provider is **well prepared** to deal with the types of health care problems that (he/she) has.	86%	12%	1%	7%
2. Child's health care provider is **well trained** in the types of health care needs that (he/she) has.	90%	8%	2%	7%
3. Child's health care provider is **willing** to treat all of (his/her) health care needs.	90%	9%	2%	7%
4. Child's health care provider **knows** (him/her) **well.**	64%	28%	9%	7%
5. Child's health care provider **knows** (his/her) **family.**	60%	28%	12%	7%
6. Child's health care provider **cares about** how medical issues **affect** (his/her) **family.**	77%	17%	6%	14%
7. Child's health care provider **understands** how medical issues **affect** (his/her) **family.**	78%	19%	4%	13%
8. Child's health care provider **communicates** with **other systems** that provide services to (him/her).	78%	19%	3%	20%
9. Child's health care provider **cares** about (him/her) **as a person.**	86%	12%	2%	8%
10. I **trust** child's health care provider to make the **best decisions** for (his/her) medical care.	84%	14%	2%	5%
11. Child's health care provider **encourages me to be responsible** for (his/her) health care.	89%	8%	3%	7%
12. Child's health care provider **answers** all of my **questions** in ways that I can understand.	87%	12%	1%	6%
13. I am an **active participant** in decisions that affect child's health.	96%	3%	1%	4%
14. Child's health care provider **respects** my **role in decisions** that affect (his/her) health.	92%	7%	1%	7%
15. I **usually see the same** health care provider for all child's health care needs.	82%	13%	4%	6%
16. When child is sick, I can get a doctors **appointment within a day or two**.	84%	12%	4%	5%
17. When I want a checkup for child, I can get a doctors **appointment within a few weeks**.	86%	11%	3%	6%
18. I am **satisfied** with child's current health care.	86%	11%	3%	15%

Barriers to Care and Unmet Need

During the past year, 20 percent of children experienced delays in needed services and 12 percent of children went without either a prescription medicine (4 percent; physical, occupational or speech therapy (3 percent); mental health counseling (3 percent) or dental care (10 percent) because they could not afford them. Most delays in receiving needed services were due to being unable to obtain an appointment soon enough (11 percent) or to long office waits (10 percent). Other reasons cited for delays in needed care included the following: office not open when you could get there (6 percent), no transportation (3 percent) language barrier (2 percent) and could not get through on the telephone (2 percent).

Respondents were asked whether they had experienced a number of potential problems when they tried to get needed health care during the past year. Caregivers of 18 percent of the children said that they either did not have insurance, had their insurance rejected or not cover the cost, or could not afford the cost of some service they tried to get during the past year. Table 24 shows the percent who responded "yes" to each item.

Table 24. Problems Experienced During Past Year When Tried to Get Needed Health Care

My insurance was not accepted	4%
I did not have insurance	11%
I could not afford the cost	8%
My insurance did not cover the cost	6%
No doctor was available	1%
The office wait was too long	7%
Family care was hard to arrange	3%
I had transportation problems	4%
It was hard to get an appointment	7%
Hours were not convenient	6%
There were language barriers	2%
Family objected to treatment	1%

Hospitalizations for Ambulatory Care Sensitive Conditions

Ambulatory care sensitive conditions[2] are those conditions which, if treated early in a primary care setting, would not likely require hospitalizations. Conditions included in this measure are diagnosis codes indicating any of the following: immunization preventable conditions, convulsions, severe ENT infections (suppurative and unspecified otitis media, pharyngitis, tonsilitis, URI), tuberculosis, COPD, bacterial pneumonia, asthma, diabetes, hypoglycemia, gastroenteritis, kidney/urinary infection, dehydration, iron deficiency anemia, nutritional deficiencies, pelvic inflammatory disease, and dental conditions. Analysis is limited only to those conditions in which the child is alive upon hospital discharge.

3 Hospitalizations for Ambulatory Care Sensitive Conditions Age 1-14

In 1998 there were 5,404 inpatient hospital admissions among children age 1-14 in which the patient was alive upon discharge from the hospital. Five conditions accounted for over 85 percent of these admissions: asthma, bacterial pneumonia, dehydration, kidney/urinary tract infections and gastroenteritis. Table 25 below shows these and other conditions in descending order by frequency of hospital admissions, as well as the percent and cumulative percent that each condition represents of all ambulatory care sensitive conditions.

Table 25. Ambulatory Care Sensitive Conditions Age 1-14 Hospitalizations for Specific Conditions

Condition	Frequency	Percent	Cumulative Percent
Asthma	1,778	32.9%	32.9%
Bacterial pneumonia	1,534	28.4%	61.3%
Dehydration	691	12.8%	74.1%
Kidney/urinary	315	5.8%	79.9%
Gastroenteritis	313	5.8%	85.7%

[2]Source: Arizona Department of Health Services Hospital Discharge Data Base. Only principle diagnosis codes were used to identify ambulatory care sensitive conditions (unless further codes are specified): failure to thrive (783.4 under 1 year of age) congenital syphilis (090 with a principal diagnosis code indicating birth [V30-V39] and age under one year, or 090 with date of admission equal to date of birth), immunization preventable conditions including pertussis (033), rheumatic fever without mention of heart involvement (390), rheumatic fever with heart involvement (391), tetanus (037), polio (045), hemophilus meningitis (320.0); grand mal status and other epileptic convulsions (345); convulsions "A" and "B" (780.3); severe ENT infections including suppurative and unspecified otitis media (382, excluding cases with myringotomy with insertion of tube, procedure 20.01), pharyngitis (462), tonsilitis (463), URI (465), chronic pharyngitis (472.1); pulmonary and other respiratory tuberculosis (011, 012); COPD, including chronic bronchitis (491), emphysema (492), bronchiectasis (494), chronic airway obstruction not elsewhere classified (496) and acute bronchitis (466.0, only if a secondary diagnosis was present for 491, 492, 494, or 496); bacterial pneumonia (481, 482.2, 482.3, 482.9, 483, 485, 486 for ages over 60 days, in the absence of a secondary diagnosis of sickle cell [282.6]); asthma (493), diabetes A (250.1, 250.2, 250.3); diabetes B (250.8, 250.9); diabetes C (250.0); unspecified hypoglycemia (251.2), gastroenteritis (558.9), kidney/urinary infection (590, 599.0, 599.9); dehydration-volume depletion (276.5); iron deficiency anemia for age five and under (280.1, 280.8 and 280.9); nutritional deficiencies (260, 261, 262, 268.0, 268.1); pelvic inflammatory disease (614 for females only, in the absence of procedure code for hysterectomy [68.3-68.8]), and dental conditions (521, 522, 523, 525 and 528).

Table 25. Ambulatory Care Sensitive Conditions Age 1-14 Hospitalizations for Specific Conditions			
Diabetes	256	4.7%	90.4%
Severe ENT	230	4.3%	94.7%
Grand mal seizures	156	2.9%	97.6%
Dental	72	1.3%	98.9%
Immunization-preventable diseases	19	0.4%	99.3%
Iron deficiency anemia	11	0.2%	99.5%
COPD	10	0.2%	99.6%
Pelvic Inflammatory Disease	7	0.1%	99.8%
Hypoglycemia	6	0.1%	99.9%
Pulmonary tuberculosis	4	0.1%	100.0%
Nutrition	2	0.0%	100.0%

The 5,404 inpatient hospital admissions for ambulatory care sensitive conditions among children age 1-14 in 1998 represent a rate of 549.0 hospital admissions per 100,000. The hospitalization rate in 1998 was the lowest rate from 1991 through 1998. Throughout this period males had higher rates of admission than females, although these differences have been reduced in recent years. In 1998, the rate of admissions for males was 10 percent higher than the rate for females (see Figure 47).

Table 26 is a profile of hospital utilization from 1991-1998 for ambulatory care sensitive conditions for children age 1-14.

Figure 47. Hospital Admissions for Ambulatory Care Sensitive Conditions per 100,000 Children Age 1-14

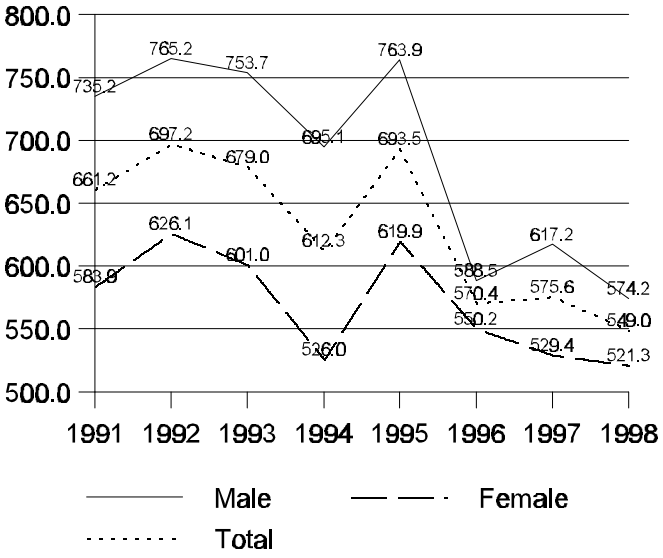


Table 26. Hospitalizations for Ambulatory Care Sensitive Conditions Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	3,016	3,219	3,291	3,126	3,461	2,929	3,131	2,960
Female	2,290	2,518	2,514	2,268	2,687	2,449	2,422	2,444
Total	5,306	5,737	5,805	5,394	6,148	5,378	5,553	5,404
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	735.2	765.2	753.7	695.1	763.9	588.5	617.2	574.2
Female	583.9	626.1	601.0	526.0	619.9	550.2	529.4	521.3
Total	661.2	697.2	679.0	612.3	693.5	570.4	575.6	549.0
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	8,541	9,830	9,075	8,554	9,071	7,928	8,242	7,719
Female	6,540	7,341	7,425	6,481	7,345	6,657	6,306	6,513
Total	15,081	17,171	16,500	15,035	16,416	14,585	14,548	14,232
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2,081.9	2,336.8	2,078.3	1,902.0	2,002.2	1,592.9	1,624.7	1,497.5
Female	1,667.4	1,825.4	1,774.9	1,503.0	1,694.4	1,495.5	1,378.4	1,389.2
Total	1,879.3	2,086.8	1,929.9	1,706.7	1,851.7	1,546.9	1,507.9	1,445.9
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2.8	3.1	2.8	2.7	2.6	2.7	2.6	2.6
Female	2.9	2.9	3.0	2.9	2.7	2.7	2.6	2.7
Total	2.8	3.0	2.8	2.8	2.7	2.7	2.6	2.6
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations for Ambulatory Care Sensitive Conditions Age 15-19

There were 927 admissions of adolescents age 15-19 in 1998 in which the patient was alive upon discharge from the hospital. Five conditions account for nearly 80 percent of these admissions: diabetes, asthma, bacterial pneumonia, kidney/urinary tract infections and pelvic inflammatory disease. Table 27 below shows these

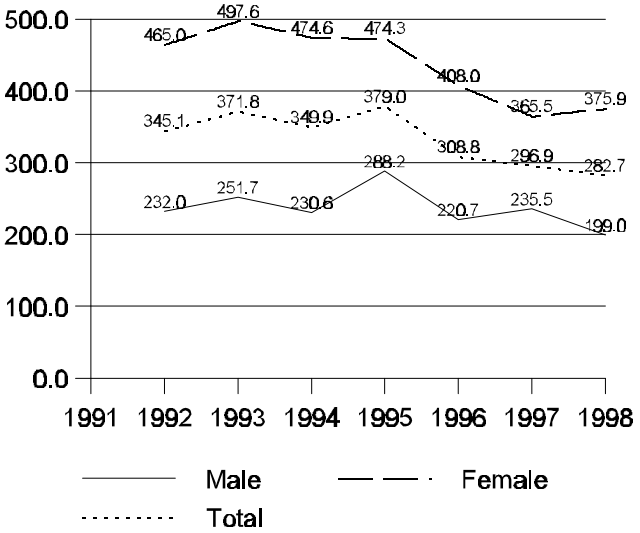
and other conditions in descending order by frequency of hospital admissions, as well as the percent and cumulative percent that each condition represents of all ambulatory care sensitive conditions.

Table 27. Ambulatory Care Sensitive Conditions Age 15-19 Hospitalizations for Specific Conditions

Condition	Frequency	Percent	Cumulative Percent
Diabetes	195	21.0%	21.0%
Asthma	179	19.3%	40.3%
Bacterial pneumonia	149	16.1%	56.4%
Kidney/urinary	147	15.9%	72.3%
Pelvic inflammatory disease	66	7.1%	79.4%
Dehydration	56	6.0%	85.4%
Gastroenteritis	48	5.2%	90.6%
Severe ENT	44	4.7%	95.4%
Grand mal seizure	21	2.3%	97.6%
Dental	7	0.8%	98.4%
Iron deficiency anemia	4	0.4%	98.8%
COPD	4	0.4%	99.2%
Pulmonary tuberculosis	4	0.4%	99.7%
Nutritional deficiencies	3	0.3%	100.0%

The 927 admissions for ambulatory care sensitive conditions among adolescents age 15-19 in 1998 represent a rate of 282.7 hospital admissions per 100,000. The adolescent admission rate appears to be declining since its high point of 379.0 in 1995. Adolescent females have had consistently higher admission rates than males throughout the time period reviewed. In fact, the rate of admissions for adolescent females in 1998 was nearly twice as high as the rate for males. (See Figure 48.)

Figure 48. Hospitalizations for Ambulatory Care Sensitive Conditions per 100,000 Adolescents Age 15-19



The average length of a hospital stay for adolescents in 1998 was 3.0 days, which is very

typical for the years 1991 through 1998. Table 28 is a profile of hospital utilization from 1991-1998 for ambulatory care sensitive conditions for adolescents age 15-19.

Table 28. Hospitalizations for Ambulatory Care Sensitive Conditions Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	359	328	329	309	411	360	393	344
Female	598	620	621	608	644	591	546	583
Total	957	948	950	917	1,055	951	939	927
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		232.0	251.7	230.6	288.2	220.7	235.5	199.0
Female		465.0	497.6	474.6	474.3	408.0	365.5	375.9
Total		345.1	371.8	349.9	379.0	308.8	296.9	282.7
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,294	1,010	1,051	945	1,274	1,196	1,173	1,026
Female	1,891	1,939	1,854	1,822	1,878	1,682	1,546	1,747
Total	3,185	2,949	2,905	2,767	3,152	2,878	2,719	2,773
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		714.5	804.0	705.2	893.4	733.3	702.9	593.6
Female		1,454.2	1,485.7	1,422.2	1,383.0	1,161.1	1,034.9	1,126.5
Total		1,073.5	1,136.9	1,055.7	1,132.2	934.5	859.7	845.6
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	3.6	3.1	3.2	3.1	3.1	3.3	3.0	3.0
Female	3.2	3.1	3.0	3.0	2.9	2.8	2.8	3.0
Total	3.3	3.1	3.1	3.0	3.0	3.0	2.9	3.0
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

Oral Health

Oral health is inseparable from overall health status. Healthy teeth and gums are a necessary part of health and well-being. In individual's ability to function efficiently, work and learn can be affected by poor oral health. However, oral health issues have often been considered as less significant than other health issues. This

lack of attention has substantial costs for affected individuals and society.

According to National Health Interview Surveys, parents report more unmet dental need than any other health need for their children. Healthy People 2000 showed that more than half of 6 - 8 year olds have experienced tooth decay. Healthy People 2010 shows strong disparities in both childhood dental disease and access to dental care.

Although an estimated $60 billion will be spent on dental services in 2000, many children and adults still experience preventable oral diseases and conditions. Dental caries remain one of the most common infectious diseases among U.S. children. According to the 1994 National Health and Nutrition Examination Survey (NHANES), almost 20 percent of preschool children have tooth decay. By the age of 8, approximately 52 percent of children have experienced caries; by the age of 17, dental decay affects 78 percent of children. Almost 50 percent of low-income children experience tooth decay.

An effective preventive strategy, commonly used for protecting permanent molars, is application of dental sealants. The third NHANES 1988-1994 found that children with sealants had significantly less untreated dental decay than children without sealants. Data collected by the National Institute for Dental and Cranofacial Research and NCHS indicate that the percent of children who receive protective sealants by the age of 8 has doubled from 11 percent in 1986-87 to 23 percent in 1994. The application of dental sealants is striking among adolescents who show a three-fold increase from 8 percent to 24 percent. Despite the effectiveness of dental sealants, less than 30 percent of U.S. children have received them. Currently, half the states have school-based programs to extend this important preventive service to young people at highest risk for dental decay.

Although no specific oral health information exists on children with special healthcare needs, children eligible for DDD Services are encouraged to obtain two dental check-ups a year. This is higher than the EPSDT guideline.

Recent survey data indicates that 75 percent of the children in Arizona under age 21 had received some kind of dental care within the past year. For 13 percent, it had been from 1-3 years, for eight percent it had been eight years, and 4 percent said that they had never received dental care. For 74 percent of the children, the purpose of the last dental visit was routine check-up and cleaning. For ten percent, the main purpose was a filling or crown. (Children 2000)

Sixty-five percent of children had their teeth cleaned by a dentist or dental hygienist within the past year. For ten percent of the children it had been longer than a year, and twenty-six percent of the children had never had their teeth cleaned by a dentist or dental hygienist.

When they need dental care, 81 percent of children go to a private dental office and another 13 percent go to public health clinics. Most caregivers felt that their dentists were either very willing (86 percent) or somewhat willing (12 percent) to deal with the special needs of their children, and most were either very satisfied (78 percent) or somewhat satisfied (16 percent) with their children's dental care.

Ten percent of children had gone without needed dental care within the past twelve months. A list of

potential barriers to dental care were read to survey respondents and they were asked to indicate whether they had experienced them when they tried to get needed dental care during the past year. Table 29 shows those barriers most commonly experienced and the percent of the children experiencing each barrier during the past year.

Table 29. Barriers to Dental Care	
Barrier Experienced	**Percent**
Insurance not accepted	2.9
Didn't have insurance	12.6
Could not afford cost	7.5
Insurance did not cover cost	4.4
No dentist available	2.5
Office wait too long	2.9
Hard to get appointment	5.6
Hours not convenient	4.3

Fewer than 2 percent indicated that they had the following problems: language barriers, family objected to treatment, don't like/trust/believe in dentists, fear, apprehension, nervousness, family care hard to arrange, or transportation.

Children covered by AHCCCS have dental insurance as part of their benefits package and AHCCCS has an annual performance measuring the percent of children age three through twenty who are enrolled throughout the year who have received dental services. For the year ending September 30, 1998, 39.8 percent of children received at least one dental visit for some kind of service representing an improvement rate of 20.3 percent over the previous year. Additionally, most of the members' visits (approximately 99 percent) had a preventive component. 1998 was the first year that AHCCCS showed a significant improvement in the rate of children receiving dental visits and the improvement was evident in all counties.

Arizona children suffer from a high rate of decay. This preventable health problem begins early in childhood. For children ages 6 months to 2 years, 5 percent have experienced tooth decay. By the time children reach 11 to 13 years, over 65 percent have experienced tooth decay. As children age, the proportion with tooth decay experience increases. The proportion of children in Arizona ages 6-8 years with tooth decay is 60 percent which exceeds the national level of 52 percent. Untreated tooth decay is also high in Arizona children. Over 43 percent of Arizona children, ages 6-8, have untreated tooth decay compared to 31 percent of children in the same ages nationally. This is more than twice the recommended Healthy People 2000 goal of 20 percent.

Healthy People 2000 recommends that 50 percent of children have dental sealants. Despite the

documented effectiveness, less than 11 percent of Arizona children have dental sealants which is below the national average of 21 percent. Dental diseases remain the most common chronic and infectious diseases experienced by Arizona children. Additional efforts and expansion of current initiatives are needed to improve the oral health for children.

Vision and Hearing

Sensory impairments can have devastating effects on academic achievement, social, behavioral and communication development. Early identification and intervention can prevent some permanent disabilities and lessen the long term impact. The OWCH administers the statewide Sensory Program. The School Hearing Conservation Program (HCP), School Vision Program and Early Identification of Hearing Loss Program (Never Too Young or NTY) were combined in 1992 to form the Sensory Program. The common goals of the three programs are early identification of sensory impairments and appropriate referrals.

The HCP was established by state mandate in 1971. State funding is used to administer the Program and statistics are gathered based on the academic year which corresponds with the state fiscal year. The mission of HCP is to assure that all public and private school children receive appropriate hearing screening and referral. Management of the statewide effort involves several components: telephone consultation and informational presentations, audiometers and tympanometers for short term loan, monitor compliance with the Rules, program quality, and state or local trends; and train-the-trainer program certifying trainers and screeners.

While the number of students reported screened in 1999 was somewhat less than last year (457,689 in 1999 compared to 524,576 in 1998), this was most likely due to a change in the reporting format. Review of the 1999 data showed 5% more schools reporting in 1999 and ninety-two percent of students in kindergarten, first, second and sixth grades were screened statewide including private, public and charter schools.

The mission of the School Vision Program is to assure that all public and private school children receive appropriate vision screening and referral based on current standards of care. The program has existed for more than 20 years without a legislative mandate and has enjoyed significant levels of voluntary compliance. In 1999, distance acuity was screened for 86 percent of all students in kindergarten, first, fourth and sixth grades.

The NTY Program was established by state statute in 1988. Legislation was a result of grass roots efforts started before 1985 and was modeled after the Joint Committee on Infant Hearing's 1982 position statement which recommended establishing newborn hearing screening programs for those children identified as "High-Risk" for hearing loss. Since the legislation was passed, technology has improved significantly and universal screening of newborns prior to hospital discharge is the gold standard. The Program has directed its efforts towards meeting the standard. The Program is a collaborative partner with the EAR Foundation of Arizona on a grant from St. Luke's Charitable Health Trust. The grant provides technical assistance and funding for equipment to hospitals initiating universal newborn hearing screening programs. Presently, there are fifty-one hospitals in Arizona that have universal screening programs, accounting for 87 percent of all births. Of those hospitals, 32 voluntarily report data to OWCH.

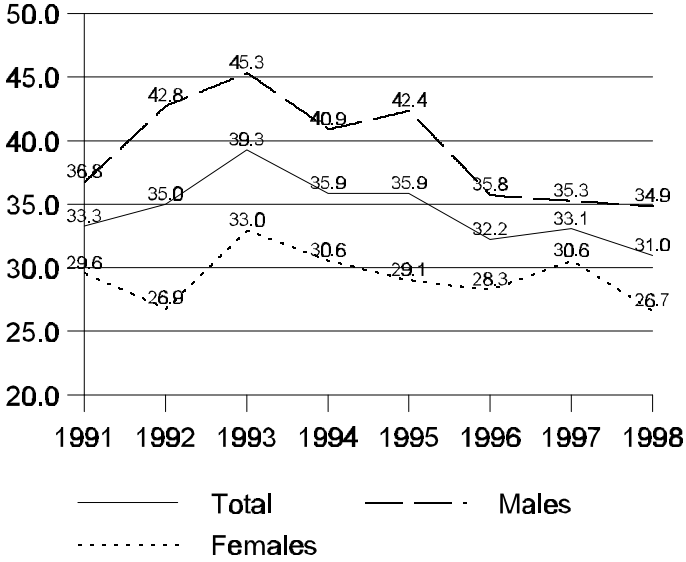
Mortality Rates and Major Causes of Death

3 Childhood Mortality Age 1-14

In 1998 there were 305 deaths among children age 1-14, representing a rate of 31.0 deaths per 100,000 children, the lowest rate observed throughout the 1990s. The five leading causes of death accounted for 67.5 percent of the deaths.

Unintentional injuries alone accounted for 41.0 percent of deaths (with 51.2 percent of these related to motor vehicles), followed by homicides (8.2 percent), malignant neoplasms (7.2 percent) infectious diseases (6.2 percent) and congenital anomalies (4.9 percent). Males have had higher mortality rates in each year from 1991 through 1998 (see Figure 49).

Figure 49. Childhood Mortality Rates per 100,000 Children Age 1-14



Mortality rates have been consistently higher for children living in rural counties compared to urban counties throughout 1990s. Urban mortality rates during this period have been relatively stable, while rural rates peaked in 1993 and have been generally declining since then. The rural rate appears to be lower than the urban rate in 1998; however, a high proportion of records with an unknown county in 1998 affected the calculations for urban and rural mortality rates, causing the anomaly that each appears to be lower than the statewide average rate, which would not be possible if all of the records were properly classified.

Figure 50. Urban vs. Rural Childhood Mortality per 100,000 Children Age 1-14

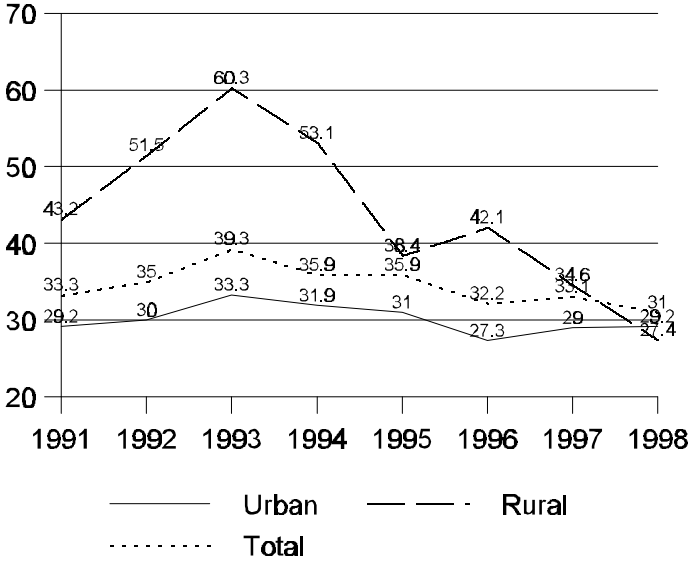


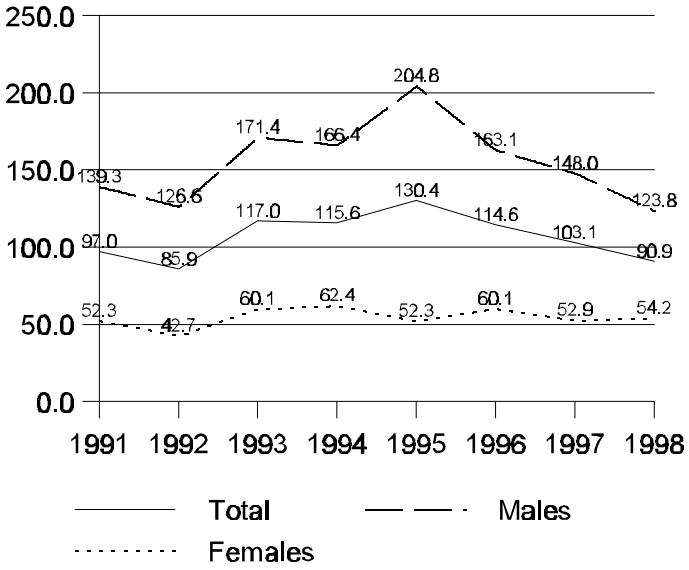
Table 30 shows the mortality rate for children in Arizona generally, for males and females, and for children in urban and rural locations from 1991 through 1998.

Table 30. Childhood Mortality Age 1-14								
Number of Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	267	288	336	316	318	304	319	305
Males	151	180	198	184	192	178	179	180
Females	116	108	138	132	126	126	140	125
Urban	180	190	221	228	222	210	229	235
Rural	78	98	115	88	65	73	61	49
Rates per 100,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	33.3	35.0	39.3	35.9	35.9	32.2	33.1	31.0
Males	36.8	42.8	45.3	40.9	42.4	35.8	35.3	34.9
Females	29.6	26.9	33.0	30.6	29.1	28.3	30.6	26.7
Urban	29.2	30.0	33.3	31.9	31.0	27.3	29.0	29.2
Rural	43.2	51.5	60.3	53.1	38.4	42.1	34.6	27.4
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	802,470	822,824	854,976	880,953	886,544	942,839	964,798	984,314
Males	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Females	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Urban	616,945	632,593	664,207	715,281	717,190	769,356	788,429	805,158
Rural	185,525	190,231	190,769	165,672	169,354	173,483	176,549	179,156

3 Adolescent Mortality Age 15-19

Among adolescents in 1998 there were 298 deaths, representing a rate of 90.9 deaths per 100,000 adolescents. The five leading causes of death accounted for a full 85.9 percent of the deaths. Unintentional injuries accounted for 44.0 percent of the deaths (with 80 percent of these related to motor vehicles), followed by homicide (18.5 percent), suicide (16.8 percent), malignant neoplasms (4.0 percent) and ill-defined conditions (2.7 percent). Mortality rates for male adolescents are consistently higher than for females, with male mortality rates more

Figure 51. Adolescent Mortality per 100,000 Age 15-19



than two times higher than female rates in 1998 (see Figure 51). Adolescent mortality rates in rural counties have remained higher than in urban counties throughout the 1990s (see Figure 52).

Table 31 shows the mortality rate for children in Arizona generally, for males and females, and for children in urban and rural locations from 1991 through 1998.

Figure 52. Urban vs. Rural Adolescent Mortality Rates per 100,000 Age 15-19

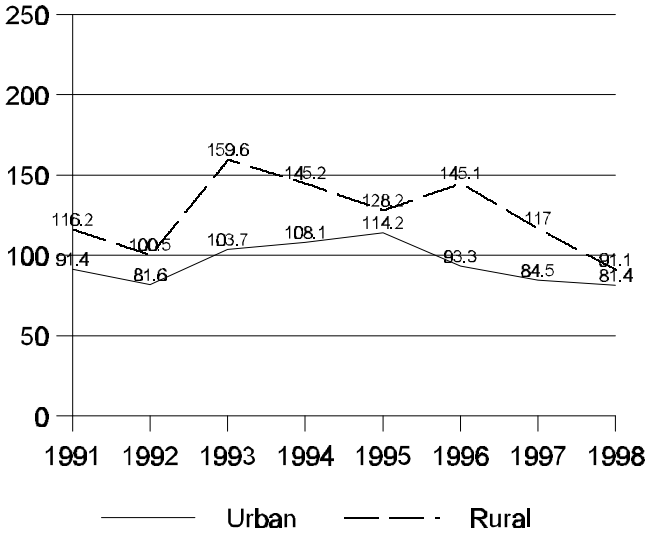


Table 31. Adolescent Mortality Age 15-19								
Number of deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	260	236	299	303	363	353	326	298
Males	192	179	224	223	292	266	247	214
Females	68	57	75	80	71	87	79	84
Urban	189	173	202	226	253	232	216	216
Rural	71	63	97	77	73	86	71	57
Rates per 100,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	97.0	85.9	117.0	115.6	130.4	114.6	103.1	90.9
Males	139.3	126.6	171.4	166.4	204.8	163.1	148.0	123.8
Females	52.3	42.7	60.1	62.4	52.3	60.1	52.9	54.2
Urban	91.4	81.6	103.7	108.1	114.2	93.3	84.5	81.4
Rural	116.2	100.5	159.6	145.2	128.2	145.1	117.0	91.1
Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927
Males	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Females	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Urban	NA	212,045	194,717	209,072	221,461	248,700	255,558	265,382

Rural	NA	62,659	60,793	53,038	56,931	59,266	60,702	62,545

Preventable Deaths of Children Under Age 18 [3]

Each year, the Arizona Child Fatality Review Team reviews deaths of children from birth through age 17 to determine whether an action by the community or an individual could have changed the circumstances that lead to death. These deaths are considered by them to be preventable. In 1998, of the 940 deaths reviewed[4] by the Child Fatality Review Team, 305 (32.5 percent) were classified as preventable. These 305 deaths represent a preventable death rate of 24.3 deaths per 100,000 children age 0-17. Table 32 below shows the number and rate of preventable deaths as well as the preventable death rate for children age 0-17 for 1996 through 1998.

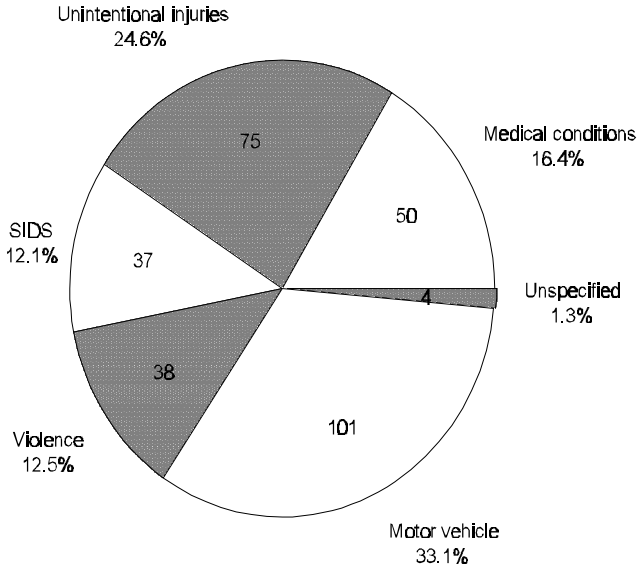
Table 32. Preventable Child Deaths Age 17 and Under

	1996	1997	1998
Number	270	303	305
Rate Per 100,000	22.5	24.6	24.3
Population	1,202,160	1,230,750	1,255,731

[3]Data Source: The 1998 rate was calculated using the number of preventable deaths provided in Arizona Child Fatality Review Team: Sixth Annual Report, November 1999, Arizona Department of Health Services/Community and Family Health Services.

[4]In 1998 approximately 96 percent of deaths were reviewed by the Arizona Child Fatality Review Team.

Figure 53. Causes of Preventable Child Deaths in 1998



In 1998 the largest number of preventable deaths were the result of motor vehicle crashes. Other causes of preventable deaths were unintentional injuries, medical conditions and prematurity, violence, and Sudden Infant Death Syndrome (SIDS). Figure 53 shows the number and percent of causes of preventable deaths in 1998.

Suicide

3 Suicide Mortality Age 10-14

There were 12 suicides in 1998 in the 1-14 age group, all of which fell within the age 10-14 age group, representing a rate of 3.5 suicides per 100,000. The suicide rate for the 10-14 age group has ranged from a low of 0.9 per 100,000 in 1985 to a high of 3.9 per 100,000 in 1993. Table 33 is a profile of suicide mortality information for children age 10-14.

Table 33. Suicide Mortality Age 10-14

Number of deaths	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	9	7	8	4	6	4	10
Female	1	4	1	7	1	3	2
Total	10	11	9	11	7	7	12
Rate per 100,000	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	6.5	4.9	5.4	2.4	3.5	2.2	5.5
Female	0.8	2.9	0.7	4.8	0.7	1.9	1.2
Total	3.7	3.9	3.1	3.5	2.2	2.1	3.5

Population	1992	1993	1994	1995	1996	1997	1998
Male	139,354	143,564	148,241	166,302	172,369	179,037	181,192
Female	133,126	136,885	141,102	147,003	152,717	157,267	161,894
Total	272,480	280,449	289,343	313,305	325,086	336,304	343,086

3 Suicide Mortality Age 15-19

In the 15-19 age group, suicide rates between 1983 and 1998 have ranged from a low of 12.0 suicides per 100,000 in 1984 to a high of 23.7 suicides per 100,000 in 1994 and 1997. The 1998 rate of 15.2 represents a 35.9 percent decrease from the 1997 rate (see Figure 54). The suicide rate for males is consistently far higher than the rate for females. In 1998, the suicide rate for males was 25.5 per 100,000, more than six times higher than the rate for females which was only 3.9 per 100,000.

Figure 54. Adolescent Suicide Mortality Rates per 100,000 Age 15-19

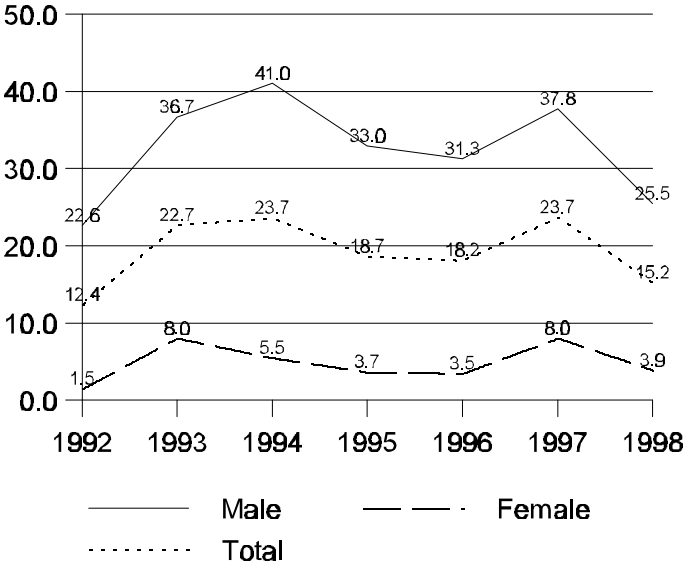
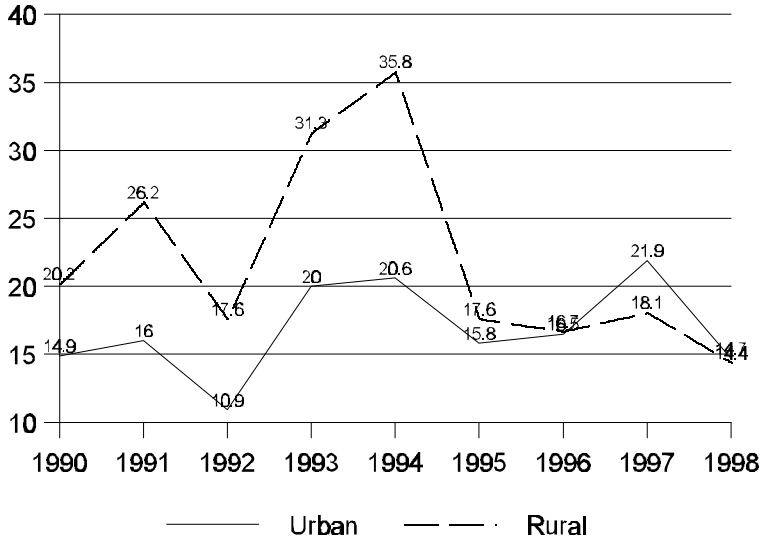


Figure 55. Suicides by Urban and Rural County Age 15-19



From 1990 through 1994, adolescent suicide rates were markedly higher in rural than in urban counties. Since 1995 rural and urban rates have been very similar. In 1998, a high proportion of missing data for county location yields anomalous urban and rural comparison rates which each appear to be lower than the overall state rate (see Figure 55).

Table 34 is a summary of suicide mortality statistics for adolescents age 15-19.

Table 34. Suicide Mortality Age 15-19							
Number of deaths	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	32	48	55	47	51	63	44
Female	2	10	7	5	5	12	6
Total	34	58	62	52	56	75	50
Rate per 100,000	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	22.6	36.7	41.0	33.0	31.3	37.8	25.5
Female	1.5	8.0	5.5	3.7	3.5	8.0	3.9
Total	12.4	22.7	23.7	18.7	18.2	23.7	15.2
Population	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 Suicide Attempts[5] Age 10-14

In 1998 there were 112 hospital stays which included a diagnosis code indicating a suicide attempt, one of which resulted in death before hospital discharge. This represents a rate of 32.6 hospital admissions per 100,000 children in 1998, which is almost 50 percent higher than the rate of 22.0 in 1997. Hospitalization rates for female suicide attempts from 1991 to 1998 are consistently higher than hospitalization rate for males. Table 35 is a profile of hospital utilization from 1991 through 1998 for suicide-related diagnoses for children age 10-14.

Table 35. Hospitalizations for Attempted Suicide Age 10-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	17	20	17	18	30	17	15	26
Female	83	74	73	92	59	77	59	86
Total	100	94	90	110	89	94	74	112
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	12.7	14.4	11.8	12.1	18.0	9.9	8.4	14.3

[5]In this section, any suicide attempt which resulted in an inpatient hospitalization is included in analysis. Suicide attempts are identified by ICD codes in the range E950-E959 which indicate suicide and self-inflicted injuries.

Table 35. Hospitalizations for Attempted Suicide Age 10-14								
Female	64.0	55.6	53.3	65.2	40.1	50.4	37.5	53.1
Total	37.7	34.5	32.1	38.0	28.4	28.9	22.0	32.6
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	27	39	24	38	94	24	33	95
Female	192	136	135	198	115	127	105	209
Total	219	175	159	236	209	151	138	304
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	20.2	28.0	16.7	25.6	56.5	13.9	18.4	52.4
Female	148.1	102.2	98.6	140.3	78.2	83.2	66.8	129.1
Total	82.6	64.2	56.7	81.6	66.7	46.4	41.0	88.6
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1.6	2.0	1.4	2.1	3.1	1.4	2.2	3.7
Female	2.3	1.8	1.8	2.2	1.9	1.6	1.8	2.4
Total	2.2	1.9	1.8	2.1	2.3	1.6	1.9	2.7
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	2	2	1	0	2	2	0	1
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	133,508	139,354	143,564	148,241	166,302	172,369	179,037	181,192
Female	129,637	133,126	136,885	141,102	147,003	152,717	157,267	161,894
Total	265,145	272,480	280,449	289,343	313,305	325,086	336,304	343,086

3 Suicide Attempts Age 15-19

In 1998 there were 373 hospital admissions for adolescents which included a diagnosis code for suicide, five of which resulted in death upon discharge. The 1998 admission rate was 113.7 admissions per 100,000

adolescents. This is the highest rate of admission since 1994. Admissions for suicide attempts have been higher for females than males each year and in 1998 females had a rate twice as high as males (see Figure 56).

Hospitalizations for attempted suicide by adolescents accounted for a total of 863 inpatient hospital days, representing a rate of 263.2 hospital days per 100,000 adolescents in 1998.

Table 36 is a profile of hospital utilization from 1991 through 1998 for the suicide-related diagnoses for children age 15-19.

Figure 56. Hospitalization Rates for Suicide Attempts per 100,000 Adolescents Age 15-19

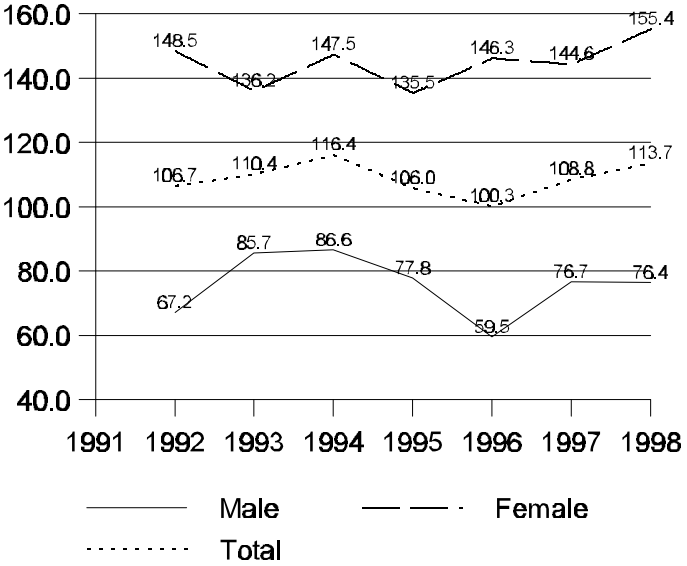


Table 36. Hospitalizations for Attempted Suicide Age 15-19

Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	110	95	112	116	111	97	128	132
Female	239	198	170	189	184	212	216	241
Total	349	293	282	305	295	309	344	373
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		67.2	85.7	86.6	77.8	59.5	76.7	76.4
Female		148.5	136.2	147.5	135.5	146.3	144.6	155.4
Total		106.7	110.4	116.4	106.0	100.3	108.8	113.7
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	238	345	345	267	325	270	362	356
Female	439	358	338	379	384	542	452	507
Total	677	703	683	646	709	812	814	863
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		244.1	263.9	199.3	227.9	165.5	216.9	206.0
Female		268.5	270.9	295.8	282.8	374.1	302.6	326.9
Total		255.9	267.3	246.5	254.7	263.7	257.4	263.2

Table 36. Hospitalizations for Attempted Suicide Age 15-19								
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2.2	3.6	3.1	2.3	2.9	2.8	2.8	2.7
Female	1.8	1.8	2.0	2.0	2.1	2.6	2.1	2.1
Total	1.9	2.4	2.4	2.1	2.4	2.6	2.4	2.3
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	9	5	7	6	4	8	9	5
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female		133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total		274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 Suicide Risk

In previous sections, suicide mortality and morbidity were presented. Those indicators focused on suicide attempts which were either successful, or sufficiently serious to result in an inpatient hospitalization. It is clear that not all who contemplate suicide will actually attempt it, and not all suicide attempts will require inpatient hospitalization. The risk of suicide is addressed in this section as the percent of children who report seriously considering suicide and who report attempting suicide.

The source of data for this indicator is the 1993 Arizona Youth Risk Behavior Survey conducted by the Health Education Department at the University of Utah under contract to the Arizona Department of Education.[6] The Youth Risk Behavior Survey was designed through the Centers for Disease Control and Prevention to measure the extent to which adolescents engage in certain risk behaviors. Thirty-eight schools were randomly selected and twenty of them (52.6%) agreed to participate. Students in randomly selected second-period classes were asked to complete the survey in December of 1993.

A total of 1,180 public school students participated in the survey. Response rates were generally insufficient to allow results to be statistically representative of all Arizona public high school students in grades 9 through 12, and too few 12th grade females in particular participated in the survey for meaningful results to be available for that group.

[6]Arizona State Board of Education, A Healthy Arizona Begins with Youth Today: Results of the 1993 Arizona Youth Risk Behavior and 1992 School Health Education Surveys, November 30, 1993.

According to the reports of students surveyed in 1993, 10.4 percent of adolescent students had attempted suicide in the past twelve months. Of these, 33.7 percent reported that the attempt resulted in injury, poisoning, or overdose that had to be treated by a doctor or nurse. Twenty-five percent seriously considered attempting suicide during past 12 months. Of these, 78 percent had made a plan about how they would attempt it and 41.2 percent actually made an attempt. Of those who had made an attempt, 58.3 percent had made more than one suicide attempt.

Figure 57. Percent of Students at Risk of Suicide Grades 9-12: 1993

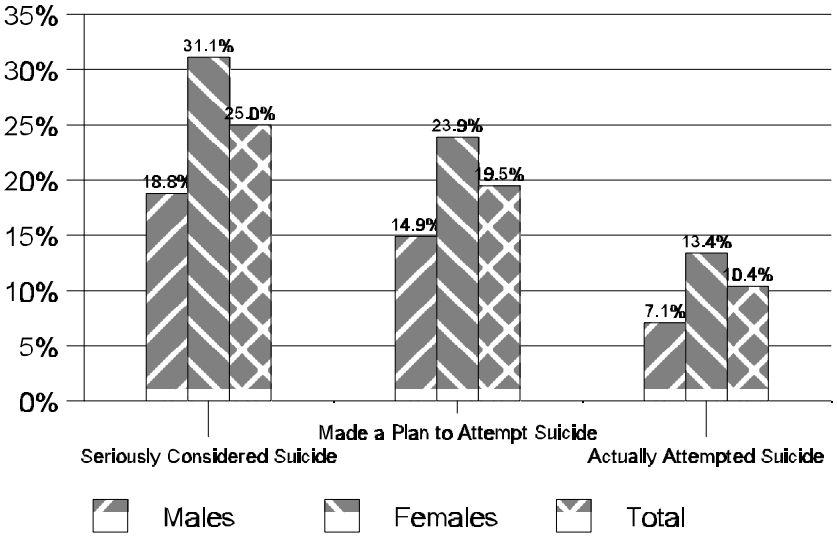


Figure 15 shows a breakdown of the percent of high school students who seriously considered attempting suicide, made a plan to attempt suicide and who actually attempted suicide in 1993 by gender. By each of these measures, females appear to be at greater risk, although there is no evaluation of the statistical significance of the observed differences between males and females. In other words, it is not known if these differences are more likely to be due to sampling error or due to real differences between males and females.

Motor Vehicles

According to a recent survey (Children 2000), 91 percent of children always use a safety seat or seatbelt when they ride in a car, and another five percent nearly always do. Approximately three percent either sometimes or seldom used safety seats or seatbelts and two percent never do.

3 **Motor Vehicle Mortality Rate[7] Age 1-14**

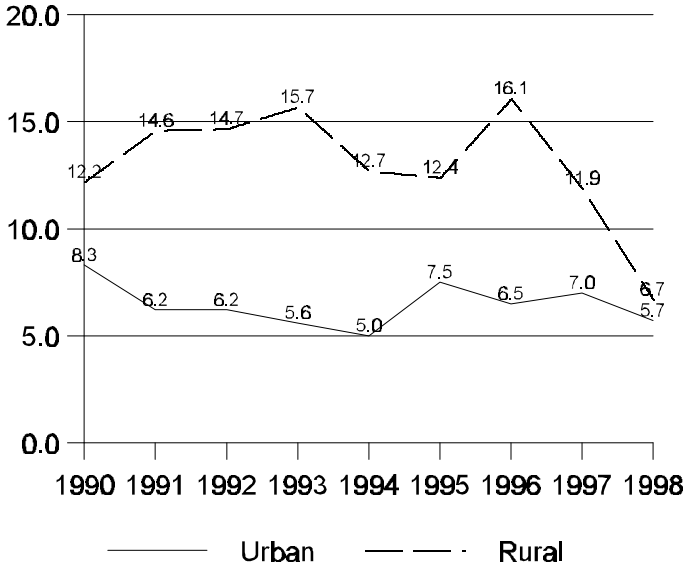
There were 64 motor vehicle-related deaths among children age 1-14 in 1998, representing a rate of 6.5 deaths per 100,000 children, the second consecutive annual decline in motor vehicle-related deaths in this age group.

[7]Motor vehicle-related deaths are identified by ICD codes E810-E825.

Table 37. Motor Vehicle Mortality Age 1-14								
	1991	1992	1993	1994	1995	1996	1997	1998
Number of deaths	65	67	67	57	81	82	81	64
Population	802,470	822,824	854,976	880,953	886,544	942,839	964,798	984,314
Rate per 100,000	8.1	8.1	7.8	6.5	9.1	8.7	8.4	6.5

Motor vehicle-related deaths have remained consistently higher in the rural areas than in urban areas. In 1998, the rural motor vehicle-related death rate was 6.7 per 100,000, while the urban motor vehicle-related death rate was 5.7 for this age group (see Figure 58).

Figure 58. Urban vs. Rural Motor Vehicle-Related Mortality per 100,000 Children Age 1-14



3 Motor Vehicle Mortality Rate Age 15-19

There were 106 motor vehicle-related deaths among adolescents in 1998, representing a rate of 32.3 per 100,000. Between 1991 and 1998, the motor vehicle-related death rate for adolescents age 15-19 has ranged from a low of 26.6 in 1992 to a high of 40.9 in 1995.

Table 38. Motor Vehicle Mortality Age 15-19								
	1991	1992	1993	1994	1995	1996	1997	1998
Number of deaths	83	73	98	94	114	114	86	106
Population		274,704	255,510	262,110	278,392	307,966	316,260	327,927
Rate per 100,000	31.0	26.6	38.4	35.9	40.9	37.0	27.2	32.3

The motor vehicle-related mortality rate has remained consistently higher for males than females in the 15-19 age group. In 1998, the mortality rate due to motor vehicles was nearly twice as high for males (41.1 per 100,000 males) as it was for females (22.6 per 100,000 females) (see Figure 59).

Adolescents death rates due to motor vehicle-related accidents are consistently higher in the rural areas than in urban areas. In 1998 the rural motor vehicle-related death rate was 44.8 per 100,000 compared to the urban motor vehicle-related death rate of 26.4.

Figure 59. Motor Vehicle-Related Mortality per 100,000 Adolescents Age 15-19

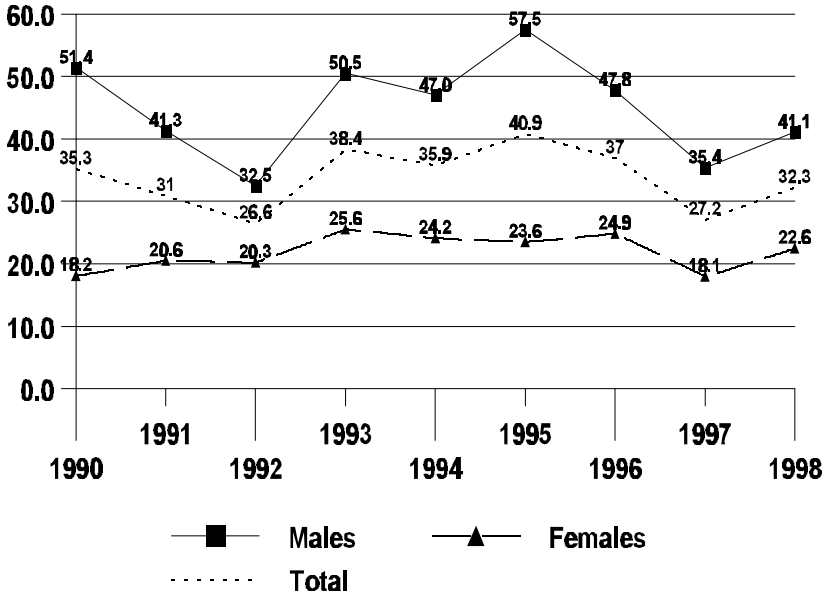
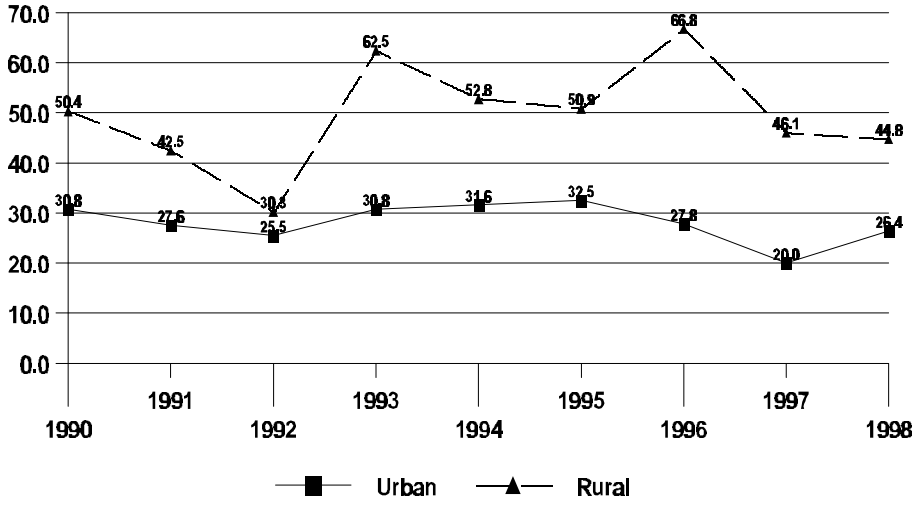


Figure 60. Urban vs. Rural Motor Vehicle-Related Mortality per 100,000 Adolescents Age 15-19



3 Motor Vehicle Injuries Reported to the Arizona Department of Transportation (ADOT) Age 0-14

In 1995, there were 7,253 injuries reported to ADOT for children age 0-14 out of a population of 955,225 children, representing a rate of 759.3 reported injuries per 100,000 children age 0-14. This was an increase from the 1994 rate of 732.6 per 100,000. Injury rates were slightly higher in this age group for males (762.1) than for females (755.3).

3 Motor Vehicle Injuries Reported to the Arizona Department of Transportation (ADOT) Age 15-19

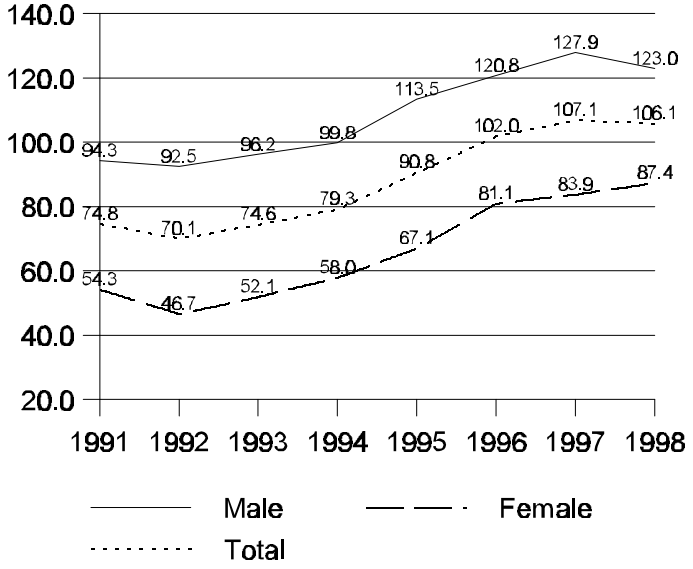
In 1995, there were 10,399 injuries reported for children age 15-19 out of a total of 278,392 adolescents, representing a rate of 3,735.4 injuries per 100,000 adolescents. This rate represented a four percent increase over the 1994 rate of 3,583.6 injuries per 100,000 adolescents. Females were injured at a five percent higher rate than males (3,828.8 per 100,000 females compared to 3,643.7 per 100,000 males).

3 Hospitalizations Related to Motor Vehicle Accidents[8] Age 1-14

There were 1,044 admissions among children age 1-14 in 1998, with a diagnosis code indicating a motor vehicle accident, representing a rate of 106.1 hospital admissions per 100,000 children. Over the three years for which statistics are presented, male admission rates for motor vehicle accidents have remained consistently higher than female rates (see Figure 61).

There were 4,119 inpatient hospital days due to motor vehicle accidents in 1998, representing a rate of 418.5 patient days per 100,000 children.

Figure 61. Hospitalizations Related to Motor Vehicle Accidents per 100,000 Children Age 1-14



[8]ICD codes used to identify motor vehicle accidents include: E810-825, motor vehicle traffic accidents and motor vehicle non-traffic accidents; E846-849, vehicle accidents not elsewhere specified; and E988.5, injury by crashing of motor vehicle, undetermined whether accidentally or purposely inflicted.

Table 39. Hospitalizations Related to Motor Vehicle Accidents: Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	387	389	420	449	514	601	649	634
Female	213	188	218	250	291	361	384	410
Total	600	577	638	699	805	962	1,033	1,044
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	94.3	92.5	96.2	99.8	113.5	120.8	127.9	123.0
Female	54.3	46.7	52.1	58.0	67.1	81.1	83.9	87.5
Total	74.8	70.1	74.6	79.3	90.8	102.0	107.1	106.1
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,767	2,284	1,860	1,894	1,975	2,386	2,669	2,603
Female	975	1,077	1,019	1,070	1,199	1,387	1,358	1,516
Total	2,742	3,361	2,879	2,964	3,174	3,773	4,027	4,119
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	430.7	543.0	426.0	421.1	435.9	479.4	526.1	505.0
Female	248.6	267.8	243.6	248.1	276.6	311.6	296.8	323.4
Total	341.7	408.5	336.7	336.5	358.0	400.2	417.4	418.5
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.6	5.9	4.4	4.2	3.8	4.0	4.1	4.1
Female	4.6	5.7	4.7	4.3	4.1	3.8	3.5	3.7
Total	4.6	5.8	4.5	4.2	3.9	3.9	3.9	3.9
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	13	10	6	11	7	13	19	18
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations Related to Motor Vehicle Accidents Age 15-19

Among adolescents there were 1,107 hospital admissions with a diagnosis code indicating a motor vehicle accident, representing a rate of 337.6 admissions per 100,000 adolescents in 1998. The male adolescent hospitalization rate has been consistently higher for motor vehicle accidents; however, in 1998 the male rate dropped and the female rate rose to produce mortality rates which are much closer than ever before throughout the 1990s (see Figure 62).

Adolescents spent 4,250 days in the hospital in 1998 due to diagnoses related to motor vehicle accidents, representing a rate of 1,296.0 hospital days per 100,000 adolescents.

Figure 62. Hospitalizations Related to Motor Vehicle Accidents per 100,000 Adolescents Age 15-19

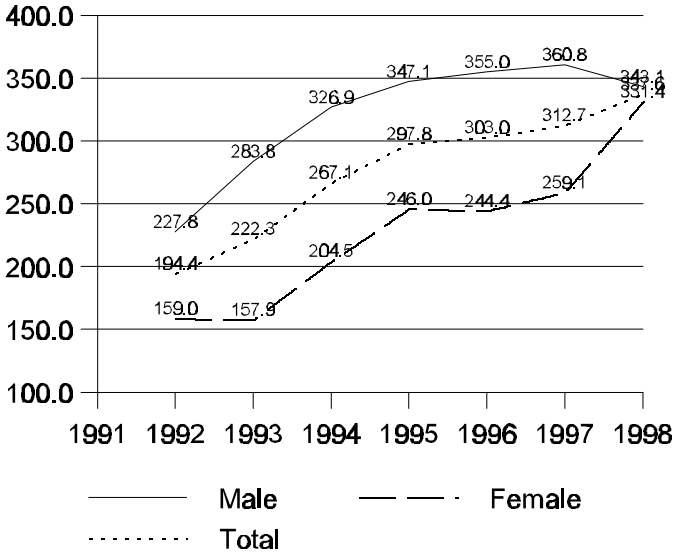


Table 40. Hospitalizations Related to Motor Vehicle Accidents: Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	437	322	371	438	495	579	602	593
Female	234	212	197	262	334	354	387	514
Total	671	534	568	700	829	933	989	1,107
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		227.8	283.8	326.9	347.1	355.0	360.8	343.1
Female		159.0	157.9	204.5	246.0	244.4	259.1	331.4
Total		194.4	222.3	267.1	297.8	303.0	312.7	337.6
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2,066	1,475	1,468	1,780	2,010	2,239	1,302	1,847
Female	1,144	1,008	899	1,027	1,186	1,519	2,421	2,403
Total	3,210	2,483	2,367	2,807	3,196	3,758	3,723	4,250

Table 40. Hospitalizations Related to Motor Vehicle Accidents: Age 15-19								
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		1,043.4	1,123.0	1,328.4	1,409.5	1,372.7	780.2	1,068.6
Female		756.0	720.4	801.6	873.4	1,048.6	1,620.6	1,549.5
Total		903.9	926.4	1,070.9	1,148.0	1,220.3	1,177.2	1,296.0
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.7	4.6	4.0	4.1	4.1	3.9	2.2	3.1
Female	4.9	4.8	4.6	3.9	3.6	4.3	6.3	4.7
Total	4.8	4.7	4.2	4.0	3.9	4.0	3.8	3.8
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	12.00	7.00	12.00	15.00	10.00	14.00	22.00	20.00
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female		133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total		274,704	255,510	262,110	278,392	307,966	316,260	327,927

Murder/Homicide

In the United States, an estimated 38,000 juveniles were murdered during the period of 1980 to 1997. Murders have declined to a 26-year low but still remain one of the leading causes of death for juveniles. Approximately 2,100 juveniles, primarily males (70 percent), were murdered in 1997; 33 percent under the age of 6 and 50 percent between the ages of 15 and 17. The majority (56 percent) of juvenile murder victims were killed by firearms (Juvenile Offenders and Victims: 1999 National Report).

3 Murder/Homicide Mortality Age 1-14

In Arizona there were 25 deaths due to homicides in the 1-14 age group in 1998, representing a rate of 2.5 deaths per 100,000 children. Table 41 below shows the murder/homicide mortality rate for children in Arizona generally, for males and females, and for children in urban and rural locations from 1991 through 1998.

Table 41. Murder/Homicide Mortality Children Age 1-14								
Number of Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	9	25	23	22	26	26	13	25
Males	NA	19	14	11	18	13	8	14
Females	NA	6	9	11	8	13	5	11
Urban[9]	NA	17	20	19	26	16	11	19
Rural	NA	8	3	3	0	7	0	4
Rates per 100,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	1.1	3.0	2.7	2.5	2.9	2.8	1.3	2.5
Males	0.5	4.5	3.2	2.4	4.0	2.6	1.6	2.7
Females	1.8	1.5	2.2	2.6	1.8	2.9	1.1	2.3
Urban	0.8	2.7	3.0	2.7	3.6	2.1	1.4	2.4
Rural	3.9	4.2	1.6	1.8	0.0	4.0	0.0	2.2
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	802,470	822,824	854,976	880,953	886,544	942,839	964,798	984,314
Males	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Females	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Urban	NA	632,593	664,207	715,281	717,190	769,356	788,429	805,158
Rural	NA	190,231	190,769	165,672	169,354	173,483	176,549	179,156

[9]Totals for urban and rural location were taken from specific county tables (Table 5E-25) for 1992, 1995 and 1996 because of inconsistencies found between these and summary data for urban and rural locations. In 1992, urban counties included Maricopa, Pima and Yuma Counties; in 1995 and 1996, urban counties included Maricopa, Pima, Yuma and Pinal Counties. In 1996, there were three cases with unknown counties.

3 Murder/Homicide Mortality Age 15-19

For adolescents, there were 55 homicides in 1998, representing a rate of 16.8 per 100,000 adolescents. Homicide rates for males have been consistently higher than the rates for females, with the difference becoming more pronounced each year from 1991 through 1995, accounted for by a steady and dramatic increase in adolescent males being victims of homicides. However, in more recent years, this trend appears to be reversing (see Figure 63).

Figure 63. Murder/Homicide per 100,000 Adolescents Age 15-19

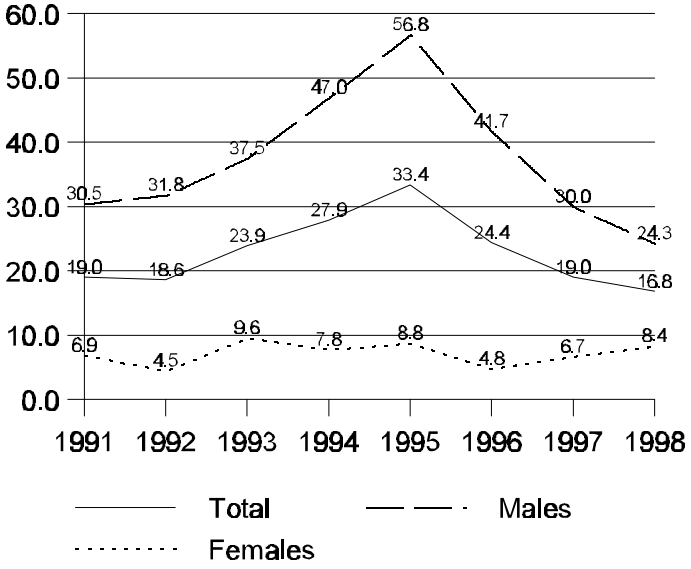
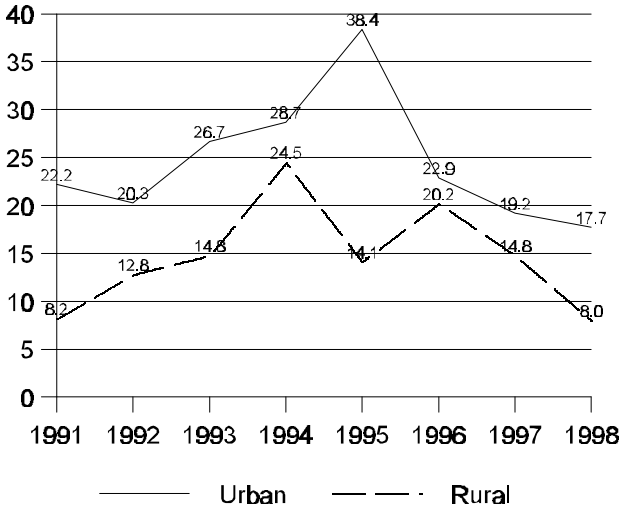


Figure 64. Urban/Rural Murder/Homicide Mortality per 100,000 Adolescents Age 15-19



Urban adolescents have been at higher risk of becoming homicide victims than rural adolescents during the 1990s (see Figure 64).

Table 42 shows the murder/homicide mortality rate for adolescents in Arizona generally, for males and females, and for children in urban and rural locations from 1991 through 1998.

Table 42. Murder/Homicide Age 15-19								
Number of deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	51	51	61	73	93	75	60	55
Males	NA	45	49	63	81	68	50	42
Females	NA	6	12	10	12	7	10	13
Urban[10]	NA	43	52	60	85	57	49	47
Rural	NA	8	9	13	8	12	9	5
Rates per 100,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	19.0	18.6	23.9	27.9	33.4	24.4	19.0	16.8
Males	30.5	31.8	37.5	47.0	56.8	41.7	30.0	24.3
Females	6.9	4.5	9.6	7.8	8.8	4.8	6.7	8.4
Urban	22.2	20.3	26.7	28.7	38.4	22.9	19.2	17.7
Rural	8.2	12.8	14.8	24.5	14.1	20.2	14.8	8.0
Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927
Males	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Females	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Urban	NA	212,045	194,717	209,072	221,461	248,700	255,558	265,382
Rural	NA	62,659	60,793	53,038	56,931	59,266	60,702	62,545

Child Abuse and Neglect

3 Mortality due to Child Abuse and Neglect[11, 12] Age 0-14

In 1997 twenty children age 0-14 died as the result of abuse, neglect, and/or maltreatment, representing a rate of **1.9 deaths per 100,000** children. Table 43 below shows the number of deaths attributed to child abuse and

[10]Totals for urban and rural location were taken from specific county tables (Table 5E-27) for 1995 and 1996 because of inconsistencies found between these and summary data for urban and rural locations. In 1996, there were six cases with unknown counties.

[11]Neglect, abuse and maltreatment are identified as causes of death by the ICD codes E904 (hunger, thirst, exposure, and neglect, excluding criminal purposeful neglect) , and E960-E969 (homicide and injury purposely inflicted by other persons).

[12]Source: Arizona Department of Health Services; Injury Mortality Among Children and Adolescents: Arizona 1987-1997, May 1999, page 29. *Rates calculated from number of cases reported in Table 18.*

neglect from 1991 through 1997, and the rates per 100,000 children age 0-14.

Table 43. Abuse and Neglect Mortality Age 0-14							
	1991	1992	1993	1994	1995	1996	1997
Number of deaths	16	38	28	30	34	27	20
Population	855,260	876,953	924,288	950,584	955,225	1,013,881	1,037,167
Rate per 100,000	1.9	4.3	3.0	3.2	3.6	2.7	1.9

3 Reported Cases of Child Abuse and Neglect [13]

In 1999 Child Protective Services received 46,082 communications, 32,631 of which met the statutory criteria of a report of maltreatment and were deemed appropriate for investigation. Of these 26,432 cases were actually investigated and 3,629 cases were substantiated as child abuse or neglect. This represents a child abuse rate of 0.3 substantiated cases of abuse and neglect per 100 children age 0-17.

Table 44 shows the number and rate per 100 children of reported cases, those which were deemed appropriate for investigation, actually investigated, and substantiated from 1990 through 1999. Beginning in November of 1994, CPS centralized its intake staff and began to use a standardized set of screening questions to determine if the information provided by a caller is sufficient to be counted as a report. This change in procedures limits the comparability of data before 1995 to more recent data.

[13]Source of data on reported cases is Arizona Department of Economic Security, Child Protective Services.

Table 44. Reported Cases of Child Abuse Age 0-17										
Total Cases	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Incoming Calls to CPS	37,928	39,548	45,390	48,283	45,031	31,809	57,018	51,782	49,672	46,082
Meets def	22,939	24,070	28,380	30,249	28,863	28,254	28,577	38,229	38,381	32,631
referred	NA	NA	NA	NA	NA	NA	67	168	176	153
Reports Valid for Investigation	22,939	24,070	28,380	30,249	28,863	28,254	28,510	38,061	38,205	32,478
Investigated by CPS	20,029	21,343	24,889	27,062	26,564	25,963	27,019	32,103	32,957	26,423
Assessed by Family Builders	NA	NA	NA	NA	NA	NA	NA	NA	2,004	6,055
% Investigated by CPS	88.7%	87.7%	89.5%	91.8%	92.2%	91.9%	94.8%	84.3%	86.3%	81.4%
% Assessed by Family Builders	NA	NA	NA	NA	NA	NA	NA	NA	5.2%	18.6%
% Total responses	88.7%	87.7%	89.5%	91.8%	92.2%	91.9%	94.8%	84.3%	91.5%	100.0%
Valid Finding of Maltreatment	NA	NA	NA	NA	NA	NA	9,280	14,394	8756.0%	3,629
Rates per 100	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Reported	3.8	3.8	4.3	4.4	4.0	2.7	4.7	4.2	4.0	3.6
Appropriate for investigation	2.3	2.3	2.7	2.8	2.6	2.4	2.4	3.1	3.0	2.5
Investigated	2.0	2.1	2.4	2.5	2.4	2.2	2.2	2.6	2.6	2.1
Substantiated		0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.0	0.3
Population	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Population 0-17	1,005,998	1,029,121	1,056,994	1,096,712	1,122,977	1,176,987	1,202,062	1,230,750	1,255,731	1,281,260

3 Hospitalizations for Abuse and Neglect for Children Age 1-14

In 1998 there were 43 admissions for children age 1-14, representing a rate of 4.4 admissions per 100,000 children. Four of these children died before being discharged from the hospital. The average length of stay for hospitalized children was 3.1 days. Children age 1-14 spent a total of 132 days in the hospital because of abuse and neglect in 1998, representing a rate of 13.4 days per 100,000 children. Table 45 profiles hospital utilization for abuse and neglect for children age 1-14 for 1991 through 1998.

Table 45. Hospitalizations for Abuse and Neglect Age 1-14

Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	23	20	20	20	19	27	23	27
Female	14	23	16	21	16	25	15	16
Total	37	43	36	41	35	52	38	43
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	5.6	4.8	4.6	4.4	4.2	5.4	4.5	5.2
Female	3.6	5.7	3.8	4.9	3.7	5.6	3.3	3.4
Total	4.6	5.2	4.2	4.7	3.9	5.5	3.9	4.4
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	174	90	129	101	62	140	96	86
Female	39	141	58	102	136	219	80	46
Total	213	231	187	203	198	359	176	132
Hospital Days per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	42.4	21.4	29.5	22.5	13.7	28.1	18.9	16.7
Female	9.9	35.1	13.9	23.7	31.4	49.2	17.5	9.8
Total	26.5	28.1	21.9	23.0	22.3	38.1	18.2	13.4
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	7.6	4.5	6.5	5.1	3.3	5.2	4.2	3.2
Female	2.8	6.1	3.6	4.9	8.5	8.8	5.3	2.9
Total	5.8	5.4	5.2	5.0	5.7	6.9	4.6	3.1
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	1	0	4	4	2	3	0	4

Table 45. Hospitalizations for Abuse and Neglect Age 1-14								
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations for Abuse and Neglect for Adolescents Age 15-19

In 1998 there were four admissions for abuse and neglect among adolescents age 15-19, representing a rate of 1.2 admissions per 100,000 adolescents. There were no deaths associated with these hospitalizations. The average length of stay was 3.8 days. Adolescents spent a total of 15 days in the hospital for abuse and neglect in 1998, representing a rate of 4.6 days per 100,000 adolescents. Table 46 profiles hospital utilization for abuse and neglect for adolescents age 15-19 for 1991 through 1998.

Table 46. Hospitalizations for Abuse and Neglect Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	0	1	0	0	0	1	2	0
Female	1	1	1	3	1	2	7	4
Total	1	2	1	3	1	3	9	4
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		0.7	0.0	0.0	0.0	0.6	1.2	0.0
Female		0.8	0.8	2.3	0.7	1.4	4.7	2.6
Total		0.7	0.4	1.1	0.4	1.0	2.8	1.2
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	0	1	0	0	0	14	7	0
Female	1	3	2	5	3	2	9	15
Total	1	4	2	5	3	16	16	15
Hospital Days per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		0.7	0.0	0.0	0.0	8.6	4.2	0.0
Female		2.3	1.6	3.9	2.2	1.4	6.0	9.7
Total		1.5	0.8	1.9	1.1	5.2	5.1	4.6

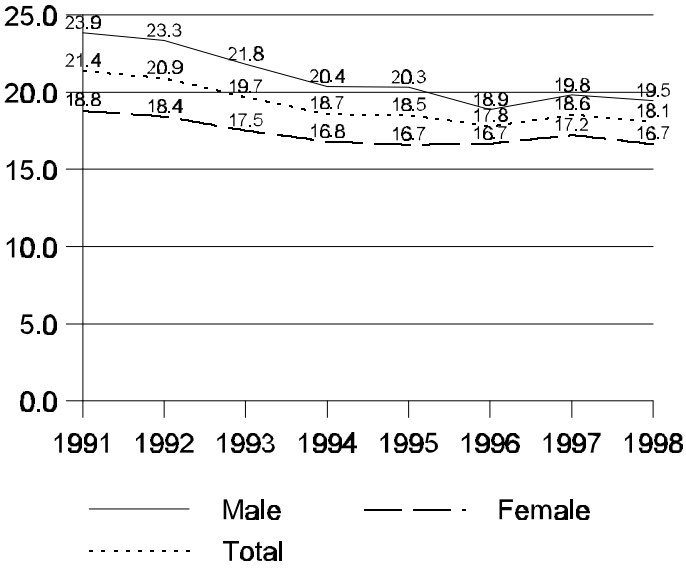
Table 46. Hospitalizations for Abuse and Neglect Age 15-19								
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	1.0	NA	NA	NA	14.0	3.5	NA
Female	1.0	3.0	2.0	1.7	3.0	1.0	1.3	3.8
Total	1.0	2.0	2.0	1.7	3.0	5.3	1.8	3.8
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	4	0	0	0	0	0	0	0
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

Hospitalizations for All Causes

3 Hospitalizations for All Causes for Children Age 1-14

In 1998 there were 17,855 hospital admissions among children age 1-14, representing a rate of 18.1 admissions per 1,000 children. Ninety-two children died before being discharged from the hospital. The average length of a hospital stay was 3.5 days. Male children were more likely to be admitted to the hospital than females during each year of the review period (see Figure 65).

Figure 65. Hospital Admissions for All Causes per 1,000 Children Age 1-14



Children age 1-14 spent a total of 62,297 days in the hospital during 1998, representing a rate of 63.3 days per 1,000 children. Males had a higher rate of hospital day utilization than females in each year of the review period. Table 47 profiles hospital utilization statistics for children age 1-14 for 1991 through 1998.

Table 47. Hospitalizations for All Causes Children Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	9,790	9,818	9,532	9,172	9,210	9,395	10,061	10,029
Female	7,393	7,417	7,333	7,258	7,219	7,433	7,887	7,826
Total	17,183	17,235	16,865	16,430	16,429	16,828	17,948	17,855
Admissions per 1,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	23.9	23.3	21.8	20.4	20.3	18.9	19.8	19.5
Female	18.8	18.4	17.5	16.8	16.7	16.7	17.2	16.7
Total	21.4	20.9	19.7	18.7	18.5	17.8	18.6	18.1
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	39,304	45,703	35,290	34,568	31,792	36,872	34,836	35,186
Female	29,094	30,107	27,121	26,728	24,400	26,234	26,832	27,111
Total	68,398	75,810	62,411	61,296	56,192	63,106	61,668	62,297
Hospital Days per 1,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	95.8	108.6	80.8	76.9	70.2	74.1	68.7	68.3
Female	74.2	74.9	64.8	62.0	56.3	58.9	58.7	57.8
Total	85.2	92.1	73.0	69.6	63.4	66.9	63.9	63.3
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.0	4.7	3.7	3.8	3.5	3.9	3.5	3.5
Female	3.9	4.1	3.7	3.7	3.4	3.5	3.4	3.5
Total	4.0	4.4	3.7	3.7	3.4	3.8	3.4	3.5
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	125	101	112	109	56	81	133	92
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations for All Causes for Adolescents Age 15-19

In 1998 there were 19,469 hospital admissions among adolescents age 15-19, representing a rate of 59.4 admissions per 1,000 adolescents. Sixty-two adolescents died before being discharged from the hospital. The

average length of stay for hospitalizations was 2.8 days. Adolescent females had a far higher rate of hospital admissions than males in each year of the review period (see Figure 66). In 1998 the female admission rate was approximately five times higher than the male admission rate.

Adolescents spent a total of 54,486 days in the hospital in 1998, representing a rate of 166.2 days per 1,000 adolescents. The rate for females was nearly three times higher than the rate for males in 1998, and was consistently higher than the male rate for all years reviewed.

Table 48 profiles hospital utilization statistics for adolescents age 15-19 for 1991 through 1998.

Figure 66. Hospitalizations for All Causes per 1,000 Adolescents Age 15-19

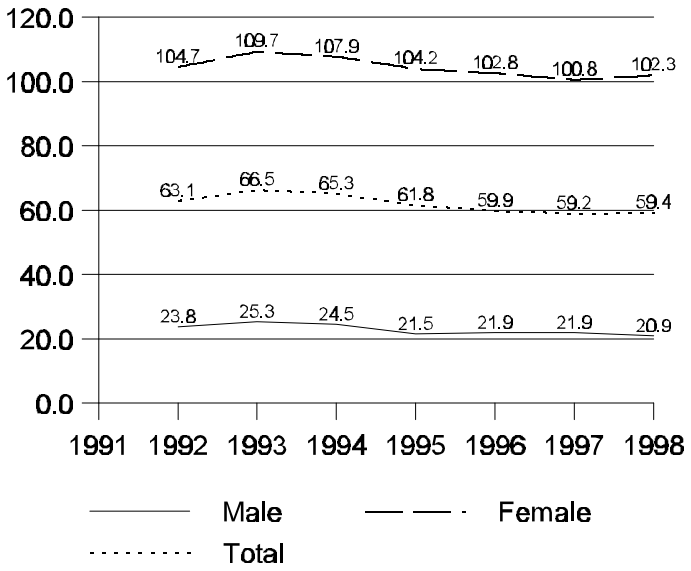


Table 48. Hospitalizations for All Causes Adolescents Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	3,553	3,359	3,309	3,285	3,064	3,565	3,650	3,610
Female	13,685	13,962	13,684	13,823	14,149	14,896	15,062	15,859
Total	17,238	17,321	16,993	17,108	17,213	18,461	18,712	19,469
Admissions per 1,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	23.8	25.3	24.5	21.5	21.9	21.9	20.9
Female	NA	104.7	109.7	107.9	104.2	102.8	100.8	102.3
Total	NA	63.1	66.5	65.3	61.8	59.9	59.2	59.4
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	16,108	15,461	15,653	15,100	12,045	15,516	14,445	15,093
Female	33,285	36,257	31,707	31,862	30,943	32,717	32,973	39,393
Total	49,393	51,718	47,360	46,962	42,988	48,233	47,418	54,486

Table 48. Hospitalizations for All Causes Adolescents Age 15-19								
Hospital Days per 1,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	109.4	119.7	112.7	84.5	95.1	86.6	87.3
Female	NA	271.9	254.1	248.7	227.9	225.8	220.7	254.0
Total	NA	188.3	185.4	179.2	154.4	156.6	149.9	166.2
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.5	4.6	4.7	4.6	3.9	4.4	4.0	4.2
Female	2.4	2.6	2.3	2.3	2.2	2.2	2.2	2.5
Total	2.9	3.0	2.8	2.7	2.5	2.6	2.5	2.8
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	63	62	68	70	56	62	74	62
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

Sexually Transmitted Disease and HIV/AIDS

3 Early Syphilis Age 0-14

There were no cases of early syphilis among children age 0-14 in 1998. Table 49 shows the numbers of reported cases and rates of syphilis among children age 0-14 from 1991 through 1998.

Table 49. Early Syphilis Rates by Gender Age 0-14								
Reported Cases	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	0	0	0	0	0	0	2	0
Female	0	0	1	0	0	0	2	0
Total	0	0	1	0	0	0	4	0
Rates per 100,000	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Females	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0
Total	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0

Table 49. Early Syphilis Rates by Gender Age 0-14								
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	437,18	448,26	472,029	485,288	488,118	533,983	544,249	553,008
Female	418,07	428,68	452,259	465,296	467,107	479,898	492,918	504,839
Total	855,26	876,95	924,988	950,584	955,225	1,013,88	1,037,16	1,057,847

3 Early Syphilis Age 15-19

In 1998 there were 24 cases of syphilis among adolescents age15-19 representing a rate of **7.3 cases per 100,000** adolescents. Adolescent females have had consistently higher syphilis rates than males (see Figure 67). Table 50 page shows the numbers of reported cases and rates of syphilis among adolescents age 15-19 from 1991 through 1998.

Figure 67. Early Syphilis Reported Cases per 100,000 Adolescents Age 15-19

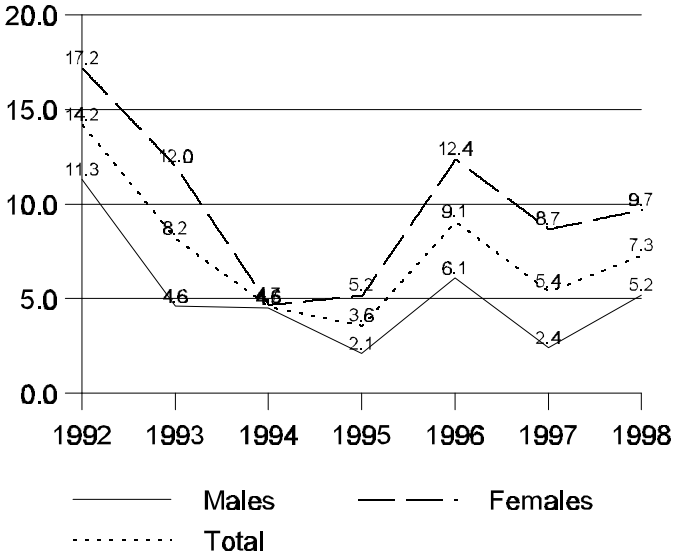


Table 50. Early Syphilis Rates by Gender Age 15-19								
Reported Cases	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	16	16	6	6	3	10	4	9
Female	47	23	15	6	7	18	13	15
Total	63	39	21	12	10	28	17	24
Rates per	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males		11.3	4.6	4.5	2.1	6.1	2.4	5.2
Females		17.2	12.0	4.7	5.2	12.4	8.7	9.7
Total		14.2	8.2	4.6	3.6	9.1	5.4	7.3

Table 50. Early Syphilis Rates by Gender Age 15-19								
Populations			**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 Gonorrhea Age 0-14

In 1998 there were 42 cases of gonorrhea among children age 0-14, representing a rate of 4.0 per 100,000 children. Table 51 shows the numbers of reported cases and rates of gonorrhea among children age 0-14 from 1991 through 1998.

Table 51. Gonorrhea Rates Age 0-14								
Reported	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	18	19	9	10	10	11	2	6
Female	66	46	52	53	47	69	37	36
Total	84	65	61	63	57	79	39	42
Rates	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males	4.1	4.2	1.9	2.1	2.0	2.1	0.4	1.1
Females	15.8	10.7	11.5	11.4	10.1	14.4	7.5	7.1
Total	9.8	7.4	6.6	6.6	6.0	7.8	3.8	4.0
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	437,181	448,269	472,029	485,288	488,118	533,898	544,249	553,008
Female	418,079	428,683	452,259	465,296	467,107	479,898	492,918	504,839
Total	855,260	876,952	924,988	950,584	955,225	1,013,881	1,037,16	1,057,84

3 GONORRHEA AGE 15-19

In 1998 there were 875 cases of gonorrhea among adolescents age 15-19, representing a rate of **266.8 per 100,000 adolescents.** Adolescent females had a rate of gonorrhea cases which was nearly two times higher than adolescent males. There has been a general decrease in the reported rates of gonorrhea among both male and female adolescents over the years from 1992 through 1998 (see Figure 68). Table 52 shows the numbers of reported cases and rates of gonorrhea among adolescents age 15-19 from 1991 through 1998.

Figure 68. Gonorrhea Reported Cases per 100,000 Adolescents Age 15-19

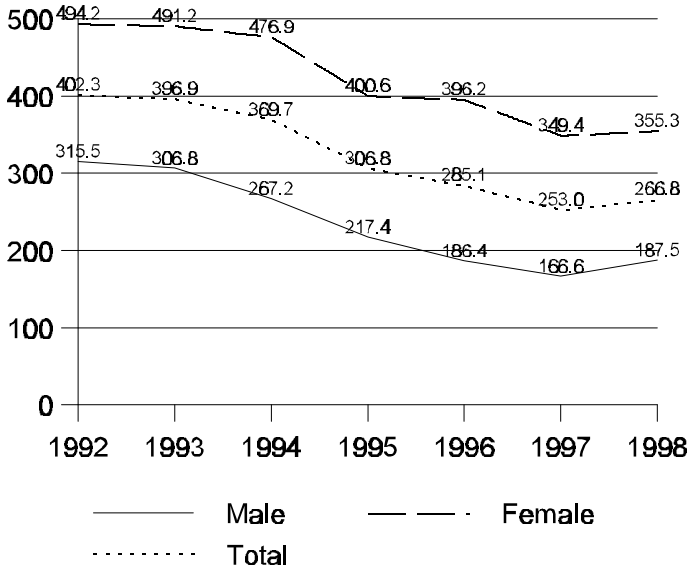


Table 52. Gonorrhea Age 15-19								
Reported	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	630	446	401	358	310	304	278	324
Female	741	659	613	611	544	574	522	551
Total	1,371	1,105	1,014	969	854	878	800	875
Rates	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males		315.5	306.8	267.2	217.4	186.4	166.6	187.5
Females		494.2	491.2	476.9	400.6	396.2	349.4	355.3
Total		402.3	396.9	369.7	306.8	285.1	253.0	266.8
Populations			**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 CHLAMYDIA AGE 0-14

In 1998 there were 252 cases of chlamydia among children age 0-14, representing a rate of **23.8 per 100,000 children.** Female rates were more than seven times higher than male rates in this age group (see Figure 69). Table 53 shows the numbers of reported cases and rates of chlamydia among children age 0-14 from 1991 through 1998.

Figure 69. Chlamydia Reported Cases per 100,000 Children Age 0-14

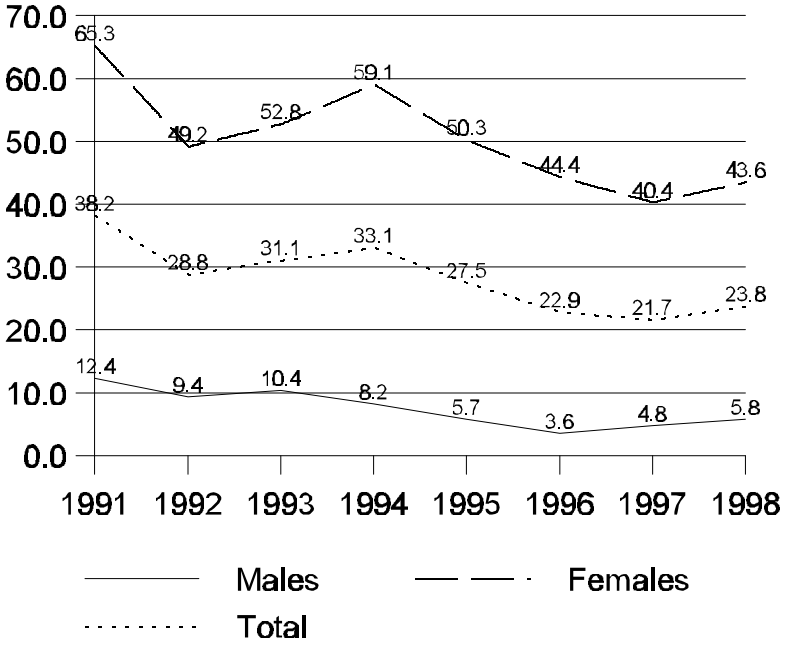


Table 53. Chlamydia Age 0-14

Reported Cases	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	54	42	49	40	28	19	26	32
Female	273	211	239	275	235	213	199	220
Total	327	253	288	315	263	232	225	252
Rates	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males	12.4	9.4	10.4	8.2	5.7	3.6	4.8	5.8
Females	65.3	49.2	52.8	59.1	50.3	44.4	40.4	43.6
Total	38.2	28.9	31.1	33.1	27.5	22.9	21.7	23.8
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	437,181	448,269	472,029	485,288	488,118	533,983	544,249	553,008
Female	418,079	428,683	452,259	465,296	467,107	479,898	492,918	504,839
Total	855,260	876,952	924,988	950,584	955,225	1,013,88	1,037,16	1,057,84

3 Chlamydia Age 15-19

In 1998 there were 4,306 cases of chlamydia among adolescents age 15-19, representing a rate of **1,313.1 per 100,000 adolescents.** Adolescent females had a chlamydia rate which was six times higher than adolescent males (see Figure 70). Table 54 shows the numbers of reported cases and rates of chlamydia among adolescents from 1991 through 1998.

Figure 70. Chlamydia Reported Cases per 100,000 Adolescents Age 15-19

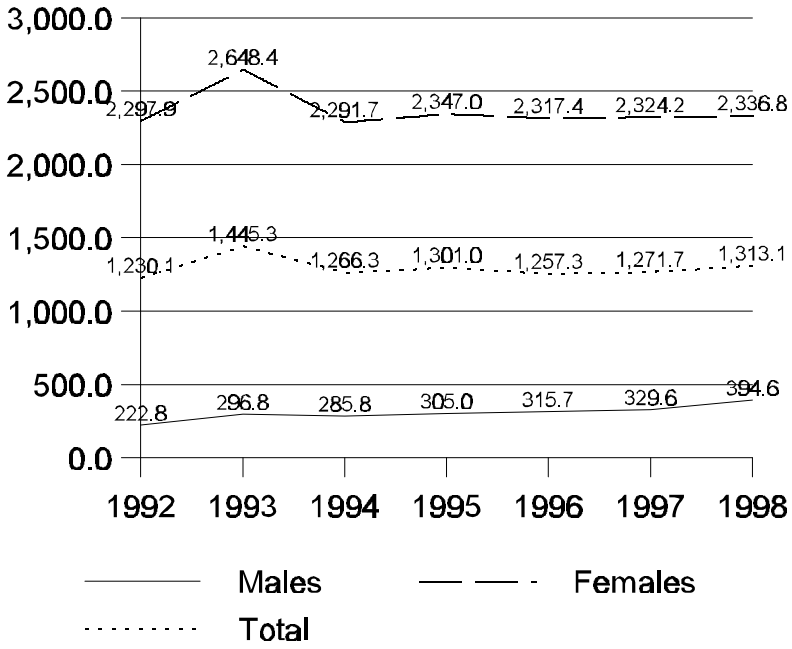


Table 54. Chlamydia Age 15-19								
Reported	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	408	315	388	383	435	515	550	682
Female	3,497	3,064	3,305	2,936	3,187	3,357	3,472	3,624
Total	3,905	3,379	3,693	3,319	3,622	3,872	4,022	4,306
Rates	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Males		222.8	296.8	285.8	305.0	315.7	329.6	394.6
Females		2,297.9	2,648.4	2,291.7	2,347.0	2,317.4	2,324.2	2,336.8
Total		1,230.1	1,445.3	1,266.3	1,301.0	1,257.3	1,271.7	1,313.1
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 HIV AND AIDS

Beginning in 1981, HIV and AIDS cases have been accumulated by age at diagnosis within each of three categories: HIV Ab+ Asymptomatic, Ab+ Symptomatic, and AIDS. When a person's condition changes from one category to another, the case is removed from the previous categorization and counted in the new category according to the person's age at the time of the new diagnosis. By 1998, were 173 reported HIV and AIDS cases for the 0-19 age group. Fifty-four cases were in the under five age group, 16 were age 5-12 and 103 were age 13-19.

3 Genital Herpes

Genital herpes information was available by age groups for the first time in 1997. In 1998 there were 148 cases of genital herpes reported in the 0-19 age group. Among children age 0-14, there were 14 cases, representing a rate of 1.3 per 100,000. Female rates were six times higher than male rates in this age group. Among adolescents age 15-19, there were 134 cases, representing a rate of 40.9 per 100,000 adolescents. Adolescent females had a rate of genital herpes which was nearly seven times higher than adolescent males. Table 55 below shows the number of reported cases and rates of genital herpes among children age 0-14 and adolescents age 15-19 in 1998.

Table 55. Genital Herpes

Reported Cases	1997		1998	
	Age 0-14	**Age 15-19**	**Age 0-14**	**Age 15-19**
Male	1	24	2	19
Female	12	176	12	115
Total	13	200	14	134
Rates	**Age 0-14**	**Age 15-19**	**Age 0-14**	**Age 15-19**
Males	0.2	14.4	0.4	11.0
Females	2.2	117.8	2.4	74.2
Total	1.3	63.2	1.3	40.9
Populations	**Age 0-14**	**Age 15-19**	**Age 0-14**	**Age 15-19**
Male	492,918	166,873	553,008	172,846
Female	544,249	149,387	504,839	155,081
Total	1,037,167	316,260	1,057,847	327,927

Nonfatal Injury and Poisoning

3 Hospitalizations for Nonfatal Injury and Poisoning Age 1-14

In 1998 there were 2,019 hospital admissions for nonfatal injury and poisoning among children age 1-14, representing a rate of 205.1 admissions per 100,000 children (see Figure 71). The average length of stay in the hospital for these children was 3.5 days.

Children in 1998 spent a total of 6,989 days in the hospital for nonfatal injury and poisoning, representing a rate of 710.0 days per 100,000 children. Table 56 profiles hospital utilization for nonfatal injury and poisoning for children age 1-14 from 1991 through 1998.

Figure 71. Hospital Admissions for Non Fatal Injury and Poisoning per 100,000 Children Age 1-14

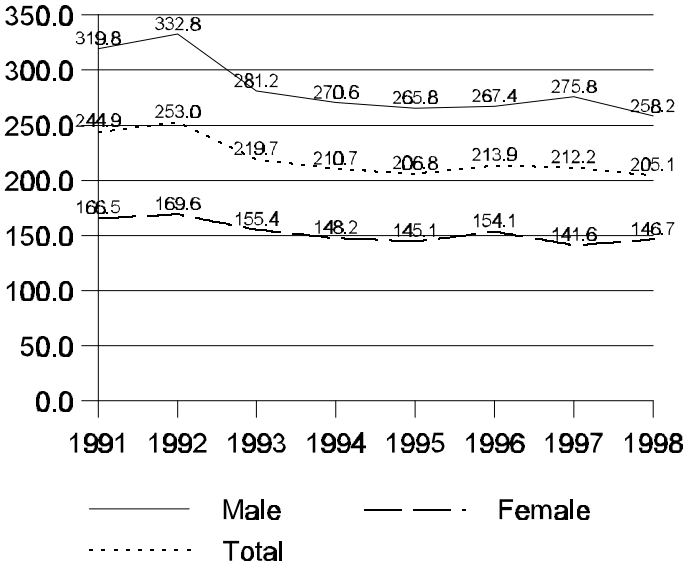


Table 56. Hospitalizations for Nonfatal Injury and Poisoning Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,312	1,400	1,228	1,217	1,204	1,331	1,399	1,331
Female	653	682	650	639	629	686	648	688
Total	1,965	2,082	1,878	1,856	1,833	2,017	2,047	2,019
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	319.8	332.8	281.2	270.6	265.8	267.4	275.8	258.2
Female	166.5	169.6	155.4	148.2	145.1	154.1	141.6	146.7
Total	244.9	253.0	219.7	210.7	206.8	213.9	212.2	205.1
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	5,397	10,761	5,295	4,845	4,273	5,414	4,984	4,594

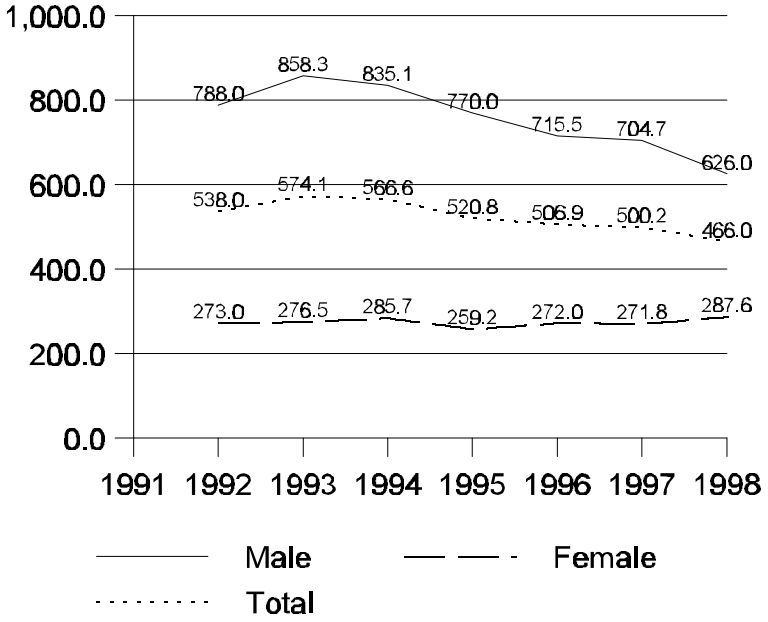
Table 56. Hospitalizations for Nonfatal Injury and Poisoning Age 1-14								
Female	2,642	3,085	2,366	2,464	2,257	2,945	2,336	2,395
Total	8,039	13,846	7,661	7,309	6,530	8,359	7,320	6,989
Hospital Days per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,315.5	2,558.2	1,212.7	1,077.3	943.2	1,087.8	982.4	891.2
Female	673.6	767.1	565.6	571.4	520.7	661.6	510.6	510.8
Total	1,001.8	1,682.7	896.0	829.7	736.6	886.6	758.7	710.0
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.1	7.7	4.3	4.0	3.5	4.1	3.6	3.5
Female	4.0	4.5	3.6	3.9	3.6	4.3	3.6	3.5
Total	4.1	6.7	4.1	3.9	3.6	4.1	3.6	3.5
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations for Nonfatal Injury and Poisoning Age 15-19

In 1998 there were 1,528 hospital admissions among adolescents age 15-19 for nonfatal injury and poisoning, representing a rate of 466.0 admissions per 100,000 adolescents (see Figure 72). The average length of stay for these hospitalizations was 4.1 days.

Adolescents spent a total of 6,217 days in the hospital in 1998 for nonfatal injury and poisoning, representing a rate of 1,895.8 days per 100,000 adolescents. Table 57

Figure 72. Hospitalizations for Non Fatal Injury and Poisoning per 100,000 Adolescents Age 15-19



profiles hospital utilization for nonfatal injury and poisoning for adolescents age 15-19 from 1991 through 1998.

Table 57. Hospitalizations for Nonfatal Injury and Poisoning Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,150	1,114	1,122	1,119	1,098	1,167	1,176	1,082
Female	387	364	345	366	352	394	406	446
Total	1,537	1,478	1,467	1,485	1,450	1,561	1,582	1,528
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		788.0	858.3	835.1	770.0	715.5	704.7	626.0
Female		273.0	276.5	285.7	259.2	272.0	271.8	287.6
Total		538.0	574.1	566.6	520.8	506.9	500.2	466.0
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4,899	4,954	5,480	4,798	4,304	4,844	4,428	4,354
Female	1,724	1,480	1,773	1,538	1,613	1,665	1,546	1,863
Total	6,623	6,434	7,253	6,336	5,917	6,509	5,974	6,217
Hospital Days per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		3,504.5	4,192.2	3,580.7	3,018.1	2,969.9	2,653.5	2,519.0
Female		1,109.9	1,420.8	1,200.5	1,187.9	1,149.4	1,034.9	1,201.3
Total		2,342.2	2,838.6	2,417.3	2,125.4	2,113.5	1,889.0	1,895.8
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.3	4.4	4.9	4.3	3.9	4.2	3.7	4.0
Female	4.5	4.1	5.1	4.2	4.6	4.2	3.8	4.2
Total	4.3	4.4	4.9	4.3	4.1	4.2	3.8	4.1
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

Chronic conditions

3 Asthma Hospitalizations Children Age 1-14

In 1998 there were 1,788 admissions, representing a rate of 180.6 hospital admissions per 100,000 children age 1-14. This was the lowest admission rate from1991 through 1998. During this time period, males consistently had higher hospital admission rates than females. The 1998 rate of 229.9 per 100,000 males age 1-14 was nearly two times higher than the female rate of 126.5 per 100,000 females age 1- 14 (see Figure 73). The average length of stay for children age 1-14 for asthma admissions was 2.3 days.

Figure 73. Hospital Admissions for Asthma per 100,000 Children Age 1-14

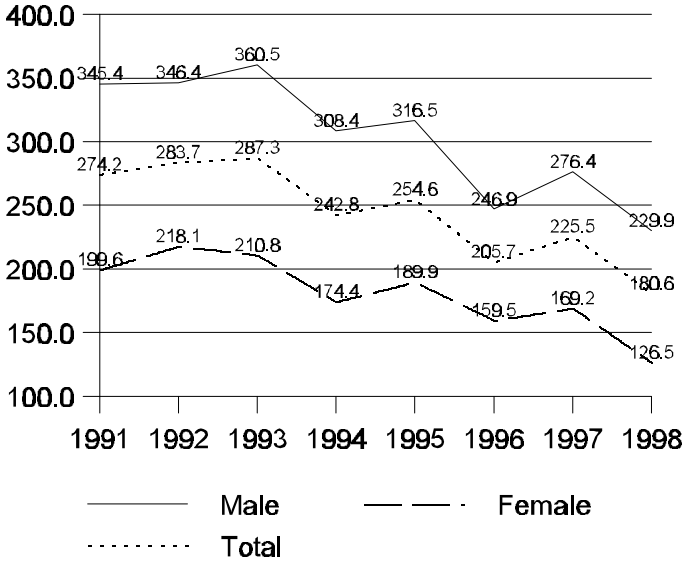
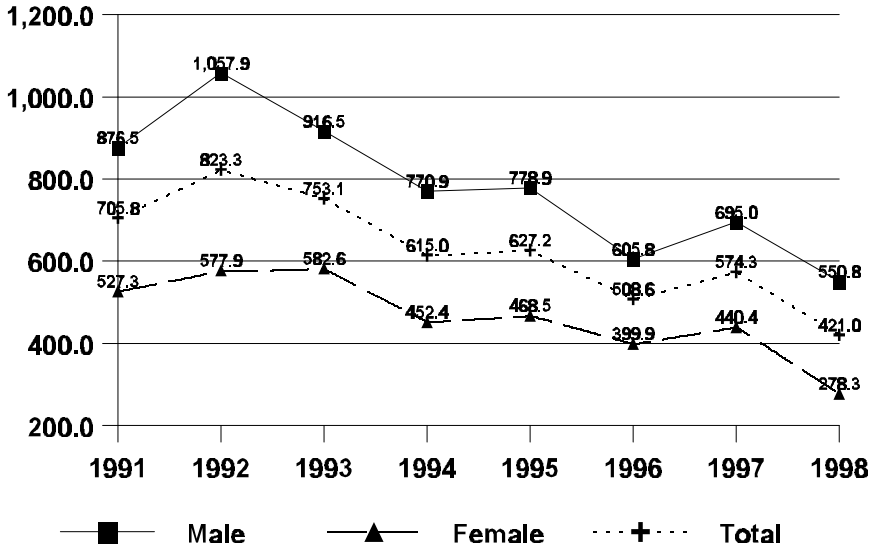


Figure 74. Hospital Days for Asthma per 100,000 Children Age 1-14



The total number of inpatient hospital days attributed to asthma in 1998 for children age 1-14 was 4,144 days, representing a rate of 421.0 days per 100,000 children. This rate was the lowest rate from 1991 through 1998. During this time period, males have had consistently higher rates of asthma-related hospital days than females. In 1998 the male hospital days rate of 550.8 per 100,000 males was nearly two

times higher than the female rate of 278.3 per 100,000 (see Figure 74). Table 58 profiles asthma-related hospital utilization for children age 1-14.

Table 58. Hospitalizations for Asthma Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,417	1,457	1,574	1,387	1,434	1,229	1,402	1,185
Female	783	877	882	752	823	710	774	593
Total	2,200	2,334	2,456	2,139	2,257	1,939	2,176	1,778
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	345.4	346.4	360.5	308.4	316.5	246.9	276.4	229.9
Female	199.6	218.1	210.8	174.4	189.9	159.5	169.2	126.5
Total	274.2	283.7	287.3	242.8	254.6	205.7	225.5	180.6
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	3,596	4,450	4,002	3,467	3,529	3,015	3,526	2,839
Female	2,068	2,324	2,437	1,951	2,031	1,780	2,015	1,305
Total	5,664	6,774	6,439	5,418	5,560	4,795	5,541	4,144
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	876.5	1,057.9	916.5	770.9	778.9	605.8	695.0	550.8
Female	527.3	577.9	582.6	452.4	468.5	399.9	440.4	278.3
Total	705.8	823.3	753.1	615.0	627.2	508.6	574.3	421.0
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2.5	3.1	2.5	2.5	2.5	2.5	2.5	2.4
Female	2.6	2.7	2.8	2.6	2.5	2.5	2.6	2.2
Total	2.6	2.9	2.6	2.5	2.5	2.5	2.5	2.3
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	1	2	2	1	1	1	0	0
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841

Table 58. Hospitalizations for Asthma Age 1-14								
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Asthma Hospitalizations Adolescents Age 15-19

In 1998 there were 179 hospital admissions with a diagnosis code indicating asthma, representing a rate of 54.6 admissions per 100,000 adolescents. The 1998 rates for both males and females were the lowest in the entire 1991-1998 review period.

Female adolescents have had consistently higher rates of asthma-related admissions than males. In 1998 the female rate of 70.3 per 100,000 was over 70 percent higher than the male rate of 40.5 per 100,000 (see Figure 75). The average length of stay for these hospitalizations was 2.7 days in 1998. Adolescents spent a total of 479 days in the hospital for asthma, representing a rate of 146.1 hospital days per 100,000 adolescents. This was the lowest rate over the years 1991-1998.

Figure 75. Hospital Admissions per 100,000 Adolescents Age 15-19

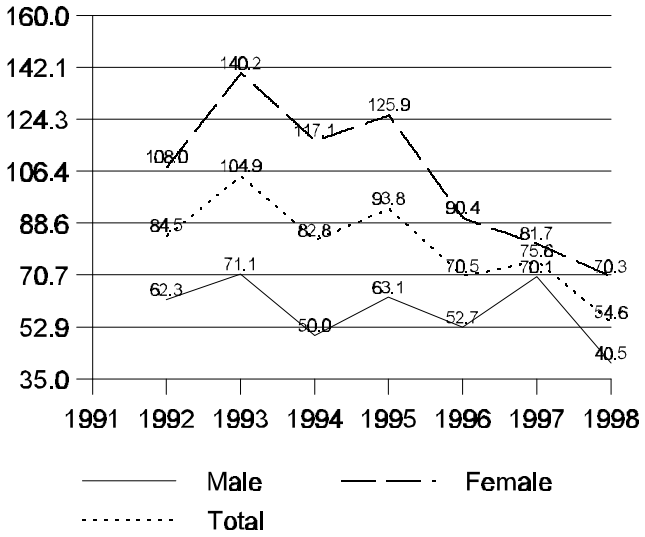
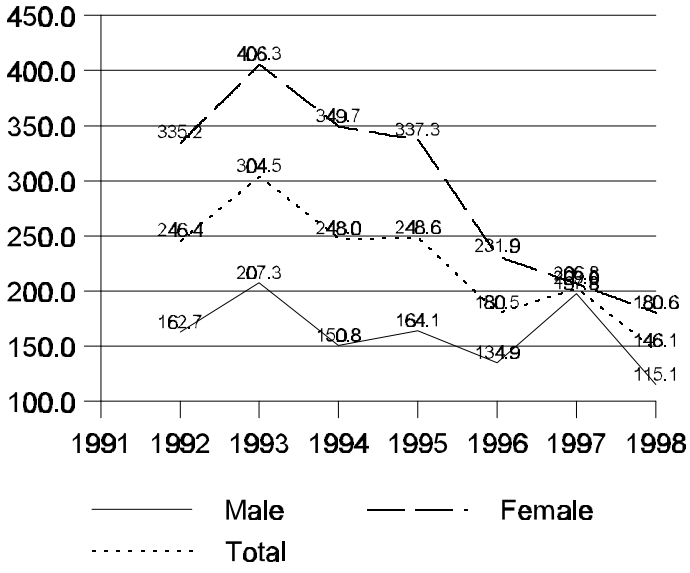


Figure 76. Hospital Days per 100,000 Adolescents Age 15-19



In 1998 females spent over 50 percent more days in the hospital per 100,000 population than males. Female rates have been higher than male rates in all years for which statistics have been presented (see Figure 76). Table 59 presents a profile of asthma-related hospital utilization adolescents age 15-19.

Table 59. Hospitalizations for Asthma Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	101	88	93	67	90	86	117	70
Female	144	144	175	150	171	131	122	109
Total	245	232	268	217	261	217	239	179
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		62.3	71.1	50.0	63.1	52.7	70.1	40.5
Female		108.0	140.2	117.1	125.9	90.4	81.7	70.3
Total		84.5	104.9	82.8	93.8	70.5	75.6	54.6
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	309	230	271	202	234	220	333	199
Female	426	447	507	448	458	336	309	280
Total	735	677	778	650	692	556	642	479
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		162.7	207.3	150.8	164.1	134.9	199.6	115.1
Female		335.2	406.3	349.7	337.3	231.9	206.8	180.6
Total		246.4	304.5	248.0	248.6	180.5	203.0	146.1
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	3.1	2.6	2.9	3.0	2.6	2.6	2.8	2.8
Female	3.0	3.1	2.9	3.0	2.7	2.6	2.5	2.6
Total	3.0	2.9	2.9	3.0	2.7	2.6	2.7	2.7
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	0	0	0	0	0	0	2	0
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female		133,341	124,791	128,114	135,788	144,862	149,387	155,081

Table 59. Hospitalizations for Asthma Age 15-19								
Total		274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 Hospitalizations for Diabetes Age 1-14

In 1998 there were 301 hospital admissions for diabetes among children age 1-14 representing a rate of **30.6 admissions per 100,000** (see Figure 77). The average length of a hospital stay for diabetes was 3.1 days. One child died before being discharged from the hospital. In 1998 children spent a total of 942 days in the hospital for diabetes, representing a rate of 95.7 patient days per 100,000 children age 1-14 (see Figure 77). Table 60 profiles hospital utilization for diabetes for children age 1-14 from 1991 through 1998.

Figure 77. Hospital Admissions for Diabetes per 100,000 Children Age 1-14

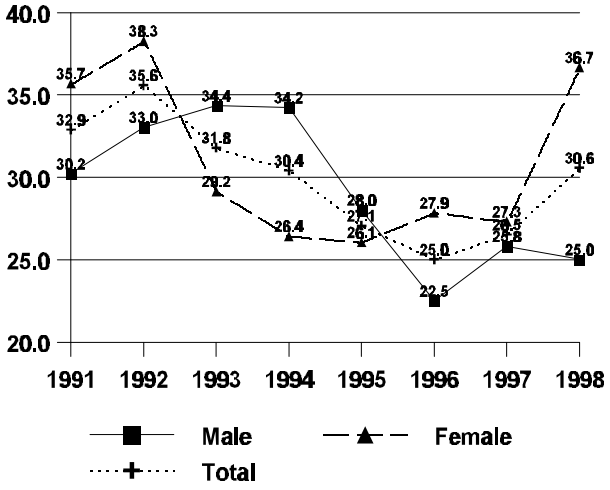


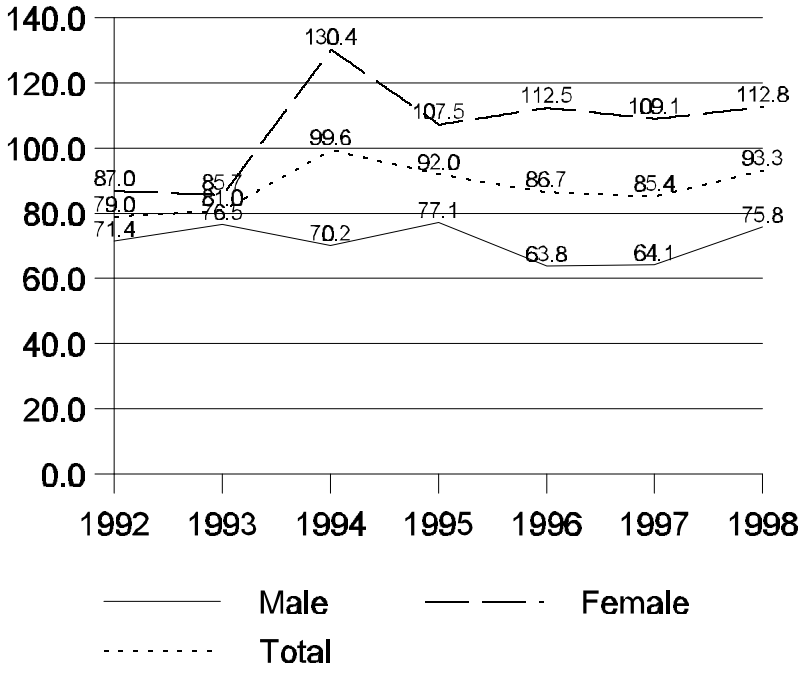
Table 60. Hospitalizations for Diabetes Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	124	139	150	154	127	112	131	129
Female	140	154	122	114	113	124	125	172
Total	264	293	272	268	240	236	256	301
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	30.2	33.0	34.4	34.2	28.0	22.5	25.8	25.0
Female	35.7	38.3	29.2	26.4	26.1	27.9	27.3	36.7
Total	32.9	35.6	31.8	30.4	27.1	25.0	26.5	30.6
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	526	540	566	522	325	467	509	408
Female	543	503	453	345	301	348	372	534
Total	1,069	1,043	1,019	867	626	815	881	942

Table 60. Hospitalizations for Diabetes Age 1-14								
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	128.2	128.4	129.6	116.1	71.7	93.8	100.3	79.2
Female	138.4	125.1	108.3	80.0	69.4	78.2	81.3	113.9
Total	133.2	126.8	119.2	98.4	70.6	86.4	91.3	95.7
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.2	3.9	3.8	3.4	2.6	4.2	3.9	3.2
Female	3.9	3.3	3.7	3.0	2.7	2.8	3.0	3.1
Total	4.0	3.6	3.7	3.2	2.6	3.5	3.4	3.1
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	2	2	1	0	0	0	0	1
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations for Diabetes Age 15-19

In 1998 there were 306 hospital admissions with a diagnosis code indicating diabetes among adolescents age 15-19, representing a rate of **93.3 admissions per 100,000** adolescents. One adolescent died before being discharged from the hospital. Females had consistently higher rates of hospitalizations for diabetes than males in all years reviewed (see Figure 78). In 1998 adolescents spent a total of 929 days in the hospital for diabetes,

Figure 78. Hospital Admissions for Diabetes per 100,000 Adolescents Age 15-19



representing a rate of 283.3 hospital days per 100,000 (see Figure 78). The average length of stay for these hospitalizations was 3.0 days. Table 61 is a profile of hospital utilization for diabetes for adolescents age 15-19 from 1991 through 1998.

Table 61. Hospitalizations for Diabetes Age 15-19								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	88	101	100	94	110	104	107	131
Female	105	116	107	167	146	163	163	175
Total	193	217	207	261	256	267	270	306
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	71.4	76.5	70.2	77.1	63.8	64.1	75.8
Female	NA	87.0	85.7	130.4	107.5	112.5	109.1	112.8
Total	NA	79.0	81.0	99.6	92.0	86.7	85.4	93.3
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	350	365	364	299	278	280	288	372
Female	453	418	416	573	638	504	509	557
Total	803	783	780	872	916	784	797	929
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	258.2	278.5	223.1	194.9	171.7	172.6	215.2
Female	NA	313.5	333.4	447.3	469.9	347.9	340.7	359.2
Total	NA	285.0	305.3	332.7	329.0	254.6	252.0	283.3
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	4.0	3.6	3.6	3.2	2.5	2.7	2.7	2.8
Female	4.3	3.6	3.9	3.4	4.4	3.1	3.1	3.2
Total	4.2	3.6	3.8	3.3	3.6	2.9	3.0	3.0
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	0	0	1	0	0	3	4	1

Table 61. Hospitalizations for Diabetes Age 15-19								
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

Mental Health

Based on the Report of the Surgeon General on Mental Health, the current prevalence for the US population affected by a mental disorder is estimated at 20%. Nearly 28% to 30% of adults have either a mental or addictive disorder. Although not as well documented among adults, an approximate 20% of children have a mental disorder with at least a mild functional impairment. The percentage of children ages 9 to 17 with a serious emotional disturbance is estimated between 5 and 9 percent. A total of 15% of the US adult population use mental health services in any given year. Similarly, approximately 21% of the child and adolescent population use mental health services annually.

According to a recent survey (Children 2000), nine percent of children have had more than one complaint from their school about their behavior during the past twelve months, and twelve percent have had a problem about which the caregiver would have liked to talk to a mental health professional. Sixty percent of them were able to talk to a health professional. For those that did not see a professional, 58 percent of them said that the reason was either that they did not have insurance, their insurance was not accepted, or that they could not afford it.

Substance Abuse

The estimated number of current illicit drug users has declined since 1979 when it was at its highest level of 25 million individuals. According to the 1998 National Household Survey on Drug Abuse, nearly 13.6 million individuals used illicit drugs 30 days prior to the interview. In particular, 9.9% of youth ages 12-17 reported current use of illicit drugs. The survey found that 8.3% of these youth were current users of marijuana. The percent of youths reporting current use of inhalants decreased significantly from 2% in 1997 to 1.1% in 1998. In addition, an estimated 4.1 million people met diagnostic criteria for dependence on illicit drugs in 1997 and 1998, including 1.1 million youths age 12-17.

The 1997 Youth Risk Behavior Surveillance System which is a school based, anonymous survey found that 9.7% of students had tried marijuana before 13 years of age. Male students (12.2%) were significantly more likely than female students (6.7%) to have tried marijuana. A little more than a quarter of students in grades 9-12 had used marijuana one or more times 30 days preceding the survey. The initiation of cocaine use including

powder, crack, or freebase was reported by 1.1% of students. An estimated 3.3% of students indicated current cocaine use.

Based on augmented sample of the 1998 National Household Survey on Drug Abuse for Arizona, the prevalence of illicit drug use among individuals 12 years and older was 7.4% in Arizona. Fourteen percent of youth ages 12-17 reported current drug use. The rate in Arizona was statistically greater than California (9.9%) and the rest of the US (9.9%). In addition, between 1997 and 998, there was a significant decline in illicit drug use among youths age 12-17 and young adults 18-25 years of age. Arizonans did not perceive great risk in using marijuana compared to rest of the US.

A report on the National Drug and Alcoholism Treatment Unit Survey highlights that there are an estimated 943,000 clients in speciality substance abuse treatment as of October 1994. There were an estimated 431 clients for every 100,000 people in the general population above the age of 12. An estimated 41% abused both alcohol and drugs while 34% abused only alcohol and 25% abused only drugs.

Medical examiners participating in the Drug Abuse Warning Network reported 9,743 drug-related deaths in 42 metropolitan areas. Cocaine was the most frequently mentioned drug in 1997 followed by heroin/morphine and alcohol-in-combination. Drug abuse decedents were more likely to be male (76%) than female (24%), which follows a trend since 1994. Deaths among individuals aged 35 and older accounted for 68% of the drug abuse episodes, among those ages 26 to 34 accounted for 21%, and those age 18 to 25 accounted for 9% in 1997. White decedents constituted the majority (61%) of drug abuse episodes compared to blacks (27%), and Hispanics (10%).

3 Substance/Drug-Related Mortality[14, 15] Age 0-14

There was one substance/drug-related death among children under age 15 in 1998. Table 62 below shows the mortality rates in this age group from 1991 through 1998.

Table 62. Substance/Drug-Related Deaths Age 0-14

	1991	1992	1993	1994	1995	1996	1997	1998
Number of deaths	0	0	2	3	2	0	5	1
Population	855,260	876,953	924,288	950,584	955,225	1,013,881	1,037,167	1,057,847
Rate per 100,000	0.0	0.0	0.2	0.3	0.2	0.0	0.5	0.1

3 Substance/Drug-Related Mortality Age 15-19

[14]Source: Drug Related Mortality, Arizona: 1986-1996.

[15]Drug-related deaths are identified by ICD codes 292, 304, 305.2-305.9, E850-E858, E950-E950.5, E962.0, E980-E980.5, E950-E959.

There were seven drug-related deaths of adolescents in 1998, representing a rate of **2.1 per 100,000.** Table 63 below shows the mortality rates for adolescents from 1991 through 1998.

Table 63. Substance/Drug-Related Deaths Age 15-19								
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Number of deaths	7	9	7	4	7	3	6	7
Population	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927
Rate per 100,000		3.3	2.7	1.5	2.5	1.0	1.9	2.1

3 Hospitalizations Related to Substance/Drug Abuse[16] Children Age 1-14

In 1998 there were 241 admissions among children age 1-14 with a diagnosis code indicating substance or drug abuse, representing a rate of 24.5 hospital admissions per 100,000 children.. The average length of stay for these hospitalizations was 3.2 days. One child died before being discharged from the hospital. The total number of inpatient hospital days in 1998 for substance abuse among children was 781 days, representing a rate of 79.3 patient days per 100,000 children. Table 64 profiles hospital utilization for substance and drug abuse related diagnoses for children age 1-14 from 1991 through 1998.

Table 64. Hospitalizations for Substance/Drug Abuse Children Age 1-14								
Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	112	100	97	127	86	101	111	116
Female	106	106	80	124	87	95	116	125
Total	218	206	177	251	173	196	227	241
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	27.3	23.8	22.2	28.2	19.0	20.3	21.9	22.5
Female	27.0	26.4	19.1	28.8	20.1	21.3	25.4	26.7

[16]ICD codes used to identify substance or drug abuse included the following: 303, alcohol dependence syndrome; 304, drug dependence; 305, nondependent abuse of drugs; 291, alcoholic psychoses; 292, drug psychoses; E850-E858, accidental poisonings by drugs, medicinal substances and biologicals; and E860, accidental poisoning by alcohol, not elsewhere classified (category includes alcoholic beverages (E860.0), ethyl alcohol (E860.1) methyl alcohol (E860.2), isopropyl alcohol (E860.3), fusel oil (E860.4) and other specified (E860.8) and unspecified (E860.9) alcohols.) Not included in identification: E930-E949, drugs, medicinal and biological substances causing adverse effects in therapeutic use.

Table 64. Hospitalizations for Substance/Drug Abuse Children Age 1-14								
Total	27.2	25.0	20.7	28.5	19.5	20.8	23.5	24.5
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	231	656	191	457	150	250	337	347
Female	211	232	152	425	221	231	266	434
Total	442	888	343	882	371	481	603	781
Hospital Days Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	56.3	155.9	43.7	101.6	33.1	50.2	66.4	67.3
Female	53.8	57.7	36.3	98.6	51.0	51.9	58.1	92.6
Total	55.1	107.9	40.1	100.1	41.8	51.0	62.5	79.3
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	2.1	6.6	2.0	3.6	1.7	2.5	3.0	3.0
Female	2.0	2.2	1.9	3.4	2.5	2.4	2.3	3.5
Total	2.0	4.3	1.9	3.5	2.1	2.5	2.7	3.2
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	0	0	0	0	0	0	1	1
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314

3 Hospitalizations Related to Substance/Drug Abuse Adolescents Age 15-19

In 1998 there were 1,030 hospital admissions with a diagnosis code indicating substance or drug abuse, representing a rate of 314.1 admissions per 100,000 adolescents. There were seven deaths associated with these hospitalizations.

The rate of substance-related hospital admissions for females was 36 percent higher than for males in 1998. Throughout the review period, females have had higher rates of hospital admissions for substance and drug abuse than males (see Figure 79). Hospital stays related to substance abuse averaged 3.9 days in 1998, with males averaging longer lengths of stay in the hospital for substance abuse than females. A total of 3,986 days were spent in the hospital for substance and drug abuse-related diagnoses in 1998, representing a rate of 1,215.5 days per 100,000 adolescents in 1998.

Figure 79. Hospital Admissions for Substance/Drug Abuse per 100,000 Adolescents Age 15-19

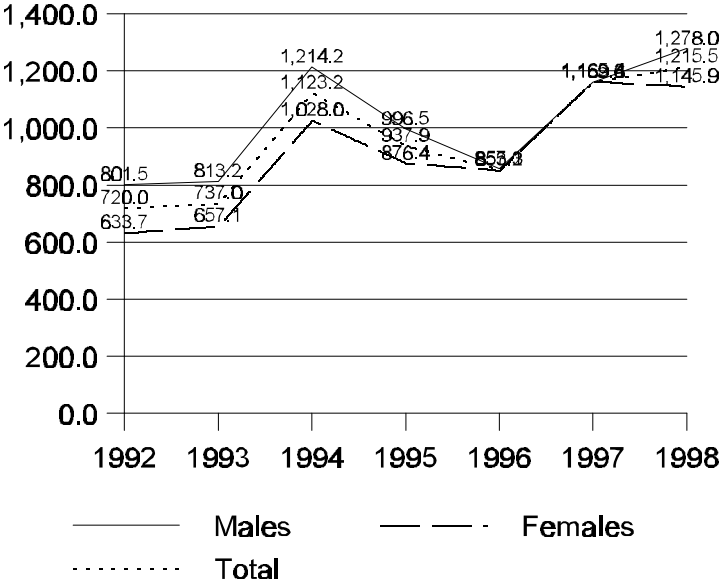


Table 65 profiles hospital utilization for substance and drug abuse related diagnoses for adolescents age 15-19 from 1991 through 1998.

Table 65. Hospitalizations for Substance/Drug Abuse Adolescents Age 15-19

Admissions	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	221	220	232	334	313	388	474	464
Female	230	230	258	359	389	480	557	566
Total	451	450	490	693	702	868	1,031	1,030
Admission Rate per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		155.6	177.5	249.3	219.5	237.9	284.0	268.4
Female		172.5	206.7	280.2	286.5	331.4	372.9	365.0
Total		163.8	191.8	264.4	252.2	281.8	326.0	314.1

Table 65. Hospitalizations for Substance/Drug Abuse Adolescents Age 15-19								
Hospital Days	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	1,238	1,133	1,063	1,627	1,421	1,398	1,935	2,209
Female	819	845	820	1,317	1,190	1,236	1,741	1,777
Total	2,057	1,978	1,883	2,944	2,611	2,634	3,676	3,986
Hospital Days per 100,000 Population	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male		801.5	813.2	1,214.2	996.5	857.1	1,159.6	1,278.0
Female		633.7	657.1	1,028.0	876.4	853.2	1,165.4	1,145.9
Total		720.0	737.0	1,123.2	937.9	855.3	1,162.3	1,215.5
Average Length of Stay	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	5.6	5.2	4.6	4.9	4.5	3.6	4.1	4.8
Female	3.6	3.7	3.2	3.7	3.1	2.6	3.1	3.1
Total	4.6	4.4	3.8	4.2	3.7	3.0	3.6	3.9
Deaths	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total	1	3	3	2	1	6	2	7
Populations	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927

3 Substance and Drug Use Behaviors[17]

The source of data for behavioral indicators related to substance abuse is the 1997 School Substance Survey, which is the seventh in a series of surveys performed by the Arizona Criminal Justice Commission, and represents students' self reports of drug use. The 1997 sample included 13,157 public school students throughout the state in grades three through twelve, with all 15 counties proportionately represented. (See Substance Abuse and Public School Students for methodological details related to sampling and survey administration, as well as more detailed findings.)

3 Elementary School Students

[17] Arizona Criminal Justice Commission, Substance Abuse and Public School Students: Arizona 1997, Tables 1-3, 1-4, 1-5, 2-3, 2-4, 2-5, 3-3, 3-4, 3-5.

Elementary students were asked whether they had used certain drugs ever in their lives, in the last 30 days, or within the last week. Alcohol was the most commonly tried substance, with 19.9 percent of elementary school children saying in 1997 that they had tried it at least once in their lives, although a lower proportion of children report having used alcohol than in previous years. Six percent of elementary school children reported having used alcohol during the past month, and 4.2 percent reported using it in the past week. The next most frequently tried substance was cigarettes, with 18.3 percent of the children reporting in 1997 that they had tried cigarettes at least once in their lives, 5.7 percent reporting that they had smoked cigarettes in the past month, and 4.5 percent reporting that they had smoked cigarettes in the past week. Figure 8 shows the percent of children reporting ever having used the most commonly used substances in each of four years. Table 66 shows the percent of children who said they used each of several substances ever, in the past month, and in the past week, in each survey from 1991 through 1997.

Figure 80. Percent of Elementary School Children Who Ever Used Certain Substances

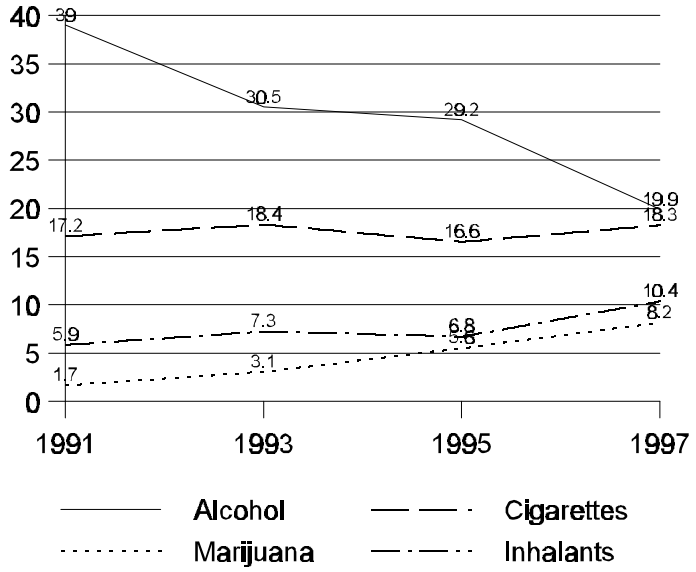


Table 66. Substance Use By Elementary School Students												
	Used Ever in Life				Used in Past Month				Used in Past Week			
Substance	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**
Cigarettes	17.2%	18.4%	16.6%	18.3%	NA	NA	NA	5.7%	NA	NA	NA	4.5%
Smokeless Tobacco	5.8%	9.8%	5.3%	6.0%	NA	NA	NA	2.6%	NA	NA	NA	2.2%
Alcohol	39.0%	30.5%	29.2%	19.9%	3.5%	10.4%	10.6%	6.0%	NA	5.5%	6.8%	4.2%
Marijuana	1.7%	3.1%	5.6%	8.2%	0.3%	1.8%	3.2%	4.0%	NA	0.8%	2.3%	3.2%
Cocaine	0.7%	1.4%	2.0%	3.5%	0.2%	0.4%	1.6%	1.9%	NA	0.3%	1.0%	1.6%
Meth/amphetamines	1.0%	1.3%	2.1%	2.8%	0.1%	0.8%	1.6%	1.4%	NA	0.6%	1.3%	1.4%
Depressants	NA	NA	NA	2.3%	NA	NA	NA	1.3%	NA	NA	NA	1.2%
Inhalants	5.9%	7.3%	6.8%	10.4%	0.9%	3.3%	3.4%	4.9%	NA	1.9%	2.6%	4.1%
Hallucinogens	1.2%	1.6%	1.4%	2.6%	0.3%	0.9%	1.0%	1.5%	NA	0.6%	1.0%	1.2%
Narocotics	NA	NA	NA	2.2%	NA	NA	NA	1.0%	NA	NA	NA	1.1%
Steroids	NA	NA	NA	2.2%	NA	NA	NA	1.2%	NA	NA	NA	1.1%

3 Junior High Students

In the 1997 survey, alcohol was the most frequently reported substance that junior high school students used with over half (54.9 percent) reporting that they had ever used it, 23.7 percent reporting that they had used it in the past month, and 12.5 percent reporting that they had used it within the past week. Cigarettes had been tried by 45.9 percent of junior high school students, with 18.7 percent having smoked cigarettes within the past month and 12.6 percent within the past week. Marijuana and inhalants were the next most likely substances for junior high school students to report using. Figure 81 shows the percent of junior high and middle school students reporting that they had used each of these substances within the past month. Table 67 shows the percent of junior high and middle school students who said they used each of several substances ever, in the past month, and in the past week, in each survey from 1991 through 1997.

Figure 81. Percent of Junior High/Middle School Students Using Certain Substances in Past Month

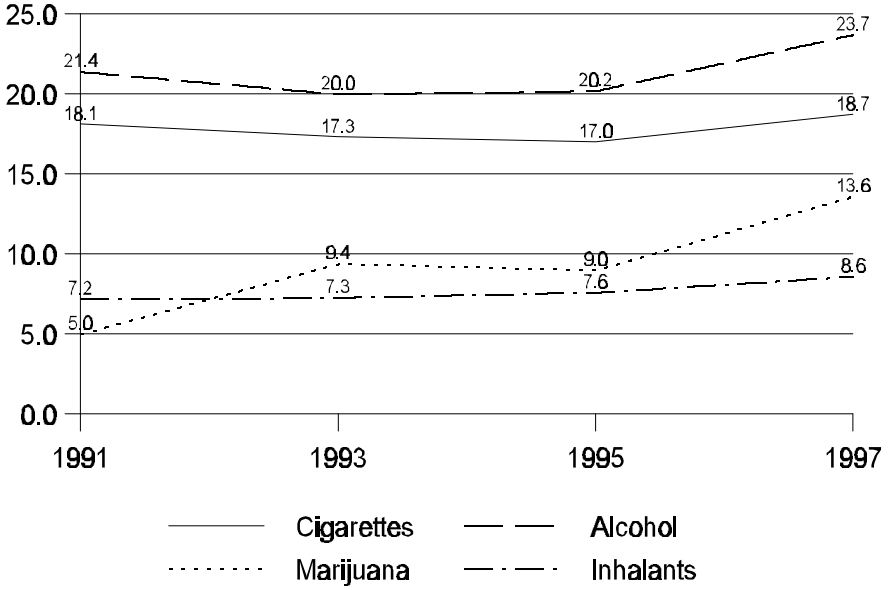


Table 67. Substance Use By Junior High/Middle School Students												
	Used Ever in Life				Used in Past Month				Used in Past Week			
Substance	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**
Cigarettes	NA	NA	NA	45.9%	18.1%	17.3%	17.0%	18.7%	NA	NA	NA	12.6%
Smokeless Tobacco	NA	NA	NA	10.9%	5.9%	7.5%	7.1%	3.4%	NA	NA	NA	2.4%
Alcohol	49.5%	46.1%	46.2%	54.9%	21.4%	20.0%	20.2%	23.7%	NA	13.1%	19.4%	12.5%
Marijuana	12.3%	19.1%	19.1%	25.8%	5.0%	9.4%	9.0%	13.6%	NA	8.1%	8.5%	9.6%
Cocaine	3.7%	5.2%	6.3%	6.1%	1.8%	2.6%	3.0%	2.9%	NA	2.6%	3.3%	2.1%
Meth/amphetamines	4.1%	5.7%	7.9%	5.8%	2.3%	2.4%	3.8%	2.6%	NA	2.5%	3.4%	1.8%
Depressants	11.0%	11.2%	11.0%	6.3%	NA	NA	NA	3.0%	NA	NA	NA	2.1%
Inhalants	14.8%	18.6%	17.5%	21.1%	7.2%	7.3%	7.6%	8.6%	NA	5.7%	6.1%	5.8%
Hallucinogens	4.7%	6.4%	7.5%	6.7%	2.5%	3.6%	3.8%	3.0%	NA	3.3%	3.4%	1.8%
Narocotics	6.1%	6.3%	6.0%	5.8%	NA	NA	NA	2.8%	NA	NA	NA	2.0%
Steroids	NA	2.8%	3.2%	3.6%	NA	NA	NA	1.8%	NA	NA	NA	1.6%

3 High School Students

In 1997 approximately three in four high school students reported that they had used alcohol at some time in their lives, with 43.4 percent having used it in the last month and 23.7 percent using it within the past week. Cigarettes had been used by 62.7 percent of high school students at some time in their lives, with 31.3 percent using them in the past month, and 25.3 percent in the past week. Marijuana had been used by 47.4 percent of high school students, with 25.1 percent using it within the past month, and 17.5 percent using it within the past week.

Figure 82 shows the percent of high school students reporting that they had used each of the three most commly used substances within the past month. Table 68 shows the percent of high school students who said they used each of several substances ever, in the past month, and in the past week, in each survey from 1991 through 1997.

Figure 82. Percent of High School Students Using Certain Substances in Past Month

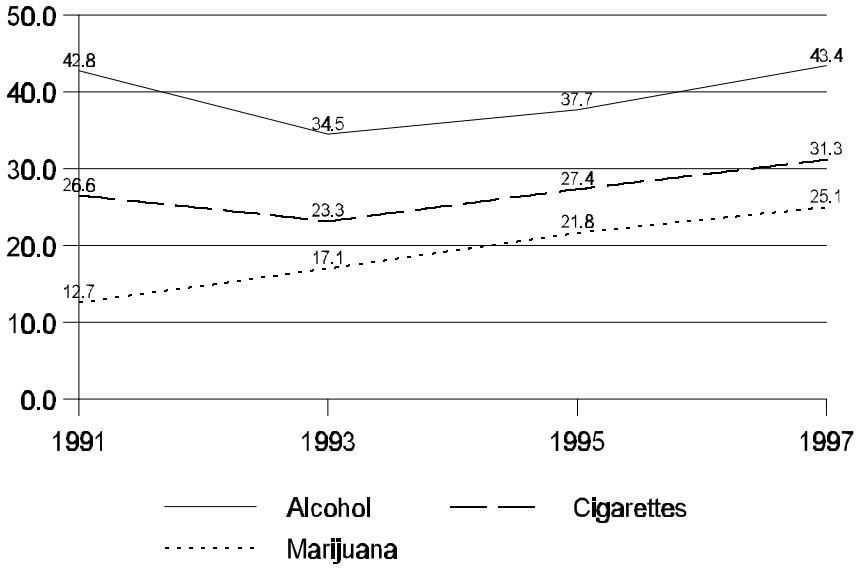


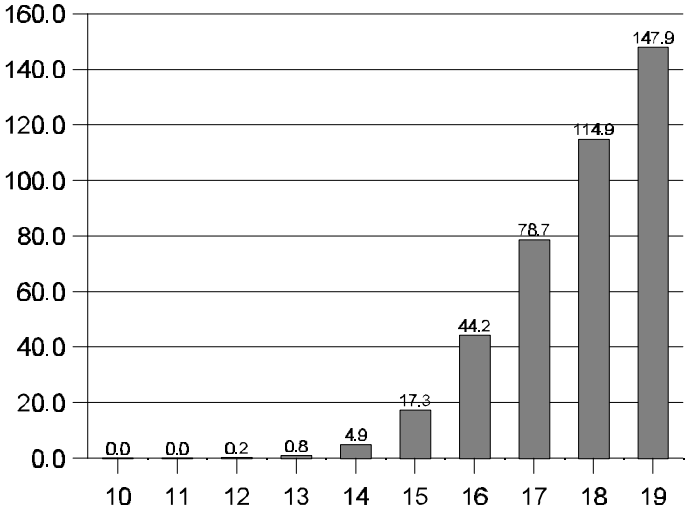
Table 68. Substance Use By High School Students												
	Used Ever in Life				Used in Past Month				Used in Past Week			
Substance	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**	**1991**	**1993**	**1995**	**1997**
Cigarettes	NA	NA	NA	62.7%	26.6%	23.3%	27.4%	31.3%	NA	NA	NA	25.3%
Smokeless Tobacco	NA	NA	NA	24.0%	9.3%	9.2%	9.6%	6.5%	NA	NA	NA	4.8%
Alcohol	74.9%	67.1%	68.8%	74.2%	42.8%	34.5%	37.7%	43.4%	NA	21.9%	23.8%	23.7%
Marijuana	33.5%	36.9%	44.1%	47.4%	12.7%	17.1%	21.8%	25.1%	NA	12.8%	16.8%	17.5%
Cocaine	9.4%	8.4%	10.7%	11.6%	3.3%	3.1%	4.5%	3.8%	NA	2.9%	4.5%	2.2%
Meth/amphetamines	10.2%	10.1%	15.7%	16.8%	3.5%	3.7%	5.8%	6.6%	NA	3.1%	4.2%	4.1%
Depressants	14.9%	11.4%	14.4%	11.2%	NA	NA	NA	4.9%	NA	NA	NA	3.1%
Inhalants	15.9%	19.1%	19.2%	25.1%	4.2%	5.1%	6.3%	5.5%	NA	4.0%	4.8%	3.2%
Hallucinogens	12.7%	10.5%	15.9%	18.1%	5.2%	3.7%	6.7%	6.4%	NA	3.1%	5.2%	3.3%
Narocotics	9.7%	7.8%	10.7%	10.5%	NA	NA	NA	4.6%	NA	NA	NA	3.0%
Steroids	na	3.3%	2.8%	2.6%	NA	NA	NA	1.4%	NA	NA	NA	1.2%

Teen pregnancy[18, 19]

In 1998 there were a total of 12,630 pregnancies among girls age 10-19, representing a pregnancy rate of 39.8 pregnancies per 1,000 girls age 10-19, resulting in 9,793 live births. Source of payment data was not yet available for 1998; however, in 1997 AHCCCS was the source of payment for labor and delivery for 72 percent of teen births.

In 1998 there were no pregnancies reported for girls age ten or eleven. For each age after that, there was a steady increase in the pregnancy rate. Figure 83 shows the pregnancy rate for each age from 10 through 19 for females in Arizona. There were also age differences in the likelihood that a pregnancy will end in abortion, with the pregnancies of younger girls ending in abortions much more frequently than the older teens. Forty-two percent of pregnant girls under age 15 had an abortion, while 24 percent of girls age 15-17 and 20 percent of girls 18-19.

Figure 83. 1998 Pregnancy Rates Ages 10-19



In the following sections, teen pregnancy statistics are presented separately for each of the following age groups: 10-14, 15-17 and 18-19.

3 Pregnancies Age 10-14

In 1998 there were 184 pregnancies among pre-adolescent girls age 10-14, representing a rate of 1.1 pregnancies per 1,000 females age 10-14. Table 69 shows the pregnancy, fertility (live births) and abortion rates from 1987 through 1998 for girls age 10-14.

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[18]The source for all data in this section is: Christopher K. Mrela, Ph.D., "Teenage Pregnancy: Arizona, 1987-1997," (Arizona Department of Health Services Office of Health Planning, Evaluation and Statistics: March, 1999).

[19]Pregnancy/Fertility Rate: The sum of live births, fetal deaths (or stillbirths) and abortions to Arizona resident women per 1,000 females. Data sources include certificates of live births, fetal deaths and reports of induced terminations of pregnancy filed with the Arizona Department of Health Services. Note: Induced terminations of pregnancy performed out-of-state are not included since they are not reported to the State of Arizona, nor are spontaneous fetal losses that occur at less than 20 weeks of gestation. Fertility rates refer to live births per 1,000 females.

Table 69. Pregnancies and Pregnancy Outcomes Pre-Adolescents Age 10-14												
Number	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	228	236	229	253	268	274	256	333	314	293	156	184
Live Births	142	160	159	188	193	188	187	246	226	216	92	102
Abortions	82	75	69	63	73	84	68	82	82	72	56	78
Rates per 1,000	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	1.9	1.9	1.8	2.0	2.1	2.1	1.8	2.3	2.2	1.9	1.0	1.1
Live Births	1.2	1.3	1.2	1.5	1.5	1.4	1.3	1.7	1.6	1.4	.6	.6
Abortions	.7	.6	.5	.5	.6	.6	.5	.6	.6	.5	.4	.5

3 Pregnancies Age 15-17

In 1998 there were 4,390 pregnancies among girls age 15-17, representing a rate of 46.9

The teen pregnancy rate within the 15-17 age group has been declining each year since it reached a high of 65.4 pregnancies per 1,000 in 1994. The 1998 pregnancy rate of 46.9 per 1,000 females represents a dramatic drop in pregnancies for this age group since 1994, and the abortion rates and fertility rates have also been declining during this same period (see Figure 84).

Figure 84. Pregnancy, Birth and Abortion Rates per 1,000 Teenage Girls Age 15-17

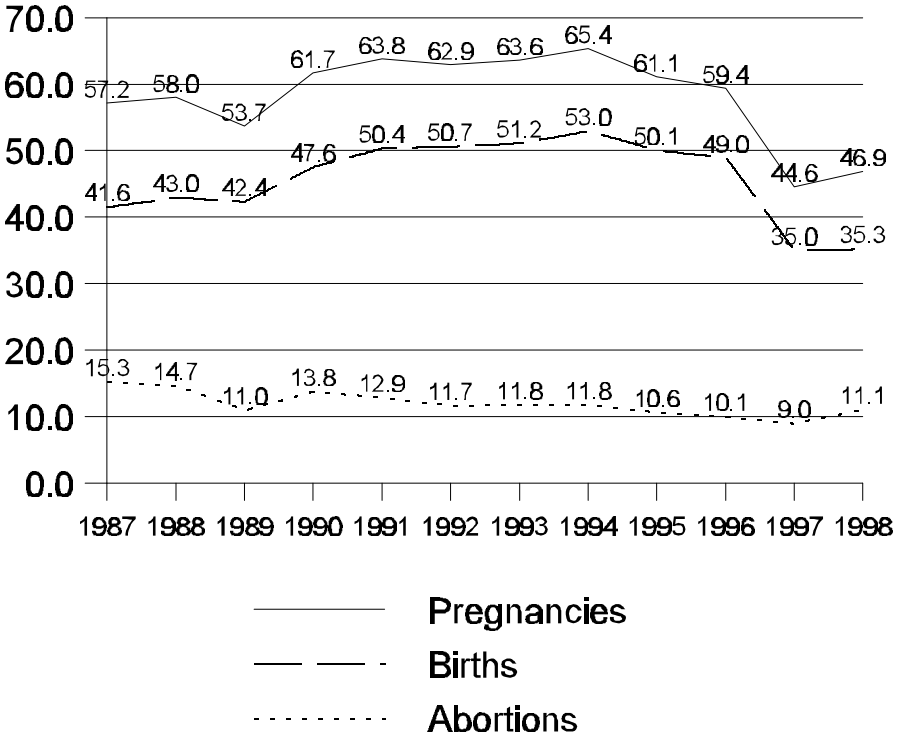
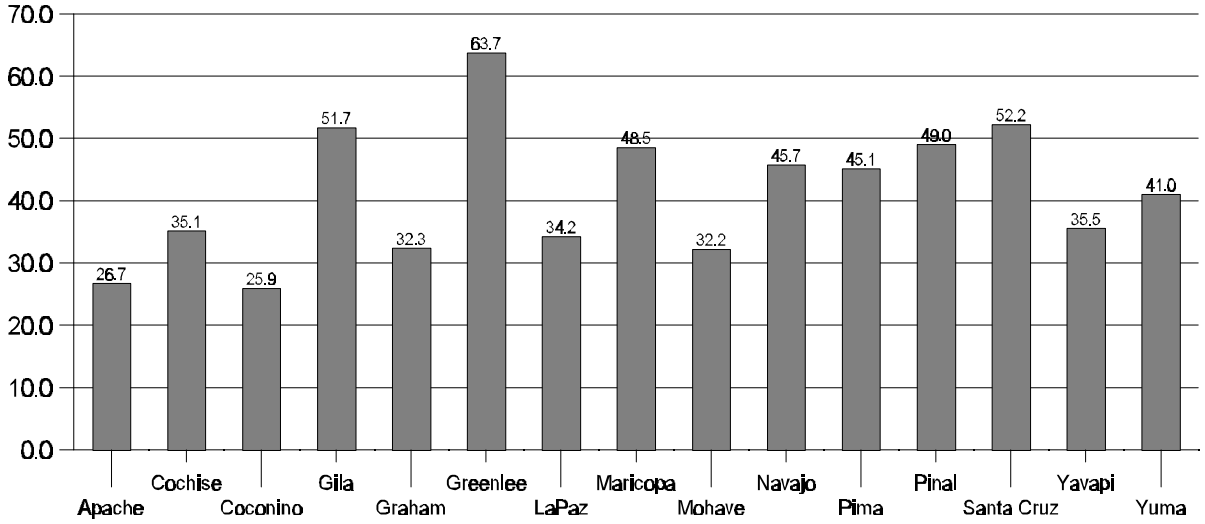


Figure 85. 1998 Pregnancy Rates by County
Age 15-17



The recent drop in pregnancy rates for the 15-17 age group is mirrored within each racial and ethnic group, as shown in Figure 86.

Figure 86. Pregnancy Rates by Ethnicity
Age 15-17

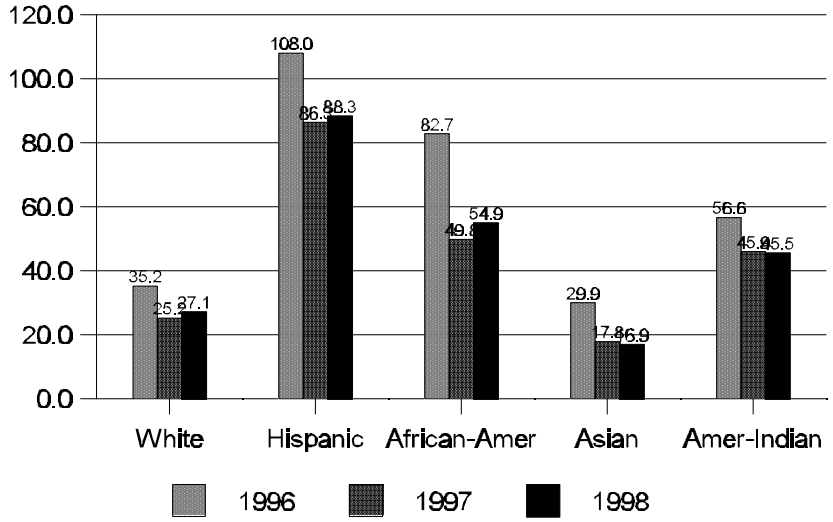


Table 70 summarizes pregnancy and pregnancy outcome statistics for teenagers age 15-17.

Table 70. Pregnancies and Pregnancy Outcomes Age 15-17												
Number	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	4,339	4,448	4,034	4,436	4,714	4,762	4,803	5,092	5,092	5,262	4,082	4,390
Live Births	3,200	3,300	3,193	3,423	3,726	3,838	3,870	4,132	4,178	4,340	3,205	3,305
Abortions	1,174	1,126	829	994	955	885	892	916	880	892	826	1,046
Rates per 1,000	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	57.2	58.0	53.7	61.7	63.8	62.9	63.6	65.4	61.1	59.4	44.6	46.9
Live Births	41.6	43.0	42.4	47.6	50.4	50.7	51.2	53.0	50.1	49.0	35.0	35.3
Abortions	15.3	14.7	11.0	13.8	12.9	11.7	11.8	11.8	10.6	10.1	9.0	11.1

3 Pregnancies Age 18 and 19

There were 6,386 pregnancies among girls age 18 and 19 in 1998, representing a rate of 131.1 pregnancies per 1,000. The rates across counties ranged from a high of 151.2 per 1,000 females in Pinal County to a low of 68.4 in Coconino County (see Figure 87).

Figure 87. 1998 Pregnancy Rates by County Age 18-19

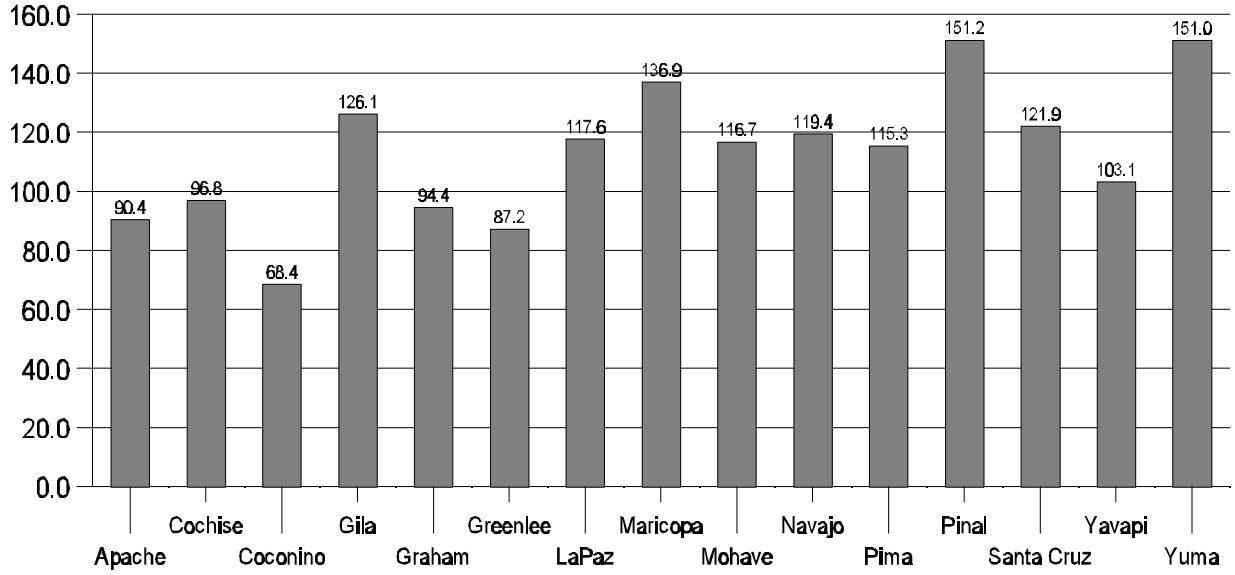


Figure 88 and Table 71 summarize pregnancy and pregnancy outcome statistics for teenagers age 18-19 from 1987 through 1998.

Figure 88. Pregnancy and Pregnancy Outcomes per 1,000 Females Age 18-19

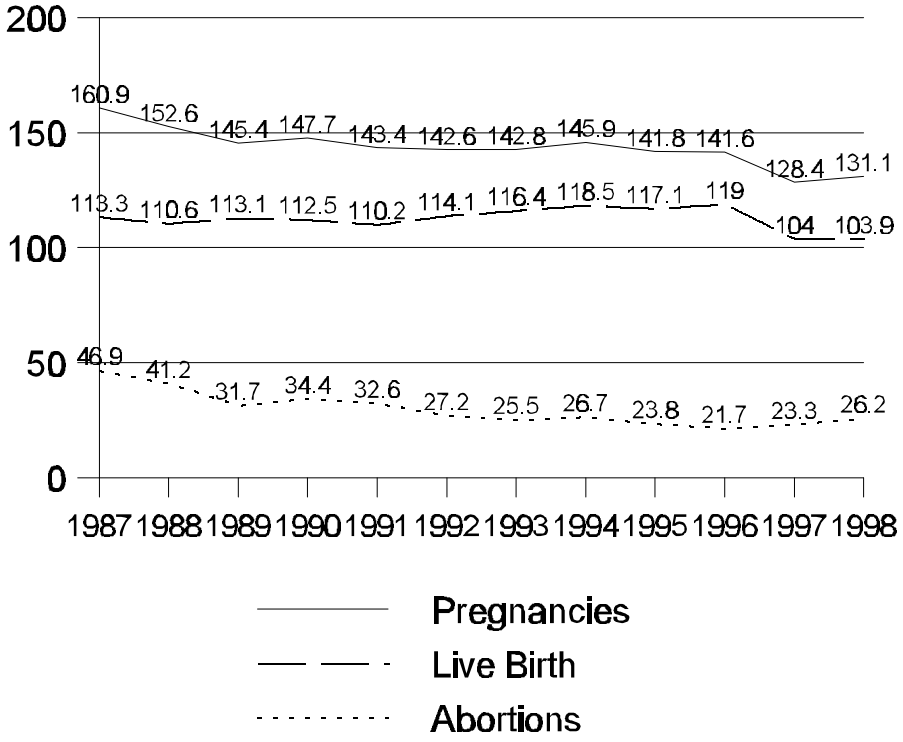


Table 71. Pregnancy and Pregnancy Outcomes Age 18-19												
Number	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	7,715	7,701	7,741	8,080	8,055	7,849	7,831	7,982	7,950	7,966	7,429	8,056
Live Births	5,433	5,583	6,023	6,156	6,189	6,281	6,381	6,480	6,566	6,691	6,017	6,386
Abortions	2,248	2,081	1,690	1,883	1,834	1,498	1,397	1,460	1,332	1,222	1,351	1,611
Rates per 1,000	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Pregnancies	160.9	152.6	145.4	147.7	143.4	142.6	142.8	145.9	141.8	141.6	128.4	131.1
Live Birth	113.3	110.6	113.1	112.5	110.2	114.1	116.4	118.5	117.1	119.0	104.0	103.9
Abortions	46.9	41.2	31.7	34.4	32.6	27.2	25.5	26.7	23.8	21.7	23.3	26.2

3.1.2.2 & 3.1.2.3 Direct and Enabling Health Care Services

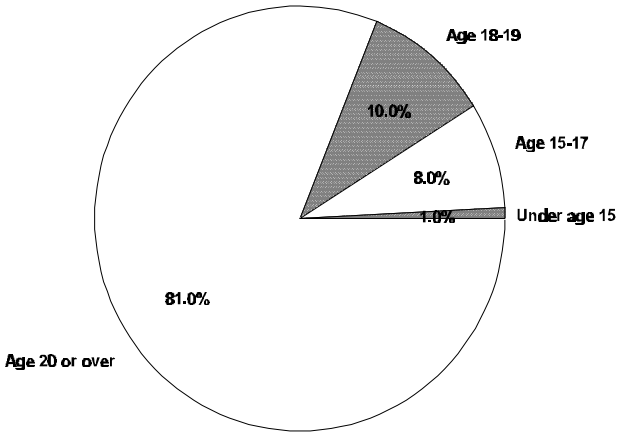
Health care in Arizona has been delivered through managed care delivery systems since the early 1980s. The managed care system effectively meets the needs of most Arizona residents. Access to care has presented challenges to those living in rural areas and to those with special health care needs. The state has a multitude of approaches to address these issues.

Family Planning Services

The provision of family planning services within Arizona has seen a great deal of change during the past five years. In addition to services provided to women of childbearing age through private health insurance, federal funding had been available through three sources: Title V, Title X and Title XX. In 1997, all funding from Title XX ($200,000 annually) was withdrawn.

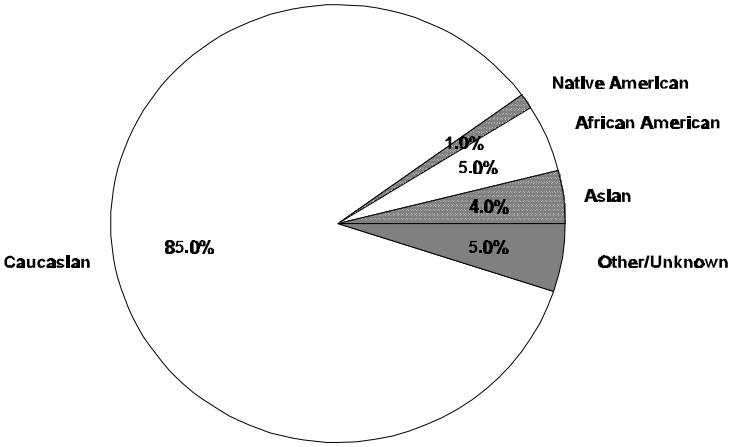
The Office of Women's and Children's Health has used Title V funds to contract for reproductive health and family planning services for women who are at or below 150% of the Federal Poverty Level. Contracts are currently in place with eleven county health departments to provide service. In 1999, the contracted counties provided 6,032 client exams and 4,370 pregnancy tests.

Figure 89. Age of Title X Clients



The Arizona Family Council is the Arizona recipient of Title X federal funds. In Arizona, Title X funded direct services are provided by community-based private and public agencies through contracts with the Council. In 1998, 45,820 individuals were served at 28 clinic sites in seven of Arizona's fifteen counties. There were 96,868 visits provided in 1998. Of the clients served, 67 percent were at or below 100 percent FPL, 16 percent are 101 - 150 percent FPL, 8 percent were 151 - 200 percent FPL and 10 percent were at 201 percent FPL or above. The majority of Title X

Figure 90. Race Distribution of Title X Clients



clients are age 20 and over as shown in Figure 89. Figure 90 shows the race distribution of Title X clients.

Health Insurance

Lack of health insurance coverage is a major barrier to accessing health care. Approximately a quarter of Arizonans (1,159,000) are uninsured, and 22 percent are considered vulnerable to becoming uninsured. (Child Health USA, 1999). Arizona ranks next to last of states and the District of Columbia in terms of the percent of children without health insurance. According to the Children's Action Alliance, there are three primary reasons the number of uninsured continues to climb: 1) On a national level, employment-based dependent health insurance has been steadily declining. Loss of employment-based insurance was the single greatest contributing factor in the decline in the number of children with health insurance. In Arizona, approximately 90 percent of uninsured children live with an employed main wage earner. 2) AHCCCS eligibility requirements for children are limited compared to other states. 3) There is a large number of children eligible for Medicaid but not enrolled. At least one-third of the children younger than eleven in Arizona who are income-eligible for AHCCCS are not in the program. A recent study by Families USA charged that many medicaid recipients mistakenly lost their benefits due to errors in implementation of the 1996 welfare reform law. These former recipients still qualified under their new low salaries. In July the state will begin a three-year $5.3 million campaign to make people aware of the different ways to qualify for Medicaid and resinstate those wrongly cut from the program.[1]

According to a recent telephone survey[2] (Children 2000) 84 percent of children under age 21 in Arizona have some kind of health insurance. Seventy-two percent of children who have insurance are covered through an employee's health insurance plan, 15 percent are covered by AHCCCS, 1.3 percent were covered by KidsCare, and 5.6 percent were covered through some other source. For those who had health insurance, most felt that the insurance covered their medical expenses either very well (79 percent) or somewhat well (18 percent). Similarly high percentages felt that their insurance covered their medical needs either very well (82 percent) or somewhat well (15 percent).

Sixty-eight percent of children have some kind of dental insurance. Sixty percent of them had coverage for preventive services, 53 percent had coverage for restorative services, 38 percent had coverage for orthodontics and 49 percent had emergency dental coverage. During the past year, dental insurance covered the family's dental expenses very well for 57 percent of the children and somewhat well for 32 percent.

Children without health insurance are less likely to have a usual source of health care and often delay seeking care. A special report by the Flinn Foundation in 1995 found two of every three Arizonan children have not had health insurance coverage for two consecutive years. Fifty-four percent of chronically uninsured children ages 1-16 had not seen a doctor or other provider in the past year and 19 percent had no usual source of care. Not

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[1]Arizona Republic, June 20, 2000.

[2]It is important to note that this number is likely to over estimate the percent of children with health insurance because a telephone survey will not reach those residents who do not have a telephone. People without telephones are likely to have lower income levels and are probably less likely to have health insurance.

surprisingly, 74 percent of chronically uninsured children families have a main wage earner who lacks insurance. Of the uninsured, 74 percent live in urban areas, with 52 percent residing in Maricopa alone. Lack of insurance coverage is impacted in part by the large population on non-U.S. citizens in Arizona, more than half of the non-US citizens surveyed were uninsured.

Managed Care

The health care delivery system and its financing has dramatically changed in the last 20 years, and managed care has played a dominant role in its evolution. To date, managed care penetration in the US is 67 percent, and approximately 181 million individuals are enrolled in managed care plans. Under the managed care umbrella, Health Maintenance Organizations (HMOs) have become a major source of health care for beneficiaries of both employer-funded care and of the public funded programs, Medicaid and Medicare. HMOs are rapidly expanding, and enrollment has increased from 51 million in 1976 to 79 million in 1999 (CDC, 1995 and Managed Care On Line Information Exchange, 1999).

According to the Health Care Financing Administration, 16.6 million Medicaid Beneficiaries were enrolled in managed care in 1998, a six fold increase from 2.7 million in 1991. As of 1998, 43 states and the District of Columbia had more than a quarter of their Medicaid population enrolled in managed care. In addition, there were 585 Medicaid managed care plans in operation, more than double since 1993 (Kaiser Family Foundation, 1999).

Children are increasing being enrolled into managed care plans as Medicaid programs nationally convert from fee-for service to managed care. The American Association of Health Plans estimated that 16.7 million children or 22 percent of all children under the age of 20 were enrolled in managed care plans in 1994. Children represented nearly 33 percent of HMO enrollment, but only 29 percent of the US population (The Future of Children, Summer/Fall 1998).

Penetration of Managed Care in Arizona

Managed care is a major force in health care in Arizona, with 86 percent of physicians in Arizona having at least one contract with a managed care plan (Group Health Association of America 1995). In Phoenix, 72 percent of commercially insured persons are enrolled in managed care plans, compared to 52.6 percent of Americans nationally (Edlin 1994). In addition, all of the women and children participating in Arizona's Medicaid program are enrolled in managed care plans.

Survey data from telephone interviews conducted during the year 2000 indicate that of children with health insurance, 85 percent are covered by a managed care plan. Sixty-three percent of all children in Arizona have health insurance through a managed care plan. Of kids with dental insurance, 75 percent of them are covered through managed care, with 45 percent of all children having dental coverage through some kind of managed care plan.

Special Challenges Facing CSHCN in Managed Care

Increasing numbers of children with special health care needs are enrolling in managed care programs. An underlying principle behind this movement, is that managed care may improve service coordination and

primary care use. However, managed care may also threaten health outcomes among children with special health care needs by potentially decreasing access to the range of needed services. Authorization requirements and reduced access or denials to specialists have been described as disadvantages of HMOs for chronically ill children. Some states as a result have enacted requirements which mandate how managed care plans select speciality providers and handle referrals to specialists. Medicaid managed care plans often reduce necessary services for chronically ill and disabled children by limiting network providers and require prior authorization for referrals to out of plan specialists. Medicaid evaluations found reductions of 30-50 percent in the probability of visiting a specialist among managed care enrollees as compared to fee-for service enrolles (The Future of Children, Summer/Fall 1998).

In Arizona, a multi-specialty, interdisciplinary model of managed care is used to provide rehabilitative services to CSHCN. The children receive primary care from one managed care organization and specialty care from another. Procedures are in place to promote good communication between primary and specialty care providers. The specialty care is carved out to ensure that services for the CSHCN are administered so as to effectively integrate and coordinate all services needed to optimize health status outcomes. There is a transition team working on merging primary care and specialty care in the future.

For children with special health care needs, the quality of the benefits package takes on a new dimension. Durable medical equipment is often not covered. Referrals to specialists, specialty services, and non-physician providers are often difficult to obtain or are limited. Needed prescription drugs are often not on insurance formularies, and preventive services which recognize the special needs of the population are often not covered. However, this year the CRS contracts reflected the same benefit package for both Title XIX and XXI eligible children.

Children with special health care needs can be successfully served using the managed care model when they are allowed to follow a more enhanced version of policies and procedures than those used with the general population. As described in *The Urban Institute* report, Medicaid Managed Care for Persons with Disabilities (August 1998):

"... mainstream programs cannot accommodate the heterogeneity of conditions among the disabled because they lack experience in individual care planning and service provision, are not equipped to address the full spectrum of health-related and social service needs of the disabled ..."

This concern is borne out in national studies, such as the *Family Voices* survey, which consistently identify the following issues:

- barriers to accessing specialty and sub-specialty providers,
- formulary restrictions,
- caps on visits to specialty and sub-specialty providers and therapists,
- adequacy of mental health services,
- adequacy of oral health services,
- unmet needs (e.g., respite services, nutritional supplements, durable medical equipment,

disposable medical supplies), and

- coordination with education and social service programs.

Findings from the various state and local studies have had practical applications. In 1996 the OCSHCN CRS received a mandate from the governor to examine the feasibility of transitioning its target population to the state Medicaid program (AHCCCS) which is a managed care system. A two-year study, including analysis of models from other states as well as Arizona data, concluded that CRS services were best provided independently of health care for those with general needs.

Over the past ten years, the delivery of services has been modified to better address the issues of CSHCN and their families. The ultimate goal now is to incorporate primary care into the system so that it will truly be comprehensive. As part of this process, and to align CRS more closely with the manner in which AHCCCS is financed, the program will begin using capitated rates in coming specialty care contracts.

The development of the rates to be used was an extensive and intensive process. Initially, models used in other states were examined to determine their feasibility for Arizona. Given the unique natures of the CRS and AHCCCS programs, it was concluded that none of those models would be efficacious. It was then decided to conduct a review of the four regional program providers to ascertain their costs for treating different conditions. From this review, a system of rates was developed such that based on local costs, each regional provider will be capitated based on their populations of people with low, medium, and high cost conditions.

Since 1993, several surveys have been conducted with Arizona families with CSHCN. The studies collected information on a variety of issues including: prevalence of health conditions, CSHCN functional limitations, access to care, and unmet needs. A 1995 survey of households found that families with CSHCN were considerably more likely to need assistance with health (and related) services than were families whose children were basically healthy.

Table 72. CSHCN Families Needing Assistance

ISSUE	No CSHCN	CSHCN	All Households
Locating a doctor to meet needs	8%	18%	10%
Locating a dentist to meet needs	10%	20%	12%
Obtaining medicine/special equipment	4%	14%	7%
Locating a baby sitter/respite care	8%	16%	10%
Information on children's behavior	14%	29%	18%
Paying basic expenses	16%	30%	20%

Subsequent assessments have demonstrated a similar pattern of need. The four primary issues identified in the December 1999 M&M Team survey were mental health, social services, service coordination, and out-of-pocket expenses. In June 2000, the Performance Outcome Measure indicators that achieved unanimous acceptance

were:

- percent of children with insurance that covers costs of needed services including: mental health, dental care, durable medical equipment, prescription medication, nutritional supplements, and medical supplies;
- the degree to which the state has a coordinated interagency enrollment/eligibility process for CSHCN; and
- percent of at-risk infants and children screened and monitored for special health care needs/developmental delay.

As of June 2000, the findings from the Family Survey (481 interviews conducted in 11 communities) indicate that families still need assistance locating physicians and dentists, obtaining respite care and paying for out of pocket expenses. Mental health services are a tremendous need that the state legislature continues to struggle with. Coordination of health care and then integrating the health care plan into education and social service programs remains a significant concern of parents. Thus, overall, there is still a significant need to work with the managed care delivery systems to make them more comprehensive and more accessible.

Arizona Health Care Cost Containment System (AHCCCS)

Arizona was the last state in the nation to implement a Medicaid program. After much debate, the legislature rejected traditional fee-for-service financing arrangements in favor of an innovative plan for Medicaid managed care. In October 1982, the nation's first Section 1115 demonstration waiver for a statewide Medicaid managed care program was approved. AHCCCS is a prepaid managed care Medicaid program that began in1982 and has become a national model. As of April 1999, AHCCCS provided health care coverage to 429,217 eligible members, approximately 10 percent of Arizona's population.

As a result of a ballot initiative passed by Arizona voters in 1996, AHCCCS submitted a request to Health Care Financing Administration (HCFA) in May1997, to allow the state to extend acute care Medicaid eligibility to low income adults and children with income up to 100 percent FPL. The Medicaid proposal was rejected because it did not achieve budget neutrality. The state Medicaid agency plans to continue its efforts to reach budget neutrality and resubmit its application to the federal HCFA.

AHCCCS health care coverage includes emergency services only for individuals who qualify for the Federal Emergency Services (FES) and State Emergency Services (SES) programs, and full medically necessary health care services for individuals who qualify for Medicaid because they are categorically eligible. In addition, AHCCCS is the state agency responsible for administering KidsCare, Arizona's Children's Health Insurance Program (the Title XXI Children's Health Insurance Program).

From the beginning, the AHCCCS program was envisioned as a partnership which would use private and public managed care health plans to mainstream Medicaid recipients into private physician offices. This arrangement opened the private physician network to Medicaid recipients and allowed AHCCCS members to choose a health plan and a primary care provider who can be either a physician, nurse practitioner or physician assistant. Primary care providers serve as the gatekeepers for the system and manage all aspects of medical care

for members.

The AHCCCS program is based on cost containment through preventive care rather than emergency care. AHCCCS health plans are paid a prospective monthly capitation amount for each member enrolled with the health plan. This capitated concept, although new to Medicaid, was patterned on the way many consumers pay for private health care insurance."[3] As of February 2000 there were 27,363 children enrolled in AHCCCS. However, counting all of the children under age 21 who were enrolled at any time during the previous federal fiscal year (October 1998 through September 1999) the number is much higher. A total of 415,549 different children under age 21 were enrolled for some length of time with AHCCCS.

KidsCare

As a result of the Balanced Budget Act of 1997, Congress enacted the State Children's Health Insurance Program (CHIP) to expand health insurance coverage to the nearly 10 million uninsured children in the U.S. Children eligible for CHIP enrollment include uninsured children below the age of 19 with family incomes below 200 percent of the federal poverty level. According to the Kaiser Family Foundation, total U.S. CHIP enrollment was 1,310,959 in June 1999, a 57 percent increase from December 1998.

Many states chose to expand Medicaid eligibility during its initial CHIP effort because it was quicker and easier to implement. States are currently in the process of preparing separate CHIP programs. Since its inception, Arizona has had a separate CHIP program.

"KidsCare is Arizona's Children's Health Insurance Program. It is a federal and state program, administered by AHCCCS, for providing health care services for children under the age of 19 living in families with a gross income at or below 200 percent of the federal poverty guidelines." (From AHCCCS web site). Since KidsCare began in 1998, enrollments have risen steadily. The outreach efforts undertaken to identify children eligible for KidsCare have also resulted in identifying additional children who are eligible for Medicaid. Enrollment increased from 3,710 in December 1998 to 14,985 in June 1999, a 304 percent increase. There were an additional 13,228 children enrolled in Medicaid as a result of applying for CHIP. As of February 2000 there were 28,657 children enrolled in KidsCare who had chosen a health plan and an additional 5,738 who had been determined eligible but had not yet been enrolled with a health plan (1.4 percent are under age 1, 69.3 percent are age 1-13, 29.1 percent are age 14-18, and 0.2 percent are age 19).[4]

There were concerns related to slow enrollment rates during the first year of the program. The AHCCCS administration made a number of modifications to their policies and procedures to enhance participation in the KidsCare Program. These efforts included: eliminated interview requirement, allowed mail in applications, simplified the application, limited required verification to income and citizenship, guaranteed a 12 month enrollment, allowed annual redeterminations by mail, promoted community partnership for outreach, direct mailings of information and applications to over 100,000 households, implemented hotline to provide help with

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[3]Source: AHCCCS Website, June 21, 2000.

[4]Source: Children's Action Alliance Website, June 21, 2000.

applications, and established an automatic conversion of children losing Medicaid eligibility due to income or resources.

Initiatives to Increase Access to Primary Care

Potential sources of primary care services include 28 community health center sites (CHCs), 13 primary care centers (PCCs) in Maricopa County, Arizona Health Care Cost Containment System (AHCCCS) contractors, two free clinics (Phoenix and Prescott), various tobacco tax primary care programs that provide care to uninsured Arizona residents who are at or below 200 percent of the federal poverty level (FPL), and hospital emergency rooms.

Community health centers served over 275,0000 individuals in more than eighty-five medically underserved Arizona locations. Approximately 145,000 of CHC clients are uninsured. In addition, CHCs provide services to Medicare clients, privately insured patients and participate in AHCCCS and the Arizona Tobacco Tax Primary Care Programs. There are eleven federally qualified community health centers located at 38 delivery sites through out Arizona that provide primary care services on a sliding scale basis.

Maricopa hosts one of the largest uninsured populations in Arizona. Its PCCs have been historical providers of health care to the uninsured and have approximately 300,000 outpatient visits annually. One of Maricopa's Primary Care Centers, McDowell Healthcare Center, is the largest provider of HIV-related medical care for adults in Maricopa County.

1994 Tobacco Tax

In November 1994, state residents approved a ballot initiative that increased tobacco taxes by 40 cents per pack to finance primary health care for the poor and anti-tobacco education and research programs. There are two major components to the Tobacco Tax Primary Care Program. Through Part A, $6 million annually is used to fund development of new primary care services. Approximately 21,600 clients were served by Part A in fiscal year 1999. Part B, the Tobacco Tax Qualifying CHC Program, receives $5 million annually that provides operational funding to existing community-based PCCs.

In addition, the tobacco tax funded the telemedicine pilot program which uses telecommunications as a medium for the provision of psychiatric and other behavioral health services. In FY 1999, the telemedicine pilot program served 322 clients and included 1852 video-conferencing services. In travel related cost savings, the Telemedicine Pilot Program saved 366,145 miles in travel, 7661 hours of staff time and $118,977 in travel cost.

Tobacco tax and participant contributions both fund Arizona's Premium Sharing initiative. This four-county, three-year demonstration program provides health insurance to families below 200 percent of the FPL. The program also provides insurance to chronic illness sufferers up to 400 percent of the FPL who can not obtain insurance. Families must contribute up to 4 percent of their household gross income; chronic illness sufferers above 200 percent are to pay the full premium.

Tobacco Tax Settlement Initiative

The *Healthy Children Healthy Families* initiative was filed in November 1999 to initiate a petition drive to place the initiative on the November general election ballot. The initiative specifies that all annual income from

the tobacco settlement, estimated to be $120 million annually, will be used for health care and prevention. The initiative promotes the expansion of AHCCCS to cover approximately 40,000 parents a year who earn up to $17,000 for a family of four. An additional $35 million per year would be directed towards programs that address at-risk families. The funding will support prenatal outreach, family mentoring, parenting education and preschool for families with children younger than six. The initiative also proposes to protect programs for smoking cessation and disease research. The petition drive has until July 6, 2000 to collect 101,762 valid signatures.

Model Work Force Programs

Model programs that are increasing access to primary care include four Arizona workforce programs. The Arizona Loan Repayment Program is for physicians and mid-level providers who agree to practice in a federally designated HPSA. The Arizona Private Provider Loan Repayment Program was funded for one year and emulated the Arizona Loan Repayment Program for private practices. The J-1 Visa Waiver program places foreign-trained physicians in federally designated HPSAs for two years. The Arizona Medical Student Loan Program grants scholarships to University of Arizona medical students in exchange for serving two years in an AZMUA. In addition to the state workforce programs, the National Health Services Corps provides both scholarship and loan repayments for primary care providers who agree to serve their commitment in a federally designated HPSA. In 1998, there were 38 National Health Services Corps placements (Health Policy Tracking Service, 1998).

The OCSHCN Children's Rehabilitative Services Program (CRS) offers care through four regional Centers of Excellence located in Phoenix, Tucson, Flagstaff, and Yuma (the state's largest population centers). The four regional Centers of Excellence provide multi-specialty, inter-disciplinary care at their base sites and through 22 condition-specific outreach clinics. With respect to surgical sub-specialists, there are a number who have years of experience and who treat pediatric patients as part of their practice. An issue is the lack of practitioners who have completed additional, specific "pediatric" fellowship training in the sub-specialties which are frequently involved in the care of CSHCN - neurosurgery and urology. As for pediatric medical sub-specialties, there is a concern over the long term availability of pediatric rheumatologists.

There is no shortage of dentists, pedodontists and orthodontists so much as a dearth of those willing to take the more medically complex CRS patients. Most of the resistance is related to perceived bureaucracy of public systems in general and low payment rates. Another concern is related to the use of anesthesia. The standards a facility must meet to perform procedures under general anesthesia or even conscious sedation are very stringent. Procedures can not be authorized unless they are done in a very controlled environment like a hospital or an outpatient surgery setting. Further, it is sometimes difficult to obtain an anesthetist with the appropriate knowledge and experience for CSHCN with complex conditions.

It is difficult to obtain the services of three allied health professionals: child life specialists, bi-lingual speech/language pathologists and bi-lingual psychologists. Even recruiting nationally, these specialists are rare and difficult to attract. Also, recruiting physical and occupational therapists is an ongoing challenge in general because of the number of in-state university training programs. These professions have made an art out of

controlling the "supply" side of the equation.

3.1.2.4 Population-Based Services

The state plays a large role in managing and coordinating health care services throughout Arizona. Access to health care is of great concern in Arizona due to its characteristic population settlement patterns. Arizona is mostly frontier and rural with over 85 percent of the state's population residing in urban centers (Phoenix, Tuscon, Mesa, Glendale, Tempe, Scottsdale). Rural residents must often travel significant distances to access primary care services. Regional hospital-based services are located in urban Phoenix and Tucson and require extensive time and travel.

Distribution of Physicians -PCPs and Specialists in Arizona

There are 48 federally designated health professional shortage areas (HPSAs). Approximately 13 percent of Arizonans live in HPSAs, and an estimated 9 percent are vulnerable to primary care shortages. In addition, Arizona has developed its own designation system for identifying underserved areas. According to the Bureau of Health Systems Development, 71 non-metro and 20 urban state-designated shortage areas are home to an overwhelming 4,344,039 state residents (91 percent of the state population).

There are also 52 state designated Arizona Medical Underserved Areas (AzMUAs). AzMUA involves the application of an index which weights ten indicators such as providers to population ratios, travel time, percent of population below poverty, adequacy of prenatal care, etc. Annually, the approximately twenty-five highest scoring areas are designated as underserved. Additionally, all HPSAs are automatically designated as AzMUAs. In 1998, thirteen AzMUAs outside of Maricopa and Pima counties did not have a provider, and twenty AzMUAs had a population to provider ratio greater than 3000:1.

Table 73 shows the area (in square miles) and population of each of the primary care areas listed by the ADHS Bureau of Health Systems Development as well as the active number of certified ambulance services, emergency medical technicians, licensed pharmacies, pediatricians, nurse practitioners, midwives, registered nurses and dentists The final column on this table shows the number of residents per active primary care provider. A primary care provide is counted as physicians plus eight-tenths of the nurse practitioners, physician assistants and registered nurses.[5]

General and Special Hospitals in Arizona

There are eighty-five licensed hospitals throughout the state of Arizona. Fifty-nine of these are classified as general hospitals, three are rural general hospitals, and twenty-three are specialty hospitals. Among the 11,423 licensed beds 6,405 are licensed medical/surgical, 1,136 are psychiatric, 529 are rehabilitation, 902 are maternity, 579 are pediatrics, 1,022 are in intensive care units, and 60 are in coronary care units.

The Arizona Perinatal Trust endorses a voluntary program which certifies levels of perinatal care provided at each hospital in Arizona. Level I perinatal care centers provide services for low risk obstetrical patients and newborns, including cesarean deliveries. Level II facilities provide services both for low risk

[5]Source: Health Policy Tracking Service, Washington, D.C., 1998.

obstetrical patients and newborns plus selected high-risk maternity and complicated newborn patients. Level II EQ facilities provide expanded services of Level II perinatal care centers for defined maternal and neonatal problems through a process of enhanced qualifications. Level III centers provide all levels of perinatal care and treatment or referral of all perinatal and neonatal patients. (For more information on high-risk perinatal care in Arizona, ***see "Perinatal Care"*** later in this section).

Table 74 shows the distribution of hospital beds and neonatal intensive care units in each county in Arizona. Although Good Samaritan Hospital and Medical Center and Phoenix Children's Hospital are each listed on this table as level III centers, they are actually certified together. (Phoenix Children's Hospital is located in the same building as Good Samaritan.)

Table 73. Distribution of Non-Hospital Providers by Primary Care Area (PCA)												
PCA	Primary Care Area	Area	Population	Certified Ambulance Services	Emergency Medical Techs	Pharmacies	Dentists	Pediatricians	Obstetricians	Midwives	PCPs	Pop/PCP
13115	Ahwatukee	70	100,246	0	202	25	73	44	29	10	195	514
19201	Ajo	1,530	4,603	1	20	1	0	1	1	0	4	1,279
21119	Ak-Chin Indian Community	33	759	0	2	0	0	0	0	0	0	*
21113	Apache Junction	89	36,791	0	80	8	5	5	4	2	23	1,614
19202	Arivaca	1,160	14,090	0	28	0	3	4	3	0	10	1,468
25301	Ash Fork	1,504	1,658	0	13	0	0	0	0	0	0	*
13112	Avondale/Tolleson	81	49,812	0	81	7	13	6	6	0	28	1,805
25303	Bagdad	521	2,895	1	16	0	0	0	0	0	3	1,113
03204	Benson	923	9,645	3	30	3	4	2	2	1	10	946
03201	Bisbee	624	20,884	2	71	2	2	5	4	1	20	1,024
09203	Bonita/Klondyke	1,165	2,932	0	2	0	0	0	0	0	3	1,047
13108	Buckeye	1,790	12,365	1	41	2	1	1	1	0	9	1,344
15511	Bullhead City	185	32,410	3	135	7	24	9	7	0	47	684
21103	Casa Grande	276	35,406	1	55	6	13	12	7	0	46	776
19211	Catalina	137	7,509	1	22	2	4	0	0	0	7	1,104
13104	Cave Creek	397	30,608	1	204	13	33	18	17	4	94	327
13119	Chandler	60	177,793	1	307	30	92	61	36	3	169	1,052
25302	Chino Valley	1,443	13,435	0	98	1	2	0	0	2	5	2,742
27511	Cocopah Tribe	26	1,835	0	2	0	0	0	0	0	0	*
12504	Colorado River Indian Tribes	341	3,051	0	0	0	0	0	0	0	0	*
19203	Continental	669	14,385	1	48	1	4	1	0	1	8	1,754
21117	Coolidge	73	10,536	0	10	1	4	1	1	0	4	2,395
25313	Cordes Junction	1,005	4,301	1	29	0	1	0	0	0	1	5,376
27507	Dateland	4,952	3,008	1	8	0	0	0	0	0	0	*
15507	Dolan Springs	2,145	3,855	2	18	0	0	0	0	0	0	*
03202	Douglas	256	20,498	1	42	5	4	5	5	0	14	1,423
11202	Duncan	619	2,963	0	12	0	0	0	0	0	1	5,387
13106	El Mirage	75	29,536	0	39	3	3	4	4	0	11	2,637
03207	Elfrida	1,281	8,663	2	28	0	0	1	1	0	3	3,332
21105	Eloy	453	13,926	1	31	0	0	1	1	0	3	4,974
05311	Flagstaff	4,665	44,240	2	308	1	7	5	4	8	40	1,095
5310	Flagstaff-Central	6	11,504	1	40	9	26	25	15	0	64	*

Table 73. Distribution of Non-Hospital Providers by Primary Care Area (PCA)												
PCA	Primary Care Area	Area	Population	Certified Ambulance Services	Emergency Medical Techs	Pharmacies	Dentists	Pediatricians	Obstetricians	Midwives	PCPs	Pop/PCP
5312	Flagstaff-West Central	12	19,380	0	64	8	19	6	6	2	31	621
21115	Florence	1,072	17,430	0	22	3	3	4	4	0	11	1,556
13102	Fort McDowell Mohave-Apache Indian Community	39	608	0	0	0	0	1	1	0	1	608
15513	Fort Mojave Indian Tribe	43	6,565	0	13	1	0	0	0	0	3	2,345
27509	Fort Yuma-Quechan Tribe	90	1,780	0	1	0	0	0	0	0	0	*
05301	Fredonia	2,770	2,437	0	2	0	1	0	0	0	1	2,437
13121	Gila Bend	2,991	4,968	1	24	0	0	1	1	0	3	1,911
21121	Gila River Indian Community	583	14,324	0	19	0	0	5	3	0	13	1,069
07103	Gila-Central-Globe	689	22,166	0	98	6	5	7	6	0	25	887
07101	Gila-Northern-Young	786	18,906	1	71	4	7	7	6	0	25	762
07105	Gila-Southern-Hayden	147	1,646	0	8	0	0	0	0	0	1	1,646
07102	Gila-Young-Tonto Basin	1,301	1,922	2	75	0	2	0	0	2	2	1,201
13120	Gilbert	34	103,325	0	223	20	32	49	34	2	125	828
13111	Glendale	30	115,592	0	181	12	52	27	21	2	89	1,299
09201	Graham-Southern	1,223	23,313	1	69	5	12	10	9	1	23	1,022
19205	Green Valley	9	13,118	0	15	3	5	5	5	0	17	772
13117	Guadalupe	1	5,395	0	1	0	0	3	3	0	4	1,349
05305	Havasupai Tribe	277	554	0	0	0	0	0	0	0	0	*
17307	Heber-Overgaard	318	2,035	1	18	1	1	1	1	1	2	1,131
17303	Holbrook	1,374	7,885	1	27	3	2	3	2	0	6	1,408
17310	Hopi Nation	3,245	13,571	0	17	0	0	0	0	0	0	*
15505	Hualapai Tribe	1,574	1,233	0	1	0	0	1	1	0	1	1,233
15501	Kaibab Paiute Tribe	168	378	0	0	0	0	0	0	0	0	*
21109	Kearny	69	3,143	1	22	1	1	1	1	0	3	1,123
15509	Kingman	4,721	45,227	0	185	8	12	8	6	0	50	901
15515	Lake Havasu City	382	46,923	1	112	8	14	10	8	1	56	841
13124	Litchfield Park	4	5,349	0	6	2	5	3	3	0	12	461
15503	Littlefield	4,864	4,876	1	18	1	0	1	1	2	3	1,434
13125	Luke	4	4,414	0	9	0	1	4	3	0	11	409
19212	Marana	476	12,475	2	60	0	0	2	1	1	9	1,418

Table 73. Distribution of Non-Hospital Providers by Primary Care Area (PCA)												
PCA	Primary Care Area	Area	Population	Certified Ambulance Services	Emergency Medical Techs	Pharmacies	Dentists	Pediatricians	Obstetricians	Midwives	PCPs	Pop/PCP
21101	Maricopa	362	8,735	0	23	0	0	0	0	0	1	8,735
13118	Mesa	122	216,498	1	411	41	110	45	41	5	166	1,304
11201	Morenci	1,400	6,262	1	33	1	2	3	3	0	7	895
01309	Navajo Nation	14,516	95,978	4	119	4	11	19	16	10	61	1,573
15512	Needles/Topock	91	1,416	1	10	0	0	0	0	0	0	*
23201	Nogales	417	28,278	2	36	5	5	10	8	0	24	1,159
05315	Page	23	9,430	0	0	3	0	5	5	0	16	582
13103	Paradise Valley	138	396,697	0	598	63	244	128	75	19	480	826
12501	Parker	467	8,126	0	12	3	2	3	3	0	12	666
19217	Pascua Yaqui Tribe	1	3,261	0	2	0	0	0	0	0	0	*
23203	Patagonia	555	3,862	0	31	1	1	1	1	0	3	1,136
13105	Peoria	91	349,789	1	512	75	195	103	67	9	401	872
13110	Phoenix Sunnyslope	4	22,599	0	16	7	5	11	9	0	45	504
13113	Phoenix-Central	4	7,353	0	3	1	0	1	1	0	2	3,676
13113	Phoenix-Central	107	434,706	0	386	72	242	191	114	13	605	719
13114	Phoenix-South Central	42	188,801	6	508	34	31	124	64	2	461	410
13123	Phoenix-South Mountain	54	101,763	0	36	15	18	21	10	0	54	1,885
09202	Pima	543	3,797	0	26	0	0	1	1	0	3	1,117
25307	Prescott	204	43,409	1	109	13	48	28	22	4	91	479
25304	Prescott Valley	34	28,895	0	58	4	5	4	3	0	12	2,449
12502	Quartzsite	1,978	6,296	0	16	0	0	1	1	0	7	926
13109	Queen Creek	64	10,385	0	35	0	2	1	1	0	3	3,054
01305	Round Valley	1,085	9,798	1	44	2	2	3	3	2	11	891
12503	Salome	1,953	1,777	0	16	0	0	0	0	0	0	*
13122	Salt River Pima-Maricopa Indian Community	79	4,203	0	12	2	1	1	0	1	2	2,101
07111	San Carlos Apache Tribe	2,697	9,793	0	20	0	0	1	0	0	1	9,793
27506	San Luis	10	8,228	0	17	1	0	0	0	0	1	8,228
21107	San Manuel	1,223	19,241	1	28	1	2	2	2	0	8	2,405
19204	San Xavier District	111	1,584	0	1	0	0	5	5	0	5	317
01301	Sanders	1,597	1,183	1	13	0	0	0	0	0	0	*
13101	Scottsdale	1,280	231,179	3	256	54	206	155	122	8	482	480

Table 73. Distribution of Non-Hospital Providers by Primary Care Area (PCA)												
PCA	Primary Care Area	Area	Population	Certified Ambulance Services	Emergency Medical Techs	Pharmacies	Dentists	Pediatricians	Obstetricians	Midwives	PCPs	Pop/PCP
05313	Sedona	118	14,509	0	82	5	13	5	4	1	18	797
17305	Show Low	1,238	29,088	3	119	7	24	14	14	3	49	599
3203	Sierra Vista	319	49,324	2	185	7	19	14	7	0	65	757
27504	Somerton	136	18,195	1	21	0	2	3	0	3	13	1,421
01303	St. Johns	1,431	5,118	1	29	1	3	0	0	0	1	5,118
21111	Superior	858	11,118	0	40	0	1	0	0	0	5	2,224
13116	Tempe	46	288,886	2	530	56	150	135	91	8	383	754
19219	Tohono O'Odham Nation	4,180	11,776	0	17	0	0	6	5	0	10	1,227
03206	Tombstone	379	2,179	0	2	1	0	0	0	0	1	2,179
23205	Tubac	264	6,959	2	38	0	0	0	0	0	1	8,699
19210	Tucson-Central	55	203,823	3	303	39	31	116	54	7	304	671
19208	Tucson-East	12	61,112	0	127	7	24	12	7	4	36	1,717
19214	Tucson-East Central	14	79,929	0	160	28	159	72	46	12	261	306
19206	Tucson-North Central	15	70,640	1	109	9	38	21	18	6	82	866
19209	Tucson-Northeast	313	140,720	2	339	22	81	77	46	19	312	450
19215	Tucson-Northwest	235	77,079	0	319	12	16	21	16	4	124	621
19213	Tucson-South Central	168	14,501	1	37	0	0	0	0	0	2	9,063
19207	Tucson-Southeast	477	116,423	0	345	14	29	15	6	7	85	1,376
27505	Wellton	364	4,649	0	4	0	0	0	0	0	0	*
01311	White Mountain Apache Tribe	2,620	11,424	2	26	0	0	5	5	2	9	1,328
13107	Wickenburg	1,734	13,346	1	44	3	4	10	10	0	20	661
03205	Willcox/Bowie	2,009	13,382	2	55	5	2	1	1	0	11	1,195
05309	Williams	3,467	7,466	1	56	2	2	3	3	0	10	762
17301	Winslow	385	13,171	1	25	4	5	2	2	0	16	844
25309	Yavapai-Northeast	1,216	38,179	5	161	3	17	13	11	2	42	900
25317	Yavapai-Prescott Indian Tribe	12	2,171	0	9	0	0	0	0	1	0	*
25305	Yavapai-South	2,080	6,829	0	25	0	0	1	1	0	5	1,423
27503	Yuma-East	84	12,922	0	76	2	2	2	2	0	9	1,436
27502	Yuma-North	7	28,296	0	32	2	0	2	2	0	11	2,526
27500	Yuma-South	28	58,580	2	170	10	38	29	17	5	84	696
27501	Yuma-West	27	2,158	0	0	0	0	0	0	0	0	*

Table 74. Licensed Hospital Beds and Perinatal Care Level in Arizona by County

Types of Hospital: H= General Hospital, RGH=Rural General Hospital, SH=Special Hospital

County	Name	Type	Total Beds	Med/Surg	Psych	Rehab	Maternity	Peds	ICU	CCU	Perinatal Care Level
Apache	Sage Memorial Hospital	H	45	25			10	10			
	White Mountain Regional Medical Center	RGH	25	21			4				
	Total Apache County		**70**	**46**			**14**	**10**	**0**	**0**	
Cochise	Benson Hospital	H	22	19			3				
	Copper Queen Community Hospital	H	28	21			3		4		
	Northern Cochise Community Hospital	RGH	24	24							
	Sierra Vista Community Hospital	H	83	62			15	6			I
	Southeast Arizona Medical Center	H	49	35			8	6			
	Total Cochise County		**206**	**161**			**29**	**12**	**4**	**0**	
Coconino	Aspen Hill Hospital	SH	26		26						
	Flagstaff Medical Center	H	122	70		12	14	6	20		II EQ
	Page Hospital	H	25	19			4	2			
	The Guidance Center	SH	40		40						
	Total Coconino County		**213**	**89**	**66**	**12**	**18**	**8**	**20**	**0**	
Gila	Cobre Valley Community Hospital	H	49	37			8		8		
	Payson Regional Medical Center	H	66	59					7		
	Total Gila County		**115**	**96**	**0**	**0**	**8**	**0**	**15**	**0**	
Graham	Mount Graham Community Hospital, Inc.	H	44	30			10		4		
	Total Graham County		**44**	**30**	**0**	**0**	**10**	**0**	**4**	**0**	
La Paz	Parker Community Hospital	H	39	36					3		
	Total La Paz County		**39**	**36**	**0**	**0**	**0**	**0**	**3**	**0**	
Maricopa	Arizona Heart Hospital	H	59	45					14		
	Arizona State Hospital	SH	489								
	Arrowhead Community Hospital & Medical Center	H	87	59			19		9		II
	Beverly Specialty Hospital-phoenix	SH	48	48							
	Chandler Regional Hospital	H	120	90			18		12		II
	Charter Behavioral Health System of Arizona/east Valley	SH	44								

Table 74. Licensed Hospital Beds and Perinatal Care Level in Arizona by County

Types of Hospital: H= General Hospital, RGH=Rural General Hospital, SH=Special Hospital

County	Name	Type	Total Beds	Med/Surg	Psych	Rehab	Maternity	Peds	ICU	CCU	Perinatal Care Level
	Charter Behavioral Health System of Arizona/glendale	SH	60		60						
	Columbia Paradise Valley Hospital	H	128	102			12		14		II
	Community Hospital Medical Center	H	43	27			8		8		
	Del E. Webb Memorial Hospital	H	161	74	54	15			18		
	Desert Samaritan Medical Center	H	414	270	62		27	20	35		II EQ
	Desert Vista Hospital	SH	52		52						
	Good Samaritan Regional Medical Center	H	562	346	34	30	89		63		III
	Healthsouth Meridian Point Rehab Hospital	SH	43			43					
	Healthsouth Valley of the Sun Rehabilitation	SH	42			42					
	John C Lincoln Hospital Deer Valley	H	74	49			10	5	10		I
	John C. Lincoln Hospital & Health Center	H	240	173			27		40	40	II
	Los Ninos Hospital	SH	15					15			
	Maricopa Medical Center	H	541	283	92		44	42	40		III
	Maryvale Hospital Medical Center	H	213	164			25	8	16		II
	Mesa General Hospital Medical Center	H	130	73		12	23	11	11		II
	Mesa Lutheran Hospital	H	315	189	32	30	22	18	24		II
	Paradise Valley Psychiatric Services	SH	19		19						
	Phoenix Baptist Hospital & Medical Center	H	226	157				8	28		II
	Phoenix Childrens Hospital, Inc.	H	128		18			89	21		III
	Phoenix Memorial Hospital	H	183	116			24	17	26		II
	Phoenix Regional Medical Center	H	277	200	18	22			37		
	Saint Luke's Behavioral Health Services	SH	70		70						
	Saint Luke's Medical Center	H	221	165	24	16			20	20	
	Samaritan Behavioral Health Ctr - Scottsdale	SH	70		70						
	Scottsdale Healthcare-Osborn	H	261	179		16	20	14	32		II
	Scottsdale Healthcare Hospitals-Shea	H	251	199			16	6	30		II
	St Joseph's Hospital and Medical Center	H	549	321		38	43	71	76		III
	Tempe Saint Lukes Hospital	H	106	41	21		20	14	10		I

Table 74. Licensed Hospital Beds and Perinatal Care Level in Arizona by County

Types of Hospital: H= General Hospital, RGH=Rural General Hospital, SH=Special Hospital

County	Name	Type	Total Beds	Med/Surg	Psych	Rehab	Maternity	Peds	ICU	CCU	Perinatal Care Level
	Thunderbird Samaritan Medical Center	H	292	164	62		41		25		II EQ
	Valley Lutheran Hospital	H	184	173			12	7	16		
	Vencor Hospital - Phoenix	H	58	53					5		
	Walter O. Boswell Memorial Hospital	H	267								
	Wendy Paine O'Brien Treatment Center Phoenix	SH	23		23						
	Wickenburg Regional Hospital	H	23	20					3		
	Total Maricopa County		**7,088**	**3,780**	**711**	**264**	**500**	**345**	**643**	**60**	
Mohave	Havasu Regional Medical Center	H	99	85			6		8		
	Kingman Regional Medical Center	H	110	76			19	7	8		I
	Mohave Valley Hospital	H	12	12							
	Western Arizona Regional Medical Center	H	90	70			8		12		I
	Total Mohave County		**311**	**243**	**0**	**0**	**33**	**7**	**28**	**0**	
Navajo	Navapache Regional Medical Center	H	54	38			10		6		I
	Winslow Memorial Hospital	RGH	34	20			10	4			
	Total Navajo County		**88**	**58**	**0**	**0**	**20**	**4**	**6**	**0**	
Pima	Carondelet Saint Mary's Hospital & Health Ctr	H	393	256	24	28	19	17	40		I
	Carondelet St Joseph's Hospital & Health Center	H	270	185		20	41		24		II EQ
	Carondelet St. Joseph's Hospital Behavioral Health (O'rielly	SH	15		15						
	Columbia El Dorado Hospital	H	135	77	15	21			22		
	Columbia Northwest Medical Center	H	162	108	30		8		16		I
	Desert Hills Center for Youth and Families	SH	12		12				0		
	Healthsouth Rehabilitation Institute - Tucson	SH	63			63			0		
	Kino Community Hospital	H	190	93	51		23	10	13		I
	Palo Verde Mental Health Services	SH	52		52						
	Sierra Tucson Inc	SH	55		55						
	Southern Arizona Rehabilitation Hospital	SH	60			60					
	Summit Hospital of Southeast Arizona Inc	SH	21			21					
	Tucson General Hospital	H	106	62	15		19		10		I

Table 74. Licensed Hospital Beds and Perinatal Care Level in Arizona by County

Types of Hospital: H= General Hospital, RGH=Rural General Hospital, SH=Special Hospital

County	Name	Type	Total Beds	Med/Surg	Psych	Rehab	Maternity	Peds	ICU	CCU	Perinatal Care Level
	Tucson Heart Hospital	H	60	46					14		
	Tucson Medical Center	H	593	394	62		46	54	37		III
	University Medical Center	H	365	176	8		50	69	62		III
	Vencor Hospital - Tucson	SH	51	51							
	Westcenter	SH	40			40					
	Total Pima County		**2643**	**1448**	**339**	**253**	**206**	**150**	**238**	**0**	
Pinal	Casa Grande Regional Medical Center	H	116	86			13	6	11		I
	Central Arizona Medical Center	H	36	10	20			3	3		
	Total Pinal County		**152**	**96**	**20**	**0**	**13**	**9**	**14**	**0**	
Santa Cruz	Carondelet Holy Cross Hospital, Inc.	H	31	22			5	2	2		
	Total Santa Cruz County		**31**	**22**	**0**	**0**	**5**	**2**	**2**	**0**	
Yavapai	Marcus J. Lawrence Medical Center	H	99	77			8	4	10		
	Yavapai Regional Medical Center	H	87	56			15	8	8		I
	Total Yavapai County		**186**	**133**	**0**	**0**	**23**	**12**	**18**	**0**	
Yuma	Yuma Regional Medical Center	H	237	167			23	20	27		II EQ
	Total Yuma County		**237**	**167**	**0**	**0**	**23**	**20**	**27**	**0**	
ARIZONA	**TOTAL ALL COUNTIES**		**11,423**	**6,405**	**1,136**	**529**	**902**	**579**	**1,022**	**60**	

Indian Health Services (IHS)

Based on the 2000 population estimates there are 259,488 American Indians living in Arizona, with 50,276 living in the Phoenix metropolitan area. Although four-fifths of the state is considered geographically rural, only 18% of the population lives in these rural areas. Many of these rural areas are home to 21 of the 23 federally recognized American Indian Tribes of Arizona. To serve these population there are three Indian Health Service Areas: Phoenix Area, which serves mainly Arizona residents (80%) but also, provides services to the state of Utah and Nevada; Tucson Area, which provide services for the Tribes located in the south of Arizona; and Navajo Area, which serves mainly northern Arizona residents (75%) but also provides services to residents of New Mexico and Utah.

Comprehensive health care is provided through inpatient, outpatient, contract, and community health programs to American Indians through their service area. One of the on-going challenges that they confront is to find experienced health professionals who are able to assume leadership roles in the future development of their work.

Midwives

Attendant and place of birth has changed in the US in the past few decades. In 1997, ninety percent of births were attended by physicians but this has decreased from 96 percent in 1989. The number and proportion of midwife attended births increased from 3.7 percent to 7 percent during the same period. Certified nurse midwives (CNM) comprise the majority of growth in the number of midwife-attended births. According to the National Center for Vital Statistics, the number of births attended by CNM's increased from 90 percent in 1989 to 95 percent in 1997. Midwives other than CNMs were more likely to attend births in residences which accounted for 60 percent of births they attended in 1997 compared to 53 percent in 1989. Non-certified midwife-attended births in hospitals also increased from 17 percent to 20 percent during this time.

Licensed midwives provide care to women who choose to receive maternity services using the midwifery model of care. The place of birth is usually the woman's home. The Arizona Department of Health Services, Office of Women's and Children's Health is the licensing agency for midwives. Licensing requirements include satisfactory completion of an examination conducted by ADHS. The exam consists of both a written (from the North American Registry of Midwives) and practical component. In addition to passing the exam, licensing requires the applicants to attend a specified number of births with a licensed midwife as an apprentice.

Licensed midwives are required to include informed consent for every patient served, conduct a history and physical, and abide by the most current obstetrical community standards of care. They are required to have an arrangement to provide laboratory services and medical consultation. In addition, the licensed midwife must identify a medical facility to where a patient will be transported if necessary. Licensed midwives are required to complete and submit birth certificates to the county in which they practice. They provide an average of five postpartum visits to their patients.

As of February, 2000 there were forty-seven licensed midwives in Arizona, practicing in seven counties and approximately 35 student midwives registered with "intent to apprentice". OWCH provides on-going

education in various locations throughout the state to Licensed Midwives.

Although midwifery is a recognized alternative to the medical model of the prenatal care system, it is faced with a number of challenges. The medical community is not supportive of midwifery as a model of care. Hospitals that admit women/babies who received midwifery service, use the same protocols as if the women had not received any prenatal care. Most insurance plans do not cover midwifery services. AHCCCS rules allow coverage for midwife services, but none of the AHCCCS-contracted health plans select them as providers. In addition, the emergency medical system presents challenges related to transport and the level of care that is needed to assist with problematic deliveries.

Behavioral Health

Effective August 13, 1986 the Arizona Department of Health Services, Division Behavioral Health Services (ADHS/DBHS) was recreated by Arizona Revised Status §36-3402 et. seq.,. The intent of the Arizona State Legislature was to create permanent authority for behavioral health and to express commitment to the importance of planning, administration, regulation and monitoring of all facets of the state public behavioral health system. The focus of DBHS is to promote healthy development and to provide effective prevention, evaluation, treatment and intervention services to people in need who would otherwise go unserved, so that people are empowered and can lead responsible, productive and meaningful lives. It also reduces the costs to society from behavioral health problems and improves the quality of life for the people served and for society.

Arizona's behavioral health services, administered through ADHS, operated for many years as a "grant in aid" program. Providers under contract to deliver services received monthly payments based on one-twelfth of the available grant. Funding for behavioral health services came primarily from the state, with some federal funding through substance abuse and mental health block grants. Under the State 1115 waiver, Arizona received permission to delay implementation of Title XIX Medicaid mental health services.

In October 1990, Arizona began a phased-in implementation of Title XIX funded behavioral health services. Children with serious emotional disturbance were the first to receive these services. With the advent of Title XIX, Arizona initially developed a fee-for-service model of service delivery. In just two short years the decision was made to move to a capitated, managed care service delivery system. With no other public sector models to follow at that time, implementation occurred without adequate infrastructure support. The infrastructure has since been developed. While the new environment has challenged the operational paradigms of the status quo, the system has introduced mechanisms intended to enhance service arrays taking the form of a defined package of services, financial viability and efforts of continuous quality improvement, and accountability.

Behavioral health services, in Arizona, have been delivered through community based contractors for a number of years. Section 36-3410 of the Arizona Revised Statutes authorizes ADHS/DBHS to contract with organizations, known as Regional Behavioral Health Authorities (RBHAs), to administer behavioral health services in the State. These RBHAs, which are private, non-profit organizations, function in a similar fashion to a health maintenance organization (HMO).

RBHAs are responsible for assessing the service needs in their region and developing a plan to meet those

needs. The RBHA system has been integrated for a number of years, making one system responsible for coordinating alcohol, drug and mental health services for all populations. The RBHAs develop a network of providers to deliver a full range of behavioral health care services, including prevention programs for adults and children, and a full continuum of services for adults with substance abuse and general mental health disorders, adults with serious mental illness, and children with serious emotional disturbance.

At this time there are five active RBHAs in Arizona: NARBHA (north of Arizona), Excel (Yuma and La Paz), Com Care (Maricopa), PGBHA (Pinal and Gila), CPSA (Graham, Greenlee, Cochise, Santa Cruz, Pima). The RBHA clinics have three funding sources: Title XIX, Title XXI and non-Title XIX (which is mainly state funds and some federal funds). The RBHA clinics have three main focus areas: Children, Seriously Mentally Ill, and Non-Seriously Mentally Ill. As of October 7, 1999 there were a total of 125,733 unduplicated clients served by the RBHA clinics for the fiscal year of July 1, 1998 to June 30, 1999. Based on the prevalence estimates from the Division of Behavioral Health Services this number accounts for only 23% of the individuals with behavioral health needs living in Arizona. It is not known at this time whether or where the remaining 77% individuals receive behavioral health care. It is estimated that only a fraction of children and adolescents with serious emotional disturbances in the United States have access to appropriate mental health services and related supports for their families.

Oral Health

The improvement in oral health has been recorded as one of the public health successes of the 20th century. Specifically, the use of fluoride in drinking water has helped reduce the damage caused by dental decay. In addition, approximately 500 million dental visits occur annually.

The prevention of tooth decay through water fluoridation can cost less than the cost of one dental filling. However, more than 100 million American children and adults (38 percent of all Americans on public water systems) do not have access to water containing enough fluoride to protect their teeth. Despite documented effectiveness, the percent of people served by optimally fluoridated community water systems in Arizona remains low. Only 47 percent of the Arizona population is served by such systems which is far below the Healthy People 2000 and 2010 targets of 75 percent.

Oral health services in Arizona are delivered primarily through private dental offices. Additionally, county health departments, community health centers and a few school-based health centers provide oral health services to various population groups. One barrier to receiving dental services is access to dental care providers. Arizona suffers from an unequal distribution of dental care providers (dentists and dental hygienists). More dental care providers practice in or near major communities including Greater Phoenix, Flagstaff, and Tucson. This distribution results in underserved areas and populations. Individuals residing in rural areas may lack adequate transportation or have unreasonable travel distances which affect access to providers.

In addition to the uneven distribution of providers, there may exist an inadequate supply. Arizona's ration of dentist-to-population is lower than the US average. Arizona has one dentist to every 2,250 people whereas the national average is one dentist to every 1,740 people, a difference of 510 people per dentist. Arizona has had a

steady population increase of 27 percent from 1990-1998. The percent increase for licensed dentists is significantly lower at 0.5 percent for 1991-1997. Arizona's population is expected to increase consistently over the next decade and there is no guarantee that the number of dentists is expected to increase at the same rate. The supply of dental hygienists is a little better. There are relatively few licensed dental hygienists in Arizona; however, the number of them has grown by 31 percent over the past five years and the growth rate is expected to continue.

The ADHS, Office of Oral Health supports the following activities to improve oral health in Arizona:

- Community water fluoridation -assistance with education, implementation and funding
- School-based fluoride mouthrinse programs -targeted at low-income children living in non-fluoridated areas in all 15 counties. Over 41,000 at-risk children participated last year.
- Dental sealant program -provide sealants to children in low-income schools who are uninsured.
- Mobile Dental Unit Loan Program -provides a temporary dental facility to communities developing permanent service delivery models.
- Public/Private Coalitions -three initiatives currently focus on increasing access to oral health services and increasing awareness of oral health issues for children.
- Public and professional education -provides education to health care providers and high-risk populations to promote behavior modifications.
- Monitoring oral health status -collects, analyzes and disseminates oral health information to assist communities in identifying high risk, special needs and underserved populations.

The Office of Oral Health has developed and implemented a state-wide children's oral health survey to integrate into the state oral health surveillance system. This survey collects community, county and state data on a three-year rotational basis. The data will be used to target resources, develop initiatives to meet local community needs and to provide useful data to local communities. Specifically, children in grades K through 3 are targeted for in-mouth dental assessments to identify dental diseases. Additionally, a parental survey is completed.

Children with Special Health Care Needs

Two key findings of the OCSHCN Family Survey related to optimism about the future of the child with SHCN. Need for community service (e.g., health care providers, respite care) was found to have a statistically significant association with optimism of the family towards the child's social and economic future. Those that are not optimistic are almost 50% more likely to need some type of help with community services than those that are optimistic. Another variable that shows a statistically significant association with optimism was the number of years with the condition. If the child had less than 10 years with the condition, the family seemed to be less optimistic about the child's future.

In Arizona, as in most other states, the system of services for CSHCN is fragmented. Further the burden is usually on the family to find out about services as referral mechanisms are limited. A variety of state and local agencies have jurisdiction over the myriad of programs and services available. Parents/caretakers generally have to submit to an eligibility determination from each program; often providing the same information over and over

again.

For the past year, high level staff from all state agencies providing services to children have been working on project *No Wrong Door*. The goal is to develop a process such that no matter which agency is approached first for services, the child will be assessed to determine the full array of assistance needed. Then the family will be given the opportunity to submit a single application for all those programs it believes appropriate. As work on *No Wrong Door* has been mandated by the Governor, it is hoped that this project will finally make services for CSHCN more coordinated and comprehensive.

Given that regular physical activity is a principal component of a healthy lifestyle, the OCSHCN is actively participating in the *National Coalition to Promote Physical Activity* - Arizona Chapter's efforts in this area. In April of this year, a meeting of representatives from the health, education, recreation, and business communities met to start work on a statewide strategic plan to increase participation in physical activity. OCSHCN will work to be sure that this plan includes resources and opportunities for people with special needs as well as for the general population.

3.1.2.5 Infrastructure Building Services

The state assumes a leadership role in assuring that the health needs of Arizonans are being met. The development of preventive, primary, acute and specialty care services are a critical component of systems development efforts.

Medical Home Project

The Medical Home Project (MHP), administered through the American Academy of Pediatrics, Arizona Chapter, was designed to increase access to and utilization of primary care services for Arizona's uninsured children from low-income families. The MHP provides delivery of medical services to children, without health insurance and who do not qualify (or are in the process of qualifying) for public assistance, in the participating physicians' offices. The MHP creates a system of linkages between medical providers and school nurses to assist with health care provision to the target population. School nurses identify and qualify children participating in the MHP. To be eligible for the MHP, all of the following criteria must be met: household income less than 185 percent of the Federal Poverty Level; not be qualified for AHCCCS; not be qualified for KidsCare; not be eligible for Indian Health Services; and have no health insurance.

If the child appears eligible for AHCCCS or KidsCare, the school nurse in encouraged to identify resources who assist families with the application for AHCCCS and KidsCare. The child with an acute illness may be seen through the MHP while in the qualifying process. The child is provided with a referral form to a participating health care provider and the school nurses makes the appointment.

A network of physicians (pediatricians, family practice physicians and specialists) provide care to children qualifying for the MHP for a fee of either $5 or $10 as payment-in-full for an office visit. The health care providers agree to provide a certain number of appointment slots to MHP children each month. The provider network development has been an ongoing effort since the beginning of the project in 1993. In addition to the network of physicians, prescription medications, diagnostic laboratory services and eyeglasses are provided as

necessary to qualifying children.

Funding for the MHP has been provided by a number of entities. The ADHS, Office of Women's and Children's Health has had a contract with the AzAAP, Arizona Chapter, since 1993 to fund the project management. Other funders have included the Robert Wood Johnson Foundation, St. Luke's Charitable Health Trust, Arizona Diamond Backs Charities, Diamond Foundation as well as many others.

The MHP is currently operational in nine Arizona counties. School nurses from 786 schools (representing 61 school districts) provide in-kind service by determining eligibility for children needing service, and by referring the child to a local MHP provider. The primary care provider network consists of 10 pediatric group practices, an additional 58 individual pediatricians, 11 family practice groups, and an additional 30 individual family practitioners. The total number of appointment slots available per month is 1081. In addition to the primary care providers, a variety of specialist providers (e.g. cardiology, dentistry, dermatology, ENT, orthopedics, pulmonology, etc.) have donated their services to children in need of care.

Community Based Centers (School based/school linked centers)

School-based health centers have grown rapidly during the 1990s throughout most of the United State. They are located in 45 states plus the District of Columbia. Arizona reports the second highest number of school-based health centers. In 1998 Arizona reported 82 school-based health centers compared to 158 in New York.

Arizona's first school based center opened in Collidge in 1988. Although this center has not provided medical care, it has provided a broad range of other services essential to families in that community. Since the development of this center, the concept of bringing services to the doorsteps of children and their families has become increasingly popular in Arizona and is improving the health status of Arizona's children and their families.

Arizona's model of Community-Based Centers is based on a systems development concept. Self-defined communities develop services based on needs which are identified by that community. Centers are funded through community partnerships developed between schools, hospitals, community health centers, private foundations, philanthropic organizations, tobacco tax initiative, etc. The population served varies at each center. Some centers provide services only to the children attending the school; some serve siblings; some serve the entire family; and some serve their entire community. The services provided also vary by each center. Community-based centers may provide primary health care, behavioral health and/or an array os social services. The location of the centers may be at a school, a location linked to a school, or a community center that serves the children from a particular school.

The ADHS, Office of Women's and Children's Health, publishes an annual directory of centers. The 1998 Directory identified a total of 182 Community-Based Centers, with centers is 13 of the 15 counties (only Gila and Greenlee Counties reported no centers). One hundred thirty-three community-based centers reported that they provided primary health care services.

Arizona State Immunization Information System

The ADHS Arizona Immunization Program provides funding, vaccines, and training support to public

immunization clinics and private providers throughout Arizona. The program works to increase public awareness by providing educational materials to County Health Departments and Community Health Centers and through partnerships with local and statewide coalitions. The program also monitors immunization levels of children in Arizona, disease surveillance and outbreak control, information and education, and enforcement of the state's immunization laws.

"On April 23, 1996, House Bill 2134 was signed by the Governor of Arizona establishing a child immunization reporting system and requiring health care professionals to report immunization information. The Arizona State Immunization Information System (ASIIS) is designed to collect, store, analyze and report immunization data to a central registry maintained at the ADHS. Such a system should reduce costs by eliminating the need for duplicate patient shots, targeting education and outreach to "high risk" locations, and reducing the impact of communicable disease to the general public. Immunization records, including key demographic data, is collected and retained in local databases in provider offices. These data can be transferred electronically to the central database registry at the ADHS. The immunization record can be made available to the patient, patient guardian or the patient's provider. Summary statistics without patient identifiers can be generated for health care professionals to determine overall immunization coverage rates, to develop outreach programs, and to provide immunization statistics to health plans for certification and audits.

PC Immunize is a windows-based software package designed for the private and public primary caregiver. This software provides the ability to determine individual patient immunization status as well as an immunization assessment. Included is a reminder/recall capability that can be linked to an office word processor or a telephone autodialer. PC Immunize is the connection to link to the ADHS central registry."[6]

The Arizona Partnership for Infant Immunization (TAPII)

"In 1992, the ADHS founded the Arizona Partnership for Infant Immunization (TAPII) as part of Arizona's federal Immunization Action Plan. The goal of TAPII is to deliver age-appropriate immunizations by the year 2000 to at least 90 percent of all Arizona children before their second birthday. The TAPII coalition consists of over 400 individuals and organizations (e.g. ADHS, AHCCCS plans, child advocacy groups, commercial HMOs, county health departments, insurers, etc.). In April 1993, the Aetna Foundation awarded the Children's Action Alliance of Phoenix with a grant to provide staff support for TAPII. One year later, the Flinn Foundation of Phoenix awarded its largest grant ever to a public agency to ADHS to develop and implement ASIIS. In 1996, day-to-day management of TAPII was transferred to a unique public/private statewide coalition, the Arizona Affordable Health Care Foundation."[7]

Newborn Screening

The Newborn Screening (NBS) Program within ADHS/OWCH is responsible for identifying babies who have some types of serious medical conditions. Finding these babies and giving them early treatment can prevent

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[6]Source: ADHS Website March 2000.

[7]Source: TAPII Website, March 2000.

serious problems such as mental retardation or even death. The NBS Program contacts with the Arizona State Laboratory to perform testing of newborn screening specimens for Phenylketonuria (PKU), Biotinidase Deficiency, Maple Syrup Urine Disease, Galactosemia, Congenital Hypothyroidism (CH), Hemoglobinopathies, and Homocystinuria. Congenital Adrenal Hyperplasia (CAH) may be added in 2001. Additional program activities include coordination with consulting specialists, physicians, and hospitals; follow-up of abnormal test results; education of health professionals and the general public; and monitoring of data associated with testing, billing for tests, follow-up and educational activities.

Universal Hearing Screening

The NTY Program was established by state statute in 1988. Legislation was a result of grass roots efforts started before 1985 and was modeled after the Joint Committee on Infant Hearing's 1982 position statement which recommended establishing newborn hearing screening programs for those children identified as "High-Risk" for hearing loss. Since the legislation was passed, technology has improved significantly and universal screening of newborns prior to hospital discharge is the gold standard. The Program has directed its efforts towards meeting the standard. Presently, there are fifty-one hospitals in Arizona that have universal screening programs, accounting for 87 percent of all births. Of those hospitals, 32 voluntarily report data to OWCH.

Perinatal System

Numerous studies have confirmed the positive benefits of prenatal care use. Seeking prenatal care early is paramount to having a safe pregnancy and a healthy baby. According to the National Center for Vital Statistics, 82.5 percent of mothers received prenatal care in the first trimester in 1997. During this same year, 4 percent of women reported receiving late or no prenatal care. Babies born to women who do not receive prenatal care are 4 times as likely to die before their first birthday.

Researchers at the National Center for Vital Statistics examined natality files from 1981 to 1995 and found a major increase in prenatal utilization, particularly intensive prenatal care use. Specifically, in 1995, 47.1 percent of women received at least the recommended amount of prenatal visits compared to 32.7 percent of women in 1981. The study determined the largest increase was among women who received more than the recommended number of visits, which rose from 18.4 percent in 1981 to 28.8 percent in 1995 (JAMA 1999).

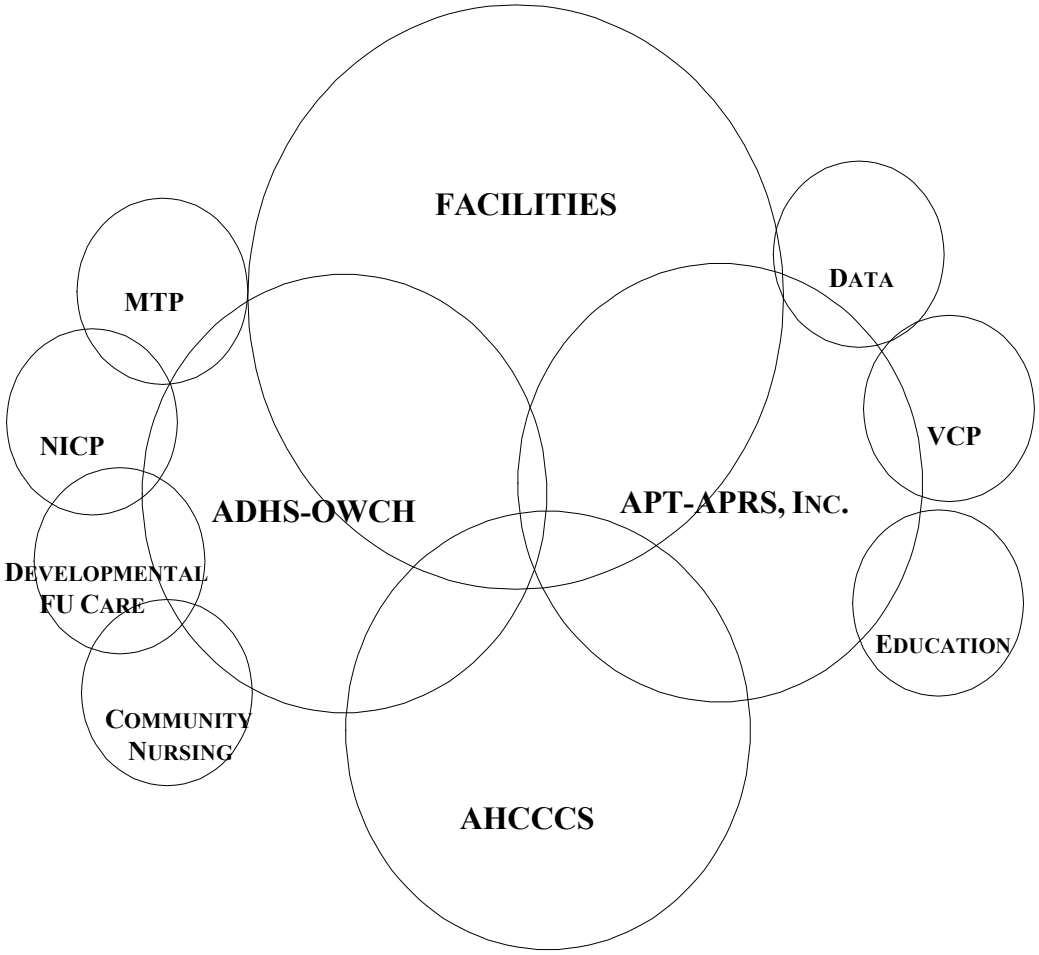
Arizona is the home of a unique perinatal regional system. Voluntary participation by the Arizona Department of Health Services(ADHS), the Arizona Health Care Cost Containment System (AHCCCS), the Arizona Perinatal Trust (APT), private physicians, hospitals and transport providers results in a system that is considered a model nationally.

The Newborn Intensive Care Program (NICP) was initiated over thirty years ago as a partnership with the medical community to promote a statewide comprehensive system of coordinated care for critically ill newborns at a time when Arizona had one of the highest infant mortality rates in the country. As a state-funded system of transport for high risk infants, the program was successful in reducing neonatal mortality by supporting a system of care which included transporting critically ill newborns from rural hospitals to urban intensive care centers that were equipped to provide higher levels of nursing and medical care during acute phases of illness.

Neonatologists provided 24 hour consultation and medical direction for transport. The ADHS/NICP served as payor of last resort for families with no insurance. (NICP does not pay for care except at APT certified facilities.) The regional system has expanded and changed over the years. Currently, services are available to all Arizona residents in a comprehensive continuum of care that supports families from the first identification of a high risk condition in pregnancy, through post discharge and until the child is three years old. The regional system is successful because of the cooperation of a critical partnership among the following entities (figure X on the following page shows the interconnections between these entities):

The Arizona Department of Health Services (ADHS) serves as payer of last resort for transport, physician, and hospital inpatient services. After all sources of payment for a family have been exhausted, including a family contribution commensurate with family income, the NICP pays an agreed upon portion of the remaining bill. The hospital agrees to "write off" an agreed upon portion of the bill. This system assures providers that the responsibility for supporting the costs for the perinatal system are distributed equitably. ADHS staff serve on Arizona Perinatal Trust Site Visit teams who certify participating hospitals and support a 24 hour hotline that provides consultation by neonatologists and perinatologists. Medical direction is available if the decision is to transport a high risk infant or mother.

Figure 91. Arizona's Regionalized Perinatal System



ADHS also supports special issue analysis and recommendations related to the regional perinatal system. For example, the ADHS partnered with the APT to support a task force which analyzed the transport system and made recommendations to strengthen the regional system. Standards of care are established for contractors who are also participants in the regional system. ADHS provides participating hospitals with perinatal reports for their hospital based on vital statistics data which are in turn used in perinatal regional planning. Data are also analyzed to provide perinatal reports on emerging issues. For example, Selected Perinatal Reports, April 2000 includes analysis of perinatal DRGs, the relationship among prenatal care, birth weight, race/ethnicity, pregnancy associated deaths, and pediatric ambulatory care sensitive conditions in the Phoenix Metropolitan Area. Finally, ADHS staff serve as consultants to the Arizona Perinatal Trust Board of Directors and the Arizona Perinatal Board of Trustees.

The Arizona Health Care Cost Containment System (AHCCCS) provides enhanced reimbursement for hospitals who are certified through the APT and serves on Arizona Perinatal Trust Site Visit teams who certify participating hospitals. AHCCCS staff also serve as consultants to the Arizona Perinatal Trust Board of Directors and the Arizona Perinatal Board of Trustees.

Arizona Perinatal Regional System Voluntary Certification Program (APRS/VCP) reviews and certifies perinatal care centers, establishes Recommendations and Guidelines for Perinatal Care Centers, and sponsors annual conference as well as ongoing educational activities for the region

Hospitals, Transport Companies, Private Physicians, Nurses, Social Workers contribute to the program in several ways. Hospitals agree to "write off" an agreed upon portion of the patient bill. Providers charge for services at a reduced rate for the state program. In addition, providers serve on Arizona Perinatal Trust Site Visit teams who certify participating hospitals and serve on various APT/ADHS committees including education, recommendations and guidelines, data, and transport.

From 1975 through 1979, the Arizona Perinatal Program was funded by Robert Wood Johnson Foundation. During this time, regional perinatal centers were established around the state with formally designated levels of service and established maternal transport. The Arizona Perinatal Trust was formed with the remainder of Robert Wood Johnson funds to continue many functions including hospital certification and perinatal education. ADHS has been an active participant in all APT activities since it began in 1980. The use of perinatal consultation and transport through the NICP are encouraged by APT representatives and APT certification is pushed by ADHS representatives. APT and ADHS jointly sponsored the High Risk Perinatal Task Force, with a report issued and printed by ADHS in 1990.

Although the need for neonatal and maternal transport services and the cost of services increased throughout the years, in many cases the resources to support these services had not. The resulting strain on the system of care surfaced in many ways. For example, costs to support the financial "safety net" that ADHS

provided to its transport contractors exceeded the budget by more than $70,000 in fiscal year 1996.

In 1998, the Office of Women's and Children's Health and the Arizona Perinatal Trust sponsored a series of strategic planning sessions with the regional system. Representatives from key agencies with knowledge, experience, commitment, and an investment in the Arizona perinatal community were invited to form a transport task force. The purpose of the task force was to guide the design and implementation of a study of Arizona's current system for conducting maternal and neonatal transports. The goal of the transport task force was to develop recommendations for improvement of the transport system. Arizona's maternal and neonatal transport system had already demonstrated improved outcomes for high risk mothers and critically ill newborn infants. Stakeholders in the perinatal community wanted the opportunity to examine the regional system of maternal and newborn transport in Arizona in order to identify opportunities for improving efficiency, effectiveness, and quality of the system and promote cost-effective utilization of transport services.

The Transport Task Force identified several key issues that emerged from the utilization study and work of the subcommittees. In addition, the key steps for implementing the recommendations were identified and still serve as a guide for action in the state.

3.2 Health Status Indicators

Please see health status indicator forms.

3.2.1 Priority Needs

The needs assessment process was directed toward an analysis of each of the MCH populations. Primary and secondary data were used in the assessment.

The first identified priority is that fewer babies should have very low birth weight. In each year from 1988 to 1998, the annual incidence of very low-birthweight births decreased in Arizona from 1.2 percent in 1995-1997 to 1.1 percent in 1998. However the number of newborns admitted to newborn intensive care units increased by 92.6 percent from 2,576 in 1989 (3.8 percent of total births) to 5,237 in 1998 (6.7 percent of all newborns).

The second priority need identified through the process is the need for all children to have health insurance. Survey data indicated that eighteen percent of the children either did not have health insurance, had their insurance rejected or it did not cover the cost of a service or could not afford the cost of some service they tried to get during the year. The rate of hospital admissions for ambulatory care sensitive conditions for children age 1 - 14 was 549 per 100,000.

All infants should be screened and treated for PKU, hypothyroidism, galactosemia, hemoglobinopathies and congenital adrenal hyperplasia is another identified need. In Arizona, 100 percent of all newborns receive an initial screening for these conditions. In 1998 six infants had confirmed cases of PKU, 25 had confirmed cases of congenital hypothyroidism and seven were found to have sickle cell.

The fourth priority need is that fewer children should die from preventable causes. Data from a number of the developmental health status indicators led Arizona to select this priority. Unintentional injuries alone accounted for 41.0 percent of deaths, followed by homicides at 8.2 percent. These statistics indicate that 49 percent of all deaths among children 1 - 14 could have been prevented. Among adolescents the rate of death was 90.9 per 100,000. Unintentional injuries accounted for 44 percent of these deaths, followed by homicide (18.5 percent) and suicide at 16.8 percent.

The fifth identified priority is that all children with special health care needs should be in a system of specialty care. The assessment identified a lack of community specialty providers resulting in the need for travel to access care. Even those with health insurance had coverage that was not sufficient to cover their needs (e.g. durable medical equipment, prescriptions, behavioral health, etc.).

The sixth need is that all children with special health care needs should have a source of insurance for primary and specialty care. Increasing numbers of children with special health care needs are enrolling in managed care programs. Managed care systems may threaten health outcomes among this population by potentially decreasing access to the range of needed services. Medicaid evaluations found reductions of 30 to 50 percent in the probability of visiting a specialist among managed care enrollees. For this population the quality of the benefits package takes on greater importance. Referrals to specialists, specialty services and non-physician providers are often difficult to obtain or are limited.

More children should be in good health, be safe and be protected was selected as a priority need. The

Children 2000 survey found that two percent of children in Arizona live in a household where some child has been treated in a way that the survey respondent considered abusive by an adult they had lived with. Seven percent of children live in a house with no working smoke detector and 36 percent live in a house with firearms in or around it. In 1998 there were 43 hospital admissions for abuse and neglect for children age 1 - 14, representing a rate of 4.4 admissions per 100,000 children. In 1998, 3,667 children were living in foster home care. There were 26,423 reports of child abuse investigated by Children's Protective Services in 1999.

The Children 2000 survey reported that ten percent of children had gone without needed dental care within the past twelve months. Arizona children suffer from a high rate of tooth decay. The proportion of children in Arizona ages 6 - 8 years with tooth decay is 60 percent which exceeds the national level of 52 percent. Over 43 percent of Arizona children, ages 6 - 8, have untreated tooth decay compared to 31 percent of children in the same ages nationally. Less than 11 percent of Arizona children have dental sealants which is below the national average of 21 percent. These findings led Arizona to establish the priority that all children should receive adequate dental services.

All children should have access to needed mental health services was a need identified through the assessment process. In the Children 2000 survey nine percent of children have had more than one complaint from their school about their behavior during the past twelve months. Twelve percent have had a problem about which the caregiver would have liked to talk to a mental health professional. For those that did not see a mental health professional, 58 percent of them said that the reason was either that they did not have insurance, their insurance was not accepted or that they could not afford it.

Priority number ten is the need for women of childbearing age to have access to preventive health care. The needs assessment identified that family planning services (Direct Health Care) are underfunded in Arizona. Data from the BRFSS indicated that women are not routinely receiving the recommended screenings for cholesterol, blood pressure, breast and cervical cancers. In addition, 20.8% of women in Arizona do not have health insurance coverage.

3.3 Annual Budget and Budget Justification

As described in the 1999 and 2000 application report, the Arizona Department of Health made the decision to transition the MCH budgeting cycle from a federal fiscal year to a calendar fiscal year. Consequently, the annual reporting of budgeted, encumbered, and expended monies through September 30th is misleading in that we actually have another three months remaining in our calendar year budget cycle so expenditures will appear less than they should be while remaining money will appear greater. Notations are made to the financial forms indicating this.

Arizona state funds (match and overmatch) will be $13,619,090 in FY2001, surpassing our state's maintenance of effort level in FY89 of $12,056,360.

3.3.1 Completion of Budget Forms

See forms 2, 3, 4 and 5.

3.3.2 Other Requirements

The estimated Title V allocation for Arizona, FY2001, is $7,200,362. Slightly more than thirty-percent ($2,169,854) of the block grant will be allocated for preventative and primary care needs for children and adolescents; thirty-percent (2,160,109) will be allocated to children with special health care needs; slightly less than thirty-percent (2,150,363) will be allocated for women, mothers and infants and ten percent ($720,036) will be budgeted for administrative costs.

It is projected that there will be $925,928 remaining as carry over from our FY00 block grant in the following types of service: $191,944 for pregnant women, mothers and infants; $433,984 for preventative and primary care needs for children and adolescents; and $300,000 in the Children's Rehabilitation Services program.

The state's maintenance of effort includes line-item funding for High Risk Perinatal Service, $3,829,000; a Perinatal block grant to all fifteen counties, $1,281,100; Teen Pregnancy Prevention for abstinence-based programs, $250,000; Sickle Cell and Cystic Fibrosis testing and treatment, $293,700; Children's Rehabilitation Service (CRS), $3,093,800; Newborn Screening, $2,297,200 ; Prenatal Outreach Program (Health Start) , $1,200,00; and TANF Perinatal Services (Home Visitation) at $250,000. An additional $3,497,400 in state general funds is allocated to the Community and Family Health Bureau and, in part, supports half of our personnel located in the Offices of the Bureau Chief, Women's and Children Health, Children With Special Health Care Needs and Oral Health and supplements above-the-line activities. Our state's FY2001 match and overmatch of $13,619,090 continues to exceed the maintenance of effort amount of FY89's $12,056,360.

For fiscal year 2001, we will receive additional state and local funding as a result of our collaboration with other state government agencies and charitable foundations. The total of $10,428,583 is designated for the Children's Rehabilitative Service, Early Childhood , Child Health, Community Development, and Quality Assurance programs.

Other federal funds in the amount of $20,697,771 represent matching funds from Title XIX and Title XXI for Children's Rehabilitative Services. Additional federal monies will contribute another $71,587,364 toward MCH initiatives which include the WIC food grant, $65,340,574; Emergency Medical Service grant for Children, $100,000 ; SSDI Primary Care, $100,000; Abstinence Education, $3,395,333 ; $2,299,698 for the Preventive Health and Health Services Block Grant; $278,310 for Early Childhood and a $73,449 genetics grant..

Core Public Health Infrastructure: **$3,322,408**

Office of Women's and Children's Health (Part A & B)*:* $9,002 will support the Department's Office of Birth Defects; $655,952 will support management service; $418,294 will support information technology automation and direct charges; $61,564 for community development; $87,588 for the Bureau Chief's Office for special projects; $63,207 for evaluation and epidemiologic analysis; $45,596 for Nutrition support; $106,068 for Child Health Primary Care; $64,764 for Healthy Mothers/ Health Babies contract with the March of Dimes; $22,000 for the Substance Abuse Program; $51,523 for the Midwifery Program; $73,519 for the Adolescent Health Program; $85,814 for Social Work Program; $226,691 for the Early Childhood Program; $71,380 for the Genetics Program; $17,687 for Child Fatality support and $5,000 for County Prenatal support.

Office of Children with Special Health Care Needs (Part C)*:* $656,759 will support administrative

initiatives; $448,000 for Community Development;; and $132,000 for Quality Assurance and Utilization Review for the Children's Rehabilitation Services program; $20,000 for epidemiological support.

Population-Based Services: $709,838

$157,540 is budgeted for the Pregnancy and Breast feeding Hotline Program; $167,004 for the Injury Prevention Program; $66,000 for the Sensory Program; $269,294 for High Risk Perinatal Services; and $50,000 for Immunizations.

Enabling and Non-Health Support: $189,051

$140,000 will support the Child Health Program's contract with Arizona Academy of Pediatrics and $49,051 will assist the Perinatal Outreach Program (Health Start).

Direct Health Care Service: **$2,259,029**

$297,000 will support community nursing services for high risk infants; $490,000 for oral health services for children; and $808,679 for county-based reproductive health services; $583,350 for CRS and $80,000 for Sickle Cell and Cystic Fibrosis..

Indirect Administrative Costs: **$720,036**

3.4 Performance Measures

3.4.1 National "Core" Five Year Performance Measures

3.4.1.1 Five Year Performance Objectives

See Form 11 for five-year targets and Supporting Documents Section 5.5 for National Core Performance Measure Detail Sheets.

3.4.2 State "Negotiated" Five Year Performance Measures

3.4.2.1 Development of State Performance Measures

See Form 16 for State Performance Outcome Measure Detail Sheets, Form 11 for five-year targets and Supporting Documents Section 5.6 for State Performance Measure Detail Sheets. Appendix D is a summary of all core and state-defined performance measures.

3.4.2.2 Discussion of State Performance Measures

The State of Arizona had selected seven performance measures for the 1999 application. One measure was added with the 2000 application and that measure has been replaced with a new measure with this application. Figure 92 on the following page shows each of the measures in the pyramid, identifies the priority needs to which it relates (described on Form 14) and its link to outcome measures. It is not intended to be exhaustive, but rather shows the most direct relationships.

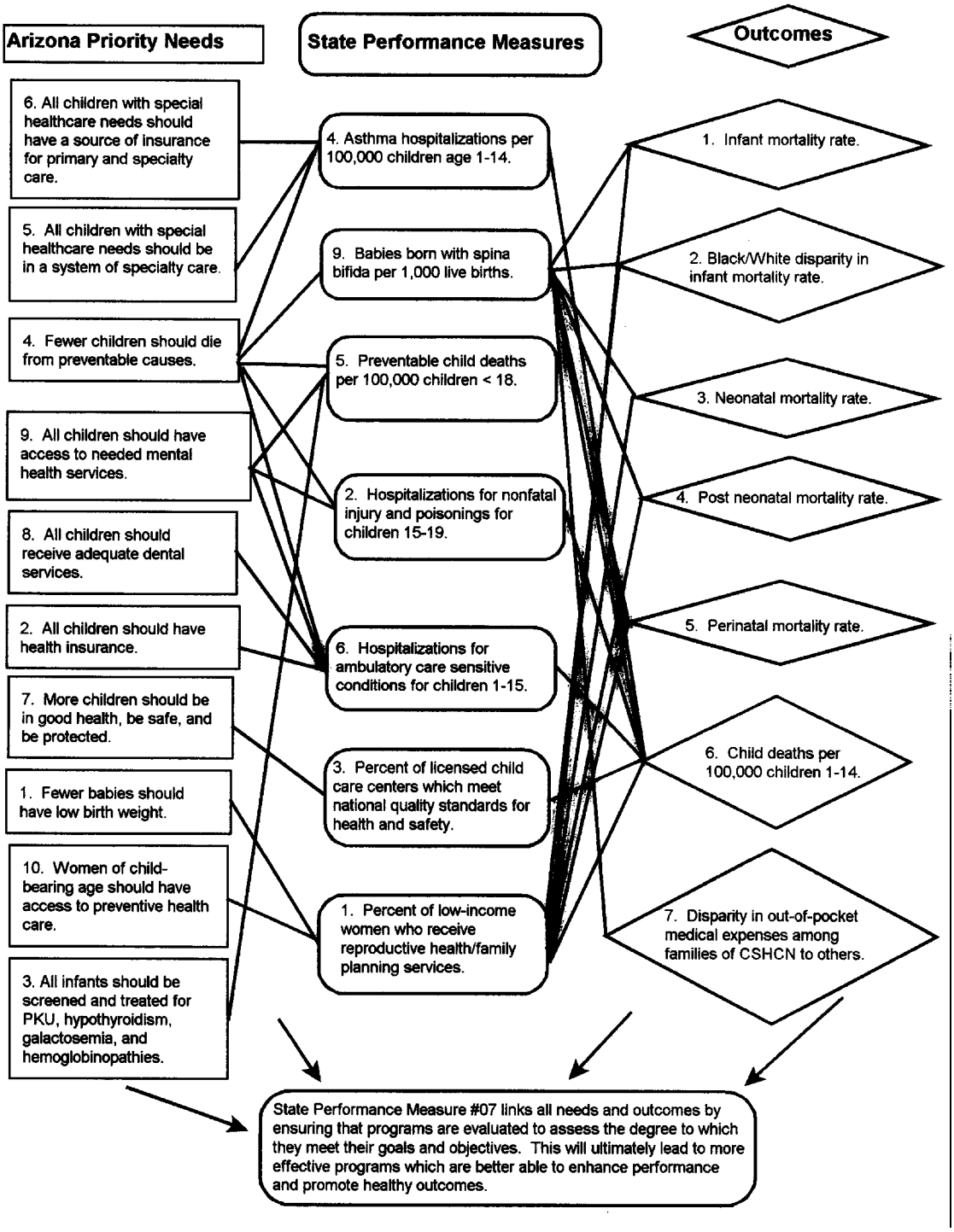
State Performance Measure #07 links to all needs and outcomes by ensuring that all programs are evaluated to assess the degree to which they meet their goals and objectives. This will ultimately lead to more effective programs which are better able to enhance performance and promote healthy outcomes. The remainder of this section describes why the state chose each of the state-defined performance measures.

State Performance Measure #01: The Proportion of women who receive reproductive health/family planning services. Title V and Title X family planning clinics provide birth control and other vital health care

services to low-income women and teens including breast and cervical cancer screening, screening and treatment for STDs, HIV and pregnancy testing and counseling, comprehensive physical exams and other primary health care services. Often, family planning clinics are the only source of primary care for women.

In 1990, 30.5 million American women were at risk of unintended pregnancy. More than half were low-income teens. If all pregnancies were intended there would be a 45% reduction in births to unmarried women

Figure 92. Relationships between Arizona Priority Needs, State Performance Measures and Outcomes



and an almost 90% reduction in births to teens. Unintended pregnancy is a serious public health issue and is costly. Provision of family planning services represents substantial savings in both human and fiscal terms. In 1991, the cost of an uncomplicated vaginal delivery was approximately $4,720, compared to the $200 per woman per year cost of contraception (including all related services).

State Performance Measure #02: Hospitalizations for nonfatal injuries and poisonings per 100,000 adolescents age 15 through 19. Injury is the leading cause of death among children one year of age and older, both nationwide and in Arizona. Injury accounts for more premature child deaths than all major diseases combined. From 1985-1995, injury accounted for nearly 70 percent of all child and adolescent deaths among Arizonans ages 1-19, and exceeded the rate of child deaths due to injury for the United States.

Many serious injuries do not result in death. Between 1989 and 1992, national data show that for every one child or youth who died from an injury, more than 11 were admitted to a hospital. While there were 1,608 injury-related deaths among children in Arizona from 1989 to 1992, there were 18,873 injury-related hospitalizations during the same period.

State Performance Measure #03: The percent of licensed child care centers which meet national quality standards for health and safety. Support for standards in child care settings impacts a variety of critical public health issues such as safety, immunizations, control of communicable and infectious diseases and early identification and treatment of health and developmental issues. The number of children in child care settings is expected to increase dramatically with the implementation of welfare reform.

State Performance Measure #04: Asthma hospitalizations per 100,000 children age 1 through 14.

Asthma is a growing problem in Arizona, especially among African-American children, hospitalized with asthma four times as often as Hispanics and Whites. Although the most recent data shows an apparent decline in asthma morbidity, asthma is estimated to be the most commonly reported chronic disease among Arizonans until age 18 (ADHS Chronic Disease Epidemiology). In fact, asthma hospitalizations for children accounted for $12.6 million in charges from non-federal hospitals in 1995 (HDDB). The Arizona Asthma Coalition, a private-public partnership, was formed by the Arizona Public Health Association to raise awareness about asthma, develop standards and protocols for health professionals, coordinate data collection between public and private entities and conduct community education and advocacy efforts.

State Performance Measure #05: Preventable child deaths per 100,000 children under age 18. This is a global measure of outcome for all children. Individual programs may target specific causes of child death but this measure looks at all child deaths that could reasonably have been prevented with appropriate intervention. While the number of children who die is relatively small, it is directly related to the much larger number of children who are harmed by the same cause.

State Performance Measure #06: The rate of children 1 through 14 hospitalized for ambulatory care sensitive conditions per 100,000 children. Ambulatory care sensitive conditions are those conditions which would not have required hospitalization if adequate primary care services had been provided. This issue has both medical and financial consequences as children become sicker than necessary before they get treatment and the

cost of treatment in an inpatient hospital setting is far higher than treatment in a physician's office.

State Performance Measure #07: The State Title V program has adopted and recommended a set of quality standards for the health care of the MCH population. Quality standards, quality assurance and quality improvement, help define the degree to which health services for individuals and populations meet desired health outcomes and are consistent with current professional knowledge (IOM). The adoption of such standards for the MCH population is an important step toward assuring quality care.

State Performance Measure #08: Percent of women of childbearing age (18-44) who take a vitamin with the recommended 0.4 mg. of folic acid daily. This performance measure was replaced with State Performance Measure #09 below.

State Performance Measure #09: The number of babies born with spina bifida per 1,000 live births. Each year approximately 70 infants are born in Arizona with neural tube defects (NTD)- this is about 1 in every 1000 births. NTD results in anencephaly and subsequent neonatal death or life-long medical and developmental needs as a consequence of spina bifida. Published data provide evidence that the daily consumption of 0.4 mg of folic acid before conception and during early pregnancy can reduce the number of children born with NTD by 50 percent.

3.4.2.3 Five Year Performance Objectives

See form 11.

3.4.2.4 Review of State Performance Measures

See Form 11 and Form 16.

3.4.3 Outcome Measures

See Form 12 and Form 16.

IV. REQUIREMENTS FOR THE ANNUAL PLAN [Section 505 (a) (2) (A)]

4.1 Program Activities Related to Performance Measures

In planning program activities, epidemiological data as well as internal program evaluations and outcomes monitoring are used to identify problem areas and help to target resources effectively.

4.1.1 Program Activities Related to Direct Services Performance Measures

Performance Measure #01: The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State CSHCN Program. OCSHCN continues to seek increased funding for children with special health care needs so that more SSI-eligible children can be served through the CRS program. Outreach expansion is now being explored to access all potentially medically eligible children. In addition, Title V dollars will continue to be used to supplement the provision of developmental clinic services to this population. The OCSHCN will continue to work on outreach activities with AHCCCS and other community partners in order to find all children eligible for Title XIX and XXI services. The OWCH Newborn Screening Program will continue to serve as payor of last resort for special formulas for children with metabolic diseases. The Sensory Program will develop and implement a training schedule in ADHS contracted Developmental Clinics regarding the use of OAE and tympanometry screening protocols and will coordinate the delivery and installation of the new equipment.

Performance Measure #02: The degree to which the State CSHCN Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients. As part of OCSHCN efforts to increase access to developmental and medical evaluations for children with special health care needs, the office will continue to work on plans with AHCCCS to implement Medicaid EPSDT reimbursement for developmental services provided to at-risk children. CRS will continue the ISA with DES to maintain eligibility workers for Title XIX and XXI at the CRS Centers of Excellence. OCSHCN will use AzEIP funding to support initiative for training of general evaluators in rural and remote areas of the state. Technological options, such as telemedicine, will be explored for the provision of specilaized developmental evaluation services in rural and remote areas as well.

State Performance Measure #01: Proportion of women who receive reproductive health/family planning services. The Reproductive Health/Family Planning Program will increase funding to contractors to ensure that more women can be served. The Program will continue to provide technical assistance to contractors and will complete and educational needs assessment of contractors. The new data collection methodology will be implemented and the policy and procedure manual will be updated. The Genetics Program will place the document "Genetic Services in Arizona, 4th Edition" on the OWCH web site and will continue distribution of hard copies to the public and professional community. Fax broadcasting will continue as a means of disseminating critical information about genetics. Health Start will continue to provide education on family planning during home visits and will make appropriate referrals to community resources. The Licensed Midwife Program will continue to provide genetic counseling communication training, HIV updates and standard precaution training for midwives.

4.1.2 Program Activities Related to Enabling Performance Measures

Performance Measure #03: The percent of Children with Special Health Care Needs in the State who have a "medical/health home." The AAP definition for medical home is care that is accessible, family-centered, comprehensive, continuous, coordinated, compassionate and culturally competent. Within both OWCH and OCSHCN, efforts are being made to develop a more comprehensive view of medical home. Through work with the Medical Home Project, OCSHCN is collaborating on information sharing, policy development and establishment of care standards for children with special health care needs to ensure that every child has a medical home. CRS is also working with AHCCCS to develop a mechanism to increase services to include primary care and additional specialty services as part of its benefits. The ultimate goal is to be able to use the CRS model of multi-specialty, inter-disciplinary care to provide comprehensive services to CSHCN.

The High Risk Perinatal Programs will evaluate data related to public health indicators and develop a strategic plan which addresses the needs of populations served by the Program. The program will provide training to contract providers related to the development of a Family Service Plan which identifies the family's resources, priorities, and concerns. The Children's Information Center will continue to promote awareness and outreach to families through public events and community health fairs. All OWCH programs will continue to facilitate referrals to AHCCCS and KidsCare to ensure medical coverage for children. The Child Health Program will increase funding to the AzAAP Medical Home Project to improve utilization and coverage for specialty services, prescriptions and laboratory services. The program will provide support to school-based/school-linked efforts to facilitate a medical home for uninsured children throughout the state. The Newborn Screening Program will increase interaction between primary care physicians and specialists for children with an abnormal NBS and those with a diagnosed disorder. The Sensory Program will include AzAAP Medical Home Project materials in the next mailing to Arizona public and private schools.

4.1.3 Program Activities Related to Population Based Services Performance Measures

Performance Measure #04: Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, hemoglobinopathies ([e.g. the sickle cell disease) (combined)]. The Newborn Screening Program will develop additional brochures about specific disorders, distribute stand-alone training videos and will air PSAs about NBS. Collaboration shall continue with the Sickle Cell Program to assure a smooth transition of follow-up for infants with abnormal hemoglobin test results on the newborn screen. Collaboration with regional NBS and genetics providers shall continue to strengthen coordination efforts. Education services will continue to educate health care professionals, hard-to-reach pregnant women in the Health Start Program, and the general public about the NBS Program, testing, obtaining samples and the addition of another test. Program participation on the SPRANS Grant Team will continue regarding linking related public health databases. As part of this effort, work will continue with those managing the Electronic Birth Certificate project and other to develop an integrated plan for data sharing/linking/matching to facilitate information transfer among programs involved with early intervention with children with special health care needs. The High Risk Perinatal Program, community health nurses will continue to provide in home education and repeat blood tests.

Performance Measure #05: Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diptheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B. OWCH will continue to provide funding for the ADHS Immunization Program for the TAPII Project to improve immunizations for children through age two during FY2001. The Health Start Program which promotes and tracks pediatric immunizations will expand the number of sites. The facilitation of access to immunizations will continue to be a major focus of the program. The Children's Information Center will continue to provide information about immunizations, including where to obtain immunizations, to Hotline callers. Educational materials about immunizations will be disseminated by OWCH staff at public events and community health fairs. The Child Health Program will continue to provide the KareBook which promotes age appropriate immunizations, on disk to interested entities. The High Risk Perinatal Program will continue to evaluate immunization status of children served through the program. Those needing immunizations will be referred to community resources.

Performance Measure #06: The rate of birth (per 1,000) for teenagers aged 15 through 17 years. Phase two of the media campaign will be launched by the Abstinence Only Education Program. The program web site will be expanded and the program will sponsor an abstinence education conference. Another RFP will be issued for community based abstinence education services targeting communities that don't currently have an established program. County Health Departments will continue to provide, under contract to the Reproductive Health/Family Planning Program, screening, diagnosis, treatment and prevention education to family planning clients and additional funding will be provided. The possibility of implementing the YRBS in Arizona will be pursued by OWCH Community Development effort. Health Mothers, Healthy Babies will continue to support community coalitions and provide educational materials on teen pregnancy prevention.

Performance Measure #07: Percent of third grade children who have received protective sealants on at least one permanent molar tooth. The Office of Oral Health will continue the statewide needs assessment and use the findings to direct community/program policies and standards. Technical assistance and coordinate efforts will continue to enhance service delivery through prepaid dental plans, public agencies and dental health groups. Efforts will continue to educate the public and health professionals about early childhood caries. The program anticipates providing dental sealants to at least 4,000 high risk children. School-based fluoride mouthrinse will be provided to at least 40,000 children. Additional oral health services, not specifically related to sealants but to the promotion of improved oral health, will also be provided. Such services include: loan the four mobile dental units and dental equipment to communities with identified needs, provide technical assistance and professional education, and coordinate an Oral Health Task Force to increase access to oral health services.

Performance Measure #08: The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children. The School Injury Surveillance Program will be transitioned from a paper reporting mechanism to the CHIP data system to expand reporting from schools. Provision of injury prevention/safety materials to ADHS programs, individuals, child care centers, schools, community based organizations and County Health Departments will continue by the Injury Prevention Program. Safe Communities Projects will continue to be funded throughout Arizona and articles will be prepared and published to educate targeted high risk injury groups

about prevention. The program will support NHTSA Child Passenger Safety Technician Training. Violence prevention projects will continue to be funded. The High Risk Perinatal Program, Licensed Midwife Program and Health Start will assure that car seat and other general safety information is available to families in both English and Spanish. Education and training activities will be increased to Level II, IIEQ and III hospitals.

Performance Measure #09: Percentage of mothers who breastfeed their infants at hospital discharge. Breastfeeding will be emphasized in all OWCH programs. Child Health will provide the KareBook in which breastfeeding is a major focus, to interested entities on computer disk. The Health Start Program will expand to additional sites and lay health workers will provide home and class education on the importance and techniques of successful breastfeeding. Literature related to breastfeeding will be made available to women enrolled in the Health Start Program. The Program will collect data regarding participants who breast feed prenatally and postpartum. The community health nurses through the High Risk Perinatal Program will continue to ensure breastfeeding education at each home visit and will encourage breastfeeding education for all hospital nursery staff. The Healthy Mothers/Healthy Babies initiative will continue to distribute information utilizing the new Breastfeeding Manual.

The Office of Nutrition will provide ongoing support and materials to the Pregnancy and Breastfeeding Hotline Program. The Breastfeeding Newsletter will be continued and inserts will be added for use in medical offices. The Pregnancy and Breastfeeding Hotline expects to increase the number of incoming calls it receives through the "Baby Arizona" campaign and will increase the number of follow-up calls it makes. The Hotline staff will complete the CAC Human Lactation Course.

Performance Measure #10: Percentage of newborns who have been screened for hearing impairment before hospital discharge. The Sensory Program will continue to work on efforts to link newborn hearing screening database to other related public health databases and to link screening data to assessment and intervention systems. The program hopes to increase the number of newborns screened to 95 percent. Additional efforts will continue within the Sensory Program that relate to the broader issue of identification of sensory impairments for all children. The program will develop guidelines for re-certification of hearing screeners for school screening efforts. The program will investigate the feasibility of modifying the workshop database to track certification of screeners. The Sensory Program will assure that a minimum of two individuals for each Developmental Services provider has been trained in the use of otoacoustic emissions and tympanometry. The Hearing Program rules revision process will be completed. In addition, the community health nurses with the High Risk Perinatal Program will continue to provide follow-up and rescreening to those children who fail ABR testing.

State Performance Measure #02: Hospitalizations for nonfatal injuries and poisonings per 100,000 adolescents age 15 through 19. The Injury Prevention Program will continue to distribute firearm safety brochures and support training and education on the dangers of firearms. The Bicycle Safety Mini-Grant Program will continue to provide helmets, training, education and materials to county health departments, school and community based organizations. Support will continue to the NHTSA Child Passenger Safety Seat Technician Training throughout the state. The Program will coordinate the use of the Injury Catastrophe House to Schools and

Community groups. The Injury Prevention 101 Training will be co-sponsored in conjunction with St. Joseph's Hospital and Medical Center. The Program anticipates that the number of SAFE KIDS Coalitions will increase in 2001.

The community health nurses of the High Risk Perinatal Program will continue to provide safety education to all NICP/OCSHCN families in their homes. The use of car seats, home and pool safety for children 0 - 3 years will be stressed. The Child Health Program will provide funds for coordination of the the School Nurse Emergency Medical Services for Children workshops. The Health Start Program lay health workers will attend classes on violence prevention, teach safety in the home and refer families to other programs for behavior issues.

The Adolescent Health Program will continue to assist the department with efforts to address teen suicide. Technical assistance and consultation will be provided by the program to individuals, agencies, organizations and schools on adolescent depression and suicide prevention/intervention. Injury data will continue to be collected from schools and analyzed to determine ways to reduce school injuries. The Social Work Program will continue to co-sponsor and participate on planning committees for conferences about preventing child abuse and family-centered practice. The Family Planning/Reproductive Health Program will provide "Talking with Teens - Depression and Suicide" training to all contractors.

State Performance Measure #08: Percent of women of childbearing age (18-44) who take a vitamin with the recommended 0.4 mg of folic acid daily. The performance measure was discontinued.

State Performance Measure #09: Number of babies born with spina bifida per 1,000 live births. Nutrition Services will continue to increase awareness of the preventive effects of folate among women of childbearing age through a nutrition education campaign conducted statewide directed toward consumers and health professionals/practitioners and the public. The Office will continue to work jointly with AzMOD and Spina Bifida Association of Arizona toward educating both the public and health professionals of the benefits of adequate folate intake. Educational activities will be initiated with the Girl Scouts and other youth organizations. A project will be implemented in which educational information regarding folate intake will be included in all DOA paychecks issued to state employees.

The Health Start Program, High Risk Perinatal Program, County Prenatal Block Grant and Family Planning/Reproductive Health Program will provide education to program participants about proper nutrition, including the use of folate.

4.1.4 Program Activities Related to Infrastructure Building Performance Measures

Performance Measure #11: Percent of Children with Special Health Care Needs in the State CSHCN program with a source of insurance for primary and specialty care. OCSHCN will continue to monitor the percent of children with special health care needs without insurance. In Fall 2000, OCSHCN will conduct a statewide, random-digit telephone survey of households to assess the status of families with CSHCN. The survey tool will address issues related to access to health services, health care coverage, the child's functional issues, out-of-pocket expenses, and the affect of having a child with a special need on family life.

Through its work with Collaborations for a New Century, CFHS will work with the business and faith

communities to educate low-income working families about all their insurance options. OCSHCN will also work with employee benefits managers and insurance companies to develop strategies for establishing risk retention pools for combined insurance plans among small businesses.

Performance Measure #12: Percent of children without health insurance. Through the statewide social work network, social workers will continue to receive updates about how to refer potentially eligible families to AHCCCS and KidsCare. The Health Start Program will continue meeting with AHCCCS and communities to expand outreach efforts. Local level "outreach" activities will be included and in-service training for lay health workers will be refined and expanded. School-Based Health Centers will continue to provide outreach and to provide needed health care services to uninsured children. Oral Health will continue to collaborate with AHCCCS to provide consultation and technical assistance through intergovernmental agreements. Information about AHCCCS and Kids Care will be provided to the families of children participating in the school-based dental sealant program.

The Children's Information Center anticipates an increase in the number of calls received as a result of OWCH initiatives and program implementations. Coordination and collaboration efforts with OCSHCN and AzEIP will continue. CIC operators will facilitate referral to AHCCCS and Kids Care for callers without insurance. The Adolescent Health Program will participate in efforts to encourage physicians to see adolescent patients and to improve reimbursement for adolescent services.

Performance Measure #13: Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program.. The Health Start Program, County Prenatal Block Grant Program and The Pregnancy and Breastfeeding Hotline, as a collaborator under the Baby Arizona Project, will facilitate referrals of children and pregnant women to the Title XIX program. In addition, OCSHCN will continue to collaborate with AHCCCS to provide Medicaid reimbursement for EPSDT visits for children with special health care needs, and will work with regional clinic staff to ensure that newly enrolled children found as a result of Kids Care outreach efforts receive appropriate paid services. School-based health centers and the AzAAP Medical Home Project will provide health care services to uninsured children and will facilitate referrals to potentially eligible families to AHCCCS and KidsCare.

Performance Measure #14: The degree to which the State assures family participation in program and policy activities in the State CSHCN program. OCSHCN will continue to support the Project Tsunami and CRS Parent Advisory Councils through reimbursement for time spent working on policy committees, reviewing documents and participating on action teams at the local and state level and through direct financial support for parent activities or groups. OCSHCN will continue to expand upon the newly-developed relationship with Family Voices, providing technical assistance and minimal financial support. New opportunities for family involvement in in-service training will be made available through the OCSHCN Family-Centered Training project. The newly state-mandated Parents Action Council will be convened and provided technical assistance in the development of a strategic plan.

Performance Measure #15: Percent of very low birth weight live births. The Health Start Program will

expand trainings for the lay health workers and will facilitate collaboration and cooperation among programs serving the same population such as AHCCCS and Kids Care. The KareBook will be provided to Health Start Program participants to encourage prenatal care and prenatal health. The Healthy Mothers/Healthy Babies (HMHB) project will hold at least two regional trainings/workshops on HMHB initiatives developed at the state and national level. The County Prenatal Block Grant will provide information to county health departments through the monthly newsletter. The Perinatal Substance Abuse Program will award five perinatal substance abuse mini-grants for education, training and prevention. Resource directories for services and treatment for women with chemical dependencies will be distributed and the Web site will be updated for current information about services and resources.

The Midwife Licensing Program will continue to provide training on all aspects of midwifery prenatal care. The midwifery model of care will continue to be promoted as an option for reducing cost and improving quality of maternity services, as well as reducing the low birth weight rate.

The Office of Oral Health will collaborate with ADHS offices to develop a periodontal disease assessment methodology for pregnant/postpartum women. At least one training will be provided for health professionals related to oral health as a risk factor for complications during pregnancy. The Social Work Services Program will be participating on the APT site visits to increase awareness of the positive impact of providing psychosocial services to families with high risk pregnancies and births.

Performance Measure #16: The rate (per 100,000) of suicide deaths among youths aged 15-19. The ADHS will continue to address this issue through the effort established last year. Key staff within the Bureau of Community and Family Health Services will participate. The Adolescent Health will sponsor at least two regional train-the-trainer programs to increase the number of community-based trainers. Training will be presented on adolescent depression and suicide prevention. Previous attendees will be invited to a one hour refresher program of "Talking with Teens". Prescreening protocols for adolescents receiving primary care services will be developed in conjunction with ARMA. The OWCH Community Development effort will continue to pursue implementation of the YRBS.

Performance Measure #17: Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates. The High Risk Perinatal Program supports the maternal and neonatal transport program to achieve effective and risk-appropriate care for pregnant women. The program will continue to compile annual perinatal statistical data comparing Arizona statistics with individual APT Certified Hospitals. Analysis of transport logs will be conducted to establish areas of identified needs and provide technical assistance as needed. The program will continue to provide technical assistance to hospitals throughout Arizona to decrease perinatal mortality and morbidity. Information pertaining to developmental care will continue to be provided to hospital administration staff. The program will continue to contract with all perinatology and neonatology groups in the state to provide medical case management, consultation services and technical assistance to hospitals and physicians as well as arrange for transport as needed and provide medical direction. The program will continue to contract with three regional 1-800 telephone lines that will receive calls for the physicians in order to provide equal

access to high risk services for all high-risk pregnant women and critically ill newborns and, as payer of last resort, with air and ground transport companies to provide 24 hour/day transport services including a highly trained team regardless of geographic location or families' ability to pay.

The Perinatal Social Work Program will participate at the APT site visits to increase awareness of the positive impact of providing psychosocial services to families with high risk pregnancies and births. The Office of Oral Health will collaborate with agencies to assess existing policies related to access to oral health services for women of child bearing years. Nutrition Services will provide technical assistance and consultation to hospital perinatal dietitians and community nutritionists, physicians, nurses and other health professionals. The nutritionist will conduct site visits to APT hospitals to increase implementation of the AZ Perinatal Nutrition Guidelines.

Performance Measure #18: Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester. The High Risk Perinatal Programs will continue to monitor and identify the percent of pregnant women in OWCH programs wiith a source of payment for prenatal care through the Electronic Birth Certificate Program. The Pregnancy and Breastfeeding Hotline (previously discussed under Performance Measure #09) and the Health Start Program (previously described under Performance Measure #12) have as a primary goal to facilitate early entry into prenatal care. The Licensed Midwife Program will promote the midwife model of care to the public and medical community. In addition, the Program will seek marketing opportunities for Licensed Midwives to promote the importance of early prenatal care. The Office of Oral Health will collaborate with public and private agencies to distribute educational materials on the importance of oral health service as part of prenatal care.

State Performance Measure #03: The percent of licensed child care centers which meet national quality standards for health and safety. The Early Childhood Program plans to increase the number of accredited programs during 2001. Fifty-two child care facilities will receive materials, technical assistance, and on-site consultations from the Association for Supportive Child Care. Two T3 institutes will be hosted by the U of A. It is anticipated that 7000 certificates to early childhood trainees will be issued. The Program will collaborate with the Professional Development committee to address six key issues: fees for participation in the registry, documentation of training and education, credit for training occurring outside the state, criteria for trainers, criteria for course approval and assessment of competencies. The Sensory Program will develop a roster of approved vision screening trainers and distribute the information to Arizona public and private schools.

State Performance Measure #04: Asthma hospitalizations per 100,000 children age 1 through 14. OWCH and OCSHCN will monitor the hospitalization rate of asthmatic children, work with other professionals in the field to develop ways to prevent such hospitalizations, and continue their work with the Arizona Asthma Coalition in the distribution of guidelines and standards of care for children with asthma. As part of its objective to establish an encounter database to track asthma incidence and services provided by school nurses, Child Health will expand its school nurse encounter database to a minimum of 175 schools. Support and technical assistance will be provided to local and regional asthma coalitions in order to develop approaches to best practices for asthma management

that can be sustained by local providers, schools, and community-based organizations.

State Performance Measure #05: Preventable child deaths per 100,000 children under age 18. The Child Fatality Review Program will continue to explore expansion of CFR process to include maternal and fetal/infant deaths. The Program will continue to provide technical assistance to all local teams and minority populations in the development and implementation of local culturally sensitive teams. Technical assistance to local teams and minority populations in the development and implementation of local culturally sensitive teams will be provided. The Citizen Review Panels will continue and the Program will begin gathering and analyzing the data collected from those reviews.

Through the High Risk Perinatal Programs, CHNs will monitor and report any child abuse and will provide education to all families regarding prevention of intentional injuries, child abuse and neglect and will provide SIDS education at every home visit. CHN's will monitor clients' use of apnea monitors.

The SIDS Program will continue training sessions for First-Responders, child care providers, hospital personnel and other professionals regarding SIDS. Data analysis will continue and the use of the investigative protocol will continue so that usage is more consistent. The program will develop a train the trainer model to train health professionals about SIDS and child abuse. Accessibility of grief counseling will be expanded in partnership with the SIDS Alliance.

State Performance Measure #06: The rate of children 1 through 14 hospitalized for ambulatory care sensitive conditions per 100,000. It is the position of the OWCH that children with adequate access to primary care would not be hospitalized for ambulatory sensitive conditions, but would receive either preventive treatment or early medical interventions before the disease process progressed to the stage requiring hospitalization. The Child Health Program, the CBG Program, OOH and Bureau of Health Systems Development will continue to collaborate to identify under-served areas and populations and program planning and funding strategies. The Medical Home Project will continue to be expanded to add specialists on an as-needed basis and to increase utilization of available appointment slots.

When the High Risk Perinatal Programs CHN's provide home education, they will also assess whether infants have and utilize a primary care provider. If one is not being utilized, the CHN will provide a linkage. The systematic plan will continue to be refined for early identification of infants and children with potential developmental and physical delays. The program will support and educate parents, families and professionals regarding program services and facilitate the timely referral of children to appropriate intervention services within the community. Expansion of developmental services to rural communities will continue and the role of the Developmental Services Social Worker will be expanded.

The Child Health Program will develop, print, and distribute the 2000 Directory of Community-Based Centers. Quality Assurance and Improvement protocols for school-based centers will be printed, distributed and added to the Web page. School-based health centers and school nurses will receive technical assistance from the Program to ensure that all children receive needed medical services.

State Performance Measure #07: The State Title V program has adopted and recommended a set of quality

standards for the health care of the MCH population. OWCH and OCSHCN programs shall continue the process of developing quality management standards and evaluation plans. As new programs and projects are developed, quality management will be incorporated into the initial implementation. The OCSHCN will continue to include parent input in the development of quality standards through the use of surveys (e.g., Patient Satisfaction, Family-Centered Care) and their participation in activities such as the CRS Medical Directors / Administrators meetings.

4.2 Other Program Activities

Telemedicine. The OCSHCN will implement a Memorandum of Understanding with the University of Arizona Telemedicine program to facilitate the development of a statewide network of sites and protocols for care. Rural families with CSHCN are extremely eager to use this technology so that they can have readier access to a wide range of services. Additionally, we will be pursuing use of the equipment to help establish parent communication networks.

Relationship with WIC. The WIC program is managed by the Office of Nutrition Services within CFHS. OWCH and OCSHCN programs have a reciprocal referral arrangement with WIC. Programs such as Health Start, Children's Information Center, Newborn Screening and AzEIP refer clients to WIC and WIC refers clients back to OWCH and OCSHCN as needs are identified.

The High Risk Perinatal Programs will continue to evaluate the necessity and feasibility of establishing new clinic sites, field clinics and services in the natural environment to increase accessibility for families throughout the state and to explore options for additional funding and/or methods of service delivery e.g. AHCCCS/EPSDT.

The Child Health Program will expand the automated student health encounter system to 175 schools and enhancements to the software program will be made. Efforts will continue to link data systems within ADHS to collect child health status indicator data. Additional efforts to link databases is underway through a SPRANS Grant and a CDC grant. Many programs within the Bureau of Community and Family Health Services as well as outside agencies, participate on the advisory boards.

Toll-Free Hotlines. OWCH operates two toll-free hotlines: the Children's Information Center (CIC) and the Pregnancy and Breastfeeding Hotline. The CIC is a statewide, bilingual/bicultural toll-free number (TDD available for the hearing-impaired in Maricopa County) that provides information, referral, support, education and advocacy to family care givers and health care professionals throughout Arizona. Follow-up is provided to all those who call the number. The Pregnancy and Breastfeeding Hotline is bilingual/bicultural hotline that facilitates entry of pregnant women into prenatal care services. Although the service is available to any caller, the target population is low income women and those with culturally diverse needs. It provides advocacy, education, information and support to disadvantaged women and their families. Follow-up calls are provided to all those who use the number.

Coordination with EPSDT Program. OCSHCN will develop a plan of action in collaboration with the state Medicaid agency to provide for Title XIX reimbursement for EPSDT services to children with special health care needs. This plan of action will include developing policies around the types of services included in the

reimbursement, periodicity of EPSDT visits and determination of who qualifies as an EPSDT provider.

Coordination with Other Federal Grant Programs. Various OWCH programs serving pregnant women and young children (Community Health Nursing, Family Planning, Prenatal Outreach Program and the Newborn Intensive Care Program) refer clients to WIC for services. OWCH currently has 3 additional federal grants: SSDI, SPRANS and one CDC Grant. The focus of the SSDI grant is to assist the state with the collection, analysis and reporting of performance measures, outcome measures, health status indicators and needs assessment. The SPRANS grant that funds the planning effort to link databases. The CDC grant is a cooperative effort between the Newborn Screening Program and the Sensory Program to identify through database linkage, children with certain metabolic disorders that have a sensory impairment. The linkage for assessment and early intervention will also be included.

Through the Arizona Early Intervention Program (AzEIP), OCSHCN works with DES in the implementation of the federal Office of Special Education Programs Individuals with Disabilities Education Act (IDEA). Through IDEA, Arizona has establish an interagency coordinating council, of which OCSHCN is a voting member. OCSHCN's responsibilities through AzEIP include provision of developmental clinic services to children age 0-3. Through Title V dollars, this program has been supplemented to provide similar services to older children as well.

Identifying Title XIX Eligible Women and Infants. The Prenatal Outreach Project, County Prenatal Block Grant Program and The Pregnancy and Breastfeeding Hotline, as a collaborator under the Baby Arizona Project, facilitate referral of pregnant women to the Title XIX program.

Social Security Administration/State Disabilities Determination Services Unit. OCSHCN has developed working relationships with the regional SSA and the State DDS. These entities are involved in developing policies around SSI determination and redetermination processes and how families who apply for SSI for their children, regardless of outcome, as referred for other services. Discussions have taken place reagrding the development of memoranda of agreement.

Vocational Rehabilitation. OCSHCN is now in the second year of an interagency agreement with the DES Vocational Rehabilitation Adminstration for the implementation of the MCHB Traumatic Brain Injury (TBI) Demonstration Project. OCSCHN provides project coordination, service coordination, family training, materials development and evaluation services for the project. Through this project, OCSHCN intends to document the strengths and barriers in the system of care for children with TBI and their families and to develop recommendations for improvement. As the project moves into the third year, OCSHCN is working with DES and the local communities to institutionalize best practices around care for children with TBI.

Family Leadership and Support Programs. The philosophy of the OWCH is based on the foundation that consumer involvement in decision-making for their health care and that of their family results in better health outcomes. To facilitate consumer involvement in decision-making, OWCH established the Community Involvement Project and established the Community Involvement Committee. The project was designed to encourage community participation in policy development, rules writing, organizational planning, advisory boards

and other activities. The original concept of parents representing families was broadened to a more all-encompassing approach to partners.

The Community Involvement Guidelines have been developed to operationalize the philosophy and to encourage consumers to participate. The term Community Advisor was initiated to refer to a consumer assisting the OWCH in various capacities. A small budget is available to provide for a token payment for the hours spent by Community Advisors in the pursuit of OWCH activities.

OCSHCN continues to support several family leadership and support programs including:

- Project Tsunami, where OCSHCN contracts with families and reimburses them for their time spent on policy, needs assessment, planning, program/community development and evaluation issues;
- Family Voices, where OCSHCN provides technical assistance and minimal financial support to this family advocacy organization;
- CRS Parent Advisory Councils, where OCSHCN support the operations of the regional and state PAC's who monitor and provide input on CRS services;
- Family Centered Institute, where OCSHCN supports the training provided by this institute to ensure that all OCSHCN staff are aware of the issues families with children with special health care needs face.

4.3 Public Input [Section 505 (a)(5)(F)]

Public input regarding the MCH Block Grant and the associated performance and outcome measures has been incorporated as a continuous process within OWCH and OCSHCN. The offices made presentations during the past year to the Arizona Perinatal Trust and to county health officers and county health directors of nursing. The presentations included county profiles for those measures for which data were available. Participants provided input regarding potential methodologies to positively influence the measures and were asked to collect data at the county level for evaluation purposes. On April 4, 2000 the perinatal measures were presented to the county prenatal block grant recipients which included most health officers and directors of nursing.

This year, as part of the OCSHCN Parent leader conference, families and providers were informed of the opportunity to review the draft document. As a result of that announcement, 15 families and providers of CSHCN agreed to review the document in detail and provide written comment. Copies were also made available to contra cting rehabilitative and developmental clinic providers.

An overview of performance and outcome measures was put on the internet with links from both OWCH and OCSHCN web sites.

ADHS representatives met with the AHCCCS executive director and medical director to discuss presenting needs assessment and performance and outcomes data to the medical directors of AHCCCS health plans when the data are finalized.

4.4 Technical Assistance [Section 509 (a)(4)]

See form 15.

V. SUPPORTING DOCUMENTS

5.1 Glossary

GLOSSARY

Adequate prenatal care - Prenatal care were the observed to expected prenatal visits is greater than or equal to 80% (the Kotelchuck Index).

Administration of Title V Funds - The amount of funds the State uses for the management of the Title V allocation. It is limited by statute to 10 percent of the Federal Title V allotment.

Assessment - (see "Needs Assessment")

Capacity - Program capacity includes delivery systems, workforce, policies, and support systems (e.g., training, research, technical assistance, and information systems) and other infrastructure needed to maintain service delivery and policy making activities. Program capacity results measure the strength of the human and material resources necessary to meet public health obligations. As program capacity sets the stage for other activities, program capacity results are closely related to the results for process, health outcome, and risk factors. Program capacity results should answer the question, "What does the State need to achieve the results we want?"

Capacity Objectives - Objectives that describe an improvement in the ability of the program to deliver services or affect the delivery of services.

Care Coordination Services for Children With Special Health Care Needs (CSHCN, see definition below) - those services that promote the effective and efficient organization and utilization of resources to assure access to necessary comprehensive services for children with special health care needs and their families. *[Title V Sec. 501(b)(3)*]

Carryover (as used in Forms 2 and 3) - The unobligated balance from the previous years MCH Block Grant Federal Allocation.

Case Management Services - For pregnant women - those services that assure access to quality prenatal, delivery and postpartum care. For infants up to age one - those services that assure access to quality preventive and primary care services. *(Title V Sec. 501(b)(4)*

Children -A child from 1st birthday through the 21st year, who is not otherwise included in any other class of individuals.

Children With Special Health Care Needs (CSHCN) - *(For budgetary purposes)* Infants or children from birth through the 21st year with special health care needs who the State has elected to provide with services funded through Title V. CSHCN are children who have health problems requiring more than routine and basic care including children with or at risk of disabilities, chronic illnesses and conditions and health-related education and behavioral problems. *(For planning and systems development)* - Those children who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.

Children With Special Health Care Needs (CSHCN) - Constructs of a Service System

1. State Program Collaboration with Other State Agencies and Private Organizations. States establish and maintain ongoing interagency collaborative processes for the assessment of needs with respect to the development of community-based systems of services for CSHCN. State programs collaborate with other agencies and organizations in the formulation of coordinated policies, standards, data collection and analysis, financing of services, and program monitoring to assure comprehensive, coordinated services for CSHCN and their families.

2. State Support for Communities. State programs emphasize the development of community-based programs by establishing and maintaining a process for facilitating community systems building through mechanisms such as technical assistance and consultation, education and training, common data protocols, and financial resources for communities engaged in systems development to assure that the unique needs of CSHCN are met.

3. Coordination of Health Components of Community-Based Systems. A mechanism exists in communities across the State for coordination of health services with one another. This includes coordination among providers of primary care, habilitative and rehabilitative services, other specialty medical treatment services, mental health services, and home health care.

4. Coordination of Health Services with Other Services at the Community Level. A mechanism exists in communities across the State for coordination and service integration among programs serving CSHCN, including early intervention and special education, social services, and family support services.

Classes of Individuals - authorized persons to be served with Title V funds. See individual definitions under "Pregnant Women," "Infants," "Children with Special Health Care Needs," "Children," and "Others."

Community - a group of individuals living as a smaller social unit within the confines of a larger one due to common geographic boundaries, cultural identity, a common work environment, common interests, etc.

Community-based Care - services provided within the context of a defined community.

Community-based Service System - an organized network of services that are grounded in a plan developed by a community and that is based upon needs assessments.

Coordination (see Care Coordination Services)

Culturally Sensitive - the recognition and understanding that different cultures may have different concepts and practices with regard to health care; the respect of those differences and the development of approaches to health care with those differences in mind.

Culturally Competent - the ability to provide services to clients that honor different cultural beliefs, interpersonal styles, attitudes and behaviors and the use of multicultural staff in the policy development, administration and provision of those services.

Deliveries - women who received a medical care procedure (were provided prenatal, delivery or postpartum care) associated with the delivery or expulsion of a live birth or fetal death.Direct Health Care Services - those services generally delivered one-on-one between a health professional and a patient in an office, clinic or emergency room which may include primary care physicians, registered dietitians, public health or visiting nurses, nurses certified for obstetric and pediatric primary care, medical social workers, nutritionists, dentists, sub-specialty physicians who serve children with special health care needs, audiologists, occupational therapists, physical therapists, speech and language therapists, specialty registered dietitians. Basic services include what most consider ordinary medical care, inpatient and outpatient medical services, allied health services, drugs, laboratory testing, x-ray services, dental care, and pharmaceutical products and services. State Title V programs support - by directly operating programs or by funding local providers - services such as prenatal care, child health including immunizations and treatment or referrals, school health and family planning. For CSHCN, these services include specialty and subspecialty care for those with HIV/AIDS, hemophilia, birth defects, chronic illness, and other conditions requiring sophisticated technology, access to highly trained specialists, or an array of services not generally available in most communities.

Enabling Services - Services that allow or provide for access to and the derivation of benefits from, the array of basic health care services and include such things as transportation, translation services, outreach, respite care, health education, family support services, purchase of health insurance, case management, coordination of with

Medicaid, WIC and educations. These services are especially required for the low income, disadvantaged, geographically or culturally isolated, and those with special and complicated health needs. For many of these individuals, the enabling services are essential - for without them access is not possible. Enabling services most commonly provided by agencies for CSHCN include transportation, care coordination, translation services, home visiting, and family outreach. Family support activities include parent support groups, family training workshops, advocacy, nutrition and social work.

EPSDT - Early and Periodic Screening, Diagnosis and Treatment - a program for medical assistance recipients under the age of 21, including those who are parents. The program has a Medical Protocol and Periodicity Schedule for well-child screening that provides for regular health check-ups, vision/hearing/dental screenings, immunizations and treatment for health problems.

Family-centered Care - a system or philosophy of care that incorporates the family as an integral component of the health care system.

Federal (Allocation) (as it applies specifically to the Application Face Sheet [SF 424] and Forms 2 and 3) -The monies provided to the States under the Federal Title V Block Grant in any given year.

Government Performance and Results Act (GPRA) - Federal legislation enacted in 1993 that requires Federal agencies to develop strategic plans, prepare annual plans setting performance goals, and report annually on actual performance.

Health Care System - the entirety of the agencies, services, and providers involved or potentially involved in the health care of community members and the interactions among those agencies, services and providers.

Infants - Children under one year of age not included in any other class of individuals.Infrastructure Building Services - The services that are the base of the MCH pyramid of health services and form its foundation are activities directed at improving and maintaining the health status of all women and children by providing support for development and maintenance of comprehensive health services systems including development and maintenance of health services standards/guidelines, training, data and planning systems. Examples include needs assessment, evaluation, planning, policy development, coordination, quality assurance, standards development, monitoring, training, applied research, information systems and systems of care. In the development of systems of care it should be assured that the systems are family centered, community based and culturally competent.

Jurisdictions - As used in the Maternal and Child Health block grant program: the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern

Mariana Islands, the Republic of the Marshal Islands, the Federated States of Micronesia and the Republic of Palau.

Kotelchuck Index - An indicator of the adquecy of prenatal care. See *Adequate Prenatal Care.*

Local Funding (as used in Forms 2 and 3) - Those monies deriving from local jurisdictions within the State that are used for MCH program activities.

Low Income - an individual or family with an income determined to be below the income official poverty line defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Omnibus Budget Reconciliation Act of 1981.[Title V, Sec. 501 (b)(2)]

MCH Pyramid of Health Services - (see "Types of Services")

Measures - (see "Performance Measures")

Needs Assessment - a study undertaken to determine the service requirements within a jurisdiction. For maternal and child health purposes, the study is to aimed at determining: 1) What is essential in terms of the provision of health services; 2) What is available; and, 3) What is missing

Objectives - The yardsticks by which an agency can measure its efforts to accomplish a goal. (See also "Performance Objectives")

Other Federal Funds (Forms 2 and 3) - Federal funds other than the Title V Block Grant that are under the control of the person responsible for administration of the Title V program. These may include, but are not limited to: WIC, EMSC, Healthy Start, SPRANS, HIV/AIDs monies, CISS funds, MCH targeted funds from CDC and MCH Education funds.

Others (as in Forms 4, 7, and 10) - Women of childbearing age, over age 21, and any others defined by the State and not otherwise included in any of the other listed classes of individuals.

Outcome Objectives - Objectives that describe the eventual result sought, the target date, the target population, and the desired level of achievement for the result. Outcome objectives are related to health outcome and are usually expressed in terms of morbidity and mortality

Outcome Measure - The ultimate focus and desired result of any set of public health program activities and

interventions is an improved health outcome. Morbidity and mortality statistics are indicators of achievement of health outcome. Health outcomes results are usually longer term and tied to the ultimate program goal. Outcome measures should answer the question, "Why does the State do our program?"

Performance Indicator - The statistical or quantitative value that expresses the result of a performance objective.

Performance Measure - a narrative statement that describes a specific maternal and child health need, or requirement, that, when successfully addressed, will lead to, or will assist in leading to, a specific health outcome within a community or jurisdiction and generally within a specified time frame. (Example: "The rate of women in [State] who receive early prenatal care in 19__." This performance measure will assist in leading to [the health outcome measure of] reducing the rate of infant mortality in the State).

Performance Measurement - The collection of data on, recording of, or tabulation of results or achievements, usually for comparing with a benchmark.

Performance Objectives - A statement of intention with which actual achievement and results can be measured and compared. Performance objective statements clearly describe what is to be achieved, when it is to be achieved, the extent of the achievement, and target populations.

Population Based Services - Preventive interventions and personal health services, developed and available for the entire MCH population of the State rather than for individuals in a one-on-one situation. Disease prevention, health promotion, and statewide outreach are major components. Common among these services are newborn screening, lead screening, immunization, Sudden Infant Death Syndrome counseling, oral health, injury prevention, nutrition and outreach/public education. These services are generally available whether the mother or child receives care in the private or public system, in a rural clinic or an HMO, and whether insured or not.

PRAMS - Pregnancy Risk Assessment Monitoring System - a surveillance project of the Centers for Disease Control and Prevention (CDC) and State health departments to collect State- specific, population-based data on maternal attitudes and experiences prior to, during, and immediately following pregnancy.

Pregnant Woman - A female from the time that she conceives to 60 days after birth, delivery, or expulsion of fetus.

Preventive Services - activities aimed at reducing the incidence of health problems or disease prevalence in the community, or the personal risk factors for such diseases or conditions.

Primary Care - the provision of comprehensive personal health services that include health maintenance and

preventive services, initial assessment of health problems, treatment of uncomplicated and diagnosed chronic health problems, and the overall management of an individual's or family's health care services.

Process - Process results are indicators of activities, methods, and interventions that support the achievement of outcomes (e.g., improved health status or reduction in risk factors). A focus on process results can lead to an understanding of how practices and procedures can be improved to reach successful outcomes. Process results are a mechanism for review and accountability, and as such, tend to be shorter term than results focused on health outcomes or risk factors. The utility of process results often depends on the strength of the relationship between the process and the outcome. Process results should answer the question, "Why should this process be undertaken and measured (i.e., what is its relationship to achievement of a health outcome or risk factor result)?"

Process Objectives - The objectives for activities and interventions that drive the achievement of higher-level objectives.

Program Income (as used in the Application Face Sheet [SF 424] and Forms 2 and 3) - Funds collected by State MCH agencies from sources generated by the State's MCH program to include insurance payments, MEDICAID reimbursements, HMO payments, etc.

Risk Factor Objectives - Objectives that describe an improvement in risk factors (usually behavioral or physiological) that cause morbidity and mortality.

Risk Factors - Public health activities and programs that focus on reduction of scientifically established direct causes of, and contributors to, morbidity and mortality (i.e., risk factors) are essential steps toward achieving health outcomes. Changes in behavior or physiological conditions are the indicators of achievement of risk factor results. Results focused on risk factors
tend to be intermediate term. Risk factor results should answer the question, "Why should the State address this risk factor (i.e., what health outcome will this result support)?"

State - as used in this guidance, includes the 50 States and the 9 jurisdictions. (See also, Jurisdictions)

State Funds (as used in Forms 2 and 3) - The State's required matching funds (including overmatch) in any given year.

Systems Development - activities involving the creation or enhancement of organizational infrastructures at the community level for the delivery of health services and other needed ancillary services to individuals in the community by improving the service capacity of health care service providers.

Technical Assistance (TA) - the process of providing recipients with expert assistance of specific health related or administrative services that include; systems review planning, policy options analysis, coordination coalition building/training, data system development, needs assessment, performance indicators, health care reform wrap around services, CSHCN program development/evaluation, public health managed care quality standards development, public and private interagency integration and, identification of core public health issues.

Title XIX, number of infants entitled to - The unduplicated count of infants who were eligible for the State's Title XIX (MEDICAID) program at any time during the reporting period.

Title XIX, number of pregnant women entitled to - The number of pregnant women who delivered during the reporting period who were eligible for the State's Title XIX (MEDICAID) program

Title V, number of deliveries to pregnant women served under - Unduplicated number of deliveries to pregnant women who were provided prenatal, delivery, or post-partum services through the Title V program during the reporting period.

Title V, number of infants enrolled under - The unduplicated count of infants provided a direct service by the State's Title V program during the reporting period.

Total MCH Funding - All the MCH funds administered by a State MCH program which is made up of the sum of the *Federal* Title V Block grant allocation, the *Applicant's* funds (carryover from the previous year's MCH Block Grant allocation - the unobligated balance), the *State* funds (the total matching funds for the Title V allocation - match and overmatch), *Local* funds (total of MCH dedicated funds from local jurisdictions within the state), *Other* federal funds (monies <u>other</u> than the Title V Block Grant that are under the control of the person responsible for administration of the Title V program), and *Program Income* (those collected by state MCH agencies from insurance payments, MEDICAID, HMO's, etc.).

Types of Services - The major kinds or levels of health care services covered under Title V activities. See individual definitions under "Infrastructure Building", "Population Based Services", "Enabling Services" and "Direct Medical Services".

YRBS - Youth Risk Behavior Survey - A national school-based survey conducted annually by CDC and State health departments to assess the prevalence of health risk behaviors among high school students.

5.2

Assurances and Certification

5.3

Other Supporting Documents

Appendix B

OWCH and OCSHCN Program and Project Descriptions

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
The Abstinence Education Program is a statewide program that supports community-based prevention programs to promote abstinence and decision-making for healthy life choices. **Abstinence Education Local Projects** consists of 16 community-based organizations who provide an abstinence until marriage message to school age youth, parents, youth workers and adults through age 45 years. They are using a variety of curricula that meet the federal definition of abstinence education. The local projects are required to be members of a community coalition that will encourage and develop broad community support, provide guidance with any barriers encountered, and assist with obtaining the matching funds required in the second contract year and beyond. Services are currently available in eleven of Arizona's fifteen counties. **Abstinence Education Media Campaign:** The media campaign was developed to support the abstinence message provided by the local projects and encourage sexual abstinence before marriage among all of Arizona's citizens. The media campaign currently consists of six television spots, four radio spots, two brochures and assorted promotional materials. One brochure, a TV spot and one radio spot target parents. The remaining campaign materials are geared towards youth or individuals of all ages. Placement of the television and radio ads have been both paid and public service announcements. All of the ads have a tag line that lists a 1-800 number where callers can request one of the brochures. The program also has a web site that contains the information in the brochure, a list of the contractors and other areas currently under construction. The media consultant provides individualized service to each of the local projects with assistance on press releases, responses to the media and development of materials specific to their project. **The Teen Pregnancy Prevention Program** was established as a result of SB 1073 which was passed during the 1995 legislative session. It allocated $110,000 for local programs, and $140,000 for a survey and media campaign. It also established an advisory board which sunset on 12/31/96. The bill established the local programs as abstinence based however, they were modified to be abstinence only when the department received the federal abstinence only funding. The funding supports three local programs. Each contractor is required to cover five areas; abstinence, refusal skills, goal setting, decision making and career exploration. The Maricopa CHD who is providing services in Westview and Tolleson High Schools is a contractor. They train peer leaders in a curricula and the peer leaders then present the information to the freshman Wellness Classes; and conduct parent education sessions. The Coconino CHD developed their own curriculum and chose to focus on elementary grades in Flagstaff and Williams when the program was changed to abstinence only. The curriculum focuses on character development. The Pinal CHD provides services in Coolidge junior and high schools. **Abstinence Education Evaluation**: The evaluation consultant will provide semi annual and annual reports on process and outcome objectives. They have developed four surveys that assess attitudes, beliefs and behaviors regarding sex and abstinence; one for pre-teens, teenagers, parents and adults. The evaluation consultants conduct an initial training and periodic updates on data collection and submission with each of the local projects. They also assist the local projects when they encounter barriers to implementing the survey. Each local project is required to participate in and support the evaluation activities.	Population Based Service	Children

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
ADHS Early Intervention Team Program emphasizes and supports family centered and culturally appropriate practices and develops policies around the care of CSHCN within early intervention activities. Professional and parental partnerships are enhanced by building relationships through collaboration.	Enabling Service	Children with special needs
ADHS Participation within AzEIP. Parent/professional partnership and family centered practice is modeled through participation within an Inter-Governmental Agreement among five state agencies for the AzEIP, Interagency Coordinating Council, and associated committees and workgroups. Parents attend meetings as paid experts and partners to offer direction and energy in order to influence other state programs to adopt family centered, culturally appropriate practices. **Developmental Services Project** assures access to developmental and discipline-specific evaluations performed by qualified personnel to determine a child's eligibility for the Arizona Early Intervention Program. Children with special health care needs above the age of three may access services if they not available from other sources. A major focus of the Developmental Services program has been to make these services accessible to families regardless of their geographic location. An Interagency Agreement among five state agencies (AHCCCS, DES, ADHS, ASDB, and DOE) facilitates provision of services to children birth to three years of age who are at risk for developmental delay. **Failure to Thrive Project** involved awarding a contract during FY 1997-98 to a local agency in Maricopa County for the purpose of developing a service delivery model for "failure to thrive." A key element of this contract is to provide an assessment by a multidisciplinary team to make recommendations for the development of an individual family service plan (IFSP) and needed early intervention services. The IFSP is the basis for providing family training, counseling, and other in-home services. The ultimate goal of this contract is to develop a model which could be replicated at other sites throughout the state. **Infant Mental Health Initiative** assists in the development of the service delivery system for children and families needing assistance within a relationship-based context under contract to OCSHCN. It seeks to explore and describe an appropriate service model, beginning with the screening, evaluation and assessment process. It further assists with increasing professional knowledge of the constructs of this emerging field of thought.	Infrastructure Building Service and Enabling Service	Children with special needs
The Adolescent Health Program promotes a system of health care for all adolescents that is community-based, culturally competent and involves adolescents in the planning, development and evaluation of the system. The program provides technical assistance and consultation for policy and program development. Support is given to the development and implementation of training/education to assure comprehensive adolescent-appropriate health service systems and standards of care.	Infrastructure Building Service	Children

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
The Adolescent Health Program (continued): **The Arizona Adolescent Health Coalition** (AAHC) provides information on programs and services for adolescents to its state wide inter-disciplinary membership. They are developing and producing a series of "Fact Sheets" for adolescents and their parents on mental health, suicide, date rape, nutrition, etc. The Adolescent Connection is a quarterly newsletter that provides information/education on a variety of adolescent health topics and resources including web sites and free materials. The AAHC has 3 quarterly meetings and one annual conference. **Adolescent Training/Education Programs:** *Demystifying Adolescence* is an comprehensive 8 module curriculum that can be modified to meet the needs of the audience. It is offered as a one credit course at Phoenix Community College and is part of an Adolescent Health Certificated program. *Talking With Teens*, adult adolescent communication training is a 6hr. 30 minute program that incorporates information from the Demystifying curriculum on adolescent growth and development, asset building and facilitated role playing with teens. Certified adolescent Health trainers can be obtained through The Arizona Prevention Resource Center. (Limited scholarships available). **Adolescent Suicide Prevention**: Competed an internal inter-departmental survey of programs and services that relate to adolescent depression and suicide. Completing a data collection and review of suicide attempts and completions, plan geomapping. Upon completion of developing an ADHS Vision, Mission and Goals, external partners will be identified to develop a working action plan with activities and tasks to decrease adolescent suicide. Collaborating with IHS on suicide prevention. **Osteoporosis Prevention:** Collaborating with the Osteoporosis Prevention Coalition to target early adolescence with an education program.		
All About Me project modifies and distributes the Arizona Early Intervention (AzEIP) book, All About Me, to children up to 21years old and their families. This notebook is a record keeping and resource tool, created by families and professionals, for families to maintain medical and personal information about their child with special needs. OCSHCN Service Coordinators distribute the publication to families of children with special health care needs.	Enabling Service	Children with special needs
Arizona Self Study Project (ASSP) - see Early Childhood Program		
AzEIP - See ADHS Participation within AzEIP		
Baby Arizona is accessed through the Pregnancy and Breastfeeding Hotline that provides the statewide link for the program. This program provides an expedited eligibility process into the state Title XIX program (AHCCCS). Services include prescreening and referral through the statewide managed care provider network.	Enabling Service	Pregnant Women

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Child Care Diabetes Guide provides specific direction on how to develop an individualized plan for caring for a child with diabetes, regulatory and safety issues, dietary and nutrition considerations, developing an emergency plan, and building partnerships with parents, staff training and administrative concerns. OCSHCN is a key member of the team developing this guide for child care providers (both center and home based) to successfully serve children who have diabetes. The guide will be distributed to child care providers throughout Arizona. This guide joins other guides previously developed by OCSHCN: Enhancing the Quality of life for Arizona's Children: Standards and Indicators for Quality Care for CSHCN"; "Model Process for Service Planning for CSHCN"; "Enrolling the CSHCN: A guide for Child Care Providers"; and "Family Centered Care for Children with Asthma"	Infrastructure Building Service	Children with special needs
The Child Health Indicator Project (CHIP) provides a software program free of charge to school nurses in the State of Arizona. The program was developed in cooperation with school nurses and recently received a grant from St. Luke's Charitable Health Trust to increase the number of schools participating to 100+ and further enhance the program to include five new modules which will decrease the paperwork school nurses have to do and increase the data concerning the indicator of well-being. The project started in 1997 with the development and introduction of the software program to pilot schools. The 1997-1998 school nurse report involved 13 schools, 11 school districts and 10, 065 students. Seventy schools participated in the project for school year 1998-1999; data collection remains on-going as some schools haven't completed their school year at this time (May 1999). Technical assistance, continued support of existing participants, and training are also provided to participating schools through OWCH. A manual was developed and published concerning the software program.	Infrastructure Building Service	Children
The Child Health Program promotes a system of primary care for all children from birth to age 21 and their families to facilitate improvement and/or maintenance of health status. The program convened the Arizona Children's Primary Health Care Task Force which developed and published the document A Future for Arizona's Children. Efforts are on-going with this plan. The Child Health Status Indicators were initially developed with money from the SSDI Grant and are now funded through the Maternal and Child Block Grant. This project identified mortality, morbidity and general well-being indicators as measures which are used by OWCH decided to monitor the health of Arizona's children. Data reports on these indicators are published for the years 1993 through 1995. The data provides direction for public policy concerning programs and strategies for children. A Future for Arizona's Children defined a leadership role for the Arizona Department of Health Services, Office of Women's and Children's Health . An action plan, strategies and recommended programs for implementation concerning children in Arizona, was developed especially low income who are in need of a medical home.	Infrastructure Building Service	Children
The Children's Information Center is a statewide, bilingual/bicultural toll free number (TDD available for the hearing impaired in Maricopa County) that provides information, referral, support, education, and advocacy to family caregivers and health care professionals throughout Arizona. Follow-up is provided, as time and staffing allows, to those who call the 1-800 number.	Enabling Service	All

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Children's Rehabilitative Services (CRS) is a statewide program which serves individuals who meet the medical and financial criteria established by ADHS. Through contracts with four regional clinics, CRS combines an array of medical and ancillary services to achieve a family-centered, interdisciplinary approach to the care of its members. The services include inpatient hospital stays, outpatient specialty clinics, outpatient diagnostic testing and specialty equipment. At the state level, the program is involved in data collection, outcome studies, provider and parent education and continuous efforts/projects to evaluate and continuously improve care to this special needs population . **CRS Quality Assurance Plan** **Annual CRS Conference** for parents, providers and all CRS regional staff is held biannually in October, with the themes of cultural awareness and sensitivity and family centered care. A planning committee of parents, providers, and staff will facilitate interactive presentations and discussions to increase understanding of these crucial principles. **CRS Eligibility Review and Standards of Care Project** was implemented to establish criteria and develop recommendations regarding specific diagnoses and to define standards of care for delivery of services. A Steering Committee provides oversight and monitoring of the implementation of the recommendations and approves Review Team deliverables. A Core Review Team is responsible for defining the criteria to be considered in reviewing the diagnosis, determining priorities and order of conditions to be reviewed, participating on Condition Specific Review Teams and identifying members of the Condition Specific Review Team. The Condition Specific Review Team reviews the literature summaries and makes recommendations regarding service delivery approach and standards of care guidelines. **CRS Orientation Project** involves the four CRS clinics which have unique needs, but a common interest in orienting new families to their program and services. Representatives from each of the clinics, along with parents from those communities, met to develop a core foundation of information that every new parent should have. Using this information, each clinic agreed to implement a new parent orientation plan that includes creation of orientation plackets and a system to assure that families receive them. **Family Centered Survey** is a project developed to ensure quality service delivery at Children's Rehabilitative Services (CRS) clinics. Surveys were sent to every family receiving services through CRS, asking them to rate the provision of family-centered care and the importance of services provided by the clinic doctors, nurses, social workers and therapists. Results will be used to evaluate areas of clinic policies, procedures or performance that require additional support, training or intervention. **Family Centered Training Project** regularly trains and educates staff at each of the four Children's Rehabilitative Services clinics on family centered practices. These sessions provide a forum for staff to discuss ways to apply family centered practices in their clinics and to learn new strategies to effectively collaborate with families who have children with special health care needs.	Direct Health Care and Infrastructure Building Service	Children with special needs

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CRS Quality Assurance Plan (continued) **HEDIS Format Indicators** is a project in which Children's Rehabilitative Services (CRS) has adopted the format of NCQA's Health Plan Employer Data and Information Set. Performance measures were developed that targeted children with special health care needs. These indicators assist us in the evaluation, accountability and improvement of the CRS program. **Physician Education Project** is a quality assurance effort in which CSHCN-contracted physicians will be offered training on family centered care practices. Through collaboration with Pilot Parents Partnerships, this training will provide practical applications of family centered care when serving children who have special health care needs. **WeeFIMS** is a functional independence measure for children. WeeFIMS is a basic indicator of severity of disability not impairment. It measures what a child with a disability actually does, whatever his or her diagnosis. This assessment is currently utilized in the Children's Rehabilitative Services program for individuals with specified conditions. The data generated by WeeFIMS is used in the analysis of the outcomes of services provided.		
Community Development Initiative improves family access to information and understanding of the eligibility and service delivery system through parent leadership in selected communities. Community Parent Leaders are reimbursed for their time and expertise in facilitating and supporting the work of their Community Action Teams. They play an integral role in developing budgets, planning and facilitating retreats and conferences, working on teams, and developing strategic plans. Community Development staff work in partnership with community parent leaders, providers, and citizens to provide information, technical assistance, and support services to promote environments within which community initiatives can thrive. Community development strategies are implemented and enhanced through participation within community infrastructures. **Community Needs/Resource Assessments** began in 1994, with the communities of Prescott, Prescott Valley and Chino Valley. Since then, such assessments have been conducted in six separate communities around the state, (Somerton, Bullhead City, Douglas, Eagar/Springerville, Peach Springs). The outcome of these assessments is an identification of the needs and gaps in services as well as strengths of the existing system. OCSHCN utilizes an electronic database of community and state-level information which is updated annually and provides the foundation for developing community profiles and report cards. These findings are used to initiate the OCSHCN Community Development process. An assessment of Mesa, the first urban site as well as the largest community to date participating in this OCSHCN process, began in 1998. **Community Profiles** is a part of the ongoing community needs assessment process. Using electronic data, profiles of community information paint a picture of the system of care for children with special health care needs. These profiles include population-based data on public health, medical and social services, education and demography. This information is used by communities to assist in prioritizing the issues on which they choose to work.	Enabling Service and Infrastructure Building Service	Children with special needs

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Community and Family Health Homepages project has as its goal to develop a consistent presence on the Internet. OCSHCN has taken a leadership role in establishing this presence by coordinating the activities of the programs in the bureau of Community and Family Health (CFHS). Representatives from each of the CFHS offices meet regularly to assure that the information presented is user friendly and promotes the mission of the bureau.	Infrastructure Building Service	All
County Prenatal Block Grant Program distributes funds to all 15 county health departments for activities focused on enhancing the health of women of childbearing age, infants and children up to two years of age. Activities in the counties are designed to encourage and result in improved integration and coordination of existing and new services that are carried out by the county health departments and/or through subcontracts with other organizations. They are based on a local assessment of needs; focused on systems development and/or service delivery; and outlined in a county plan.	Infrastructure Building Service	All
Cultural Competence in Community Service Delivery Project networks with Indian Health Services, tribes, Minority Health, and other agencies and offices to develop a guide to enhance provider and staff knowledge of the African American, Native American and Hispanic cultures.	Infrastructure Building Service	All
DES/ADHS Eligibility Process Improvement is an inter-agency workgroup comprised of DES/FAA and ADHS/OCSHCN staff working to improve the current Children's Rehabilitative Services (CRS) financial eligibility process, and ensure sensitivity toward families. In addition, the goal of the project is to ensure that families obtain access to the full array of services offered by the state agencies. The team is working on policies and procedures to enhance this process.	Infrastructure Building Service	Children with special needs
Developmental Services Project - see ADHS Participation within AzEIP.		
Early Childhood Program assists agencies, communities and individuals to assess young children's needs and develop integrated systems of services that will improve the health, safety and development of young children. Projects include: **The Arizona Self Study Project (ASSP)** is designed as a partnership between public and private agencies to support early childhood programs through the Self Study process of a national accreditation system. The project was developed to assist Early Childhood programs in Arizona that are interested in improving the quality of services they provide for children. **Health and Safety Training Project** provides a system of health and safety training and consultation for those who care for children. The project is designed to develop and offer comprehensive, quality training and resources to those who train and to those who provide direct services to the early childhood population in Arizona. **Healthy Child Care Arizona** is a CISS grant awarded to OWCH. It is a collaborative systems development grant, in which OCSHCN is a lead player. The goals are to offer more health information to child care providers and parents, increase the knowledge of child care providers on health resources and to expand the health information collected by child care providers about the children they serve, to include information relevant to children with special health care needs.	Infrastructure Building Service	Children and Children with special needs

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Emergency Medical Services for Children Program was established to expand and improve the system of emergency medical services for children who need treatment for trauma or critical illness. The program activities include: development of an EMSC Resource Center; development of a WEB page; reproduction/distribution of educational materials (i.e. CD ROM Children with Special Health Care Needs); provision of professional training; conducting educational needs assessments of professional EMS personnel and promotion of the Recommendations and Guidelines for Pediatrics Emergency Care and Transport in Arizona; and facilitating meetings of the EMSC Advisory Committee.	Infrastructure Building Service	Infants, Children and Children with special needs
Failure to Thrive Project - see ADHS Participation within AzEIP.		
Family Builders is run by the state social services agency to provide prevention and early intervention services to families at risk of abusing or neglecting their children. OCSHCN collaborates with the state social service agency in providing access to public health and developmental services for the at-risk children.	Infrastructure Building Service	Children with special needs
Family Centered Survey - see CRS Quality Assurance Plan		
Family Centered Training Project - see CRS Quality Assurance Plan		
Family Voices - see Project Tsunami		
Framework for System Change: Reorganization of Children and Family Services is a project that evolved from interest by the Arizona legislature to eliminate duplication of services provided to children and families. This study committee has provided OCSHCN with a forum for incorporating four major products -- Universal Application, Sliding Fee Scale, Single Service Coordination and Family Service Plans -- into how the agencies serving children and families in Arizona do business in the future.	Infrastructure Building Service	All
Genetics Services Program addresses genetics issues that affect the health status of Arizona residents. Arizona has conducted a needs assessment and has developed a State Plan for Genetics. This plan is comprehensive, addressing genetic issues for preconceptual, prenatal, childhood, and adulthood. The State Plan contains over 160 action items which include an all encompassing educational plan, evaluation of services to women and children, plan for prevention of birth defects, where applicable, and plan for addressing adult onset genetic issues. In addition, OCSHCN contracts to provide genetic services to children and families with potential genetic issues that could affect their health status.	Infrastructure Building Service and Direct Health Care Service	All
The Hand-Held Medical Record (HHMR) is a project which assists pregnant women and their children in tracking their health status. The HHMR, entitled KareBook, for children was originally developed and piloted under an SSDI grant. The extended HHMR with includes information on prenatal care was funded by the St. Luke's Charitable Health Trust. A research design has been implemented to determine if the use of the HHMR positively affects the health of pregnant women and their children; control and experimental groups are assigned randomly and will be followed from pregnancy through birth.	Infrastructure Building Service	Pregnant women, infants and children
Health and Safety Training Project - see Early Childhood Program		
Healthy Child Care Arizona - see Early Childhood Program		

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Healthy Mothers/Healthy Babies (HM/HB) provides coordination services for the Arizona HM/HB coalitions. The coordination services include professional technical assistance and the publication of a quarterly newsletter. The individual coalitions engage in activities that promote the health status and well being of mothers and children in their communities. This is accomplished through the distribution of educational materials, public awareness campaigns and health fairs. Training is provided for HM/HB coalitions on various topics related to maternal and child health.	Population Based Service	Pregnant women, mothers and infants
HEDIS Format Indicators - see CRS Quality Assurance Plan		
Helpful Hints Guide is a project analyzing legislation and policies affecting children with special health care needs. The first and second phases of the project identified barriers posed by state and federal laws and policies. The third phase involves families as leaders in developing a guide that will provide information to facilitate understanding some of the barriers and opportunities that families may face.	Enabling Service	Children with special needs
High Risk Perinatal Programs (HRPP) provides an essential link in the infrastructure of the regionalized perinatal system for high risk infants and pregnant women. The HRPP epitomizes and maintains, through contractual agreements, a system to assure that risk-appropriate care is available and accessible to all critically ill newborns and high risk pregnant women in Arizona. These services are available, regardless of geographic location and ability to pay. The program assists families, when needed, to cope with catastrophic costs related to newborn intensive care. The HRPP is the earliest entry point for any and all of Arizona's sick babies to receive comprehensive, risk and developmentally appropriate care. The HRPP uses vital statistics information to analyze perinatal trends. This information is analyzed by community and shared with APT hospitals to support planning and service delivery appropriate to the population served by the hospital. HRPP Services include the following programs: **Transport Medical Consultation and Case Management Services -** ADHS contracts with all neonatology and perinatology medical groups in the state to provide medical consultation regarding the identification, treatment, stabilization and, if needed, approval, coordination and on-line medical control of neonatal and maternal transports. This service is maintained through three ADHS/HRPP/NICP dedicated perinatal '1-800' telephone lines, with immediate availability of air or ground emergency transport and team services statewide, 24 hours a day, seven days a week. **Maternal & Neonatal Transport Services** are provided by ADHS/HRPP contracted medical transport companies to provide air and ground transport, as well as medical specialty team services to care for high risk mothers and sick neonates. Any transport coordinated through the auspices of the ADHS/HRPP/NICP, must be authorized by a program contracted perinatologist or neonatologist. The ADHS/HRPP/NICP collaborates with the Arizona Perinatal Trust-Arizona Perinatal Regionalized System, Inc., (APT-APRS), and it's Voluntary Hospital Certification Program to enhance, standardize and provide the infrastructure for the delivery of the highest quality of care available to mothers and babies.	Direct Health Care	All

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High Risk Perinatal Programs (HRPP) (continued) **Inpatient Hospital & Physician Services** are provided by contracted APT-APRS Certified Level II, II EQ and Level III centers. ADHS/HRPP supports the training and implementation of developmental care practices in NICU and Special Care units. This is done through semi-annual completion of the "Supportive Developmental Care Quality Performance Program, Guidelines for Evaluation". Each level III, II EQ and one level II hospital have a dedicated developmental specialist who is reliable in the NIDCAP assessment. A statewide Developmental Care Council meets quarterly to provide training and networking opportunities. This Council has also developed guidelines to assist hospitals in the development and ongoing management of their programs. ADHS/HRPP has also taken the lead in the development and updates to the "Discharge Planning Guidelines for Newborn Intensive Care Graduates" in order to identify, discuss and evaluate the discharge planning process and transition from hospital to home for babies who spend time in the NICU or Special Care Unit. ADHS Inpatient Physician Contracts are in place with physician groups to provide risk appropriate medical care to program infants and their families during their Newborn Intensive Care Unit (NICU) or Special Care Unit hospitalization. **Community Health Nursing (CHN) Services** provide risk appropriate home based nursing and ancillary services to HRPP Newborn Intensive Care Program (NICP) enrolled infants and other children identified with special health care needs. The CHN component of the NICP delivers a statewide, coordinated system of specialized nursing services (including social services and early intervention services) to infants who are enrolled in the NICP. The CHN provides families with support during transition of the infant from hospital to home. Following discharge from the hospital the CHN provides case management, conducts developmental, physical and environmental assessments and makes referrals and links to specific community resources and services as needed. This program has collaborated with the Office for Children with Special Health Care Needs (OCSHCN) to provide assessment and intervention services for families with children needing these services, who do not meet eligibility criteria for HRPP/NICP. In these cases services are provided for children up to twenty-one. **Developmental Follow-Up Clinic Services** provide community, home or clinic based developmental assessments as follow-up for NICP enrolled infants, and infants who are identified as high risk for developmental delay. These infants and children (0 to 3) receive periodic, in depth developmental assessments and discipline specific evaluations, using a multi-disciplinary approach. Clinic visits are available until the child is five years old or receiving services through the Arizona Department of Education. The Developmental Follow-Up Services Program collaborates with the Arizona Early Intervention Program to determine the need and facilitate developmental clinic follow-up for more families. The "Arizona Early Intervention Strategic Plan" has been written and serves as an infrastructure to review and define the system serving infants and toddlers, to identify deficiencies, delays, and needs early in development, and to allow for linkage to appropriate resources and services.		

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HRPP Publications: **Infant Toddler Mental Health Coalition (I/TMHCA)** has established a plan of action to address the goals and objectives to enhance the mental health of our children from birth to three years. The I/TMHCA is incorporated and has applied for 501-C3 status. ADHS supports the coalition's efforts including an annual training institute. ADHS supports the "Arizona Infant Mental Health Strategic Plan" that was instituted in 1995 and uses that document in planning. programs for infants/toddlers 0-3 yrs. of age. The **"Newborn Intensive Care Program Parent's Handbook"** explains the HRPP, also known as the Newborn Intensive Care Program (NICP), to families whose baby's are participants (or potential participants) in the Program. A handbook is given to all families who are transported or who are in any Arizona NICU for more than seventy-two (72) hours. It explains the Program in easy to understand language, includes parents most frequently asked questions, and details the financial component of the program in easy to understand terms. It provides phone numbers for reference following the hospitalization. It is printed in English and Spanish. The **"Arizona Perinatal Trust-Arizona Perinatal Regionalized System, Inc., Recommendations and Guidelines"** provide the certification structure which identifies the level of care provided for mothers and babies at facilities throughout Arizona. They further assist in the collaborative process of increasing and maintaining a high standard of care through peer review, evaluation and recommendations for improvement based on the most current established medical, clinical and nursing practices. The **"Arizona Perinatal Regionalized System, Strategic Plan and Recommendations for Transport"**defines the model of Arizona's regionalized perinatal services, including a reflective guide for the design and implementation of Arizona's system for conducting maternal and neonatal transports. This document examines the perinatal transport system, identifies opportunities to improve efficiency, effectiveness, the quality of the transport system and looks at the promotion of cost-effective utilization of transport services in the future. To assist care givers, the **"Developmental Care Guidelines"** have been written to address parameters of developmentally supportive care to provide an environment that will enhance growth patterns and decrease morbidity. The guidelines service as a instrument that will assist hospitals in initiating and enhancing their developmental care programs. The guidelines were developed in a joint effort of ADHS and the Developmental Care Council to address training, service provision, policy writing and sharing of developmental information with the family and the community health nurses who provide services to the family after the child's discharge.	Infrastructure Building Service	All
Indian Health Service (IHS) Networking increases IHS knowledge and support of Children's Rehabilitative Services Community Based Service Delivery. Networking with IHS improves coordination, case management and referral for services. **Indian Health Care Coalition** evolved from a collaborative effort that was initiated by OWCH and OCSCHN. The initial informal meetings have since evolved to include other ADHS offices and has become a formal gathering. A mission and goal statement have been developed.	Enabling Service and Infrastructure Building	Children with special needs, infants, women and children

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Indian Health Service (IHS) Networking (continued): **The Gathering of Native Americans (GONA)** is a product of the Community Partnership Training Project initiated by the Federal government through the Center for Substance Abuse Prevention to assist in efforts to reduce and prevent alcohol and other drug use. In addition, the curriculum is being used for broader community mobilization efforts that deal with other health and safety issues that effect a community. The GONA four-day training curriculum incorporates the values of the levels of human growth and responsibility found in Native American culture: belonging, mastery, interdependence and generosity. Three tribes have inquired about the possibility of getting financial assistance to sponsor a GONA.		
Infant Mental Health Initiative - see ADHS Participation within AzEIP.		
Injury Prevention Program provides consultation, and technical assistance on injury prevention among various communities throughout Arizona, to reduce specific injury morbidity and mortality. The program collects and analyzes school injury data to use in program planning and evaluation.	Infrastructure Building Service	Children
The Medical Home Project was developed in collaboration with the American Academy of Pediatrics, Arizona Chapter, as a result of the document *A Future for Arizona's Children*. This project provides a system of linkage between school nurses and pediatricians and other health care providers who provide acute care to children of low income families who need medical services and have no other source of health care. The project produces a monthly report for the Arizona Department of Health Services, Office of Women's and Children's Health (OWCH), an annual report and holds quarterly Advisory Board meetings which OWCH participates in.	Enabling	Children
Midwife Licensing Program protects the health and safety of Arizona mothers through licensure. Licensed midwives provide services to women who chose to receive maternity services using the midwifery model of care. The place of birth is usually the women's home.	Infrastructure Building Service	Pregnant women, mothers and infants
Never Too Young (NTY) program promotes early identification of hearing loss and linkages to appropriate assessment and intervention services. NTY was developed in 1985 and was briefly funded through legislation in 1987. The statute has four components; 1) an advisory board, 2) a registry, 3) education, 4) identification of qualified pediatric audiology providers. The nine member advisory board includes the following: pediatric nurse, pediatrician, neurologist, audiologist, hearing aid dispenser, Arizona School for the Deaf and Blind, Department of Education, neonatologist, otologist, and parent (non-voting member). The board meets quarterly. Every two years a strategic planning session is held to establish priorities and goals for the program. Primary objectives are: Improve the number and qualifications of screeners, educate medical personnel regarding newborn hearing screening and resources available, increase the number of hospitals participating in the registry, and identify resources for assessment and hearing aid fitting for under or uninsured babies.	Infrastructure Building Service	Infants

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Never Too Young (NTY) (continued): The NTY program participates in a Center's for Disease Control working group to develop data definitions for a national early hearing detection and intervention database. The group has completed the definitions and is piloting the database. Arizona, through the NTY program, is one of 17 states participating in a grant from the MCHB through the Marion Down's Center on Hearing Impairment. The goal of the grant is to increase the number of babies screened for hearing impairment and assure that they are linked to early intervention services. NTY facilitated meetings of pediatric audiologists to develop community standards for the provision of pediatric audiology services in Arizona.		
Newborn Screening is a statewide program that screens newborns for the following seven genetic disorders: congenital hypothyroidism, phenylketonuria (PKU), galactosemia, homocystinuria, maple syrup urine disease (MSUD), biotinidase deficiency and homoglobinapathies (sickle cell anemia). The program also provides follow-up services for these disorders. The program is involved in data collection, provider and parent education, laboratory testing, and offers counseling or referral services to promote the best health for all infants born in Arizona. Coordination with the project around CSHCN assures the availability and accessibility of metabolic formula for children with metabolic disorders. The Newborn Screening Program has a SPRANS grant to plan the development of the infrastructure of an integrated public health information system for children in Arizona. Data systems now available will be analyzed to determine mechanisms for data sharing. Through this, Arizona will be better able to link systems of early intervention with systems of early identification to help assure that every child with a genetic or congenital condition, developmental disability or other special health care need is identified and receives appropriate care.	Population Based Service	Pregnant women, mothers, infants, and children with special needs
OCSHCN Service Coordination assures service availability to all eligible families, especially in rural and underserved areas. Service Coordinators assist families in identifying their resources, concerns, and priorities; developing a Family Service Plan; and securing and monitoring delivery of services. **Service Coordination Quality Assurance** ensures contract compliance by monitoring contractual requirements for intake time frames, the service planning process, family and provider involvement, and service delivery documentation. OCSHCN service coordinators receive periodic site visits and review of case files. Quality service provision is facilitated by providing feedback to the contractors as to their documentation efforts. Each contractor works on a quality assurance plan to better meet the needs of the children and families we serve.	Enabling Service and Infrastructure Building Service	Children with special needs
Phoenix Pediatric Medical Home Grant is a collaborative project between OCSHCN/Children's Rehabilitative Services, Pilot Parents Partnerships and a private pediatrician group that serves children with special health care needs. The goal is to develop a model format for assuring a medical home for children who have special health care needs. One outcome will be an analysis of the costs of serving these children, both by pediatricians and specialty clinics, which will serve as a tool for capturing accurate managed care/capitation costs.	Infrastructure Building Service	Children with special needs
Physician Education Project - see CRS Quality Assurance Plan		

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Pregnancy and Breastfeeding Hotline is a bilingual/bicultural hotline that facilitates entry of pregnant women into prenatal care services. Although the service is available to any caller, the target population is low income women and those with culturally diverse needs. It provides advocacy, education, information and support to disadvantaged women and their families. Follow-up calls are provided to those who use the Hotline numbers, as time and staffing allows.	Enabling Service	Pregnant women, mothers and infants
Prenatal Outreach Project is a neighborhood outreach program which works with pregnant women, or women who think they may be pregnant, and their families to help improve their health and the health of their families. Using lay health workers from within the neighborhood, Health Start provides education, support, and advocacy to assist women and their children.	Enabling Service	Pregnant women, mothers and infants
Project Tsunami is a statewide parent advisory group composed of families who have children with special health care needs. Project Tsunami parents can participate at any level they choose, and are compensated for their time and efforts. Parents provide feedback and participate on OCSHCN workgroups and committees. **Family Voices** is a national grassroots network of families and friends speaking on behalf of children with special health care needs. OCSHCN is supporting the local Arizona Family Voices Parent coordinators, assisting in the coordination of mailing National and State newsletters to the current membership of approximately 400 Arizona families, and helping to increase the Arizona Family Voices membership.	Enabling Service	Children with special needs
Reproductive Health/Family Planning Program is a statewide clinic-based primary care program that provides complete reproductive health services to promote optimal health. Services include education, counseling, medical, and referral services that equip people to make voluntary, informed decisions about the quantity and spacing of children.	Direct Health Care	Pregnant women, mothers and infants

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
The School-based/School-Linked Health Center Program provides technical assistance to schools/communities that are interested in establishing school-based or school-linked health programs and provides ongoing technical assistance to established centers. The Program has worked in cooperation with the St. Luke's Charitable Health to develop and produce the manual *Exploring Managed Care* and present a one day conference to selected school-based health centers who are in the position to look at managed care for a funding source for continued operations. The program has also provided funding for evaluation of school-based health centers and produced the following report: *A Process Evaluation of School-Based Health Centers in Arizona.* This program participates with the groups Breaking the Cycle Advisory Board and the School-Based/School-Linked Health Center Council. In addition, a school-based/school-linked health center conference "Celebrating the What Works for Kids!: The Value of School-based Health Centers" will take place early June, 1999. This conference is drawing state and national speakers and participants. The Together We Care: How to Establish and Maintain A Community-Based Center in Your Arizona Community manual was published in 1996 to assist school-based/school-linked health centers in opening and maintaining a SB/SLHC. This manual remains in use currently and has been sent to other states to assist them in established a SB/SLHC in their community. The manual takes community representatives through a needs assessment, putting together an advisory board for the center and licensing and opening the center. The Together We Care Directory is published annually and describes all the known school-based/school-linked health centers in Arizona. It is currently on a web page and available for anyone's use. The web page will be updated annually.	Infrastructure Building Service	Children and Children with special needs
The School-based/School-Linked Health Center Program (continued): The Quality Assessment and Improvement Model for School-Based/School-Linked Health Centers in Arizona is a new manual for use by SB/SLHCs in Arizona. It provides a basic plan for how to develop and maintain a quality assurance and improvement program in any SB/SLHC program along the continuum of strictly primary care centers to strictly a social services model with most of Arizona's centers falling somewhere along the continuum. Tools and sample policies and procedures are included in the manual with a matrix of major funding source requirements. The Arizona Community-Based Centers: Strategic Planning for Technical Assistance Report was published concerning a report of personal interview of a selected sample of CBCs statewide to assess the perceived needs for technical assistance for the Arizona Department of Health Services.		

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
School Hearing and Vision Screening Program goal is to promote systematic screening for hearing and vision disorders in the school aged population to allow early identification and appropriate intervention. Hearing screening is mandated and vision screening is a voluntary program in Arizona. The primary objective in the past four years has been to improve compliance with both the mandatory and voluntary guidelines. This has been accomplished through educational efforts. Three mailings are completed each year. Two contain informational materials and report forms. The third mailing is to all schools that are not in compliance. Efforts to complete data entry early enough to allow the noncompliant mailing to go out in the fall were successful this year. Compliance with both programs is now excellent and efforts are now being directed toward improving the quality of the screening programs.	Population Based Services	Children and children with special needs
The Sensory Program (including Never Too Young, School Vision Screening, and The Hearing Conservation Program) endorses early identification and correction of vision and hearing impairments. This allows for the elimination or minimization of the devastating effects on academic, social, and communication development. **See Never Too Young** **See School Hearing and Vision Services**	Population Based Service	Infants, children and children with special needs
Shriners/CHOICES is a demonstration project funded by the Federal Maternal and Child Health Bureau and Shriners Hospitals which began in 1990. The objective is the design, implementation and evaluation of models of collaboration between Shriners Hospitals and State Agencies serving children with special health care needs. OCSHCN's role includes 1) ensuring that children served by Shriners who are eligible for Children's Rehabilitative Services get access to both ongoing specialty and primary care, and 2) improving coordination between out-of-state Shriner's services and community services, upon the child's return home.	Enabling Service	Children with special needs
The Social Work Program provides consultation about psychosocial issues to the Office of Women's and Children's Health programs, including the Newborn Intensive Care Hospital, Community Nursing, and Developmental Services programs.	Infrastructure Building Service and Enabling Service	Women, Infants and Children

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
The Social Work Program (continued) **Perinatal Social Work Networks** are conducted in Phoenix, and Tucson in order for perinatal social workers to share information and new ideas in the field. The Social Workers in Health Care Network in conjunction with the Society for Social Work Leadership in Health Care is conducted for all social workers with an interest in improving psychosocial care for patients and families in health care. The purpose of these networks is to provide educational and networking opportunities to social workers in the health care field in hospitals and the community. **Social workers are represented on the Arizona Perinatal Trust** site reviews for certification of hospital Perinatal Centers. Social work consultation is also provided to community programs on issues of psychosocial issues related to health care, child abuse prevention, family centered practice, domestic violence, and policy development. **Standards for the Provision of Perinatal Social Work** have been revised and finalized, and plans are being made for printing and distribution to hospitals statewide. These standards are used by social workers to maintain professional social work guidelines in the care of patients and their families in Perinatal units in hospitals. **The Home Visiting for At-Risk Families Report** was developed as a collaborative effort with community programs providing home visiting services. It has been published as a guide for best practice and is being used to develop guidelines for the Arizona Early Intervention Program.		
SSDI (State Systems Development Initiative) Grant Program supports staff who provide technical assistance to school nurses and community-based centers in the areas of school health and school-based health centers. This program works on the Advisory Task Force developing Comprehensive Health Standards for the State of Arizona in collaboration with the Arizona Department of Education. The Advisory Task Force is an on-going program.	Infrastructure Building Service	Children and Children with special needs
SSI Transmittal and Referral Process is a Federally mandated process under Title V and Title XVI of the Social Security Act to assure that SSI child beneficiaries under the age of 16 years are provided appropriate outreach, referral, disability determination, and rehabilitative services. The current Arizona process involves collaboration with or among the Social Security Administration, Disability Determination Services, Arizona Department of Health/ Office for Children with Special Health Care Needs/ Children's Rehabilitative Services, and Department of Economic Security/ Division of Developmental Disabilities.	Enabling Service	Children with special needs
Substance Abuse Program targets women of childbearing age. This program provides information, education and training to increase awareness and knowledge of the risks associated with the use of alcohol, tobacco and other drugs during pregnancy. The program also conducts investigative activities for establishing current data related to maternal substance abuse.	Population Based Service	Pregnant women, mothers and infants
System of Care Team provides a forum for the discussion of issues emerging from the community needs assessment process that have statewide implications. The team is comprised of appointed representatives from each of the major state agencies and programs serving children and families. This team develops consensus on policy recommendations to improve the system of care in local communities for children with special health care needs.	Infrastructure Building Service	Children with special needs

APPENDIX B: OWCH* AND OCSHCN PROGRAM AND PROJECT DESCRIPTIONS	LEVEL OF SERVICE	POPULATION GROUP SERVED
Training and Technical Assistance Network (TA Network) was initiated when OWCH received a four year Community Integrated Service Systems (CISS) grant (10/01/96 - 09/30/2000) from the U. S. Department of Health and Human Services, Maternal and Child Health Bureau. The grant is to create a self-sustaining TA Network to assist efforts of communities to increase their capacity and effectiveness to improve the health system in Arizona. The TA Network can help Arizonans develop and use the skills to be effective in directing health systems development in their communities, through linking with qualified coordinated training, skill building and learning experiences. The premise is that systems development skills need to be available to and from local people whenever possible. A Directory, "Who's Who In Community Health Development: A Resource Directory for Skill Building" has been published and has been included on the TA Network's web page.	Infrastructure Building Service	All
Traumatic Brain Injury Project, in collaboration with the Arizona Governor's Council on Spinal and Head Injuries, is a demonstration project to assess and improve the system of care for families with children who have suffered traumatic brain injury. The focus of the project is on the development of: service protocols, family informational materials, collaborative processes among agencies and provision of service coordination to ensure access to needed services and supports.	Infrastructure Building Service	Children with special needs
27 Weeker Study is a research project which involves analysis of secondary data on children born between 22 and 26 weeks gestation. The purpose of the study is to identify effective intervention strategies that can be used to increase survival rates and improve long-term developmental outcomes for these infants.	Infrastructure Building Service	All
Universal Application is an interagency project to develop and implement a core set of intake information that can be used by all agencies serving children and families to determine eligibility for services. Universal application will simplify the process for families and reduce the myriad of paperwork and redundant requests for information when children receive services from more than one state agency. The project will also facilitate information sharing among state agencies.	Infrastructure Building Service	All
WeeFIMS - see CRS Quality Assurance Plan		

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
Performance Measure 1 (Type: Capacity) **The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care needs (CSHCN) Program.** **Related to Healthy People 2000 Objective 17.20:** **Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by public Law 101-239.**					
Performance Measure 2: (Type: Capacity) The degree to which the State Children with Special Health Care needs (CSHCS) Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients. Related to Healthy People 2000 Objective 17.20: Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by public Law 101-239.					
		_	1&2.01 Expand CRS services to SCHIP-eligible population	CRS -KidsCare is implemented in Arizona. -CRS members being identified as KidsCare and receiving services. Provide on site eligibility screening and enrollment services. -Implemented capitation reimbursement in CRS for KidsCare.	-Outreach expansion continued for KidsCare. -Continue to provide on site eligibility screening and enrollment services.
				Community Development -Developed procedures to streamline the KidsCare, Title XIX and CRS application with DES and AHCCCS.	-Continue outreach for potentially eligible KidsCare children within the CRS regional sites and outreach clinics. -Continue to develop and implement a universal application process for KidsCare, Title XIX and CRS.
_	_	_	1&2.02 Continue to provide direct medical and rehabilitative services to eligible children through a system of regional clinics.	CRS -Served over 16,000 eligible children, of which 11,500 were eligible for AHCCCS, and over 4,000 were also enrolled in SSI.	-Seek additional state dollars for services to eligible children. -Outreach expansion now being explored to access all potentially medically eligible children and additional SSI eligible children.
				Newborn Screening (OWCH) - Continued to serve as payor of last resort for special formulas for children with metabolic diseases, including PKU and homocystinuria, at four regional clinics	**- Continue to provide funding for special metabolic formulas for children, for amounts not covered by insurance**
_	_	_	1&2.03 By FY 2000, re-establish and monitor criteria for the delivery of service to CSHCN in rural and underserved areas of the state. Implement relevant recommendations based on selected criteria (family-centered care, quality assurance, cost-benefit, etc.)	Developmental Services -A new Request for Proposal was concluded, resulting in the successful addition of three contractors serving rural counties. The contractors will afford a community based service model, which will be more accessible for children and families. -Additional requirements related to natural environment, teaming and reflective practice were integrated in the methodology. -Training was initiated for three additional general evaluators serving rural and Native American communities.	-Training and technical assistance will occur at the annual business meeting as well as throughout the year to enhance skills in natural environment and reflective practice. -Technical assistance regarding program and resource development with the new contractors will ensure a successful startup. -Continue to pursue telemedicine technology for the provision of developmental services in remote areas.
				Community Development -Community parent leaders facilitate CRS Community Based Outreach Clinics in two rural communities. -Initial data from the Mesa Needs/Resource Assessment demonstrate a continuing need for outreach services within metropolitan and rural Maricopa County. --Completed family driven pilot project utilizing telemedicine technology in rural North Eastern Arizona.	-Continue collaboration with Maricopa County CRS contractor to assist in facilitation of outreach services. -Continue to pursue telemedicine technology for the provision of developmental and genetics services in remote areas. -Mesa Partnership/OCSHCN to support Maricopa CRS efforts in conducting outreach clinics/services in eastern Maricopa County.
				Service Coordination -A new Request for Proposal was concluded with statewide coverage provided. New requirements related to natural environment and reflective practice were	-Training and technical assistance will occur at the summer Service Coordination Retreat regarding natural environment and best practice methodology. -Collaboration within ADHS/CFHS and BHS will occur to transition service

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				included. -A collaborative arrangement in Maricopa County will combine expertise in social/emotional/behavioral delays with service coordination to maximize service delivery.	coordination for 0-3 AzEIP eligible children with social/emotional/behavioral delays to BHS.
_	_	_	1&2.04 Annually increase by 15% per year the number of developmental and/or medical evaluations received by at risk children screened in ADHS evaluation clinics: FY '93 is the baseline year.	Developmental Services - 734 developmental evaluations were completed within six and one half months for children birth to three years of age presenting with potential developmental delay	- With increased costs for the provision of services in the natural environment and no increased funding, exploration of cost effective evaluations will be pursued
_	_	_	1&2.05 Annually increase the number of developmental and/or medical evaluations performed according to adopted standards and processed by Medicaid EPSDT and other managed care organizations for at risk children: BY 98 is the baseline year.	Developmental Services - Due to the complete turnover of staff within AHCCCS and the hiring of a new Executive Director for AzEIP, work on this issue was halted	- Over the course of the year beginning 7/1, an analysis of Medicaid status will occur, as this data is now gathered
				Sensory Program (OWCH) - Grant funding was awarded to a private foundation to equip and train ADHS contracted developmental clinics to provide hearing evaluations using OAE and tympanometry screening protocols - Worked with AHCCCS, CRS, ASDB, St. Luke's Charitable Trust to resolve issues related to barriers to early identification and intervention services for children with hearing loss	- Implement training schedule in ADHS contracted Developmental Clinics regarding the use of OAE and tympanometry screening protocols - Facilitate the delivery and installation of the new equipment in the contracted ADHS Developmental Clinics
				Newborn Screening Program (OWCH) - Worked with CRS to help assure the infants diagnosed with a disorder screened for through NBS are referred for appropriate medical/developmental evaluations	- Continue to work with CRS to assure that children receive appropriate evaluations - Continue to plan for better data sharing/linking/matching between the programs
State Performance Measure #01 (Type: Risk Factor) Proportion of low-income women who receive Reproductive Health/Family Planning Services Related to Healthy People 2000 Objective 5.12 Increase to at least 95% the proportion of all females 15-44 at risk of unintended pregnancy who use contraception. Related Healthy people 2000 Objective 5.2: Reduce to no more than 30% the proportion of all pregnancies that are unintended.					
_			S1.01 By September 30, 1998 increase funding support base for family planning services to AZ women of childbearing age utilizing options for reproductive health/family planning.	Reproductive Health/Family Planning (OWCH) - Provided domestic violence training for all Contractors - Provided technical assistance to all contractors - Collaborated with Az Family Planning Council, ADHS Offices and counties to improve family planning services - Data collection methodology changed because FHAMIS no longer available - Provided technical assistance to counties in developing approaches to increase dollars for services	- Continue to provide technical assistance to contractors - Complete an educational needs assessment of contractors - Review RH/FP Policy and Procedure Manual
				Health Start (OWCH) - Provided education on family planning at each home visit - Collected and analyzed data - Provided community referrals for services	- Continue to provide education on family planning with home visitation - Continue to collect and analyze data - Continue community referrals for services
_	_	_	**S1.02 Implement Genetics State Plan.**	Genetics (OWCH) - Developed QA tool with OCSHCN for evaluation of Genetics Clinics - Revised Strategic Plan for Folate/Folic Acid - Continued activities to increase folate awareness - Held regular meetings of Folate Committee to carry out objectives - Implemented Teratogen Information Program known as *Pregnancy Riskline* - Information brochure has been published and widely disseminated. - Booklet *Genetic Services in Arizona, 4th edition* was updated, published, and	- Information on booklet *Genetic Services in Arizona, 4th edition* will be put on OWCH web site - Continue dissemination of booklet *Genetic Services in Arizona, 4th edition* - Continue use of fax broadcasting on genetics topics - Determine need for change in legislation regarding insurance coverage of metabolic foods and formulas to eliminate insurance cap - Continue education of the legislature regarding genetics

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				disseminated - Began fax broadcasting on genetics topics to health professionals and health insurance companies - Legislation signed into law regarding genetic testing privacy and confidentiality - Legislation requiring health insurance companies to cover a percentage of the costs of metabolic foods and formulas was introduced. - Continued education regarding all aspects of Newborn Screening. - Education of legislature regarding genetic services occurred with the two bills regarding genetics that were introduced	
_			**S1.03 Train Licensed Midwives in the communication process involved in genetic counseling.**	Licensed Midwife Program (OWCH) - Provided all Licensed Midwives with the updated Genetic Services in Arizona, 4th Edition 2000	- Continue genetic counseling information for midwives
_			**S1.04 Provide forum on HIV clinical management in**	Licensed Midwife Program (OWCH)	

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Performance Measure 3: **(Type: Capacity)**
The percent of Children with Special Health Care Needs who have a "medical/health home."
Related Healthy People 2000 Objective17.20:
Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by public Law 101-239.

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	**PROGRAMS/ACTIVITIES FY 2001**
_	_	_	**3.01 Identify infants and children with potential developmental and physical delays, support and educate parents and families, and refer children to intervention services in the community.**	Community Development -The OSEP Report has just now been received (May 2000) following the November 1998 and January 1999 monitoring. -ADHS, as providers of developmental evaluations to determine AzEIP eligibility, incorporated I.D.E.A. provisions in the new contract. -Children with social/emotional/behavioral delays are now being identified due to the training and exploration of this domain, related to Infant Mental Health Brain and Relationship Based Research and Practice. -A statewide training curriculum has been provided via ADHS/OCSHCN/BHS to Behavioral Health professionals related to children birth to three years of age. -Two additional communities, through parent leader efforts, have addressed the need for information for families, one through the establishment of a Family Information Center, and the other through exploration of establishing an information center. -Parent leaders in Mesa have begun to connect parents with resources even though still in the needs/resource assessment process.	-ADHS representatives will participate in the disbursement and discussion of the OSEP AzEIP Monitoring Report, as well as development of a responsive plan to address the report. -The next phase of the statewide Behavioral Health professional training will occur over this year to include consultation/training individualized to the needs of each geographic region. -Mesa parent leaders will continue to link parents with resources.
				High Risk Perinatal Program - Have continued to monitor the eligibility and referral process in order to assure that infants, children, and families receive appropriate medical and specialty services - Participated in the development and implementation of the new Client Automated Tracking System which will enable the program to review outcome data and other public health measures - Provided information to families to facilitate enrollment in Medicaid, Kids Care, or other intervention services within the community	- Evaluate data related to public health indicators and develop a strategic plan which addresses the needs of population served by the High Risk Perinatal Program
				Children's Information Center (OWCH) - Provided Information and referral to families with children who have special health care needs - Provided follow-up calls to families - Provided/Faxed referrals to designated AzEIP coordinators throughout the state of Arizona - Provided information packets of resources for families with children who have special health care needs (OCSHCN and AzEIP) - Exhibited/promoted program information to families at public events and community health fairs	- Staff will continue to collaborate and support OWCH/OCSHCN outreach efforts - Staff will continue to promote awareness and outreach to families through public events and community health fairs - Staff will continue to collaborate with the AzEIP
				High Risk Perinatal Program/Developmental Services/OCSHCN	- Provide outreach to children and families to promote Medicaid and Kids Care enrollment.
				Sensory Program (OWCH): - Number of hospitals now screening all newborns for hearing is 36 - 87% of all infants born in Arizona are now screened for hearing loss prior to hospital discharge	- Increase the number of hospitals screening all newborns for hearing loss to 40 - Stabilize and improve refer rates at hospitals - Increase number of hospitals participating in the data collection system

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				- 22 hospitals are currently participating in the hearing registry system - More than 38,000 children are currently included in the database - Provided technical support to hospitals implementing universal newborn hearing screening programs - Continuing to provide informational brochures to hospital newborn hearing screening programs	
				Health Start (OWCH) - Assessed, educated & monitored medical/health home at home visits - Performed ASQ development inventory on each child ≥ 4 months of age - Referred to community health resources	- Lay health workers and ADHS will continue to participate in monitoring activities, gathering data and analyzing availability of medical home for participants - Continue to perform ASQ development inventory on each child - Continue to refer to community health resources
				Newborn Screening (OWCH) - Continued to identify the medical/health home of infants with an abnormal NBS - Educated parents of infants with an abnormal NBS on the importance of establishing a medical home for their children and on how to establish a medical home - Worked with physicians to help assure that children were referred to appropriate intervention services within the community - Provided parents with information about disorders and referrals to some resources for counseling and further information - Developed a PSA recommending that parents ask their doctors for a second newborn screening test	- Continue to identify the medical/health home of infants with an abnormal NBS - Continue to educate parents of infants with an abnormal NBS on the importance of establishing a medical home for their children and on how to establish a medical home - Continue to work with physicians to help assure that children were referred to appropriate intervention services within the community - Begin providing more information to parents of children with a confirmed disease about resources they might need - Continue to develop and air PSAs encouraging second newborn screening tests
_	_	_	**3.02 Continue to refine the systematic plan for early identification of infants and children with potential developmental & physical delays.**	High Risk Perinatal Program/Developmental Clinics (OWCH) - Continued to meet with District Management Teams to review the eligibility and referral process and identify opportunities for improvement - Presented information related to the eligibility and referral process for HRPP at the Hocus Pocus Perinatal Focus conference - Continued to provide information to contract providers related to risk factors which influence a child's eligibility for services and the referral process	- Review outcome data and adjust the eligibility and referral process as appropriate to meet the needs of this high risk population - Work with other NICP service components to promote a seamless process of service to infants, children and families - Market the services of the HRPP to the Professional Pediatric Medical community
				Newborn Screening (OWCH) - Was awarded a SPRANS Planning Grant to develop mechanisms to increase data sharing among programs serving children with special needs for the purpose of improving rates of early identification and coordination between early identification and early intervention programs - Initiated planning efforts, identified stakeholders, and began analysis of data systems - Requested extension of the grant to allow completion of the project - Began getting parents involved in the process through PSAs encouraging parents to get a second NBS for their babies	- Extend discussions to establish mechanisms to better share data among programs serving children with special needs - Complete the plan for data sharing/linking/matching among early identification and early intervention programs and integrate the plan into the state Genetic Plan - Continue trying to increase parental involvement in the screening process
				Child Health (OWCH) - SBHCs provided direct services to uninsured children, presenting the opportunity to identify children with special needs. The SBHCs are expanding and communication channels improved which increases the potential for identifying and serving these children - Approximately 150 schools have nurses participating in CHIP. This participation enhances the opportunity to identify individual children and groups of children with special health care needs - 61 school districts throughout the state referred children to the AzAAP	- Support efforts to expand School Based Health Care - Support efforts to improve information sharing (communication and data collection) among SBHCs. Take a lead role in insuring accuracy and relevancy of information collected and disseminated from SBHCs - Expand CHIP participation to 175 schools - Aggregate and disseminate data collected through CHIP - Review role of Medical Home Project. Examine new possibilities for reaching children with special needs

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				Medical Home Project	
				High Risk Perinatal Program-Transport Services (OWCH) - Educated contractors & providers regarding early indicators of developmental & physical delays, especially in the Level I Hospitals & rural communities - Reviewed , updated, determined appropriateness, educated & monitored criteria for services & entry into the Newborn Intensive Care Program in communities throughout AZ, especially the rural communities - Distributed & provided the NICP Parent Handbook to all hospitals, community health nurses, clinics, contracted transport companies to educate, use as reference & to ease the apprehension of pregnant women & their families regarding emergency maternal & neonatal transport - Supported statewide conferences & educated parents, communities, professionals during the Infant & Toddler Infant Mental Health Conference & Hocus Pocus Perinatal Focus conference	- Continue to support and attend the annual Infant Mental Health Conference & the Hocus Pocus Perinatal Conference - Continue to educate communities, pregnant women, health care givers, including physicians regarding the regionalized perinatal program, the voluntary hospital certification process & early identification of potential developmental, physical & medical problems in the maternal & neonatal period - Expand education & outreach programs to instruct health care givers to stabilize high risk maternal patients for transport enhancing the fetus and ultimately the neonate. Instruct neonatal stabilization prior to transport
				High Risk Perinatal Program-Community Nursing (OWCH) - Developed a periodicity schedule for home visits using identified risk criteria - Instituted a comprehensive family service plan for high risk infants & toddlers	- Increase the use of social workers & early interventionists in HRPP/NICP community health home visiting arena - CHN contractors will begin AzEIP credentialing process - Provide NCAST training for CHN's & Return To Basics staff
				Community Development (OCSHCN) -Obtained funding and co-sponsored a statewide conference related to pediatric under-nutrition or failure to thrive to provide training and needs assessment for service delivery. -ADHS/OCSHCN was the key supporter for the Fourth Annual Risk to Resiliency Institute on Infant/Toddler Mental Health. -Maricopa County Service Coordination staff developed an identification and referral system within CRS for children meeting AzEIP eligibility, particularly those spanish speaking children/families. -Participated in the statewide system for hearing screening of all newborns. Obtained funding for OAE equipment.	-Obtain funding for the formation of a statewide team to develop a strategic plan for a systems approach to pediatric under-nutrition. -Continue support for the Fifth Annual Institute on Infant Mental Health which provides training to families and professionals. -Develop training and protocols for hearing screening. -Participate on the Arizona Interagency Coordinating Council and related committees that facilitates AzEIP, Part C.
				Social Work Services (OWCH) - Provided education and support to medical social workers in hospitals and the community who serve families with high risk pregnancies and births, who provide emotional assistance, crisis intervention, and resource information - Completed revisions for the Standards for the Provision of Perinatal Social Work Services and distributed them to medical social workers, hospital perinatal centers, Arizona Perinatal Trust members, and ADHS staff - Arranged educational opportunities for perinatal social workers with topics such as the impact of Fetal Alcohol Syndrome on the family, Newborn Screening, Hospital Paternity program and child support enforcement, Young Fathers Program, Emily Center- resources for families, post-partum depression, and domestic violence, to provide perinatal social workers with resources to assist families - Provided consultation to perinatal social workers on issues such as family systems, program development, managed care, case management, organizational development	- Continue to organize educational opportunities to meet the training needs of perinatal social workers - Continue to provide consultation to medical social workers
_	_	_	**3.03 Facilitate the timely referral of children to appropriate intervention services within the community.**	High Risk Perinatal Program/Developmental Clinics (OWCH & OCSHCN) - Continued to monitor contractor compliance with referral requirements for early intervention services - Participated in the District Management Team meetings which facilitate	- Provide the opportunity for Developmental Services contractors to meet and collaborate with AzEIP Interim Services Coordinators regarding the eligibility and

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				collaboration and further development of the referral process - Provided individualized technical assistance and training to each of the Developmental Services contract providers related to the referral process and other factors which facilitate or influence eligibility for early intervention services within the community -A team composed of representatives from CRS, DES, AHCCCS, and contractors developed policies and procedures for timely referral.	referral process - Provide training to contract providers related to the development of a Family Service Plan which identifies the *family's* resources, priorities, and concerns - Contractors implemented new referral procedures.
				Community Development/AzEIP - Through the AzEIP Strategic Planning process, a model for referral and initial evaluation/assessment has been conceptualized, with numerous ADHS staff participating in its development. The plan emphasizes the importance of and includes referral from the earliest time of service delivery for high risk infants/children.	- Continue to participate in the development of an operations plan for implementation of the AzEIP Strategic Plan.
–		–	3.04 Beginning FY '95 and continuing, improve the integration of primary care and specialty care for children enrolled in the CRS program.	CRS - Participated in the Phoenix Pediatric Medical Home Project. - Eligibility Review and Standards of Care Project has developed guidelines for providers and services in community based settings. Components incorporated into CRS contracts. - Education/collaboration to community providers. - Increase collaboration between CRS specialists and primary care providers. - Primary care providers invited to participate in regional site specialty clinics as part of interdisciplinary team. - CRS Eligibility Review and Guidelines of Care Project. Development of organizational and clinical guidelines. - Implemented CRS Eligibility Review and Guidelines of Care Project into CRS contract - National/local education outreach regarding integration of primary and specialty care - Conducted CRS regional and field Clinic on site evaluations for continuous improvement. - Facilitated distribution of CRS Field Clinic dictations to Primary Care Physicians. -Formed a CRS/AHCCCS transition team to develop a mechanism to increase CRS services to include primary care and additional specialty services. -Formed a team to develop policies and procedures for transition to capitation.	**- Analyses of research. Identification of areas of improvement.** **- Facilitate education and collaboration among families and community providers and CRS interdisciplinary teams.** **- Continue education/collaboration to community providers** **- Continue to increase collaboration between CRS specialists and primary care providers** **- Primary care providers participate in CRS regional Spina Bifida and other specialty clinics as part of interdisciplinary team.** **- Continue to develop and implement CRS Eligibility Review and Guidelines of Care Project organizational and clinical guidelines.** **- Additional guidelines added to future CRS contracts** **- Ongoing National/local education outreach.** **- Continue to conduct CRS regional and field clinic on site evaluations for continuous improvement.** **- Follow-up regional and field clinics that are non compliant with sending out dictation reports from CRS to PCPs.** **- The CRS/AHCCCS transition team will develop an operational plan for activities related to enhancing CRS services.** **- Implement capitation reimbursement to CRS contractors.**
				Newborn Screening (OWCH) - Through discussions with physicians and office staff, as well as through initiating contact with a consulting specialist, continued to increase interaction between primary care physicians and specialists for children with an abnormal NBS and those with a diagnosed disorder	**- Continue to increase interaction between primary care physicians and specialists for children with an abnormal NBS and those with a diagnosed disorder**
				Social Work Services (OWCH) - Participated in networking activities with federal, state, county and tribal health programs with the Indian Health Coalition to increase awareness of psychosocial health issues in Arizona - Provided consultation to social workers on issues such as family systems, program development, managed care, case management, organizational development	**- Continue to build coalition activities to include Indian issues in statewide public health concerns, including participation on the Indian Health Coalition committee** **-C ontinue to provide consultation to social workers on psychosocial issues**
				Community Development - Participated in the Phoenix Pediatric Medical Home Project.	- Network with local communities, IHS and CRS Regional Sites to facilitate

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				- Worked with CRS Flagstaff Regional Site in the planning and implementation of CRS Community Based Specialty Services. - Increased community knowledge and support for CRS community based services. - Completed the CRS Community Based Service Delivery Planning Guide. - Facilitated the distribution of CRS Field Clinic dictations to primary care physicians. - Established working relationships with the Inter-Tribal Council of Arizona, the Arizona Council on Indian Health Care, IHS, The Native American Community Health Center, The Native American Connections, and the Indian Health Care Coalition. Invited to participate in conferences and summits.	coordination of services. - Increase community awareness and supports of CRS program and community based services. - Participate by invitation in ongoing workgroups addressing rural and urban Indian Health issues. Issues apply both to service delivery for CSHCN via CRS and other community resources.
				Indian Health Care Coalition	- Network with local communities and CRS regional sites to facilitate coordination of primary care and specialty care - Increase community awareness and supports of CRS program and community based services
	_	_	3.05 Beginning in FY 98, Service delivery for survivors of traumatic brain injury will be identified through a focused Service Coordination Pilot Project	Traumatic Brain Injury Pilot Project Service Coordination: -Granted one year extension on grant to analyze data and share findings with the community. -The Tucson TBI pilot served an average of 53 children per month, rendering a total of 427 services. -The Flagstaff TBI pilot served an average of 6 children per month, rendering a total of 67 services. -The Flagstaff community team established an identification and referral process that will continue beyond the time limited scope of this project. -Adapted Portage Model of Child/Family Relationship Assessment for use in TBI Project to evaluate provision of service coordination.	-Develop a statewide plan to address TBI. -Due to the conclusion of this TBI pilot, the transition and closure plan will be implemented. Ongoing needs for public awareness and referral will be addressed.
				EMSC: - Hosted TBI Project presentation at March 2000 EMSC Advisory meeting to promote project collaboration	
				Children's Information Center (OWCH and OCSHCN) - The CIC staff received and completed the TBI Pilot project training - The Spanish version of the TBI screening tool has been completed - The TBI referral list has been completed for Pima County	- The CIC will begin to implement and provide statewide telephone support for the TBI project - Staff will continue to support the referral process of services to families
_	_	_	3.06 By 2005 ensure that each child with special health care needs has a medical home.	Administration (OWCH & OCSHCN) -Develop questions for inclusion in the 2000-2001 needs assessment survey to obtain information on Medical Home (using the AAP definition).	**-Work with the Utah State University, Early Intervention Research Institute, on refining this.**
				High Risk Perinatal Program (OWCH & OCSHCN) - Developed data collection forms and Report formats which will allow the program to monitor the availability of a Medical Home for children with special health care needs - Provided information for contractors to assist families in securing a medical home	**- Analyze reported data and provide summary information to program contractors** **- Collaborate with parents and providers to provide information which encourages the selection and appropriate use of a primary care provider**
				Social Work Services (OWCH) - Provided educational activities for perinatal social workers which included information about the importance of encouraging families to obtain a medical home for infants after discharge from the hospital.	**- Continue to educate social workers about the importance of a medical home for infants prior to discharge.**
				Community Development -Participation continues on the steering committee of the Medical Home Project.	-Participate in the development of a CSHCN patients' bill of rights.
				Sensory Program (OWCH)	

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				- No specific information was distributed to AZ schools during this year regarding the AzAAP Medical Home Project	- Include AzAAP Medical Home Project materials in the next mailing to Arizona public and private schools
				Newborn Screening (OWCH) - Continued to identify the medical/health home of infants with an abnormal NBS - Educated parents of infants with an abnormal NBS on the importance of establishing a medical home for their children and on how to establish a medical home	- Continue to identify the medical/health home of infants with an abnormal NBS - Continue to educate parents of infants with an abnormal NBS on the importance of establishing a medical home for their children and on how to establish a medical home
Other Enabling Services (not specifically related to performance indicators)					
_	_	_	Other.01 Beginning FY '94-95 and ongoing, improve the dissemination of information to families on services available and the proper protocols for eligibility determination for CSHCN.	Newborn Screening (OWCH) - Continued to develop brochures about specific disorders screened for through NBS, their symptoms, methods of treatment, etc. - Continued to educate health care professionals, through on site training, a training video and written materials, about the specific disorders screened for through NBS, their symptoms, methods of treatment, etc. - Began informing parents about newborn screening through PSAs	**- Continue to develop brochures about specific disorders, to distribute stand-alone training videos and to air PSAs about NBS**
				CIC (OWCH) - Disseminated information to families on services available - Provided advocacy and support to families with the systems process for eligibility	**- Continue to strengthen collaboration efforts with OCSHCN and DES**
				OCSHCN -Distributed *All About Me* books to families via Sv Coordination. -Distributed *Helpful Hints Guide* to families. -Supported *Family Voices* coordinators and distribution of educational material. Staff attended national Family Voices conf. -Community Family Information Centers play increased role in education/training of families in Eagar/St. Johns/Flagstaff/Page. -Continued to educate health care professionals about CRS through on-site training using videotaped and written materials.	**-Continue distribution of *All About Me and Helpful Hints Guide.*** **-Continue support of Family Voices initiative.** **-Tri-City Partnership exploring establishment of Family Information Center in Prescott area.** **-Continue education of health care professionals about CRS services.**
_	_	_	Other.02 Improve families' ability to access and utilize other community resources and services.	CRS - Drafted guidelines for CRS Coordination of Care Project. - Shriners/ADHS collaboration: clinic participation/coordinating care - Implement recommendations from CRS Nursing Plan of Care Coordination. - Quality Assurance Project for OCSHCN Service Coordinators- QM Plan developed - ADHS/CFHS/OCSHCN Internet Home Page developed and coordinated among CFHS Offices - Emergency Medical Services Program; State Strategic Plan developed for emergency services. OCSHCN addressed CSHCN in the strategic plan. - Restructure of CRS regional/State PACs. -Leadership training for CRS PAC representatives.	**- Implement recommendations for CRS Coordination of Care Project.** **- Continue Shriners/ADHS collaboration: clinic participation/coordinating care/transition services.** **- Implement QM Plan for OCSHCN Service Coordinators** **- Interactive data bases for viewers** **- Implement recommendations from strategic plan.**
				CIC (OWCH) - Provided families with information and referrals to community resources and services statewide through the utilization of the CIC integrated database - Promoted public awareness about accessible community resources and services through exhibits, public events and community health fairs	**- Continue to promote public awareness through exhibits at public efvents and health fairs** **- Continue to provide accessible automated information and referrals to families**
				Community Development -Community Parent Leader Retreats, conference calls, and community visits facilitate learning in accessing community resources.	-Continue technical assistance with parent leaders in their efforts to make community and system change.

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				-Families with children with mental health issues welcomed and integrated within The Alliance of Southern Apache County for issue resolution and support purposes. -Mesa Partnership has created significant awareness of its presence and mission. Partners continue to support Partnership access to families.	-Meet with ADHS/BHS Children's Manager to explore integration of OCSHCN community development model. -Continue to reach out to community, interviewing interested citizens, and creating awareness of the initiative.
				EMSC (OWCH) - Made EMSC materials and information available through agreement with the PCH Emily Center	- EMSC Program moved out of OWCH to the EMS Bureau
				Newborn Screening (OWCH) - Continued to educate the primary care physicians and parents of infants with an abnormal NBS on the resources available to them - Distributed brochures about specific disorders screened for through NBS, their symptoms, methods of treatment, etc. to parents and physicians	- Continue to educate primary care physicians and parents of infants with an abnormal NBS on the resources available to them - Continue to distribute information in the form of brochures and fact sheets to parents of infants with an abnormal NBS
				Social Work Services (OWCH) - Provided community resource information to perinatal social workers during meetings, mailings, and conferences in order for the social workers to share this knowledge to provide information to families	- Continue to provide community resource information to perinatal social workers to assist families
				Family Planning/Reproductive Health (OWCH) - Contractors continue to refer to appropriate community resources and services	- Contractors continue to refer to appropriate community services and resources
				Child Health (OWCH) - 1998 Sb/Sl Directory was reviewed for accuracy of information and appropriateness of format - 1999 Directory information was placed on the OWCH website	- Work with Sb/Sl Council to determine methodology for updating directory information in a timely and efficient manner - Update 1999 Directory information - Print 200 copies of 2000 Directory, disseminate to interested parties
				HRPP (OWCH) - Revised the HRPP Web Page and program fact sheets in order to clearly describe the process for accessing appropriate services - Conducted a statewide telephone survey to obtain feedback from families related to the appropriateness and quality of service delivery with the Developmental Services Program - Developed a data collection form and Report formats which will enable the program to monitor referrals to community services, the status of referrals, and barriers to service delivery - Evaluated & enhanced the appropriateness & utilization of HRPP/NICP Transport Services in Southern Az	- Analyze referral data which has been collected by the HRPP service components and share with contract providers, community advisors, and other community agencies - Collaborate with parents or other community advisors, contractors, and other community agencies to improve the process for accessing community resources - Collaborate with the Az Perinatal Trust/Az Perinatal Regional System, Inc. in the implementation of Transport Certification of Maternal & Neonatal Emergency Transport Services in Az
		_	Other.03 Beginning FY '94-95 and each year thereafter, increase by 15% the number of families with children identified at risk through the ADHS who are utilizing Family Services Plans (FSP).	Service Coordination -251 IFSPs have been developed from Oct 1, 1999 through March 2000, a total of 6 months. -Approximately 59 children statewide with pediatric undernutrition have been served since July 1999.	-Evaluate use and outcomes of selected sample of FSPs to measure effectiveness of document and process. -Participate in AzEIP Action Plan in response to OSEP's Arizona Monitoring Report.
_	_	_	Other.04 Beginning FY '98 ensure that all families with CSHCN have access to CHN family follow up as needed.	High Risk Perinatal Programs - 865 children with special health care needs were seen by the HRPP/NICP Community Health Nurses	- Revise guidelines for referral & service provision

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
Performance Measure 11 (Type: Capacity) Percentage of CSHCN in the State CSHCN program who have a source of insurance, including Medicaid, for primary care, specialty care, and enabling services. Related to Year 2000 Objective 17.20 Increase to50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.					
		T	11.01 By FY '98, implement health system indicators to monitor the health status of CSHCN.	OCSHCN Adminstration -Reconvened statewide system of care team to strategize on methods for taking analysis of health indicators to a\the next level. Worked closely with the Early Intervention Research Institute at University of Utah in the design and update of the needs assessment methodology	-Use outcomes of system of care team meetings to frame health indicators report as an integral part of the '99-00 CSHCN needs assessment.
T	T	T	11.02 Beginning FY99 Monitor and provide information on access to insurance coverage for CSHCN	Sensory Program (OWCH): - Grant funding was awarded to the Ear Foundation for the Kids HEAR grant which provides medical services, audiological services, hearing aids and related supplies to children who have limited financial resources and are not eligible for AHCCCS or Kids Care (CHIP) - To assure that there are no delays in obtaining services, the Kids HEAR grant also provides a bank of loaner hearing aids for any child under 6 mos of age diagnosed with a hearing loss	- Continue to implement the Kids HEAR grant - Work to integrate the various systems serving children with hearing loss such as: CRS, ASDB, AzEIP
				HRPP (OWCH) - Developed data collection forms & Report forms which facilitate the collection of information regarding the source of insurance coverage throughout all components of the HRPP/NICP - Insurance coverage information is collected & analyzed on all Program clients	- Analyze program data related to participant insurance coverage - Establish a statewide team of program staff & contract providers who will evaluate data & establish guidelines for collection of payments from third party payors
				OCSHCN Administration -Continued to work with Collaboration fro a New Century, specifically in the area of KidsCare (SCHIP) outreach and public education for the faith and business communities.	-Providing leadership for committees on health care coverage options for small businesses.
				Newborn Screening (OWCH) - Participated in the process through which legislation was passed requiring insurance coverage of at least 50% (with an annual cap of $5,000) of the cost of metabolic foods and formula for disorders that are part of the NBS panel	- Monitor compliance with the new statute and provide information to groups with an interest in this issue
Performance Measure 12 (Type: Capacity) Percent of children without health insurance. No related Healthy People 2000 Objective.					

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T	T	**12.01 Collaborate with AHCCCS and other funding agencies to expand outreach efforts**	**Social Work Services (OWCH)** **- Collaborated with AHCCCS in sharing information about KidsCare with perinatal social workers**	**- Continue to share information about KidsCare with perinatal social workers to increase their resources for families**
				Child Health (OWCH) **- SBHCs provided outreach to children without health insurance**	**- SBHCs will continue to provide outreach to the uninsured**
				Health Start (OWCH) **- Funding was reduced for Health Start with 8 sites remaining in operation** **- Funding increased again July, 2000 and additional sites were added** **- New data system was established with entry at the sites** **- Coordinated outreach activities at the local level** **- Coordinated with other programs to facilitate access to care** **- Coordinated with AHCCCS with resulted in many referrals to Health Start from AHCCCS** **- Applied QA standards to data collection and utilization**	**- Continue meetings with AHCCCS and communities to expand outreach efforts** **- Collaborate and coordinate with AHCCCS** **- Refine and expand in-service training for lay health workers** **- Continue to coordinate with other programs to facilitate access to care.** **- Continue to refine the new data system** **- Continue to apply QA standards to the data collection and utilization process.**
				CIC and Pregnancy & Breastfeeding Hotline (OWCH) **- Served 1,000 callers requesting information on services for children** **- Continued to collaborate and support the Traumatic Brain Injury outreach efforts supported by the grant from the Office of Children with Special Health Care Needs** **- Continued to provide technical assistance and support to implement the "Healthy Child Care in Arizona" effort** **- Participated in public health exhibits** **- Participated and continued to strengthen collaborative efforts with Tapii organization to promote immunizations in Arizona** **- Continued to provide information and referral support to ADHS/CFHS/OWCH programs including, Newborn Screening, OCSHCN and Folate outreach efforts** **- Continued to strengthen coordination/collaboration efforts with the Office of Children with Special Health Care Needs and the Arizona Early Intervention Program** **- Continued to distribute KidsCare applications to families calling the hotline(s)** **- Distributed information and applications at community health fairs** **- Provided information and referrals to families about service systems and providers (Premium Sharing, Kids Care, Tobacco Tax Clinics, etc.)** **- Strengthened the coordination/ collaboration efforts with the Office for Children with Special Health Care Needs and the Arizona Early Intervention Programs**	**- Increase the number of calls received (approximately 1,350) generated by OWCH initiatives and program implementations** **- Continue to strengthen collaboration efforts with community and governmental agencies statewide** **- Identify and implement marketing strategies to promote the Children's Information Center** **- Continue to expand and refine methods that highlight needs and motivates systems change** **- Continue to operate an accessible statewide computerized hotline that provides information on medical and human service resources** **- Continue to strengthen and coordinate efforts with OCSHCN to help facilitate access to care for children with special health care needs and resources for their families** **- Continue to promote the KidsCare outreach efforts and to mail out applications** **- Continued efforts to strengthen coordination/ collaboration with Children's Information Center** **- Network with Tribal leaders and contacts for CRS services provided on tribal land through the Indian Health Care Coalition** **- Continue to support outreach efforts and strengthen collaboration efforts with providers, government agencies, non-profit agencies and clinics**

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Office of Oral Health - Provided KidsCare enrollment information to an estimated 3,000 uninsured families participating in the Arizona Dental Sealant Program - Provided technical assistance on dental issues to AHCCCS through an intergovernmental agreement	- Provide AHCCCS and KidsCare information to families of children participating in the Arizona Dental Sealant Program - Continue to collaborate with AHCCCS and other agencies to provide consultation and technical assistance through intergovernmental agreements - Provide technical assistance on oral health issues to community-based dental care delivery systems
				HRPP (OWCH) - Continued collaboration with AHCCCS to enhance program contractual responsibilities - Continued to provide information to families on Kids Care & other health coverage options potentially available to them	- Identify families without health insurance & provide information about Kids Care and other health coverage options - Continue to encourage program contractors to educate their patients & patients families about AHCCCS & their patients responsibilities
				County Prenatal Block Grant (OWCH) - Collaboration is a high priority for county health departments. Outreach activities have been increased in many counties to address maternal and child health issues, e.g. early prenatal care, low-birth weight, breastfeeding, folate and perinatal substance abuse - Coordinators for the county prenatal block grant were provided a presentation from ACHHHS that enabled them to increase their efforts for Kids Care enrollment - County health departments collaborated with other agencies within their counties. Duplication of services has been reduced and enhances service delivery - Information packets on access to care were distributed to clients enrolled in case managements programs, prenatal classes, teen support groups and at health fairs	- County health departments will continue collaborating with AHCCCS, Baby Arizona on increasing awareness of Kids Care - County health departments will continue to provide referral services to families through their case management programs
	T		12.02 By September 30, 2000 all members of AAHC that work with adolescents will understand KidsCare and be able to refer appropriately. 12.03 (NEW 2001): Members of AAHC that work with adolescents will appropriately refer children to KidsCare	**Adolescent Health (OWCH)** - Provided KidsCare information (AAHC) Quarterly meetings -"Consent and Confidentiality in Adolescent Health Care-A Guide for Arizona Health Care Practioners" developed by the Adolescent Health sub-committee of ARMA and mailed to all health care providers to encourage services to the adolescent population	- Continue to provide Kids Care information to AAHC members - Discussion at Adolescent Health sub-committee of the Arizona Medical Association regarding strategies to encourage physicians to see adolescent patients, and improve reimbursement for adolescent services

Performance Measure 13 (Type: Process)
Percent of potentially Medicaid eligible children who have received a paid Medicaid service.
No related Healthy People 2000 Objective.

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
		T	13.01 Beginning FY97 and ongoing, ensure that CSHCN who are Medicaid-eligible are identified and obtain needed services.	Community Development - SSI multi-agency workgroup developed a screening tool matching medical diagnosis with service agency, received and screened SSI transmittals from Disability Determination Services (DDS), and developed a database documenting transmittals and dispensation. - Sent outreach letters to potentially eligible CRS children/families. - Provided information to SSA about available State services for CSHCN in Arizona. -Continued the CRS/DES ISA to maintain screening and enrollment for Titles XIX and XXI at CRS contractor sites.	- Continue screening and referral of SSI transmittals to appropriate agencies. - Provide State agencies with an annual report of SSI transmittal referrals. - Continue working with SSA to provide information to families about services available in Arizona. - Continue Titles XIX and XXI screening and enrollment at CRS contractors.
	T	T	13.02 Ensure that children who are uninsured or underinsured are identified and obtain referral for AHCCCS or Kids Care	High Risk Perinatal Program (OWCH) - Developmental Services providers received information related to Kids Care eligibility & enrollment process - Pamphlets & Kids Care applications were distributed to families through Developmental Services providers	- Continue to identify families without insurance coverage & provide information about Kids Care, AHCCCS, or other health coverage options
				Child Health (OWCH) & OCSHCN - SBHCs and the Medical Home Project have assisted children and their families without health insurance to apply for Kids Care and/or Medicaid -Worked with SSI to ensure that children who are not eligible for SSI are referred to CRS for coordination of potential medical benefits, including AHCCS and Kids Care -CRS and developmental clinics trained on KidsCare and AHCCCS eligibility and enrollment processes	- SBHCs and the Medical Home Project will continue to assist children and their families without health insurance to apply for coverage -OCSHCN and its contractors will continue to assist CSHCN and their families without health insurance to apply for coverage.
Performance Measure 14 (Type: Process) The Degree to which State assures family participation in program and policy activities in the State CSHCN program. Related to Healthy People 2000 Objective 17.20. Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.					
T	T	T	14.01 By January 1998, develop and implement activities to assist in the assessment of family-centered service within OCSHCN and OWCH programs.	Community Development - Develop Tsunami Orientation packet and training - Family Centered Survey conducted. Report sent to CRS regional contractors. - Physician Education Project implemented - Family centered training for CRS regional clinic staff members - CRS Patient Discharge Survey - CRS Specialty Clinic On site Evaluations (Monthly/quarterly visits) - CRS Field Clinic On Site evaluation tool developed - ADHS/CRS/Easter Seals contract required family centered staff training -Conduct CRS Family-centered Care Survey	- Implement orientation and training for Tsunami and PAC parents. - Ongoing- family centered survey distributed to CRS families. - Continue to develop education modules and training - Family centered training for CRS Staff incorporating Physician Education Modules - Continued site visits and feedback to clinic staff - Regularly scheduled field clinic evaluations - Evaluate effectiveness of Easter Seals/CRS contract - Distribute findings of CRS Family-centered Care Survey

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HRPP (OWCH) - Supported contractor participation in Portage Training related to early intervention, reflective practice & family centered care - Developed & implemented a statewide telephone survey to evaluate family satisfaction with the Developmental Services portion of the program - Included parents & other community agencies in the development of the RFP for Developmental Services - Included a parent & community provider on the evaluation team for Developmental Services proposals - Distributed & analyzed Family satisfaction Surveys for Community Health Nursing component of the program	- Facilitated increased family participation in HRPP policy & program development - Analyze results of the family satisfaction survey for Developmental Services; share results with contract providers & assist them in developing action plans which would address opportunities for improvement - Support contractor participation in educational opportunities related to family centered practice - Require contractor participation in the AzEIP Self Assessment & Program Development process which will include information related to family centered practice - Continue CHN Satisfaction Surveys
				Developmental and Service Coordination Services -Family Centered Survey of Developmental Services occurring. -Request for Proposals requiring family centered practices in service delivery. -Parent vital review team member for Service Coordination Contracting process.	-To analyze and utilize results of family survey to improve service delivery.
				EMSC - (OWCH) - Parent participation was secured for the EMSC Advisory Board	- Program moved from OWCH to EMS Bureau
				CRS - Planned the CRS Biannual Conference to be facilitated by parent-professional teams with a family-centered theme. - Developed and implemented tool to monitor quality of CRS genetic services.	- Analyze genetics services data and make adjustments to the program.
T	T	T	14.02 Beginning FY '97 and ongoing, community leaders will utilize the Protocols for Community Development and Elements of Community Development to foster parent/professional partnership, cultural competence, increased leadership and incorporation of the philosophy into other elements of the service delivery system.	**Community Development** -Parent leaders are increasingly assuming decision making roles in their community. Examples are: participating on hiring committees for professionals, giving presentations to community groups, organizing and directing the use of resources, influencing policy development at the community, state and federal levels. -Staff are identifying and connecting with families of varied cultures as part of the needs/resource assessment in Mesa. -Mesa Needs/Resource Assessment information gathering almost completed, having interviewed over 350 families, providers and community citizens.	-Continue to gather information on successes and outcomes and publish a document describing the model and outcomes. -Analyze Mesa data, complete written Report Card, present results to community through various methods, identify action initiatives, and initiate action plans.
				Social Work Services (OWCH) - Developed the OWCH Community Involvement Project and Notebook of policies and procedures guiding OWCH staff and consumers to participate in OWCH programs	- Continue Community Involvement with consumer input and participation in OWCH programs

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
		T	**14.03 Beginning FY '97 and ongoing, parental involvement in decision making around OCSHCN programs will be enhanced.**	**Community Development** **-Parent Leaders are beginning to confront service issues in local communities, and participate as worthy problem solving agents.** **-Community Parent Leaders participated in statewide needs assessment policy setting meeting and national Institute for Child Health Policy meeting.** **-Parent Leader named to Legislative Committee on foster care as a result of May Conference facilitation.** **-Parent Leader elected Co-Chair of the ICC for Infants/Toddlers.** **-Parent vital member of review team for Service Coordination RFP/Contracting process.** **-Azeip Parent Participation Policy facilitating financially supported parent participation developed and passed by ICC.** **-Community Parent Leaders provided training for NAMI in Anchorage, Alaska.** **-Community Development Consultant invited to train CSHCN Families and State Leaders in Austin, Texas regarding ADHS/OCSHCN Community Development Model.**	**-Continue to seek opportunities for supporting meaningful parent participation.** **-Begin planning for the Community Development Conference in early summer 2001in which community teams gather to increase skills to assist their work. Assess potential to invite teams from other states and MCH staff.** **-Continue technical assistance with parent leaders in their efforts to make community and system change through monthly conference calls, retreats, and community conference which together provide opportunities for skill building and reflective practice.**
				CRS **-Parent involvement requirements included in provider contracts.** **-Parents participate in CRS Medical Director/Administrator meetings.** **-State legislation enacted to create State Parent Action Council**	**- Continue parent involvement with CRS providers.** **- Continue parent participation in the CRS Medical Director/Administrator meetings.** **- Convene State Parent Action Council.**
		T	**14.04 Evaluate the efficacy of the CRS program through development of outcome measures for specific conditions.**	**CRS** **-Continue development of outcome measures for all CRS conditions which do not require financial eligibility, including review of body systems**	**-Use findings to develop recommendations and plans for changes to the CRS eligibility process.**
		T	**14.05 Beginning FY '97, continue to trend CRS cost data by fiscal year.**	**CRS** **- Monitored and evaluated genetic services costs regarding utilization and cost analysis.**	**- Conduct analysis and comparison of genetic services costs via telemedicine to traditional delivery method.**
T	T	T	**14.06 By September 30, 2000, all state agencies serving CSHCN/HRPP will agree to maintain a coordinated approach to child find and service delivery through an IFSP.**	**Community Development/AzEIP** **-CHNs implementing FSPs.** **-Coordination improving regarding one working intra-agency IFSP document.**	**-Evaluate use and outcomes of selected sample of FSPs to measure effectiveness of document and process.**
				HRPP (OWCH) **- Provided training to contract providers & fully implemented the Family Service Plan**	**- Continue to provide training & technical assistance on the use of the Family Service Plan**

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T	T	**14.07 Provide a statewide system of community based family centered, culturally sensitive, coordinated services that meet the primary and special health care needs of each child and their family.**	**<u>Social Work Services (OWCH)</u>** **- Co-sponsored the Family Centered Practice conference to provide information about Family Centered Practice to perinatal social workers and the community** **- Participated on the Board of Directors and the Training Committee of the Arizona Association for Family Centered Practice which conducted 2 workshops in addition to the annual conference, focusing on strength-based services for families** **- Conducted presentations to social workers at the national conference of the ASTHO Social Workers, and to perinatal physicians, nurses and social workers at the APT annual conference**	**- Continue to co-sponsor and participate in Family Centered Practice activities in collaboration with Department of Economic Security and community agencies**
				<u>HRPP (OWCH)</u> **- Supported the 4th Annual Institute on Infant Toddler Mental Health through funding & staff support** **- Promoted infant toddler mental health service delivery in all components of the Program** **- Provided financial support for parents & program professionals to participate in Infant Toddler Mental Health Institute, Hocus Pocus Perinatal Focus Conference, the HRPP/NICP Business Meetings & other educational opportunities as funding allowed** **- HRPP/NICP provides a statewide comprehensive, community based, family centered, culturally sensitive coordinated service that meets the primary & special health care needs of each child, family & community**	**- Continue to provide training & technical assistance on the use of the Family Service Plan** **- Continue to support infant toddler mental health** **- Continue to promote infant toddler mental health service delivery** **- Continue to provide support for educational opportunities for parents & program professionals** **- Monitor contractor performance to assure compliance with program philosophy & service delivery standards & guidelines** **- Continue to provide a statewide comprehensive, community based, family centered, culturally sensitive coordinated services to meet the primary & special health care needs of each child, family & community**
				<u>Child Health (OWCH)</u> **- Initiated planning for the SBHC Conference for June 2001. It will allow discussion of how family-centered, culturally sensitive, coordinated services are provided among SBHCs in and outside of Arizona** **- The AzAAp MedicalHome Project continued to recruit providers who provide family-centered, culturally sensitive, coordinated services to children and their families**	**- Explore need for another SBHC conference for 2002** **- Review role of Medical Home Project**

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Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Community Development - Supported the 3rd Institute on Infant-Toddler Mental Health and The Infant-Toddler Mental Health Coalition of Arizona through funding and staff support. - Developed plan and obtained funding from AzEIP to increase state level coordination and develop training and best practices with behavioral health professionals. - Developed plan and obtained funding to conduct statewide institutes regarding Pediatric Undernourished. - Community parent leadership has expanded to nine communities; requests for support to others received. - Community organizations are assuming responsibility for how services are rendered, availability of providers, and information and coordination for families.	- Continue support of Infant-Toddler Mental Health issues, including the 4th Annual Institute and Coalition organizational goal setting. - Implement plan of coordination and training/best practices of Infant-Toddler Mental Health service delivery. - Plan and implement Statewide Institutes regarding Pediatric Undernourished. - Provide technical assistance and support to additional parent leaders and communities through linking and mutual learning. - Explore factors promoting minority parent participation in community organizations.
		T	14.08 By FY 2000, a universal application process will be utilized by at least 8 programs.	**OCSHCN Administration** -Supplied information to the Governor's "No Wrong Door" initiative to support their mission of the development of a statewide referral process and common screening application.	-CFHS Bureau Chief will continue to serve on the Governor's "No Wrong Door" committee.
Performance Measure 15 (Type: Risk factor) The percent of very low birth weight infants among all live births. **Related to Healthy People 2000 Objective 14.15.** Reduce very low birth weight to no more than than 1% of all births.					
T	T		15.01 Increase participation of women, families and communities in OWCH sponsored programs / activities	**Midwife Licensing Program (OWCH)** - Provided education programs, with Contact Hours, for Licensed Midwives and others, to prevent low birth weight	- Continue to provide education programs, with Contact Hours, to prevent low birth weight
				County Prenatal Block Grant (OWCH) - County health departments participated in the Fetal Alcohol Syndrome Awareness Training the Trainer project - The Fabulous FAS Quiz Show was provided to residents in Apache, Cochise and Navajo counties	Educational materials on OWCH programs will continue to be distributed in counties throughout the state - Training workshops will continue to be conducted on increasing the knowledge of county residents through programs and projects sponsored by OWCH
				Child Health - KareBook project at two Maricopa sites was completed - KareBooks were made available to interested parties on CD - Additional hardcopy KareBooks were distributed to interested parties	- Continue to make KareBooks available to interested parties

**Population: A=Pregnant women, mothers and infants, B=Preventive and primary care for children, C=Children with special needs.

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Health Start (OWCH) - Lay health workers provided monthly prenatal and postpartum in-home visits and/or class education - Funding was reduced in 1999 with 8 sites remaining open - Increased funding in July, 2000 which added new sites - Applied quality assurance to data collection process - Implemented and refined evaluation plan for the program - Facilitated collaboration and cooperation among programs serving the same population - Established relationships with the National and Arizona programs using lay health workers - Aided in establishing community college certification for Community Health Workers, including lay health workers - Implemented and improved the data system to enhance data collection	- Continue to implement and improve the data system to enhance data analysis - Continue to apply quality assurance to data collection process - Continue to implement and refine evaluation plan for the program - Continue to facilitate collaboration and cooperation among programs serving the same population - Continue relationships with National and Arizona programs using lay health workers - Continue to coordinate with AHCCCS and other medical health plans - Continue monthly prenatal and postpartum in-home visitation and/or classes to program participants - Continue to coordinate participant's care with their medical provider
				Social Work Services (OWCH) - Developed the Community Involvement Project to form a system for OWCH staff to utilize consumers of services to participate in activities such as program development and advisory committees, policy and procedure review, community forums, community health information fairs, and other activities to encourage input from consumers - Provided educational opportunities to social work professionals who provide emotional support and crisis intervention to families with high risk pregnancies and births, on topics such as the impactt of FAS on the family, Newborn Screening, Hospital Paternity program and child support enforcement, Young Fathers Program, Emily Center resources for families, post-partum depression, domestic violence to provide them with resources to assist families	- Continue to coordinate the Community Involvement Project to encourage OWCH staff to utilize consumers to participate in OWCH programs - Continue to provide education to social work professionals to increase their knowledge in providing psychosocial support to families with high risk pregnancies and births
				Healthy Mothers, Healthy Babies - Held Annual Conference. - Expanded information in quarterly newsletter and distributed. - Provided support to local coalitions for projects and fund raising activities. - Assisted in the development of a Breast-feeding training manual. - Distributed donated clothing to over 100 families through local coalitions. - Participated in a planning session that produced new strategies for increasing visibility, viability and garnering support from local communities. - Provided fiscal management.	- Hold a minimum of two regional trainings/meetings/workshops on HMHM initiatives developed at the state and national level. - Continue to improve the content and distribution of the newsletter - Continue to provide clothing to needed families. - Participate in the nomination process for receiving a national HMHB award.. - Continue to provide support to local coalitions for projects, increasing membership and conducting fund raising activities. - Continue to provide fiscal management. - Increase support to Native American coalitions. - Increase the number of coalitions in the state. - Increase visibility, viability and local support - Identify new funding options for sponsoring local projects.

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HRPP (OWCH) - Provided education for established CHN caseloads using risk criteria - Provided education to communities throughout AZ to increase the knowledge of the HRPP/NICP & increase the participation of women, families & communities in OWCH/HRPP/NICP programs & activities	- Analyze the current system of high risk perinatal service delivery & change it to enhance & verify CHN Program services - Continue to educate the medical & client population on the HRPP/NICP to make it more successful & useful to clients & their families
				HMHB (OWCH) - Regional trainings were held on the importance of folate for women of childbearing age. Materials received from OWCH Nutrition Consultant and information gained from presentations were utilized at the trainings - Folate educational materials were made available to residents in all counties at health fairs, Baby Showers, libraries and other community activities; Breastfeeding was also promoted by providing educational materials	- Continue efforts to increase knowledge of the risks associated with the use of alcohol, tobacco and other drugs by pregnant women - Increase efforts to promote the importance of early prenatal care to women of child bearing age
T			15.02 Monitor OWCH programs/systems to improve continuity and utilization of prenatal care.	**County Prenatal Block Grant (OWCH)** - County Health Departments received training at CPBG Coordinators meetings for systems development that will aid in better service delivery to their clients - Technical assistance was provided to counties through monitoring activities conducted to develop and/or improve systems of service for prenatal care - Several CPBG Advisory Councils have joined other groups within their counties that sponsor OWCH programs with similar focus to improve service delivery - County health departments Advisory Councils continued to recruit members from the public and private sector, local business, health care professionals and the faith community. This aids in planning activities for their communities that will meet the needs of residents	- County health departments will continue their participation in training provided by OWCH to improve system development within their counties - County health departments will utilize the policy and procedure manual and site visit reports provided by OWCH to improve utilization of CPBG funds for prenatal services - Efforts will continue in county health departments to recruit new members to their Advisory Councils that will aid in the prevision of prenatal care and systems development

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Community Development (OWCH) - Through the CISS grant–TA Network, the following technical assistance resources that could support/enhance community-based health systems development and assist with prenatal care planning activities were made available to all THDs, CHDs and County Prenatal Block Grant Coordinators: Collaboration Building Training and Group Facilitation Training, and the "Who's Who in Community Health Development: A Resource Directory for Skill Building". - THDs, CHDs, and County Prenatal Block Grant Coordinators were informed of the "Who's Who in Community Health Development: A Resource Directory for Skill Building "being available on the TA Network Web Page and will be mailed the second and final edition of "Who's Who in Community Health Development: A Resource Directory for Skill Building".	- Continue to collaborate with ADHS offices to improve health needs/systems development at the local level - Ciss TA project ends 9/30/00 - Continue to maintain the TA Network Web Page and directory until that time it would be advantageous to link/affiliate it with another Community Development resource
				Licensed Midwife Program (OWCH) - Provided training, thirteen Chart Reviews with Contact Hours were offered to the Licensed Midwives in Phoenix and Tucson	- Continue to provide training on all aspects of midwifery prenatal care
				Child Health (OWCH) - KareBooks distributed to participants in Hand Held Medical Record Project	- Complete Hand Held Medical Project - Make KareBooks available on CDs to interested agencies
				Office of Oral Health	- Collaborate with ADHS offices to develop a periodontal disease assessment methodology for pregnant/postpartum women - Provide at least one training for health professionals related to oral health as a risk factor for complications during pregnancy
T			15.03 The Substance Abuse Program will address the issues of chemical dependency through public awareness, risk identification, technical assistance and development of resources for clients and agencies serving them.	**Substance Abuse (Perinatal) Program (OWCH)** - Extended the Mini-Grant awards for three-years. The awards will provide funds to HMHB Coalitions, county health departments and non-profit organizations to conduct perinatal substance abuse project to increase knowledge of the risks associated with the use of drugs by pregnant women - Conducted a survey for developing a resource directory of services available to women with chemical dependencies - Distributed over 7,000 brochures, pamphlets on perinatal substance abuse at conferences, workshops, health fairs and through the mail - Provided educational materials for use by educators to increase knowledge of youth on risks associated with the use of drugs during pregnancy - Distributed videos for use by providers and educators for increasing knowledge on the use of alcohol, tobacco and other drugs by pregnant women	- Publish and distribute resource directory of services available to women with chemical dependencies - Continue to provide information on perinatal substance abuse to professionals and the public

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				County Prenatal Block Grant (OWCH) - Women were screened in case management programs and provided risk appropriate services - Home visits were provided in some counties to women that were identified as high risk and interested in this service - Risk appropriate care was expanded in some counties due to collaboration with other agencies within their counties	- Risk appropriate services will continue to be provided through case management programs conducted at county health departments
T			15.04 The Substance Abuse Program will convene a workgroup to address issues related to very low birth rate and increase awareness of the associated risk of very low birth weight and perinatal substance abuse.	**Perinatal Substance Abuse Program (OWCH)** - Identified several agencies to participate in a statewide workgroup to address perinatal substance and the correlation with very low birth rate - Gathered data on perinatal substance abuse and very low birth weight	- Continue efforts to identify agencies and individuals to participate in a work group that will address issues related to perinatal substance abuse and very low birth weight babies - Continue to gather data on very low birth weight and literature correlating it with perinatal substance abuse
T			15.05 Build, improve and/or expand a health system that provides risk appropriate prenatal care to target women.	**Prenatal Block Grant (OWCH)** - Service integration has been improved by coordinating services with other agencies in the counties that have similar interests - Efforts to identify and development partnerships with other agencies in all counties increased to improve and/or develop a health system that will provide risk appropriate care to pregnant women	- Activities will continue to improve and expand case management services provided by county health departments - Efforts will continue to identify partners to aid in the development of a health system for providing adequate prenatal services
T			15.06 Develop Pilot Program to analyze vital records data on maternal weight gain and selected newborn outcomes	**Licensed Midwife Program (OWCH)** - Networked between ADHS, OWCH and Midwives (Licensed and student) - Accomplished formal education for Midwives (Licensed and student) - Wrote Rules with medical and midwife community input - Conducted examinations for licensure - 6 new Licensed Midwives met requirements - Interfaced with Child Fatality Review Office to learn preventable causes of fetal and neonatal deaths when they occur with Licensed Midwife client(s) - Designed Midwife Licensing System and data entry completed - Promoted the midwifery model of care (licensed and Certified Nurse Midwives) as an option for reducing cost and improving quality of maternity services, including reducing low birth weight	- Plan formal education for Midwives (licensed and student) - Complete Rule revision process started in 1998 - Distribute formalized Rules, once passed, to: all licensed midwives, all known student midwives, Arizona Perinatal Trust, and others as requested - Conduct formal education for Midwives (licensed and student) including preceptor training - Report outcomes by using Midwife Licensing System - data entry of midwive's quarterly reports - Interface with multidisciplinary team through Child Fatality Review Office to help prevent fetal and neonatal deaths - Promote the midwifery model of care (licensed and Certified Nurse Midwives) as an option for reducing cost and improving quality of maternity services, including reducing low birth weight rate
				Newborn Screening (OWCH) - Was awarded a SPRANS Planning Grant to develop a plan for data sharing among programs providing early identification or early intervention for children with special needs. This should improve rates of early identification and coordination with early intervention programs - Implemented the development of a data sharing/linking/matching plan	- Complete the planning process for data sharing among programs providing early identification or early intervention for children with special needs - Investigate mechanisms by which the plan may be implemented

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Child Health (OWCH) - KareBooks distributed to Hand Held Medical Record project participants	- Discontinued
				County Prenatal Block Grant (OWCH) - Pima County and Maricopa County Health Departments have expanded their efforts on data collection for perinatal and prenatal outcomes	- County health departments that have began activities for analyzing maternal and child health will continue - County health departments that have not began activities for analyzing maternal and child health data will be encouraged to do so and will be provided technical assistance by OWCH to achieve that activity
T			15.07 Implement and monitor a system of care to assure access to perinatal social work services for women, infants and families.	**Social Work Services (OWCH)** - Revised and distributed the Standards for the Provision of Perinatal Social Work Services - Provided consultation and technical assistance to the High Risk Perinatal Program as well as hospital perinatal social workers and social workers in the community - Participated on Arizona Perinatal Trust site reviews as a team member to continue to improve the quality of social work services in Arizona hospital perinatal centers, including Desert Samaritan Medical Center, Maryvale Hospital, Phoenix Indian Medical Center, Northwest Hospital, Carondelet St. Joseph's Hospital and Medical Center, and Casa Grande Regional Medical Center - Supported educational opportunities to teach advocacy training to social workers, including the Social Workers in Health Care Network, the National Association of Social Workers - Public Policy Committee, and Social Work Day at the Legislature	- Continue participation on the Arizona Perinatal Trust site visits to increase awareness of the positive impact of providing psychosocial services to families with high risk pregnancies and births - Continue to support and educate social work professionals to increase their knowledge to assist families with psychosocial issues - Continue to distribute and review the Standards for the Provision of Perinatal Social Work Services with perinatal social workers

Performance Measure 16 (Type: Risk factor)
The rate (per 100,000) of suicide deaths among youths aged 15-19.
Related to Healthy People 2000 Objectives 6.1 and 7.2a.
Reduce suicides to no more than 8.2 per 100,000 youths aged 15-19.

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T	T	**16.01 By September 30, 1998 provide adult/adolescent communication training to County Health Departments.** **16.02 (NEW 2001) By September 30, 2001 provide adolescent communication, depression/suicide identification, prevention training in all counties.** **16.03 (NEW 2001) By September 30, 2001 the adolescent sub-committee of ARMA will have identified and/or developed pre-screening tools for use by providers with their adolescent population to identify those adolescents with depression.**	**<u>Adolescent Health (OWCH)</u>** **- Administered follow up survey of all attenders of the first "Talking With Teen" training that identified information on depression/suicide as the number one need** **- Awarded contract to APRC to amend the "Talking With Teens" curriculum to include training on adolescent depression and suicide** **- Completed a Train-the-Trainer program** **- The AAHC completed a Fact Sheet on adolescent depression and suicide prevention for parents and one for teens. This has been distributed to all members and distributed at all AAHC exhibit locations.** **- A session on "Teen Suicide, Assessing the Risk" was presented at the AAHC Conference** **- Az. adolescent suicide data was presented at the AAHC quarterly meeting and has been distributed upon requests** **- Initiated a process to develop pre-screening protocols for adolescent health care providers with the Adolescent sub-committee of ARMA** **- Initiated a process to address EPSDT anticipatory guidance that includes depression and suicide**	**- By September 30, 2001 at least two regional train-the-trainer programs will be completed to increase the number of community based trainers** **- 300 adults will receive the adolescent depression/suicide training** **- Previous attenders will be invited to a one hour refresher program of "Talking with Teens"** **- Pre-screening protocols for adolescents receiving primary health care will be developed** **- Physicians who have been identified as interested in the adolescent population will be surveyed re: attendance at a meeting to address access to care, pre-screening tools, and strategies to increase reimbursement for adolescent services provided**
	T		**16.04 By December 30, 1999 develop Consent and Confidentiality protocols "best practice" for health care professionals collaborating with the Adolescent sub-committee of ARMA.** **16.05 (NEW 2001) By December 30, 2001 in collaboration with the adolescent sub-committee of ARMA, submit to AHCCCS revised EPSDT forms for those 10-18 years of age. This will include specific recommendations for anticipatory guidance as well as age appropriate screenings.**	**<u>Adolescent Health (OWCH)</u>** **- Continued to distribute the "Consent and Confidentiality" booklet. The ARMA adolescent sub-committee developed a presentation to use at physician conferences**	**- Discontinued** **- Participate on the ARMA sub-committee to revise EPSDT standards**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		16.06 By June 30, 1999 establish a statewide adolescent suicide prevention plan. 16.07 (NEW 2001) Through active participation on the Suicide Prevention Coalition, implement at least two activities that are specifically directed toward adolescent suicide prevention by July 1, 2001.	Adolescent Health (OWCH) - Inter-Departmental Steering Committee for Adolescent Suicide Prevention met 3 times and developed an Action Plan that has not yet been approved - Participated on a Suicide Prevention Coalition developed in collaboration with EMPACT (suicide crisis response, prevention programs, curricula, intervention). Developed mission, vision committees. Participated on the Data and Research Committee that analyzed hospital discharge data on attempts by county, age, sex, ethnicity and method. Geomapping was conducted on completions - Developed and initiated a one year action plan for products and activities - Identified resources on the Net - Provided consultation and technical assistance to individuals and schools on crisis response, and community development to enhance resources - Collaborated with the Injury Prevention Program	- Continue active participation on the Suicide Prevention Coalition with all of their planned activities - Continue to pursue ADHS approval to take a lead role and/or partner with IHS - Continue to collaborate with the injury prevention program - Provide technical assistance and consultation to individuals, agencies, organizations and schools on adolescent depression, suicide prevention/intervention
				Community Development (OWCH) - Met with contact person from CDC and other state agencies to discuss possible options regarding the implementation of the CDC 's YRBS in Arizona during FY2001, that will be used statewide in the schools, to collect data on students self report of depression and suicidal ideation - Became a member of the Arizona Suicide Prevention Coalition and the Research and Data subcommittee	- Will continue to explore possibility of implementing the YRBS in the Spring of FY2001 - Will continue to participate on the Arizona Suicide Prevention Coalition - Will work with the Arizona Adolescent Health Coalition on their training activities pertaining to adolescent depression
Performance Measure 17 (Type: Risk factor) Percentage of very low birth weight (VLBW) infants delivered at facilities for high-risk deliveries and neonates. Related to Healthy People 2000 Objective 14.14 Increase to at least 90% the proportion of pregnant women and infants who receive risk-appropriate care.					
T		T	17.01 By FY 2003, identify specific areas for successful developmental intervention into the lives of infants born at 22 to 26 weeks gestational age in Arizona.	OCSHCN Administration -Collected data for most recent fiscal year available. On hold until research project is transitioned to Bureau Epidemiologist.	-Work with Bureau Epidemiologist to ensure continuation of research project.
				HRPP (OWCH) - Minimum requirements for developmental Specialists hours dedicated to developmental care responsibilities, including the number of NIDCAP's were developed & implemented based on average quarterly NICU/ICN census - The Developmental Council revised the Guidelines for Developmental Care - Developmental Care information was presented to Hospital MCH Directors at the 2/00 Business Meeting	- Analyze the current system of high risk perinatal service delivery & change it to enhance & verify CHN Program services - Continue to educate the medical & client population on the HRPP/NICP to make it more successful & useful to clients & their families - Monitor contractor compliance based on the new requirements - Continue to provide information pertaining to developmental care to hospital administration staff - Continue to provide early intervention services to the risk population

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T			**17.02 Data from birth records analyzed, feedback to AZ Perinatal Trust and hospitals**	**<u>High Risk Perinatal Program-Transport Services (OWCH)</u>** **- Contractor analyzed data from birth records & prepared perinatal statistical data comparing each APT/APRS, Inc. Voluntary Certified Hospitals with AZ & national perinatal data**	**- Distribute perinatal data findings comparing APT/APRS, Inc. Certified Hospitals with AZ & national data** **- Continue to collect, compile & distribute annual perinatal data comparing AZ hospitals and comparing national perinatal data**
T			**17.03 Enhance Maternal and Neonatal Transport Program to achieve effective and risk-appropriate care for pregnant women**	**<u>High Risk Perinatal Program/Transport (OWCH)</u>** **- Technical assistance regarding resuscitation, stabilization & transport of high risk maternal & sick neonatal patients given to hospitals throughout Arizona** **- Resources (policies & procedures, recommendations & guidelines) distributed to hospitals throughout AZ to enhance the standard of medical care for high risk mothers & sick babies** **- Revised the perinatal transport logs to capture essential data to better report consistent trends in transport** **- Provided facilitation of transport flight services to perform only the highest standard of care based on a regional system of perinatal emergency transport services**	**- Continue to provide the leadership, technical assistance and motivation to the organized system of maternal & neonatal emergency transport in AZ** **- Analyze data from the maternal & neonatal transport log to establish areas of identified needs & provide technical assistance as is appropriate** **- Continue to contract for specialized services of the perinatology & neonatology physician groups in AZ to provide medical case management, consultation & technical services to hospitals, physicians & communities** **- Continue to contract as payor of last resort with air & ground transport companies to provide 24 hour/day emergency medical transport services including specialty teams, regardless of geographic location or families ability to pay** **- Survey consumers for patient satisfaction regarding services provided by the AZ Perinatal Regional System**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T			**17.04 Enhance the HRPP/Newborn Intensive Care Program to achieve effective and risk appropriate care for newborns**	**<u>High Risk Perinatal Program (OWCH)</u>** **- Refined, organized & implemented the perinatal emergency transport system in Southern Az** **- Developmentally supportive care was incorporated into certification guidelines for the APT & in the transport portion of the Program** **- Contracted with all Level II EQ & III nurseries to implement/continue developmental care programs** **- Continued to monitor the provision of family centered, culturally sensitive, & developmentally appropriate coordinated services for mothers & babies** **- Continue to provide developmentally appropriate care in Level II EQ & Level III (& one Level I) nurseries** **- Continued collaboration with APT/APRS, Inc. & AHCCCS to promote the highest quality of care in perinatal care centers; perform Voluntary Certification Site visits/reviews; and, participate on APT Committees** **- Provision of consistent, coordinated training (by all 4 components) to ensure infants are enrolled in the HRPP/NICP** **- Developmental Services provided training for 2 additional evaluators who will be able to provide home based services in remote areas of Az** **- ADHS program staff provided technical training & assistance through a site visit to each of the Developmental Services Contractors, including data collection & reporting requirements as well as clarification of other contract requirements** **- Revision of the Developmental Standards of Care & statewide training guidelines for general evaluators** **- Hospital Program began providing formal site visits with continued provision of technical training & assistance as indicated**	**- Continue to monitor contractor performance through formal site visits to each of the contract providers providing training, education & technical assistance as indicated necessary** **- Encourage the provision of services in a setting which best meets the needs of the child & family** **- Continue to contract with all Level II EQ & III nurseries to continue developmental programs, as well to provide developmentally appropriate care in these nurseries** **- Continue implementation of the Strategic Plan for Developmentally Supportive Care** **- Encourage Level II nurseries to provide developmentally appropriate care.** **- Across all components of the Program continue to provide consistent coordinated training & education to ensure all eligible infants are enrolled in the HRPP/NICP** **- Full implement the formal site visit process across all components of the Program** **- Evaluate data related to public health indicators & develop a strategic plan which addresses the needs of population served by the HRPP/NICP**
T			**17.05 By September 30, 1999 implement and monitor a system of care to assure access to & utilization of perinatal care services for women and infants**	**<u>Social Work Services (OWCH)</u>** **- Revised and distributed the Standards for the Provision of Perinatal Social Work Services** **- Provided consultation and technical assistance to the High Risk Perinatal Program as well as hospital perinatal social workers and social workers in the community** **- Participated on Arizona Perinatal Trust site reviews as a team member to continue to improve the quality of social work services in Arizona hospital perinatal centers, including Desert Samaritan Medical Center, Maryvale Hospital, Phoenix Indian Medical Center, Northwest Hospital, Carondelet St. Joseph's Hospital and Medical Center, and Casa Grande Regional Medical Center** **- Supported educational opportunities to teach advocacy training to social workers, including the Social Workers in Health Care Network, the National Association of Social Workers - Public Policy Committee, and Social Work Day at the Legislature**	**- Continue participation on the Arizona Perinatal Trust site visits to increase awareness of the positive impact of providing psychosocial services to families with high risk pregnancies and births** **- Continue to support and educate social work professionals to increase their knowledge to assist families with their psychosocial issues** **- Continue to distribute and review the Standards for the Provision of Perinatal Social Work Services with perinatal social workers**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Licensed Midwife Program (OWCH) - Licensed 6 new midwives attending home births in Arizona - Regulated Licensed Midwives in Arizona - Conducted quality assurance activities related to quarterly reports submitted by Licensed Midwives - Provided 13 education programs with contact hours, in both Phoenix and Tucson, for Licensed Midwives and student midwives on topics related to perinatal care services	- Continue to regulate and license midwives attending home births in AZ - Continue to conduct quality assurance activities related to quarterly reports submitted by Licensed Midwives - Continue to provide education programs with contact hours, in both Phoenix and Tucson, for Licensed Midwives and student midwives on topics related to perinatal care services
				Office of Oral Health	- Collaborate with agencies to assess existing policies related to access to oral health services for women of child bearing age
				Perinatal Nutrition (OWCH) - Az Perinatal Nutrition Guidelines continued to be distributed to APT certified hospital contacts and Chief Clinical Dietitians during nutrition site visits - Nutrition Site Visits were made to 14 APT hospitals - Organized and chaired Az Perinatal Nutrition Network (AzPNN) Meetings this year - 3 in Phoenix and 1 in Tucson - Developed nutrition objectives and organized and presented nutrition education to Return to Basics CHN's - Cosponsored Nutrition & Cognition from Iowa State Univ and Pediatric Update from U of Ala Satellite Teleconferences2000 - Provided professional expertise on planning committee for Feeding & Feeding Disorders Conference May 2000 - Developed 2000 Meeting List with MCH & Nutrition allied meetings for meeting planners and education opportunities - Provided Technical assistance and education to Co Prenatal Block Coordinators, Child Health, Genetics, High Risk Perinatal Program, Lic Midwife Program, TA Network, Early Intervention, Healthy Communities programs, IHS area dietitians, Head Start, MOD, Bone Builders Task Force, Az School Health Assoc Board and the Central Az Dietetic Assoc Board	- Provide technical assistance and consultation to hospital perinatal dietitians and community nutritionists, physicians, nurses and other health professionals - Make at least 12 nutrition site visits to APT hospitals throughout the state to increase implementation of the Az Perinatal Nutrition Guidelines - Organize and chair AzPNN Meetings with the state - Continue to provide information on perinatal nutrition education opportunities - Provide technical assistance and education to ADHS and OWCH programs - Continue to Chair the ONS Anemia Team - Continue to Chair the ADHS Folate Committee and provide access to the Folate for a Healthy You exhibit -Plan and organize a Bright Futures Nutrition Training for dietitians and other health professionals in Az - Continue to provide information on perinatal nutrition education opportunities
T			17.06 Develop and implement QA process for transport portion of High Risk Perinatal System	**High Risk Perinatal Program (OWCH)** - Developed & implemented Transport Services QA/CQI process, provided training & education on the process with contracted emergency maternal & neonatal transport vendors - Reviewed, edited & printed the final version of the ADHS/APT AZ Perinatal Regional Systems, Strategic Plan & Recommendation for Transport Document	- Distribute the ADHS/APT Az Perinatal Regional Systems, Strategic Plan & Recommendations for Transport Document to all of the appropriate contractors, committee members & interested parties in Az - Collaborate with APT/APRS, Inc. to implement the certification process for transport providers

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
Performance Measure 18 (Type: Risk factor) Percent of infants born to pregnant women initiating prenatal care in the first trimester of pregnancy. Related to Healthy people 2000 Objective 14.11 Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.					
T			18.01 Monitor the percent of pregnant women in OWCH programs with a source of payment for prenatal care through use of the electronic birth certificate data.	High Risk Perinatal Program (OWCH) - Continued to monitor & identify the pregnant women in the OWCH's Health Programs with a source of payment for prenatal care through the Electronic Birth Certificate Program	- Continue to monitor the women in OWCH's Health Programs with a source of payment for prenatal care through the Electronic Birth Certificate Program. Compare & analyze the information gathered
				Community Development (OWCH) - Through the CISS grant–TA Network, the following technical assistance resources that could support/enhance community-based health systems development and assist with prenatal care planning activities were made available to all THDs, CHDs and County Prenatal Block Grant Coordinators: Collaboration Building Training and Group Facilitation Training, and the "Who's Who in Community Health Development: A Resource Directory for Skill Building" - THDs, CHDs, and County Prenatal Block Grant Coordinators were informed of the "Who's Who in Community Health Development: A Resource Directory for Skill Building " being available on the TA Network Web Page and will be mailed the second and final edition of "Who's Who in Community Health Development: A Resource Directory for Skill Building"	- Continue to collaborate with ADHS offices to improve health needs/systems development at the local level - Continue to maintain the TA Network Web Page and directory until that time it would be advantageous to link/affiliate it with another Community Development resource
				Pregnancy & Breastfeeding Hotline (OWCH) - Provided technical assistance in the Baby Arizona evaluation subcommittee which contracted for a satisfaction survey of providers and pregnant women - Provided statistics to the Baby Arizona evaluation subcommittee which measures outcomes, costs and entry into care	- Continue to collaborate with Baby Arizona and support outreach efforts - Continue to strengthen and coordinate collaborative efforts with DES
T			18.02 Monitor the average Gestational Age for entry into care and the average number of prenatal visits for pregnant women in the care of Licensed Midwives.	Licensed Midwife Program (OWCH) - Promoted the midwife model of care in Arizona, answering public inquiries and presenting information to professionals through conferences, poster sessions and presentations - Sought marketing opportunities for Licensed Midwives to "sell" the importance of early prenatal care - Assisted Governor's Office in issuing a Proclamation for International Midwifery Day on May 5, 2000 - Monitored the gestational age at entry into care and the number of prenatal visits for pregnant women in the care of Licensed Midwives	- Continue to promote the midwife model of care in Arizona to public and professionals - Continue to seek marketing opportunities for Licensed Midwives to "sell" the importance of early prenatal care

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T			**18.03 Promote the benefits of early entry into prenatal care.**	**HMHB (OWCH)** - Coalitions increased distribution of educational materials on the importance of prenatal care by coordinating activities with local county health departments and libraries - Began activities for increasing knowledge to men of the importance of prenatal care by planning training on male involvement	- Continue to distribute educational materials
				County Prenatal Block Grant (OWCH) - Prenatal education classes were provided and services available to women in most of the counties. Counties that do not have formal educational classes have brochures and pamphlets on the importance of early prenatal care - Counties that have combined their Advisory Councils with Healthy Mother's Healthy Babies Coalitions had Health Fairs, Baby Showers and other activities that promote early prenatal care - Navajo County began activities for forming an Early Intervention Coalition to address the needs of early prenatal care, domestic violence and child abuse prevention	- Continue to promote early enrollment in prenatal care through health fairs, Baby Showers, libraries and other community activities by providing educational materials - Continue efforts to link women with AHCCCS, Baby Arizona and WIC to improve the provision of prenatal care - Continue integration of services with reproductive programs conducted in local communities
				Office of Oral Health	- Collaborate with public and private agencies to distribute educational materials on the importance of oral health service as part of prenatal care
State Performance Measure 03 (Type: Process) The proportion of child care centers who meet national quality standards for health and safety. **Healthy People 2000 Objective** No identified Healthy People 2000 objective.					
T	T		**S3.01 Improve health and safety in child care**	**Sensory Program (OWCH)** - 18 additional trainers completed the Train-the-Trainer (T3) program in hearing screening - More than 500 individuals were certified for hearing screening in FY 1999 - In collaboration with Prevent Blindness America, a vision screening curriculum was developed and offered for the first time at the Spring Train-the-Trainer (T3) Institute - 19 trainers completed the program for vision screening - An RFP was issued and contract awarded for the administration of the T3 program	- Develop a roster of approved vision screening trainers and distribute the information to Arizona public and private schools - Train 20 additional vision screening trainers - Develop a system to track the number of vision workshops held and the number of vision screeners trained

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T		**S3.02 Increase the number of accredited child care facilities by one per federal fiscal year.**	**Early Childhood (OWCH)** **- Seven child care centers became accredited with assistance from the Arizona Self-Study Project** **- Assisted 52 early childhood facilities and small group homes through the Arizona Self-Study Project** **- Added 6 new accredited child care facilities to the list, exceeding expectations**	**- 52 child care facilities will receive materials, technical assistance, and on-site consultations from the Association for Supportive Child Care**
T	T	T	**S3.03 Develop a consistent, clear, and accurate public health message throughout AZ provided as economically as possible to any setting where children gather (system called T3).**	**Early Childhood (OWCH)** **- Awarded $25,000 contract to U of A, Maricopa County Cooperative Extension for T3. This represents the final step in making T3 self-sustaining** **- Hosted a T3 institute in Phoenix for 50 new trainers that included adult learning, hearing and vision screening, special needs curricula and nutrition**	**- The T3 contractor, U of A, will host two institutes** **- 7000 certificates to early childhood trainees will be issued**
				Sensory Program (OWCH) **- T3 curriculum completed by 18 additional trainers** **- T3 Vision curriculum was developed in collaboration with Prevent Blindness America and offered for the first time at the Spring T3 Institute**	**- No additional vision curriculum units planned**
	T	T	**S3.04 Develop new curricula in the following areas:** **1) Special Needs** **2) Sexual Abuse Identification and Reporting** **3) Hearing Screening**	**OCSHCN Administration** **-Completed criteria with the Central Arizona College on child care issues relevant to CSHCN. Curriculum is now in the final stages of review; curriculum expected to be published and implemented in the Fall of '99.**	**-Continue to provide leadership to the work of the Central Arizona College around dissemination and implementation of the curriculum**
T	T		**S3.05 Collaborate with DES to arrive at a career ladder for the Early Childhood Professional/day care workers.**	**Early Childhood (OWCH)** **- Successfully contributed to the completion of a strategic plan for career ladder development for the early childhood child care worker in collaboration with DES**	**- OWCH will continue to collaborate on the Professional Development committee to address six key issues: fees for participation in the registry, documentation of training and education, credit for training occurring outside the state, criteria for trainers, criteria for course approval and assessment of competencies**
T	T		**S3.06 Improve the quality of child care in AZ through the CISS Grant (Healthy Child Care Arizona) by increasing availability and integration of health and social support services in order to improve the health, safety and well-being of AZ children and the communities in which they live.**	**Early Childhood (OWCH)** **- The CISS grant has successfully completed five health education products to link health services with parents through the child care provider**	**- OWCH will continue the grant activities by distributing the materials to 5000 unlicensed, unregulated child care facilities in Arizona. APRC will fill orders through a Business Reply Postcard process** **- An evaluation will be conducted based on responses through postcards from requests**

State Performance Measure 04 (Type: Risk Factor)
Asthma hospitalizations per 100,000 children age 1 through 19.
Related to Healthy People 2000 Objective 11.1
Reduce asthma morbidity, as measured by a reduction in asthma hospitalizations to no more than 160 per 100,000 people.

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		**S4.01 Establish encounter database to track asthma incidence and services provided by school nurses.**	**<u>Child Health (OWCH)</u>** **-CHIP, which tracks asthma encounters by the school nurse, was expanded to 150 schools** **- Database to track asthma encounters documented by CHIP is in place**	**- Provide asthma information from the database to interested entities** **- Expand participation in CHIP to 175 schools**
		T	**S4.02 Explore methods for reducing asthma hospitalizations among CSHCN**	**<u>OCSHCN & OWCH</u>** **-OCSHCN Planning and Evaluation Consultant appointed ADHS representative to the Arizona Asthma Coalition (AAC) Steering Committee and the CDC Asthma Program.** **-Facilitated efforts of a Maricopa County coalition to obtain a Robert Wood Johnson Foundation asthma grant including preparation of the letter of intent and, subsequently, the complete proposal.** **-Supported the Phoenix Children's Hospital's development of a mobile asthma screening and treatment program (Breathmobile).** **-Managed state tobacco-tax funds for lay and professional asthma education.**	**-Continue to provide consultation and technical assistance to the AAC and local coalitions.** **-Disseminate CDC and EPA asthma information to state and local community groups.**

<u>State Performance Measure 05</u> (Type: Risk factor)
The Rate of Preventable Child Deaths
<u>Healthy People 2000 Objective</u>
No identified Healthy People 2000 objective.

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T	T	**S5.01 By December 31, 1998 develop a model national training curriculum for child fatality review**	**<u>Child Fatality Review</u>** **- Arizona Child Fatality Review Program is viewed as a national model** **- Participated at the National level on the FIMR Consortium and ICAN National Center on Child Fatality Review Advisory board.** **- Established A Maternal/Fetal work group to develop a mechanism for coordination of efforts for Maternal reviews, Fetal/Infant reviews, SIDS reviews and Child Fatality Reviews** **- Partnership efforts resulted in implementation of a Head and Spinal injury prevention project that has been funded and initiated in three counties** **- Established a subcommittee formed to focus on Child Abuse cases and make recommendations for system change and development of prevention strategies** **- A special study was developed to look at the prevention of Native American child deaths** **- Formed a local CFR Coordinator's subcommittee as part of the state team to develop an educational network and to assess the functioning of the local teams** **- Developed a new data form to improve the quality of the data set to include ICD-9 codes** **- Developed a new data system to improve the analysis of data** **- Initiated beta testing of the new data system and data form** **- Expanded the Internet site (hhtp://www.hs.state.az.us/cfhs/index.htm)** **- Developed a <u>Citizen Review Panel Program (CRP)</u> - The Child Fatality Review Program has began implementation of a new Arizona Citizen Review Panel Program (CRP) to provide oversight of the Child Protective Service (CPS) system. Panels will develop recommendations for improvement of the CPS system**	**- Continued national training in partnerships with MCHB and ACOG** **- Continue to explore expansion of CFR process to include Maternal and Fetal/ Infants deaths** **- Continue partnerships in communities and with other agencies to identify strategies to improve systems and implement programs for preventing child fatalities** **- Continue to provide technical assistance to all Local teams and minority populations in the development and implementation of Local culturally sensitive teams** **- Continue to expand the evaluation component of the CFR program to access the functioning of Local teams and insure quality and integrity of data collection** **- Continue to monitor and ameliorate the data set based on needs of the community and the State** **- Expand data analysis components** **- Initiate the data training component to include all counties who want technical assistance on analyzing county data** **- Provide technical assistance** **- Enhance web-site on an ongoing basis** **- Continue to enhance the availability of the CFR data for program analysis and development** **- Continue development of Citizen Review Panels. Begin gathering and analysis of data collected through Panel reviews. Distribute 1st Annual report**
	T		**S5.02 By December 31, 1998 pilot a community awareness campaign on prevention of unintentional injuries, suicides and homicides.** **S5.03 By December 31, 1998 and on-going, provide community awareness statewide campaign of child abuse and neglect.**	**<u>High Risk Perinatal Program (OWCH)</u>** **- Continue to routinely provide & participate in CHN, parent & community education & training on prevention of intentional injuries, child abuse & neglect**	**- Continue to monitor & review reported child abuse** **- Continue to provide education & training to all programs regarding prevention of childhood injuries, child abuse & neglect in the perinatal community**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Social Work Services (OWCH) - Co-sponsored and participated on the conference planning committee for Child Abuse Prevention and the Family Centered Practice Conferences and member of the Child Abuse Prevention Advisory Board, and the DES/Division of Children and Families Advisory Board - Child abuse and domestic violence issues are included in the Standards for the Provision of Perinatal Social Work Services - Participated in conferences and workshops about preventing child abuse, domestic violence, understanding postpartum depression and treatment, and other topics to provide information for perinatal social workers to share with families	- Continue to co-sponsor and participate on planning committees for conferences and workshops about preventing child abuse and family centered practice available to county health and community programs - Review and interpret the Standards for the Provision for Perinatal Social Work Services with community perinatal social workers - Continue participation in training and conferences related to preventing domestic violence and child abuse
				Child Health (OWCH) - School nurses are documenting the prevalence of child abuse and neglect in the school population through the CHIP program	- Increase the number of school nurses using the CHIP program to document child abuse and neglect referrals
T	T		S5.04 By FY 2003, reduce preventable deaths due to established conditions to no more than (25 per 1,000) among children age birth to 21 years.	**Child Fatality Review** - Partnership development efforts resulted in implementation of a Head and Spinal injury prevention project that has been funded and initiated in three counties - Established a Subcommittee to focus on Child Abuse cases and make recommendations for system change and develop prevention strategies - Formal establishment of a Citizen Review Panel Program through an intergovernmental agreement with the Department of Economic Security - A special study was developed to look at the prevention of Native American child deaths. - Data Driven Recommendation for prevention are reported to the Governor and Legislatures on November 15th of every year.	- Continue partnerships in the community and with other agencies to identify strategies to improve systems and implement programs for preventing preventable child fatalities - Continue to provide technical assistance to all local teams and minority populations in the development and implementation of local culturally sensitive teams - Continue expansion of Citizen Review Panel Program - Continue making data driven recommendations
T			S5.05 By December 31, 1998, expand SIDS activities. S5.06 Provide SIDS Education to parents.	**Social Work Services (OWCH)** - Provided information to the social work members of the Phoenix and Tucson Perinatal Social Work Networks about SIDS and other infant/childhood diseases, including information on Newborn Screening, as resources to share with families	- Continue to search for resources for SIDS education
				Early Childhood (OWCH) - A SIDS curriculum was completed, piloted, and successfully disseminated to 50 T3 trainers	- Curricula will be updated and disseminated as needed

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				SIDS - Participated at National level as member of the SIDS Alliance Board of Director, Advisory Board Member for the Association of SIDS and Infant Mortality Programs (ASIP) and Advisory Board Member for the National SIDS and Infant Death Program Support Center - Provided Spanish translations of SIDS Newsletters, Grief pamphlets and Door hangers (preventability strategies) in partnership with the SIDS Alliance - The investigative protocol continues to be used by first responders. The SIDS Alliance in coordination with the state SIDS Advisory Council provides training workshops for hospital personnel and other professionals - Co-sponsored the 4th Annual SIDS Conference with The SIDS Alliance - The network of grief counseling in partnership with the SIDS Alliance was expanded - Meetings of the SIDS Advisory Council continue to be held - Coordinated a comprehensive parents survey with the SIDS Alliance	- Continue participation as member of the SIDS Alliance Board of Directors., Advisory Board Member for the Association of SIDS and Infant Mortality Programs (ASIP) and Advisory Board Member for the National SIDS and Infant Death Program Support Center - Continue training sessions for First-Responders, Child Care providers, Hospital Personnel and other professionals - Continue data analysis in coordination with the Child Fatality Review Program (CFR) - Continue to promote usage of the investigative protocol so that usage is more consistent statewide - Continue to provide public education about the risk factors for SIDS - Develop a train the trainer model statewide to train health professional - Expand grief counseling accessibility in partnership with the SIDS Alliance
				High Risk Perinatal Program (OWCH) - CHN's have provided SIDS education & training to families - CHN's monitor & assist in the use of apnea monitors used by clients	- Continue to provide SIDS education & training to families - Continue to provide support & instruction on the use of in-home apnea monitors to all families
State Performance Measure 06 (Type: Risk factor) The rate of children, 1-19 years, hospitalized for ambulatory care sensitive conditions. **Healthy People 2000 Objective 21.3:** Increase to 90% the proportion of children and youths cared for in a statewide system of community-based, family centered, culturally sensitive coordinated services that meet the primary and special health care needs of each child.					
T	T	T	S6.01 All infants, including CSHCN, will have and utilize a primary care provider	**High Risk Perinatal Program (OWCH & OCSHCN)** - CHN's monitored all families for use or assignment of a primary care provider. If no PCP was being used, the CHN made the linkage by referral to a PCP - CHN's continue to provide in-home education to every parent on infant car seats, pool safety and home safety - CHN's continue to provide education to families to promote Medicaid & Kids Care when appropriate	- Continue to provide linkage for referral for families who have no established PCP - Continue to provide support & instruction on safety in the home, pool safety & use of car seats

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Health Start (OWCH) - Lay health workers assessed, assured that all infants had and utilized a primary care provider at each visit. - Referrals were made if there was not a primary care provider being used - Provided outreach to infants/children/families to promote Kids Care enrollment	- Lay health workers will continue to assess and assure that all families have and utilize a primary care provider. Referrals will be made if there is not such a provider. - Continue to provide outreach to program infants/children/families to promote Kids Care enrollment
T	T	T	S6.02 Identify infants and children with potential developmental and physical delays. S6.03 Support and educate parents and families about developmental and physical delays. S6.04 Refer children to intervention services in the community.	**Social Work Services (OWCH)** - Provided information to perinatal social workers to assist them to support and educate families about developmental delays/disabilities and the psychosocial impact on families. Staff from DES/DDD participated in the Perinatal Social Work Network educational meetings - Provided resources and technical assistance to the perinatal social workers to refer facilities for community intervention - Participated on the District III Arizona Early Intervention program Management Team to share information about developmental and physical delays for children birth through 3 years of age	- Continue to provide information to perinatal social workers to assist them to support and educate famlies about developmental delays/disabilities and the psychosocial impact on families - Continue to provide resources to the perinatal social workers to refer families for community intervention
				AzEIP - Developed general evaluator competency guidelines to be used a standard for training Developmental Services general evaluators. - Developed an Expressive Language Delay policy and procedure for AzEIP children - Added "Psychosocial Assessment" to the new Developmental Services CATS forms to encourage Social Work referral for these services - Developed new Developmental Services data collection forms which will allow for closer monitoring of AzEIP timelines and eligibility determination criteria. -Supported and participated in AzEIP Portage Project training.	- Plan to standardize training modules for general evaluators. - Continue to work for consistency in AzEIP eligibility determination among the Developmental Services contractors. -Facilitate Ecological Intervention Philosophy and Practices within the High Risk-Perinatal Program, Developmental Services and OCSHCN Service Coordination through multi-agency pilot projects. -Explore and incorporate AzEIP Personnel Development Standards into policies and contracts, as applicable.
				Health Start (OWCH) - Lay health workers educated parents/families on the development of their children - Administered Ages and Stages Questionnaire (developmental assessment) to all infants and children in the Program - Facilitated the timely referral of children with questionable ASQ to community resources and/or agencies - Collaborated with community agencies to develop a system of referral and data exchange	- Continue to support education of parents/families on the development of their children - Continue using Ages and States Questionnaire with parents to assess the child's development - Continue to facilitate timely referrals of children with questionable ASQs to community resources and/or agencies - Continue to collaborate with community agencies to develop a system of referral and data exchange

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				CIC (OWCH) - Provided information and referrals to families with children with special health care needs - Mailed out informaiton packets with AzEIP educational information to help families identify if their child might have a developmental delay - Provided advocacy and support to families with children with special health care needs - Provided/faxed referrals for families to designated AzEIP coordinators throughout Arizona - Promoted public awareness through community health fairs and events	- Continue to promote and disseminate information on services available for mothers of infants and children - Continue to identify and link families with resources - Continue to support and collaborate with the AzEIP
				Newborn Screening (OWCH) - Performed about 130,000 tests for endocrine and metabolic disorders and hemoglobinopathies. Of these, 45 babies were identified with confirmed abnormalities. care providers, staff of other agencies providing services to pregnant women and/or young families, and the general public - Worked with CRS to help assure the infants diagnosed with a disorder screened for through NBS are referred for appropriate medical/developmental evaluations - There was a 100% match for newborns with metabolic disorders identified through Newborn Screening in calendar year 1999 and enrollment in CRS - Continued to distribute a general program brochure for parents (English and Spanish), brochures about seven different disorders, and other materials - Continued to work with Health Start in educating hard-to-reach pregnant women - Continued to collaborate with CRS to enlist infants affected with metabolic disorders into CRS for receipt of interdisciplinary care - There was a 100% match for newborns with metabolic disorders identified through Newborn Screening in calendar year 1999 and enrollment in CRS - Continued to provide funding to CRS-contracted pharmacies for the distribution of formulas to infants and children with phenylketonuria and other metabolic disorders	- Continue to develop and/or purchase educational materials - Continue to work with CRS to assure appropriate referral - Continue to work with Health Start in educating hard-to-reach pregnant women - Continue to provide funding to CRS-contracted pharmacies for the distribution of formulas to infants and children with phenylketonuria and other metabolic disorders -Continue to collaborate with CRS to enlist infants affected with metabolic disorders into CRS for receipt of interdisciplinary care

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Developmental Services -Completed general evaluator competency guidelines for selection of trainees as well as those required for completion of training. -Assisted numerous communities in making competent determinations of eligibility through technical assistance. -Developed standardized data information system reports for analysis and forecasting. -Financial support of professionals provided for the Portage Training Project.	-Produce a standardized training manual including competencies and resources. -Continue to participate in Portage Project Training with emphasis on natural environment.
				Child Health (OWCH) - SBHCs and school nurses identify children, support and educate parents and school staff about children who have potential developmental and physical delays and refer to appropriate resources, including the AzAAP Medical Home Project	- Support SBHCs and school nurses in their efforts to expand services to children, parents and staff
				EMSC (OWCH) - Transitioned the EMSC Resource Center to the PCH Emily Center	- EMSC moved from OWCH to the Bureau of EMS
				High Risk Perinatal Program (OWCH & OCSHCN) - Identified & referred, as appropriate, children who were at risk of potential developmental & physical delays - Expansion of developmental services to rural communities by providing support for training of new professionals - Facilitation the timely referral of children to appropriate community services through evaluation & monitoring of the eligibility & referral process - Continued use of guidelines for screening, assessment & early intervention strategies for infant mental health, prematurity & failure to Thrive conditions - Participation on the Community Involvement Committee to address psychosocial issues that families are faced with, especially during a traumatic or at risk situation - Collaboration with community agencies to perpetuate the system of appropriate referral & data exchange - HRPP/NICP computer & slide program of history & use of each of the components of the HRPP/NICP - Update of all of the HRPP/NICP Fact Sheets & a single page of HRPP summary of programs within used during public gatherings, public relations events, education & training opportunities	- Distribution of the revised Perinatal Social Worker Guidelines - Develop &/or update a marketing tool other than slide or computer presentation to be used when at public relations events, orientation & training sessions - Produce an informational public broadcasting service commercial regarding HRPP/NICP Services
	T		S6.05 By October 1, 1998 expand Medical Home Project beyond acute care to a true "medical home".	**Child Health (OWCH)** - Medical Home Project has 8 pediatricians providing Phase II services - Medical Home Project has been reviewed to better service families and continuing care vs. acute and episodic care	- Redirect efforts of Medical Home Project toward provision of a "medical home"

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		S6.06 Continue to collaborate with Tobacco Tax-funded Primary Care initiative to expand services to underserved areas/populations S6.07 By December 31, 1998, increase in the number of public-private partnerships between schools and communities S6.08 By October 1, 1998, expand Medical Home Project for additional dental services and specialist care.	Child Health (OWCH) - Collaborated with the Health System Development and Office of Oral Health - Updated Web page - Updated Directory - Initiated planning for a SBHC conference for 2001 - Reviewed Medical Home Project for opportunities to better service families and to provide continuing care vs. acute and episodic care	- Continue collaborative efforts - Make Quality Assurance and Improvement Manual and Directory available to interested parties, hard copy and on web page - Redirect efforts of Medical Home Project toward provision of a "medical home"
				Early Childhood (OWCH) - T3 continued to collaborate and supported issuing of certificates to early childhood settings where Nutrition Module was taught - Collaborated with representative from ONS and Nutrition Services on T3 Advisory Board	- Continue T3 trainings - Collaborate with ONS and Nutrition Services on T3 Advisory Board
				Office of Oral Health	- Continue collaboration with Bureau of Health Systems Development to promote dental services as part of primary care services - Collaborate with public and private agencies to promote dental care delivery systems as part of services provided through school-based health centers
T	T	T	S6.09 By September 30, 1998, the TA Network project will develop and implement a project evaluation plan S6.10 By September 30, 1998, draft of the Statewide Directory for Training and Technical Assistance will be printed and distributed. S6.11 By September 30, 1999, some of the Tribal Health Departments and additional County Health Departments will be connected via Internet	CISS GRANT (OWCH) Discontinued	
T	T	T	S6.12 Maintain the TA Network to enhance technical assistance throughout the state by local experts	CISS Grant (OWCH) - THDs, CHDs, and County Prenatal Block Grant Coordinators were informed of the "Who's Who in Community Health Development: A Resource Directory for Skill Building "being available on the TA Network Web Page and will be mailed the second and final edition of "Who's Who in Community Health Development: A Resource Directory for Skill Building".	- Continue to maintain the TA Network Web Page and directory until that time it would be advantageous to link/affiliate it with another Community Development resource
T	T	T	S6.13 (NEW 2001) Support water fluoridation initiatives in Arizona communities	Office of Oral Health	- Provide support to at least one Arizona community related to water fluoridation - Monitor community water fluoridation compliance and report findings to CDC

State Performance Measure #07 (Type: Process)
The State Title V CSHCN program has adopted and recommended standards and training programs to improve the health care of the CSHCN population.
Related Healthy People 2000 Objective 17.20
Increase to 50 the number of states that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
		T	**S7.01 By the end if FY '98, a service coordination model will be written.**	**Service Coordination** **-Continued analysis of changing ADHS Service Coordination model. Inclusion of serving children with expressive language delay and children with pediatric undernourished (failure to thrive).** **-Analysis of the ADHS Service Coordination Model continued, including its applicability to different populations, including Traumatic Brain Injury, Speech Language and Gross Motor Delay and Pediatric Undernourished.**	**-Description and publication of the ADHS Service Coordination Model.** **-A description of the ADHS Service Coordination Model, including a Policy and Procedures Manual, will be written and distributed to contractors and others via the ADHS/OCSHCN Webpage.** **-Explore and incorporate AzEIP Personnel Development Standards into policies and contracts, as applicable.**
T	T	T	**S7.02 By FY '99, establish criteria and develop recommendations for CRS-eligible diagnoses and definition of standards of care for delivery of CRS services.**	**CRS** **-Completed review of all eight conditions not requiring financial eligibility as well as body systems.**	**-Continue field testing and analysis of cost changes a s a result of recommendations. Develop budget justifications for changes and attempt to include in departmental legislative priorities for FY '00.**
				High Risk Perinatal Programs (OWCH and OCSHCN) **- Implemented new data system linking HRPP & OCSHCN data beginning in August**	**- Continue to use & improve use of new data system** **- Analyze Program data & utilize data to develop & implement program quality improvement activities**
				Sensory Program (OWCH) **- Pediatric Audiology Guidelines were published and distributed** **- No additional activities were done with this objective this year**	**- Monitor use of Pediatric Audiology guidelines** **- Promote use of Pediatric Audiology guidelines in identifying providers of identification, assessment, and treatment services for children with hearing loss**
T	T	T	**S7.03 Beginning FY '95 and ongoing, implement quality management analysis for OCSHCN and programs.**	**High Risk Perinatal Program/Developmental Clinics (OWCH)** **- Provided technical assistance & training to each of the Developmental Services contract providers** **- Monitored provider compliance with contract requirements** **- Developed & implemented a statewide telephone survey of family satisfaction with the Developmental Services Program** **- Completed the implementation of General Evaluator Competencies** **- Developed training guidelines & a General Evaluator Training Manual** **- Conducted site visits with training & technical assistance for each of the Developmental Services contractors**	**- Assist contract providers with the development of Annual CQI plans** **- Monitor family satisfaction of services rendered** **- Conduct formal site visits to each of the contract providers** **- Monitor provider compliance with contract requirements**
				Nutrition Services for CSHCN **-Conduct quality assurance monitoring of Nutrition services component for all CRS clinics**	**-Develop a Nutrition Service Chart review form to document nutrition services provided for each specialty clinic** **-Continue to conduct Nutrition QA monitoring as part of the overall CRS QA Monitoring Plan**
				Community Development **-Developed with Community Parent Leaders the Community Development Model of Evaluation.**	**-Utilizing the Community Development Model of Evaluation, gather and analyze community information.** **-Write and distribute a Lessons Learned/ Status Report of Community Action.**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
		T	**S7.04 Beginning FY '96 and continuing, OCSHCN will develop condition specific best practice, family centered standards of care for families and providers.**	**<u>CRS</u>** **-CRS Eligibility Review and Guidelines of Care Project developed organizational and clinical guidelines** **-Implemented CRS Eligibility Review and Guidelines of Care Project into CRS contract** **-Developed Nutrition Standards for CSHCN, covering care across the continuum, from clinical settings to hospital, community, home and school** **- Revised Teachers' Guide on phenylyketonuria.**	**-Continue to develop and implement CRS Eligibility Review and Guidelines of Care Project organizational and clinical guidelines.** **-Additional guidelines added to future CRS contracts** **-Distribution and training to HCP and para professionals on effective use of Nutrition Standards for CSHCN.** **-Revise Teacher's Guide on Galactosemia**
T	T	T	**S7.05 Beginning FY 2000 and until grant termination, coordinate CSHCN nutrition training with the Pacific West MCH Distance Learning Grant**	**<u>Nutrition Service for CSHCN</u>** **- Develop and offer various distance learning training opportunities on a statewide basis** **- Assess to training curriculum and technical assistance provided by USC UAP and UW** **- Level 2 CSHCN training will be offered by ADHS ONS. Training will be provided by Pacific West MCH Distance Learning project** **- Lee Renda and Margie Tate attended Pacific West MCH Advisory Board Public Health Nutrition Leadership Institute meeting**	**- Effectively build upon the training particularly in the area early nutrition intervention for CSHCN** **- Continue to train HCP, both Nutritionists and para professionals in the provision of the three levels of nutrition and feeding practices for CSHCN, including screening, assessment, intervention, prevention of complex nutritional problems** **- Continue to collaborate with WIC to offer CSHCN training and continuity of care**
		T	**S7.06 Beginning FY '96 and ongoing, educate child care providers and HCP on CSHCN nutritional needs and diets.**	**<u>Nutrition Services for CSHCN</u>** **- Continued to provide the special needs component to the Train the Trainer (T-3) curriculum.** **- Incorporated new curriculum for early childhood educators and families into CAC** **- Eight new T-3 trainers completed the T-3 training program** **- Received Nutrition Education and Training Grant**	**- Integration of the curriculum in the T3 system will sustain the continuation of training for child care providers in AZ on nutrition for CSHCN. In addition it will provide basis information to build awareness and increase skills and knowledge on an ongoing basis on nutritional needs of CSHCN throughout their life span** **- Curriculum will continue to be evaluated and revised as appropriate to meet the changing needs of CSHCN and providers in the community. ADHS will seek to build a system to provide training locally to increase skills among professionals and paraprofessionals in the area of CSHCN.**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T	T	**S7.07 Identify infants and children with potential developmental and physical delays, support and educate parents and families, and refer children to intervention services in the community.**	**<u>Newborn Screening (OWCH)</u>** **- Performed about 130,000 tests for endocrine and metabolic disorders and hemoglobinopathies. Of these, 45 babies were identified with confirmed abnormalities** **- Worked with CRS to help assure the infants diagnosed with a disorder screened for through NBS are referred for appropriate medical/developmental evaluations** **- There was a 100% match for newborns with metabolic disorders identified through Newborn Screening and enrollment in CRS** **- Continued to work with Health Start in educating hard-to-reach pregnant women** **- Continued to develop and/or purchase educational materials for use with health care providers, staff of other agencies providing services to pregnant women and/or young families, and the general public** **- Continued to distribute a general program brochure for parents (English and Spanish), a fact sheet about the program for agencies, brochures about seven different disorders, and other materials. Over 60,000 brochures were distributed** **- Continued to provide education about NBS to appropriate groups. Presented aspects of the program at over 60 activities, including conferences and on-site training sessions** **- Continued to collaborate with local agencies, regional NBS and Genetics providers and others to develop and/or update Web pages, manuals, guidelines and other documents** **- Developed a Public Service Announcement (PSA) informing parents about NBS and recommending that they ask their doctors about a second newborn screening test** **- Developed two videos to be used in training professionals about NBS, one a stand-alone video and the other one used to enrich an on-site training session**	**- Continue to develop and/or purchase educational materials** **- Continue to work with CRS to assure appropriate referral** **- Continue to work with Health Start in educating hard-to-reach pregnant women** **- Continue to provide education about NBS to appropriate groups** **- Continue to collaborate with other appropriate agencies and programs** **- Begin to distribute the stand-alone video and obtain feedback on its effectiveness**
				<u>Child Health (OWCH)</u> **- School nurses referred children with potential developmental delays to medical Home Project and SBHC providers**	**- Encourage school nurses to continue identifying and referring children with potential developmental delays**
				<u>High Risk Perinatal Program (OWCH)</u> **- Provided training to general evaluator candidates who will be able to provide home or community based services in remote areas of the state** **- Collaborated with OCSHCN & AzEIP staff to develop a Request for Proposal for Developmental Services which addresses enhancements to service delivery: services in natural environment, AzEIP Program & Individual Assessment & development & hearing screening, team conferencing & collaboration with community resources**	**- Continue to evaluate the necessity for additional Developmental Services providers which will increase the accessibility for families throughout the state** **- Continue to facilitate the collaboration between all HRPP/NICP service components, other ADHS programs & referral agencies** **- Continue to integrate the social services components into the HRPP services delivery system**

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Sensory Program (OWCH) - Continued to provide technical assistance to hospitals implementing universal newborn hearing screening programs - 36 hospitals are currently implementing universal newborn hearing screening programs - Continuing to provide educational brochures to hospitals with universal newborn hearing screening programs - Obtained funding through a private foundation for hearing testing equipment and training to do hearing screening in developmental clinics	- Continue to work on linkages between newborn hearing screening database and other related public health databases - Continue to work on linkages between newborn hearing screening database and the early intervention system
		T	S7.08 Explore the adequacy and equity of sliding-fee scales in improving access to services, the extent to which state-funded programs use such scales, and related federal rules. Adopt and implement the sliding fee scale concept in all identified programs by September 30, 2003.	**OCSHCN Administration** - Abolished the untenable sliding fee scale and instituted 100% coverage for families with incomes up to 200% FPL (up from 150 % FPL). Changed CRS charges to parents (with incomes over 200% FPL) to the Medicaid eligible rate. Also, there is no charge to those with incomes up to 250% FPL for clinic visits.	-Implement the changes and monitor the impact on the system.
Other Infrastructure Structure Building Services (not specifically related to performance indicators)					
		T	Other .01 Beginning September 1, 1995 and ongoing thereafter, provide survey, legislative analysis and needs assessment data to statewide System of Care Team as a way to assist state programs to target resources toward areas of highest need and potential for health status improvement.	**OCSHCN Administration** -Work with the System of Care Team to identify areas of assessment for the 2000 needs assessment. This was delayed one year due to internal problems with data collection.	
T	T	T	Other .02 By the end of FY '98, improve the current Community Profiles database to incorporate user-friendly aspects of easy access and "push-button" reporting capabilities	Objective discontinued.	
T	T	T	Other .03 During FY '98, begin to trend indicators that measure the success of community development. Add one community per year to the needs assessment process	**Community Development** -The Mesa Needs/Resource Assessment process is almost completed. Due to the size of the community, over 350 Mesa parents, providers and citizens were interviewed or surveyed. -The Community Development Model of Evaluation was utilized to gather both factual and anecdotal information over the year.	-Mesa Partnership is planning the presentation of the results, considering content and method of presentation. -Analysis of information from the evaluation process will occur as a document is written describing the model.
T	T	T	Other .04 By September 30, 1999 develop and implement the ADHS homepage on the internet	**Child Health (OWCH and OCSHCN)** - Child Health information is included on the Web page	- Expand Child Health information available on the internet
				Pregnancy & Breastfeeding Hotline (OWCH) - Paid advertisement with US West link in Pima and Maricopa Counties - Updated program's web page	- Continue to expand OWCH Pregnancy and Breastfeeding Hotline paid advertisement - Continued to expand and update information provided on the ADHS/OWCH web page

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HRPP (OWCH) - 865 children with special health care needs were seen by the HRPP/NICP Community Health Nurses	- Revise guidelines for referral & service provision
	T		Other .05 By December 31, 1998 develop and implement a plan for an automated surveillance system for child health status	**Child Health (OWCH)** - CHIP expanded to 150 schools - ADE provided with information - Completed back end work for database - New modules added to the software - Sustainable/affordable training component arranged - Arrangements made for continuing tech support and software enhancement - Aggregate data made available on the internet	- Expand program to 175 schools - Assist trainers and tech support providers to provide service to CHIP users. - Collaborate with ADE to maximize use of CHIP data. - Add enhancements to software
	T		Other .06 Reduce low hemoglobin - iron deficiency to < 3% among children aged 1 through 4 years.	**Nutrition (OWCH)** - Implemented strategic plan - Coordinated anemia team meetings within LANDAA	- Identify causes - Identify potential interventions - Conduct field studies - Refine medical referral process
T			Other .07 By March, 1999 develop Midwife Licensing System to monitor quarterly report data.	**Licensed Midwife Program (OWCH)** - Analyzed data on three years of home births with help of CDC Project Specialist - Prepared reports on safety of home birth in Arizona	- Distribute reports on safety of home birth in Arizona - Publish article based on analysis of three years of home birth outcomes
T	T		Other .08 Support/assist communities in identifying there community health needs and ways to address them on an ongoing basis. Other .09 By December 30, 2002, the TA Network Directory and Web page will be maintained by a community organization that provides community development technical assistance	**Community Development (OWCH)** - Continue collaboration with ADHS offices and counties on identifying community health needs - Continue collaboration with IHS to expand the Indian Health Care Coalition activities to improve the health of all Native Americans in Arizona - Participated in Healthy Communities (which replaced Turning Point activities) to continue to identify the needs of local communities and develop achievable action steps - A few tribes have expressed an interest in sponsoring a Gathering of Native Americans (GONA) event and have inquired about some funding to assist with the event	- Continue to collaborate with ADHS offices to improve health needs/systems development at the local level - Continue to collaborate on the Indian Health Care Coalition - Continue to participate on Healthy Communities - Continue to make funding available for GONA events

Population** A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				CISS Grant (OWCH) - The TA Network sponsored a repeat of the FY 99 distance learning training on Collaboration Building - The TA Network sponsored a regional Group Facilitation training in Navajo County that was facilitated by the Institute of Cultural Affairs (ICA) - The first edition of the TA Network's Directory, "Who's Who In Community Health Development: A Resource Directory for Skill Building" was printed and distributed - The TA Network's Directory, "Who's Who In Community Health Development: A Resource Directory for Skill Building" was put on the TA Network's web page - The second and final printed edition of The TA Network's Directory, "Who's Who In Community Health Development: A Resource Directory for Skill Building" was printed and distributed - One county health department and 5 tribal health departments received funding for assistance with INTERNET installation (To date, a total of 11 local health departments, 5 county and 6 tribal health departments, received funding for assistance with INTERNET installation) - Archival notebook of the TA Network has been assembled - If funds available, will implement follow-up training for all those that participated in the Group Facilitation Training events since the grant started - If funds available, will explore a one or two day community development event to cover a variety of community development topics	- The TA Network Project ends 9/30/00 - The Office of Women's and Children's Health will maintain the TA Network's Web page, including the online TA Network's Directory, "Who's Who In Community Health Development: A Resource Directory for Skill Building", until a community organization can be found to take over these activities
T	T	T	Other.10 (NEW 2001) Improve current Community Oral Health Profile system	**Office of Oral Health**	- Update data sources - Develop a plan for including new data sources - Develop a plan for data reporting
	T		Other.11 (NEW 2001) Add BMI to CHIP to begin tracking childhood obesity and related health issues	**Child Health (OWCH)**	- Make database modifications - Provide updated database to CHIP users

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
Performance Measure 4 (Type: Risk factor) Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, hemoglobinopathies [(e.g. the sickle cell disease) (combined)]. **Related to Healthy People 2000 Objective 14.15** Increase to at least 95% the proportion of newborns screened by State-sponsored programs for genetic disorders and other disabling conditions.					
T			4.01 Follow-up on recommendations by MCH Newborn Screening Evaluator to modify programs.	Newborn Screening (OWCH) - Continued to review and revise Follow-up protocols and the internal policy manual - Continued to collaborate with the Sickle Cell Program to assure a smooth transition of follow-up for infants with abnormal hemoglobin test results on the newborn screen - Continued to collaborate with regional NBS and Genetics providers to strengthen coordination and cooperation - Continued the efforts to educate health care professionals and the general public about the NBS program, testing, obtaining samples and the addition of another test - Developed two training videos for professionals, one as a stand-alone training on NBS and the other to enrich an on-site training session	- Continue to review and revise Follow-up protocols and the internal policy manual - Continue to collaborate with the Sickle Cell Program to assure a smooth transition of follow-up for infants with abnormal hemoglobin test results on the newborn screen - Continue to collaborate with regional NBS and Genetics providers to strengthen coordination and cooperation - Continue the efforts to educate health care professionals and the general public about the NBS program, testing, obtaining samples and the addition of another test
T			4.02 Develop continuous quality improvement for submitters of NBS specimens	Newborn Screening (OWCH) - Unsatisfactory specimens remained at less than 1% - The database for the follow-up of abnormal specimens required continued modification and was not finished until FY2000 - QA reports on program data have been developed, and will be used as part of a comprehensive QA plan	- Maintain the unsatisfactory specimen rate at less than 1% - Review existing data to assess where improvement could be expected - Develop a comprehensive QA plan for data acquisition and use. Review QA of contracted laboratory services
T			4.03 Evaluate the feasibility of adding congenital adrenal hyperplasia to the Newborn Screening Panel 4.04 Implement the addition of another test to the screening panel, and determine the need and feasibility of mandating a second NBS.	Newborn Screening (OWCH) - Continued with the Rules process to make the required changes - Continued to work with the laboratory, health care providers, advisory staff, and others to implement the new test - Continued with an analysis of the Economic Impact of the proposed Rules changes - Worked with legislators to change the NBS legislation which is inhibiting the ability of the program to require a second test, a prerequisite for adding congenital adrenal hyperplasia to the screening panel. Legislative changes were not made this year	- Continue with the Rules process to make the required changes - Continue to work with the laboratory, health care providers, advisory staff, and others to implement the new test - Complete the Rules process and implement the new Rules

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T			**4.05 Develop and implement strategies to improve data acquisition, integrity, quality and completeness.**	**<u>Sensory Program (OWCH)</u>** **- SPRANS grant was awarded to conduct feasibility study on linking public health databases** **- Newborn Metabolic screening program has the lead on the grant project and the Sensory program is participating on the project team**	**- Continue to participate on the SPRANS Grant team regarding linking related public health databases**
				<u>Newborn Screening (OWCH)</u> **- Continued to communicate with those managing the Electronic Birth Certificate project. Program is working towards linking the NBS databases with the Vital Statistics databases to better determine the number and identity of babies missed in screening** **-Through the QA Reports on program data that have been developed, data acquisition, integrity and completeness are being assessed. Plans are being developed and implemented, as part of a comprehensive QA plan, to improve the quality and completeness of data** **- Established communication with other appropriate sources of data to check the validity of the data, and develop mechanisms to obtain more complete data** **- Was awarded a SPRANS Planning Grant to develop a plan for data sharing among programs providing early identification or early intervention for children with special needs. This should improve rates of early identification and coordination with early intervention programs** **- Implemented the development of a data sharing/linking/matching plan**	**- Continue to work with those managing the Electronic Birth Certificate project and others to develop an integrated plan for data sharing/linking/matching to facilitate information transfer among programs involved with early identification and early intervention with children with special health needs** **- Continue to review program data and to implement mechanisms to improve data** **- Continue to collaborate with those having other appropriate sources of data**

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T			**4.06 Develop and implement an over-all plan to educate health care providers (at various levels), agencies helping pregnant women, and the general public about NBS.**	**Newborn Screening (OWCH)** **- Continued to develop and/or purchase educational materials for use with health care providers, staff of other agencies providing services to pregnant women and/or young families, and the general public** **- Continued to distribute a general program brochure for parents (English and Spanish), a fact sheet about the program for agencies, brochures about seven different disorders, and other materials. Over 60,000 brochures were distributed** **- Continued to provide education about NBS to appropriate groups. Presented aspects of the program at over 50 activities** **- Continued to collaborate with local agencies, regional NBS and Genetics providers and others to develop and/or update Web pages, manuals, guidelines and other documents** **- Continued to work with Health Start in educating hard-to-reach pregnant women** **- Developed a PSA informing parents about NBS and recommending that they ask their doctors for a second newborn screening test** **- Developed two videos to be used in training professionals about NBS, one a stand-alone video and the other one used to enrich an on-site training session**	**- Continue to develop and/or purchase educational materials** **- Continue to provide education about NBS to appropriate groups** **- Continue to work with the Health Start Program in educating hard-to-reach pregnant women** **- Continue to collaborate with other appropriate agencies and programs** **- Begin to distribute the stand-along video and obtain feedback on its effectiveness**
				CIC (OWCH) **- The CIC telephone number is utilized in NBS correspondence as the number to call if the client is Spanish speaking** **- The CIC hotline staff provided bilingual support services to the NBS program to accept and place follow-up calls**	**- Staff will continue to collaborate and support the NBS Program**
T			**4.07 Maintain CHN/NBS Project in all counties**	**High Risk Perinatal Program (OWCH)** **- Provided CHN education & drawing of blood tests when appropriate in all 15 AZ counties** **- Provided in-home education during CHN visits to clients' families on NBS, the collection of blood for NBS.**	**- CHN's will continue to provide home visits to educate & facilitate repeat second NB screenings** **- Identification**

Performance Measure 5 (Type: Risk factor)
Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B
Related to Healthy People 2000 Objective 20.11
90% of children will have completed the full immunization schedule through age 2 (19-35 months).

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T		**5.01 Continue to promote immunization as a priority in all OWCH programs addressing child health.**	**Health Start (OWCH)** - Provided Health Start at 8 sites throughout the state - Additional sites added in July, 2000 - Lay health workers provided education on immunizations at home visits and group education - Assessed, educated and monitored the status of immunizations on all Health Start children - Collected data from clients on age appropriate immunizations for their children	- Lay health workers will continue to provide home and class education. - Collect data from program participants regarding those age appropriately immunized. - Lay health workers will participate in community activities (fairs, town meetings, etc.) and be educated about age appropriate immunizations
				Newborn Screening (OWCH) - Continued to work with the Maricopa County Childhood Immunization Program to coordinate efforts to increase childhood immunization rates and the number of infants receiving two Newborn Screens - Continued to work with the Phoenix Fire Department, which holds regular immunization clinics, to enable them to collect repeat Newborn Screens, on an irregular basis, with the NBS program informing parents of this service, as appropriate, and encouraging them to take advantage of both services for the children in the family	- Continue to collaborate with the Maricopa County Childhood Immunization Program - Continue to work with the Phoenix Fire Department, and others providing immunization clinics, to accomplish shared goals
				CIC (OWCH) - Participated in the TAPII steering committee which provides direct support in its' effort to promote public awareness and to ensure that Arizona children receive their immunizations on time - Promoted immunizations through dissemination of materials at public events and community health fairs	- Continue to support and collaborate with TAPII and ADHS
				Licensed Midwife Program (OWCH) - Licensed Midwives provided with continuing education on newborn protection and immunizations	- Continue to update Licensed Midwives with current information on immunizations
				EMSC (OWCH) - Provided immunization brochures at various meetings and conferences related to EMSC	Discontinued
				Child Health (OWCH) - 1000 KareBooks were distributed to participants in the Hand Held Medical Record project and to designated Health Start sites - KareBooks were made available on CDs to organizations interested in printing them for themselves - Additional KareBooks were printed and disseminated to interested agencies - School nurses recorded immunization information into CHIP - SBHCs provided immunizations to the children they serve as an EPSDT service	- Continue to provide KareBook CDs to anyone requesting them - Increase school nurse participation in CHIP to 175 schools - Support expansion of SBHCs and their provision of immunizations

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				High Risk Perinatal Programs (OWCH) - Participated in the development of data collection forms & Report formats which will enable the statewide analysis of data related to immunization status of children enrolled in the HRPP/NICP - Continued to promote an early immunization practice within HRPP/NICP contracted hospitals - Collected & analyzed data related to immunization status on a statewide basis	- Continue to promote early immunization practice within HRPP/NICP contracted hospitals - Continue to collect, monitor & analyze data related to immunization status (statewide) of HRPP/NICP enrolled infants & children - Continue to promote the immunization of children through monitoring data & education of staff & families.
				County Prenatal Block Grant (OWCH) - Immunizations were provided for infants in several counties that have mothers enrolled in case management programs - Information on immunization was provided by all county health departments - Immunizations were provided for infants and children through Graham County's Well Child Clinic - Navajo County Health Department assisted immunization clinics throughout the southern part of the county and provided education on the importance of immunization - Mohave County provided immunization services to infants and children - LaPaz County provided immunization to infants and children in conjunction with prenatal services provided to women and mothers	- Immunization will continue to be an area for which county health departments will provide direct services and/or information and referrals
T	T		5.02 93% of the Health Start children will be identified as age appropriately immunized based on data received.	**Health Start (OWCH)** - Analysis of data verified that 93% of the children were age appropriately immunized - Provided community education on the importance of proper immunization of children - Provided community education and monitored immunizations	**Health Start** - Continue to provide community education on the importance of proper immunization of children - Continue to provide community education and monitor immunizations of Health Start children

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
Performance Measure 6 (Type: Risk factor) The rate of birth (per 1,000) for teenagers aged 15 through 17 years Related to Healthy People 2000 Objective 5.1 Reduce pregnancies among females aged 15-17 to no more than 50 per 1,000 females aged 15-17.					
T	T	T	6.01 Implement a statewide media campaign to promote Abstinence Until Marriage 6.02 Implement a technical assistance and training program to assist providers of service and implementing abstinence education program. 6.03 Implement a statewide evaluation of abstinence education program. 6.04 Develop and implement a statewide program monitoring plan and provide mechanisms for feedback and program improvement.	Community Development (OWCH) - Met with contact person from CDC and other state agencies to discuss possible options regarding the implementation of the CDC's YRBS in Arizona during FY2001, that will be used statewide in the schools, to collect data on students that self report abstinence	- Will continue to explore possibility of implementing the YRBS in the Spring of FY2001
				Abstinence Only Education (OWCH) - Launched media messages to target males - Expanded local education programs to cover one additional county, now have coverage in 12 of 15 counties - Issued an RFP for mini-grants. Seven projects were funded to provided abstinence only education projects primarily in areas of state that are not currently being served. Projects were funded to cover the three counties who do not currently have ongoing programs - Planning for the youth conference has begun. Date has tentatively been set for June 8, 2001 - Parent/Youth committee established - Distributed Abstinence Education materials at the Arizona Family Fun Fest - An Evaluation Institute was held for contractor - Partnered with the Arizona Department of Education to provide training for the WAIT abstinence curriculum - Completed and distributed first year evaluation report	- Launch phase two of the media campaign - Expand scope of the program evaluation - Expand educational website - Sponsor an Abstinence Education conference - Issue another RFP for mini grants - Continue training collaboration with Department of Education - Refine provision of services based on annual evaluation report - Research need for Spanish abstinence only education materials and curriculum and identify outreach strategies for same population
	T		6.05 County Health Departments and programs working with adolescents will explore methodology for STD reduction among adolescents.	Reproductive Health/Family Planning (OWCH) - Data was presented at AAHC quarterly meeting	- Continue to provide data and strategies for reduction to the AAHC
				Adolescent Health (OWCH) - Data was provided to AAHC members through presentations at quarterly meetings	- Continue to provided data and current strategies on STD reduction to AAHC members and others.
	T		6.06 Provide information on abstinence programs to those working with adolescents. 6.07 Reproductive Health/Family Planning services are accessible to teenagers as an option to prevent pregnancy	Adolescent Health (OWCH) - Presented three sessions on Abstinence at the Adolescent Health Coalition Conference - Presented information on the Abstinence program at AAHC Quarterly meetings	- Continue to provide information to AAHC members through presentations at quarterly meetings.
				Family Planning/Reproductive Health (OWCH)	- All contractors will provide RH/FP services to adolescents.

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HMHB (OWCH) - Seven coalitions sponsored Teen Maze's where educational materials on risks associated with teenage pregnancy were distributed; participatory activities designed to discourage pregnancy by teenagers were provided for girls and boys - Eleven coalitions sponsored or participated in local health fairs where educational materials were distributed to discourage teenage pregnancy - Maricopa County coalition conducted four Teen Fairs including a Teen Maze at Camelback High School; developed a community outreach prenatal education program through their newly created Prenatal Care and Teen Fair Subcommittees	- Continue to provide educational information on the risks associated with teenage pregnancy at local community events - Continue to conduct health fairs, Teen Mazes, Baby Showers and other activities advocating for teenage pregnancy prevention - Continue to provide educational materials to local libraries on teenage pregnancy prevention
Performance Measure 7 (Type: Risk factor) Percent of third grade children who have received protective sealants on at least one permanent molar tooth. **Healthy People Objective 13.8** Increase to at least 50% the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of the permanent molar teeth.					
T	T		7.01 By FY 1999 the Office or Oral Health will affect policy development and standards in oral health care.	**Office of Oral Health** - Improved dental care delivery to 8 prepaid plans serving 537,036 members - Provided consultation, collaboration and technical assistance to 15 agencies and communities - Assessed oral health status of approximately 3,500 children participating in the Arizona School Dental Survey (surveillance system) - Provided technical assistance on policy issues to at least 15 Arizona agencies	- Continue state oral health needs assessment and use the findings to direct community/program policies and standards - Provide consultation, technical assistance and/or collaboration on oral health issues and dental programs for at least 15 public agencies, non-profit organizations, dental health groups and communities. - Improve dental care delivery systems of at least seven Arizona prepaid dental plan organizations serving 500,000 plan members.
T			7.02 By FY 2000 OOH will increase knowledge of BBTD prevention through oral health education delivered by WIC and other non-dental health care educators	**Office of Oral Health** - Discontinued	- Discontinued
				Early Childhood Edcation (OWCH) - Successfully piloted Oral Health Curriculum to 40 trainers through the T3 System	- Training will continue as needed and as requested
T	T		7.03 By FY 2001, OOH will increase knowledge of Early Childhood Caries prevention through professional and public education.	**Office of Oral Health** - Provided early childhood education to 200 personnel of WIC and Head Start facilities - Applied for and received additional funding to support early childhood education of health professionals from a local foundation - Early Childhood Caries conference to be held August 18, 2000 for dentists and dental hygienists - Integrated early childhood caries education training module into a home visiting nursing program (Return to Basics)	- Provide education on early childhood caries to Arizona health professionals - Collaborate with public and provide agencies to promote ECC education

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		**7.04 By FY '99 the Office of Oral Health will prevent tooth decay in high risk and special needs populations through the delivery of preventive dental care.**	**Office of Oral Health** **- Provided dental sealants to over 4,000 high risk children through the Arizona Dental Sealant Program** **- Applied for and received additional funding from HRSA for the expansion of school-based dental sealant programs in rural areas of Arizona** **- Provided school-based fluoride mouthrinse to 46,868 children in 126 schools** **- Applied for and received additional funding from CDC for water fluoridation efforts** **- Assisted one community purchase water fluoridation equipment with a CDC fluoridation grant** **-Assisted two communities with technical assistance on water fluoridation education**	**- Provide dental sealants to at least 4,000 high risk children** **- Provide school-based fluoride mouthrinse to at least 40,000 high risk children for tooth decay prevention**
				Child Health (OWCH) **- Nurses in 150 schools documented oral health needs and provision of sealants through the CHIP program**	**- Increase to 175 the number of schools using CHIP to document provision of sealants and to identify and refer children for additional dental services**
	T		**7.05 By FY 2000 the Office of Oral Health will facilitate the development of community-based dental care services to high risk and special needs populations.**	**Office of Oral Health** **- Loaned four communities mobile dental units and dental equipment to communities in order to increase access to dental care for underserved residents** **- Provided six communities with technical assistance in the development of community-based dental care delivery systems** **- Coordinated a new Arizona Oral Health Task Force to address access to care issues in rural Arizona** **- Provided technical assistance and data support to the Bureau of Healthy Systems Development for the designation of Dental Health Professional Shortage Areas (D-HPSAs)** **- Maintained community oral health profile and distributed to communities to assist in development of local dental care delivery systems**	**- Loan communities four mobile dental units and dental equipment to increase access to dental care for underserved residents** **- Coordinate an oral health task force to increase access to oral health services** **- Provide technical assistance to at least two community agencies for the development of community-based oral health care delivery systems**

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T		**7.06 By FY 1999 the Office of Oral Health will increase the knowledge of oral health care by providing education, training, resources, and communication to Arizona residents, communities, and health professionals.**	**Office of Oral Health** **- Provided oral health education to 9,100 Arizona residents through classroom education, community health fairs, dental screenings and promotional events, including 600 special needs residents** **- Provided professional education on oral health issues to an estimated 728 Arizona health professionals** **- Collaborated with the Arizona Dairy Council to develop a nutrition and oral health education curriculum for all public elementary schools** **- Developed and distributed dental screening guides for oral assessment of children to all public and private schools** **- Began the development of an oral health curriculum for Arizona elementary schools** **- Developed an oral health resource library for professionals and consumers**	**- Provide oral health education to 5,000 Arizona residents through classroom education, community health fairs, dental screenings and promotional events** **- Provide professional education on oral health issues to 5,000 Arizona health professionals** **- Maintain an oral health resource library for use by health professionals and educators**

Performance Measure 8 (Type: Risk factor)
The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children.
Healthy People Objective 9.3a
Reduce deaths to children aged 14 and younger caused by motor vehicle crashes to no more than 3.5 per 100,000 children aged 1-14.

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		**8.01 By September 30, 1999 implement a statewide Emergency Medical Services for Children system**	**<u>Emergency Medical Services for Children (OWCH)</u>** **- Developed Web page for EMSC** **- Completed the prehospital and Emergency Dept training survey analysis of data** **- Made arrangements with the U of A Emergency Medicine Resource Center to duplicate 6 training CDROMs** **- Distributed the CDROMs to the EMSC National Resource Center and Arizona EMS Providers** **- Made information and resources available to EMS providers and lay public through cooperation with the PCH Emily Center** **- Provided School Nurse EMSC Training June 8-10,2000** **- Convened quarterly meetings of the EMSC Advisory group** **- Participated in the Intermountain Regional EMS for Children Coordinating council** **- Supported the IRECC Conference to be held in Tucson** **- Completed Arizona Resources Guide for Behavioral Health Resources (Suicide referral information)** **- Participated in the Arizona Suicide Prevention Coalition and ADHS Interdepartmental Steering Committee for Adolescent Suicide** **- Supported the continuation of Child Health Status Indicator data** **- Developed EMSC exhibit displayed at 12 community events conferences** **- Edited the Guidelines for Emergency Care and Transport** **- Distributed the NAEMT Model Pediatric Protocols to the EMSC Advisory Group for use as a companion standards document**	**- Provide School Nurse EMSC Training** **- Enhance and update web page** **- Continue to support training and resource provision through the Emily Center at Phoenix Children's Hospital** **- Showcase the EMSC Program through exhibits and community events** **- Participate on the CODES Advisory Board** **- Establish a common data set** **- Collect appropriate EMSC data for reporting purposes** **- Continue participation on the AZ Suicide Prevention Coalition** **- Implement a suicide prevention program modeled after Alaska's EMS program** **- Obtain approval by the EMS Committees for EMSC Guidelines and Protocols**
	T		**8.02 Coordinate a statewide school injury surveillance program for children.**	**<u>Injury Prevention Program</u>** **- Provided injury prevention/safety material to ADHS programs, individuals, child care centers, schools, community based organizations, and County Health Departments** **- Supported NHTSA Child Passenger Safety Technician Training** **- Conducted and/or co-sponsored seven educational campaigns to increase public awareness for injury prevention in Az.**	**- Continue to provide injury prevention/safety material to ADHS programs, individuals, child care centers, schools, community based organizations, and County Health Departments** **- Continue to support NHTSA Child Passenger Safety Technician Training** **- In collaboration with GOHS and EMSC, support Child Passenger Safety Training for Special Needs Seats** **- Continue to support and increase public awareness through educational campaigns for injury prevention in Arizona**
				<u>CIC and Pregnancy and Breastfeeding Hotline (OWCH)</u> **- Provided information and referrals for car seats to women and families with children**	**- Continue to support and promote public awareness through dissemination of materials and referrals on how to obtain car seats as available through efforts from the Governor's Office of Highway Safety**

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				School Injury Surveillance (OWCH) - Injury Surveillance reports were generated from CHIP data - Participating schools were surveyed to determine impact and value of this program	- Review surveys and determine future course of injury surveillance activities/program - Convert non-CHIP data so it can be included in reports generated by CHIP
T	T		8.03 Instruct families in the use of car seats, home and pool safety.	**High Risk Perinatal Program (OWCH)** - Increased car seat education & training to 69% of Level II, II EQ & III hospitals - Increased discharge of infant in car seat to 55% of Level II, II EQ & III hospitals - Provided information to families on car seat usage & other general safety information through contract providers - Provided a list of resources for car seats to families through contract providers	- Increase car seat education & training to 80% of Level II, II EQ & III hospitals - Increase car seat usage at time of discharge to 75% of Level II, II EQ & III hospitals - Continue to provide information to families on car seat usage & other safety information through contract providers, in both English & Spanish - Continue to update & distribute to program contractors a list of resources for obtaining car seats
				EMSC (OWCH) - Continued to enhance the EMSC Resource Center within OWCH and the Emily Center - Promoted the Coalition on Child Abuse Blue ribbon Campaign - Developed/obtained child safety/prevention brochures to distribute at community events	- EMSC Program moved out of OWCH to the EMS Bureau
				Injury Prevention - Funded four Safe Communities Projects throughout Arizona. Safe Communities projects address intentional and unintentional injuries - Published articles and ads to educate targeted high risk injury groups (Arizona Black Pages, the Board Monitor, Community Newspapers)	- Continue to publish articles and ads to educate targeted high risk injury groups - Continue Safe Communities Projects, incorporating violence prevention - Continue to fund violence prevention projects through SAFE Communities and/or other community based projects (suicide, gang violence, and other violence-related programs)
				Licensed Midwife Program (OWCH) - Licensed Midwives received the latest information on infant safety	- Continue to assure that Licensed Midwives receive the latest information on infant safety
				County Prenatal Block Grant (OWCH) - Educational information on the importance of car seats was provided to all county health departments. This information is made available to residents at the health departments - Gila County distributed car seats on a loan basis to their residents - Coconino County provided CPR classes for children - Cochise County purchased videos and books and distributed them to eight libraries that included safety information for infants and children	- County health departments will continue their efforts to increase knowledge of risks to infants and children in cars, riding bicycles and swimming pools - Counties that provide car seats and helmets will continue this activity and seek resources to expand the activity - Educational information will continue to be distributed at county health departments, health fairs, Baby Showers and other events conducted in the community

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				Health Start (OWCH) - Assessed and monitored participants in the use of car seats, home and pool safety - Educated all participants in safety in the car, home and pool - Collected data on safety habits	- Continue to assess and monitor program families' use of car seats, home and pool safety - Continue to educate participants in safety in the car, home and pool - Continue to collect data on program participants' safety habits - Lay health workers will provide safety education at community functions
				Community Development (OWCH) - Met with contact person from CDC and other state agencies to discuss possible options regarding the implementation of the CDC's YRBS in Arizona during FY2001, that will be used statewide in the schools, to collect data on students self report of motor vehicle safety	- Will continue to explore possibility of implementing the YRBS in the Spring of FY2001
Performance Measure 9 (Type: Risk factor) Percentage of mothers who breastfeed their infants at hospital discharge Related to Healthy People 2000 Objective 2.11 Increase to at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50% the proportion who continue breastfeeding until 5 to 6 months old.					
T	T		9.01 Ensure breastfeeding emphasis promotion in all OWCH programs 9.02 95% of mothers served by OWCH recognize the importance of breastfeeding 9.03 (NEW 2001): 100% of hotline staff will have completed the Human Lactation Breastfeeding Course	**Health Start (OWCH)** - Funding for the program was reduced in 1999 and 8 sites continued to operate - In July, 2000 funding and sites increased - Lay health workers provided education and techniques on breastfeeding with each home visit - Collected data on breastfeeding from participants	- Lay Health Workers will provide home and class education on the importance and techniques of successful breastfeeding. - Continue to ensure breastfeeding education at each home visit. - Utilize, teach, and distribute breastfeeding literature, and KareBooks to families on the program. - Collect data from program participants regarding those who breast feed prenatally and postpartum.
				Licensed Midwife Program (OWCH) - Provided licensed midwives with breastfeeding updates for continued promotion among women who give birth at home	- Continue to provide Licensed Midwives with breastfeeding updates for continued promotion among women who give birth at home
				HMHB (OWCH) - Native American Sub-Committee conducted their 11th Annual Maternity Fair; implemented the Breastfeeding Education Protocol developed in partnership with the March of Dimes and ADHS - Coalitions distributed educational materials on Breastfeeding at heath fairs, maternity fairs and other community activities conducted in their communities; educational materials were also placed in libraries	- Continue efforts of promoting breastfeeding by distribution educational materials at health fairs, maternity fairs, Baby Showers and other community events

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				County Prenatal Block Grant (OWCH) - Breastfeeding was promoted by all county health departments through various programs - Information on the importance of breastfeeding was provided in their prenatal education programs - LaPaz, Navajo, Cochise and Apache County Health Departments have lending libraries that provided videos and educational materials on breastfeeding - Educational information on breastfeeding was distributed at health fairs	- County health departments will continue to promote breastfeeding as an important component of prenatal care; and will support breastfeeding promotions - Educational materials will continue to be distributed at health fairs, Baby Showers and other events conducted in the community
				Nutrition (OWCH) - Continued distribution of Model Breastfeeding Hospital Policy &Breastfeeding Education Protocol to APT certified hospitals - Proctored 2 Pregnancy Hotline staff through completion of the DEP Human Lactation & Breastfeeding Course - Revised the DEP LactationCourse to become a 5 day intensive course recognized by IBCLE which was piloted with 15 WIC staff at CAC. (Central Az College) - Continued pump loan program and breastfeeding incentives offered to mothers and babies on WIC - Revitalized breastfeeding peer couselor programs in 3 WIC agencies (Clinica Adelante,Pinal Co,CoconinoCo)and continued same program in Pima - Az Breastfeeding Coalition awarded CATCH grant from AAP in12/99 and achieves 501c3 status - Celebrated World BF Week with billboards, table tents, baby showers, poster contests, & media blitzes statewide 8/1-7,2000 - 4 WIC agencies achieve HP2000 objectives for breastfeeding initiation of 75% (Coconino Co, Mariposa CHC, El Rio CHC, Yavapai Co) - Adopted an Employee Breastfeeding Policy for ONS as a pilot with plan to extend to CFHS. Ctd employee policies in 4 local agencies. (Maricopa, Pimal, Coconino, Yavapai Co WIC)	- Provide ongoing support and materials to the Pregnancy & Breastfeeding Hotline staff for packets and health fairs - Continue to proctor staff through the DEP Lactation Course from CAC - Continue BF Newsletter with inserts for use in medical offices - Support Az BF Coalition Meetings and committee activities - Train all WIC staff on automated breastfeeding questions & data collection and reports - Automate pump inventory and tracking - Implement automated care plans and breastfeeding instruction and doctor referral program. - Develop Peer Counselor program statewide - Partner with insurance companies to pay for pump rentals for mothers of hospitalized infants - Sponsor BF speakers and inservices for WIC and hospital staff - CFHS BF Policy Comm will expand the ONS Pilot BF Policy to CFHS/ADHS
				Child Health (OWCH) - 1000 Karebooks were distributed - Karebooks on CD were distributed to interested agencies	- Promote dissemination of Karebooks to expectant/new mothers through service providers - Give providers Karebooks on CD so they can print and provide these books to women

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				High Risk Perinatal Program (OWCH) - Each HRPP/NICP CHN ensures breast feeding education (including technique) occurs at each home visit, when appropriate - Encouraged increased participation in breast feeding education availability in Level II, II EQ & III hospital nurseries	- Continue to support & encourage breast feeding education for all hospital nursery staff - Assure contracted providers use resources, like lactation consultants & current techniques & education, for the enhancement of their knowledge of breast feeding
				Preagnancy and Breastfeeding Hotline (OWCH) - Represented OWCH in the Statewide Breastfeeding Coalition - Provided breastfeeding materials and information packets - Promoted breastfeeding through dissemination of breastfeeding brochures - Provided breastfeeding counseling to pregnant/postpartum mothers via hotline - Two of three full time staff have completed the Human Lactation Breastfeeding Course to improve counseling services to callers	- Continue to expand professional knowledge on breastfeeding - Continue to represent OWCH in the coalition and provide on-going support - Continue to disseminate breastfeeding information through packets and at health fair events - Continue to provide breastfeeding counseling
T			9.04 By September 30, 1998 expand Pregnancy & Breast-feeding Hotline to handle Baby AZ calls	**Pregnancy & Breastfeeding Hotline (OWCH)** - Served 10,900 callers requesting information on how to obtain prenatal care. Approximately 10% requested other social service information - Continued to collaborate as the initial contact point for the "Baby Arizona" campaign - Participated in and exhibited at public health promotional events - Provided bilingual communication support for ADHS media activities - Served on Baby Arizona steering, evaluation and work group committee - Served as the initial contact point in the Baby Arizona sponsorship of the Healthy Start South Phoenix Project - Served as the initial contact point in the Healthy Mother's Healthy Babies sponsorship of the Maryvale Prenatal Care Public Awareness Project - Conducted surveys and provided measures of statistical information to Folate subcommittee	- Expand the number of incoming calls received (approximately 12,000) - Strengthen the involvement with the Alliance of Information and Referral Systems and complete the AIRS certification program - Secure additional staff as needed to adequately serve the increase in calls - Continue to expand hotline staff skills development and knowledge - Continue to strengthen collaboration efforts with other agencies - Continue to establish ongoing links that focus on women of child bearing age - Further marketing strategies to promote the Pregnancy and Breast-feeding Hotline - Develop and implement program evaluation plan - Continue to provide technical support to ADHS/CFHS/OWCH programs and community agencies - Strengthen the involvement with the Alliance of Information & Referral Systems - Continue to increase the number of women through the Baby Arizona streamlined process
T			9.05 By FY 2000, 90% of the pregnant women calling the hotline will have received some level of entry into prenatal care by the time of delivery.	**Pregnancy & Breastfeeding Hotline (OWCH)** - Ability to provide follow-up calls was limited by staffing constraints	- Increase the number of follow-up calls to verify entry into prenatal care.

Performance Measure 10 (Type: Risk factor)
Percentage of newborns who have been screened for hearing impairment before hospital discharge.
Related to Healthy People 2000 Objective s:
17.6 Reduce significant hearing impairment to a prevalance of no more than 82 per 1,000 people.
17.16 Reduce the average age at which children with significant hearing impairment are identified to no more than 12 months of age.

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
T	T		**10.01 Develop training curriculum for developmentally appropriate hearing screening for children age 0 - 5.**	**Sensory Program (OWCH)** **- One Train-the-Trainer (T3) Institute was held this year** **- 18 additional trainers completed the training for a total of 48 active trainers** **- More than 70 training workshops were held in FY 1999** **- More than 500 people were certified to do hearing screening through the T3 process in FY 1999**	**- Develop guidelines for re-certification of hearing screeners** **- Investigate the feasibility of modifying the workshop database to track certification of screeners**
				High Risk Perinatal Program (OWCH) **- Monitoring & retesting of children who failed their ABR's or hearing screening & referred them to early intervention services, was appropriate** **- Children were seen in Developmental Follow-Up Clinics where hearing screens were provided for infants at risk for hearing deficiencies.**	**- Assure that a minimum of two individuals for each Developmental Services contract provider has been trained in the use of otoacoustic emissions & tympanometry equipment which will be provided by the Arizona Ear Foundation** **- Continue to monitor children for hearing needs through the HRPP/NICP Developmental Services**
				Early Childhood Education (OWCH) **- Curriculum was successfully developed and piloted in October.** **- Hearing screening experienced growth in trained screeners in rural areas**	**- Revisions and updates to the hearing and vision curricula will continue**
	T		**10.02 By September 30, 1998, hearing screening compliance by private schools will be increased by 10%.**	**Sensory Program (OWCH)** **- Objective was discontinued**	
	T		**10.03 Maintain school hearing screening compliance rates.**	**Sensory Program (OWCH)** **- Hearing Screening rule revision process has been initiated with ADHS Rules Administration Unit** **- Use of otoacoustic emission technology for special populations has been incorporated into the revised draft of the rules** **- Requirement for re-certification of screeners has been incorporated into the revised draft of the rules** **- Trained an additional 18 hearing screening trainers through the T3 program for a total of 48 active trainers** **- Reminder postcards were sent to schools not reporting data for the 1998-99 school year** **- Data showed that 92% of students in required elementary grades in public, private, and charter schools were screened for hearing last year**	**- Work to complete the Hearing Program rules revision process** **- Investigate feasibility of modifying the school database to track audiometer calibration dates** **- Investigate the feasibility of modifying the database to track certification/re-certification dates for screeners**
T			**10.04 Assure screening of 60% of all babies born in Arizona within the first three months of life and decrease the average age of identification of hearing loss to less than one year of age.**	**Newborn Screening (OWCH)** **- Was awarded a SPRANS Planning Grant to develop a plan for data sharing among programs providing early identification or early intervention for children with special needs. This should improve rates of early identification and coordination with early intervention programs** **- Implemented the process to develop such a plan**	**- Complete the planning process for data sharing among programs providing early identification or early intervention for children with special needs** **- Investigate mechanisms by which the plan may be implemented**

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				HRPP (OWCH) - Universal screening issues were addressed by ADHS Site Reviewers during APT/APRS, Inc. Site Visits at Level II, II EQ & III hospitals	- Universal screening issues were addressed by ADHS Site Reviewers during APT/APRS, Inc. Site Visits at Level II, II EQ & III hospitals - Developmental Services contract providers provided hearing screening &
				Sensory Program (OWCH) - 36 hospitals have universal newborn hearing screening programs - More than 85% of all newborns are screened for hearing loss prior to discharge - Facilitated meetings with hospital screening programs, Never Too Young Advisory Board, Ear Foundation, Early Intervention programs, and Pediatric Audiologists to resolve data tracking and follow-up issues and provide networking opportunities for individuals involved in early identification and intervention efforts	- Continue working on efforts to link newborn hearing screening database to other related public health databases - Increase number of newborns screened to 95% - Continue working on efforts to link newborn hearing screening data to assessment and intervention systems
State Performance Measure #02: (Type: Risk Factor) The rate of hospitalizations for nonfatal injuries and poisonings for children aged 1-19. **Related to Healthy People 2000 Objectives:** 9.2: Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000 people. 9.2a: Reduce nonfatal unintentional injuries among black males so that hospitalizations for this condition are no more than 856 per 100,000 people. 7.4: Reduce the incidence of child abuse and neglect among medically and socially high risk infants and children in CFHS programs by 50%. 13.6 Extend the requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.					
	T		S2.01 By December 31, 1997 implement statewide injury training and curricula for train the trainer and health care providers.	**Injury Prevention** - Distributed Firearm Safety Brochure and provided training and education on the dangers of firearms - Co-sponsored Fire Prevention Week with Arizona Fire and Burn Educator's Association	- Continue to distribute Firearm Safety Brochure and provide training and education on the dangers of firearms
				EMSC (OWCH) - Continued to fund the resource center at the PCH Emily Center - Distributed 2 CD Roms within Arizona and through the National Resource Center on Emergency Care in the Special Needs Population	- EMSC Program moved out of OWCH to EMS Bureau

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	T		**S2.02 Develop and implement strategies for the prevention of adolescent suicide by September 30, 1999 and ongoing**	**Adolescent Health (OWCH)** **- Inter-Departmental Steering Committee for Adolescent Suicide Prevention met 3 times and developed an Action Plan that has not yet been approved** **- Participated on a Suicide Prevention Coalition developed in collaboration with EMPACT (suicide crisis response, prevention programs, curricula, intervention). Developed mission, vision committees. Participated on the Data and Research Committee that analyzed hospital discharge data on attempts by county, age, sex, ethnicity and method. Geomapping was conducted on completions** **- Developed and initiated a one year action plan for products and activities** **- Identified resources on the Net** **- Provided consultation and technical assistance to individuals and schools on crisis response, and community development to enhance resources** **- Collaborated with the Injury Prevention Program**	**- Continue active participation on the Suicide Prevention Coalition with all of their planned activities** **- Continue to pursue ADHS approval to take a lead role and/or partner with IHS** **- Continue to collaborate with the injury prevention program** **- Provide technical assistance and consultation to individuals, agencies, organizations and schools on adolescent depression, suicide prevention/intervention**
T	T	T	**S2.03 Provide safety education to all HRPP/OCSHCN families in their homes**	**High Risk Perinatal Program (OWCH & OCSHCN)** **- Community Health Nurses provided in home safety education to all HRPP/NICP clients & their families during home visits** **- Developmental Services Programs provided home safety & injury prevention information to families served by the program**	**- Continue to provide home safety & injury prevention education to families served by the HRPP/NICP Programs**
				Developmental and CHN Services **-Developmental and CHN services provide coordinated safety education through anticipatory guidance. Data is gathered regarding the use of car seats, immunizations, growth and nutrition as related to the age of the child.**	**-Continue to provide safety guidance throughout these programs.**
	T		**S2.04 Provide funds for coordination of School Nurse Emergency Medical Services for Children (SNEMS-C) workshops.**	**Child Health and EMSC (OWCH)** **- Conducted one SNEMS-C workshops**	**- Conduct one SNEMS-C workshop**
	T		**S2.05 Expand School Injury Surveillance to include more schools reporting.**	**School Injury Surveillance (OWCH)** **- Injury Surveillance is included in CHIP with over 150 participating schools** **- Provided injury surveillance reports to participating schools** **- Participating schools were surveyed to determine impact and value of this program**	**- Review surveys and determine future course of injury surveillance activities/program** **- Convert non-CHIP data so it can be included in reports generated by CHIP**

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	T		**S2.06 Collect injury data from schools for use in injury prevention and intervention programs**	**School Injury Surveillance (OWCH)** **- Injury Surveillance is included in 150 CHIP schools. An additional 120 schools submitted injury data using the old methodology** **- Provided injury surveillance reports to participating schools** **- Participating schools were surveyed to determine impact and value of this program**	**- Review surveys and determine future course of injury surveillance activities/program** **- Convert non-CHIP data so it can be included in reports generated by CHIP**
T	T		**S2.07 By September 30, 1999 implement a statewide Emergency Medical Services for Children system**	**EMSC (OWCH)** **- See 8.01**	**- See 8.01**
T	T		**S2.08 Reduce the incidence of child abuse and neglect among medically and socially high risk infants and children.**	**HMHB (OWCH)** **- Expanded distribution of educational materials on child abuse at health fairs, Baby Showers and placement in libraries and other public and private agencies**	**- Continue to advocate for improved maternal and child health services and the reduction of child abuse and neglect by providing educational materials and training**
				High Risk Perinatal Program (OWCH) **- Provided educational opportunities for providers & other community professionals on the importance of infant mental health & the risk factors that contribute to child abuse& neglect among medically & socially high risk infants & children** **- Designed data collection forms which will assist providers in identifying children who may be at risk for abuse & neglect**	**- Analyze program data related to children who are at risk for abuse & neglect & develop a referral process that addresses these needs** **- Continue to educate providers on factors which influence child abuse & neglect through support of the Infant Toddler Mental Health Coalition & Training Institute**
	T		**S2.09 Design and implement a statewide injury surveillance program for children.**	**Injury Prevention** **- MCH Epidemiologist collected and analyzed data on injuries to children and reported data to program for planning purposes**	**- Continue to collect and analyze injury data**
				EMSC (OWCH) **- Represented EMSC on the Arizona CODES Advisory Board**	**- EMSC Program moved out of OWCH to the EMS Bureau**
T	T		**S2.10 Instruct families in the use of car seats, home and pool safety.**	**High Risk Perinatal Program (OWCH)** **- Community Health Nurses provided in home education in the use of car seats, home & pool safety for children 0 - 12 months** **- Developmental Services provided information to families on car seat usage & injury prevention**	**- CHN's will continue to provide in home education in the use of car seats, home & pool safety for children 0 - 12 months** **- Continue to provide educational materials to families served by the HRPP on car seat usage & injury prevention**
				Licensed Midwife Program (OWCH) **- Provided the Licensed Midwives with the latest information on infant safety**	**- Continue to provide the Licensed Midwives with the latest information on infant safety**

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				Injury Prevention - Conducted one NHTSA Child Passenger Safety Technician Training and provided support for CPSS Check-Up Events statewide - Received 50 Car Seats from Governor's Office of Highway Safety and distributed seats throughout the state - Received 30 car seats from Allstate Insurance Company to distribute at Child Passenger Safety Seat Check-Up Events - Received Chevy Venture Van to be used for Child Passenger Safety Seat Check-Up Events statewide - Distributed over 2,200 bicycle helmets statewide - Distributed over 80 child safety seats statewide - Supported Child Safety Seat Check-ups statewide - Conducted and/or participated in 5 Child Safety Seat Inspections	- Continue to support NHTSA Child Passenger Safety Seat Technician Training throughout Arizona - Continue to support Child Safety Seat Check-ups statewide - Continue to Coordinate the Arizona SAFE KIDS Van for use in Child Passenger Safety Seat - Check Up-Events throughout Arizona
	T		S2.11 By December 31, 1998 pilot a community awareness campaign on prevention of intentional injuries, suicide & homicide.	**Health Start (OWCH)** - Funding was reduced in 1999 for Health Start with 8 sites in operation - Additional funding was received July, 2000 resulting in additional sites - Provided community education and education to families served by the program - Taught safety in the home and environment at home visitation and group education sessions - Conducted classes on violence prevention - Referred families to community programs for behavior issues	- Attend workshops on child abuse and neglect - Continue to conduct classes on violence prevention - Continue community education and education to families served by the Health Start program. - Teach safety in the home and environment. - Refer families to other programs for behavior issues.
				Injury Prevention - Conducted and/or co sponsored seven educational campaigns to increase public awareness for Injury Prevention in Arizona (Child Passenger Safety Week, National SAFE KIDS Week, Recall Round-up) - Continued to include intentional injuries and suicide in program focus - Continued to identify external partners for implementation of suicide prevention activities - Participated in Arizona Suicide Prevention Coalition activities	- Continue to support and increase public awareness through educational campaigns for Injury Prevention in Arizona (Child Passenger Safety Week, National SAFE KIDS Week, Recall Round-up) - Continue to support the efforts of the Arizona Suicide Prevention Coalition - Continue to support suicide prevention training and education throughout the state
				EMSC (OWCH) - Participated on the Interdepartmental and AZ Suicide Prevention Coalition - Developed a Guide to Behavioral Health resources in the state	- EMSC Program moved out of OWCH to EMS Bureau

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	T		**S2.12 Make information available to county health departments and community programs on substance abuse/use, violence, homicide & suicide.**	**Child Fatality Review** **- Distribute the annual report statewide**	**- Continue to refine data base to respond to community needs for requested information and respond appropriately to requests for special studies**
				Substance Abuse (Perinatal) Program (OWCH) **- Sponsored Phase I of a 2-day FAS Awareness Training the Trainer Workshop open to providers throughout the State that provided a curriculum, videos and educational information for use in their communities. Certificates provided for those who completed** **- Sponsored Phase II of the FAS Awareness Training the Trainer Workshop - A 2-day Workshop for providers and an evening session open to the public for increasing their knowledge of FAS**	**- Continue to provide training and information to providers and the public on perinatal substance abuse**
				Abstinence Only Education (OWCH) **- Provided training to abstinence education contractors on stress reduction, paternity determination, child support, sexual conduct with minors, STD's/HIV and AIDs and special population groups**	**- Continue to provide training to contractors on a quarterly basis**
				Injury Prevention (OWCH) **- Exhibited at three conferences and three community events** **- Coordinated the used of the Injury Catastrophe House to Schools and Community groups** **- Provided injury prevention/safety material to ADHS programs, individuals, child care** **- Provided consultation and technical assistant to county health departments, schools, Community-based groups and organizations involved in injury prevention** **- Represented OWCH**	**- Continue to make presentations on Injury Prevention and Control at conferences, workshops and training** **- Continue to Coordinate the used of the Injury Catastrophe House to Schools and Community groups** **- Continue to provide injury prevention/safety material to ADHS programs, individuals, child care centers, schools, community based organizations, and County Health Departments** **- Continue to support NHTSA Child Passenger Safety Technician Training.** **- In collaboration with GOHS and EMSC support Child Passenger Safety Training for Special Needs Seats** **- Continue to distribute Firearm Safety Brochure and support training and education on the dangers of firearms** **- Co-Sponsor Injury Prevention 101 Training with St. Joseph Hospital and Medical Center** **- Continue to provide consultation and technical assistant to county health departments, schools, Community-based groups and organizations involved in injury prevention** **- Continue to Represent Injury Prevention Program and OWCH on appropriate local, regional and national committees and boards** **- Continue to participate in the Arizona EMSC Advisory Committee** **- Continue to support and facilitate violence prevention training and educational Workshops. (Based on Availability of Funds)** **- Continue to Co-sponsor Violence Prevention Conferences and other related training throughout the state on injury prevention local, regional and national committees and boards**

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Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HRPP (OWCH) - Provided training sessions on domestic violence & the effects of violence on the young child through ADHS support of Arizona's Infant Toddler Mental Health Coalition's annual Institute - CHN's receive annual updates regarding safety as it relates to	- Continue to provide ADHS support of training sessions related to violence, substance abuse, homicide & suicide
				HMHB (OWCH) - Distributed information on Fetal Alcohol Syndrome and the risks associated with the use of alcohol, tobacco and other drugs by pregnant women to county health departments and at health fairs and other community activities - Coordinated activities with county health departments to increase knowledge of domestic violence by distributing educational materials	- Expand distribution of educational materials by coordinating activities with local health departments and other community groups with similar interests
				Family Planning/Reproductive Health (OWCH) - Domestic violence training was provided to all contractors - Completed revision of the original "Talking With Teens" curriculum	- "Talking With Teens- Depression and Suicide" training will be provided to all contractors
				Social Work Services (OWCH) - Co-sponsored and participated on the conference planning committees for Child Abuse Prevention and the Family Centered Practice Conferences and member of the Child Abuse Prevention Advisory Board, and the DES/Division of Children, Youth and Families Advisory Board - Included domestic violence and child abuse issues in the Standards for the Provision of Perinatal Social Work Services - Participated in workshops and conferences about preventing child abuse, domestic violence, understanding postpartum depression and treatment, and other topics to provide information for perinatal social workers to share with families.	- Continue to co-sponsor and participate on planning committees for conferences about preventing child abuse and family-centered practice available to county health departments and community programs - Review and interpret the Standards for the Provision of Perinatal Social Work Services with perinatal social workers - Continue participation in training and conferences related to preventing domestic violence and child abuse

*Population: A=Pregnant women, mothers and infants, B=Preventive and primary care for children, C=Children with special needs.

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
	T		**S2.13 Establish a violence prevention coalition.**	**Injury Prevention** - Developed one new SAFE KIDS Chapter in Santa Cruz County - Supported Arizona SAFE KIDS and Local SAFE KIDS initiatives statewide - Coordinated the Implementation of the Arizona SAFE KIDS Activities throughout the state - Co- Sponsored Arizona SAFE KIDS Conference with Phoenix Children's Hospital - Distributed information on the SAFE America Foundation Safest Kid In America Contest - Co-sponsored Little Sisters Conference for adolescent girls, sponsored a workshop on Rape Prevention - Facilitated two Harvard School of Public Health Violence Prevention Training Teleconferences - Co-Sponsored Engaging Youth: A Community Solution with the Community Forum	- Continue to support the increase of the number of SAFE KIDS Coalitions and/or Chapters through the state - Continue to support expanded partnerships with SAFE KIDS and other injury prevention activities - Continue to offer the Harvard School of Public Health Violence Prevention Training throughout the state
	T		**S2.14 Make information available on oro-facial injury to community programs**	**Office of Oral Health** - Made educational materials available to professionals, educators and consumers through the oral health resource library	- Make information available on orofacial injuries to dental professionals, educators and consumers
				Injury Prevention - Co-sponsored with the Office of Dental Health a Mouth Guard and Sports Safety Campaign	- Continue to co-sponsor with the Office of Oral Health, a Mouth Guard and Sports Safety Campaign
T	T		**S2.15 Address issues and make recommendations related to perinatal substance abuse including infants and children affected by same.**	**Perinatal Substance Abuse Program (OWCH)** - Member of the Immplementaton Oversight Committee for Perinatal Substance Abuse that was successful in the development of an ISA with an agency in Tucson to conduct a pilot project case management project - Collaborated with the FAS Community Resource Center in Tucson for expanding awareness of perinatal substance abuse. Provided funds for presenting information on FAS and perinatal substance abuse to Social Workers in Tucson	- Continue efforts to increase awareness of perinatal substance abuse; promote and advocate for increased funding from the State to address the issue - Continue efforts to identify funding opportunities
State Performance Measure #09: (Type: Risk Factor) Number of babies born with spina bifida per 1,000 live births. No related Healthy People 2000 Objective.					
T	T		**S9.01 Implement a nutritional component emphasizing folate in all OWCH perinatal programs**	**Health Start (OWCH)** - Funding was reduced in 1999 with 8 sites remaining in operation - Additional funding allocated July, 2000 and new sites added - Provided education to participating families on the benefits of good nutrition, proper diets and the importance of folate	- Continue to educate participating families on the benefits of good nutrition and proper diets - Continue to educate participating families on the importance of folate

*Population: A=Pregnant women, mothers and infants, B=Preventive and primary care for children, C=Children with special needs.

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				HRPP (OWCH) - Folate display board was exhibited at all HRPP/NICP functions this year - Provided Folate education & written information to all Program contract providers - Distributed information related to the importance of folate of	- Educate, display and distribute Folate information at all HRPP/NICP functions - Continue to distribute educational materials to contractors & families receiving services through the HRPP/NICP related to the importance of folate for women of childbearing age
				County Prenatal Block Grant (OWCH) - All county health departments participated in the statewide folate promotion that was sponsored by the March of Dimes and Healthy Mothers, Healthy Babies - Information on folate is included in all prenatal education programs sponsored by the counties - County health departments participated in regional trainings that were sponsored by Healthy Mothers, Healthy Babies	- County health departments will continue to support Folate education in their counties - Educational information will continue to be distributed at the health departments, health fairs and other community events
				Pregnancy and Breastfeeding Hotline (OWCH) - Conducted surveys and provided measures of statistical information to the Folate subcommittee - Disseminated folate brochures through information packets and at exhibits through community health fairs	- Continue to survey hotline calls and provide measures of statistical information to the Folate subcommittee - Continue to support public awareness of the importance of Folate
				Family Planning/Reproductive Health (OWCH) - Folate educational materials were made available to all County Health Departments	- Folate educational materials will be provided to all County Health Departments
				HMHB (OWCH) - Two regional training workshops were conducted on the importance of folate and how to educate the community on the importance during pre-conception and prenatal care - Centrum vitamins were distributed by all coalitions which included folate at health fairs, Teen Mazes, Baby Shower and other projects conducted in their communities	- Continue efforts to increase knowledge of the importance of folate to women of childbearing age by distributing educational materials and providing training
				County Prenatal Block Grant (OWCH) - Provided educational materials to counties regarding proper diet and use of folate.	- Continue to provide educational materials to counties regarding proper diet and use of folate.

*Population: A=Pregnant women, mothers and infants, B=Preventive and primary care for children, C=Children with special needs.

Population* A	B	C	PLAN OBJECTIVES	ACCOMPLISHMENTS FY 2000	PROGRAMS/ACTIVITIES FY 2001
				Nutrition Services (OWCH) - Increased awareness of the preventive effects of folate among women of childbearing age through a nutrition education campaign conducted statewide - Reviewed and revised the Folate Education Strategic Plan - Regular meetings of the Folate Committee held to carry out these objectives - Continued to work jointly with the AzMOD & Spina Bifida Assoc of Az to educate both the public and health professionals on the role of folate this included trainings for reproductive health professionals - Featured the Folate for Health Exhibit and materials at 14 conferences across the state - Published two folate articles in a series of 5 in the ADHS Prevention Bulletin that is mailed to health professionals statewide - ONS mailed folate brochures and order sheets to over 1000 MD's and NP's throughout the state - ONS fulfills all requests for folate information and brochures as a result of Committee outreach efforts, our order sheets and phone calls from consumers and health professionals - Nutrition Updates are provided to many programs including County Prenatal Block Grant Coordinators, AzSHA (AzSchool Health Assoc), AzPNN (AzPerinatal Nutrition Network), and ONS & OWCH staff	- Continue to increase awareness of the preventive effects of folate among women of childbearing age through a nutrition education campaign conducted statewide - Continue to increase awareness of the preventive effects of folate among Az health professionals/practitioners - Continue working jointly with AzMOD and Spina Bifida Assoc of Az toward educating both the public and health professionals of the benefits of adequate folate intake for all adults but especially for women of childbearing age - Initiate educational activities with the Girl Scouts and other youth organizations - Actualize a program to include folate brochures in all DOA pay checks to increase folate knowledge among state employees
				Child Health (OWCH) - Provided folate brochures to the SBHC Council as requested	- Provide folate brochures to the SBHC Council as requested
T			S9.02 95% of pregnant women in OWCH perinatal programs shall understand the importance of good diet, folate, and minimal weight gain.	**Licensed Midwife Program (OWCH)** - Provided Licensed Midwives with current nutrition materials and updates - Monitored weight gain of women giving birth at home with Licensed Midwives	- Continue to provide Licensed Midwives with current nutrition materials and updates - Continue to monitor weight gain of women giving birth at home with Licensed Midwives
				Health Start (OWCH) -Funding reinstated FY2000 and funded 8 Health Start sites, and funding and sites increased 7/1/2000 -Taught all pregnant program participants the importance of good diet, folate, and minimal weight gain at home visitation, and class education -Many sites provided prenatal exercise group classes	-Continue to teach classes and visit women in their homes to teach pregnant women in the Health Start program about the importance of good diet, folate, and minimal weight gains

*Population: A=Pregnant women, mothers and infants, B=Preventive and primary care for children, C=Children with special needs.

APPENDIX D: PERFORMANCE MEASURES SUMMARY SHEET

Performance Measure	Pyramid Level of Service				Type of Service		
	DHC	ES	PBS	IB	C	P	RF
1) The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.	X				X		
2) The degree to which the State Children with Special Health Care Needs (CSHCN) Program provides or pays for specialty and subspecialty services, including care coordination, not otherwise accessible or affordable to its clients.	X				X		
3) The percent of Children with Special Health Care Needs (CSHCN) in the State who have a "medical/health home."		X			X		
4) Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, hemoglobinopathies (e.g. the sickcle cell diseases) (combined).			X				X
5) Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B.			X				X
6) The birth rate (per 1,000) for teenagers aged 15 through 17 years.			X				X
7) Percent of third grade children who have received protective sealants on at least one permanent molar tooth.			X				X
8) The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children.			X				X
9) Percentage of mothers who breastfeed their infants at hospital discharge.			X				X
10) Percentage of newborns who have been screened for hearing impairment before hospital discharge.			X				X
11) Percent of Children with Special Health Care Needs (CSHCN) in the State CSHCN program with a source of insurance for primary and specialty care.				X	X		
12) Percent of children without health insurance.				X	X		
13) Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program.				X		X	

Performance Measure	Pyramid Level of Service				Type of Service		
	DHC	ES	PBS	IB	C	P	RF
14) The degree to which the State assures family participation in program and policy activities in the State CSHCN program.				X		X	
15) Percent of very low birth weight live births.				X			X
16) The rate (per 100,000) of suicide deaths among youths 15-19.				X			X
17) Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.				X			X
18) Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.				X			X
State Performance Measures							
1) Proportion of low-income women who receive reproductive health/family planning services.	X						X
2) Hospitalizations for nonfatal injuries and poisonings per 100,000 adolescents age 15 through 19.			X				X
3) The percent of licensed child care centers which meet national quality standards for health and safety.				X		X	
4) Asthma hospitalizations per 100,000 children age 1 through 14.				X			X
5) Preventable child deaths per 100,000 children under age 18.				X			X
6) The rate of children 1 through 14 hospitalized for ambulatory care sensitive conditions per 100,000.				X			X
7) The State Title V program has adopted and recommended a set of quality standards for the health care of the MCH population.				X			X
8) (Discontinued.) Percent of women of childbearing age (18-44) who take a vitamin with the recommended 0.4 mg. of folic acid daily.			X				X
9) Number of babies born with spina bifida per 10,000 live births.			X				X

NOTE: DHC = Direct Health Care ES = Enabling Services PBS = Population Based Services
IB = Infrastructure Building C = Capacity P = Process RF = Risk Factor

Appendix E

Core Performance Measures: Status and History

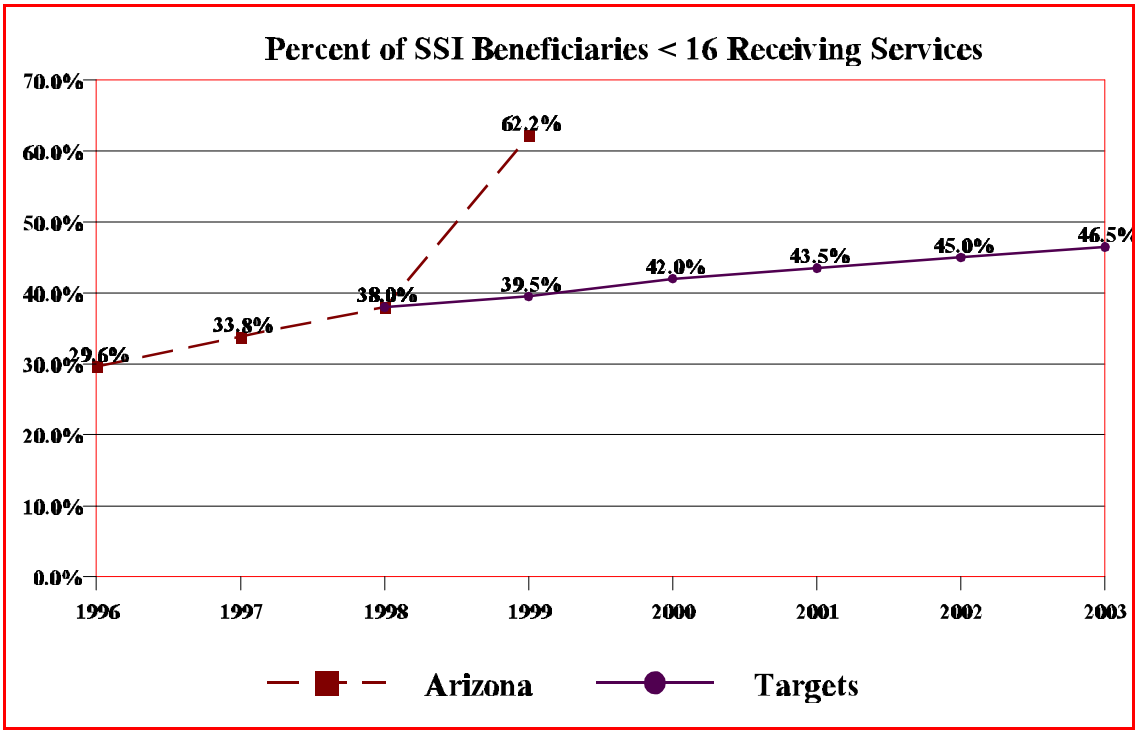
01
PERFORMANCE MEASURE

TYPE: Capacity **Category: Direct Health Care**	**Percent of State SSI beneficiaries <16 years old receiving rehabilitative services from the State CSHCN Program.**

Healthy People 2000 Objective	**Objective 17.20** **Increase to 50 the number of states that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.**
Numerator:	**The number of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State's CSHCN program during the federal fiscal year.**
Denominator:	**The number of SSI beneficiaries less than 16 years old in the State.**

Status

1999 Target:	**39.5**
1999 Actual:	**62.2**
Note:	**Methodology changed to permit an actual count instead of estimated count for 1999.**



02
PERFORMANCE MEASURE

TYPE: Capacity **Category: Direct Health Care**	**Degree to which the State CSHCN Program Provides or pays for specialty and subspecialty services including care coordination, not otherwise accessible or affordable to its clients.**

Healthy People 2000 Objective

Objective 17.20
Increase to 50 the number of states that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.

Status

1999 Target: 9
1999 Actual: 9

1. **Medical and surgical subspecialty services**
2. **OT, PT services**
3. **Speech, hearing and language services**
4. **Respiratory services**
5. **Durable medical equipment and supplies**
6. **Home health care**
7. **Nutrition services**
8. **Care coordination**
9. **Early intervention services**

Arizona Score for 1999: 9 out of 9

03
PERFORMANCE MEASURE

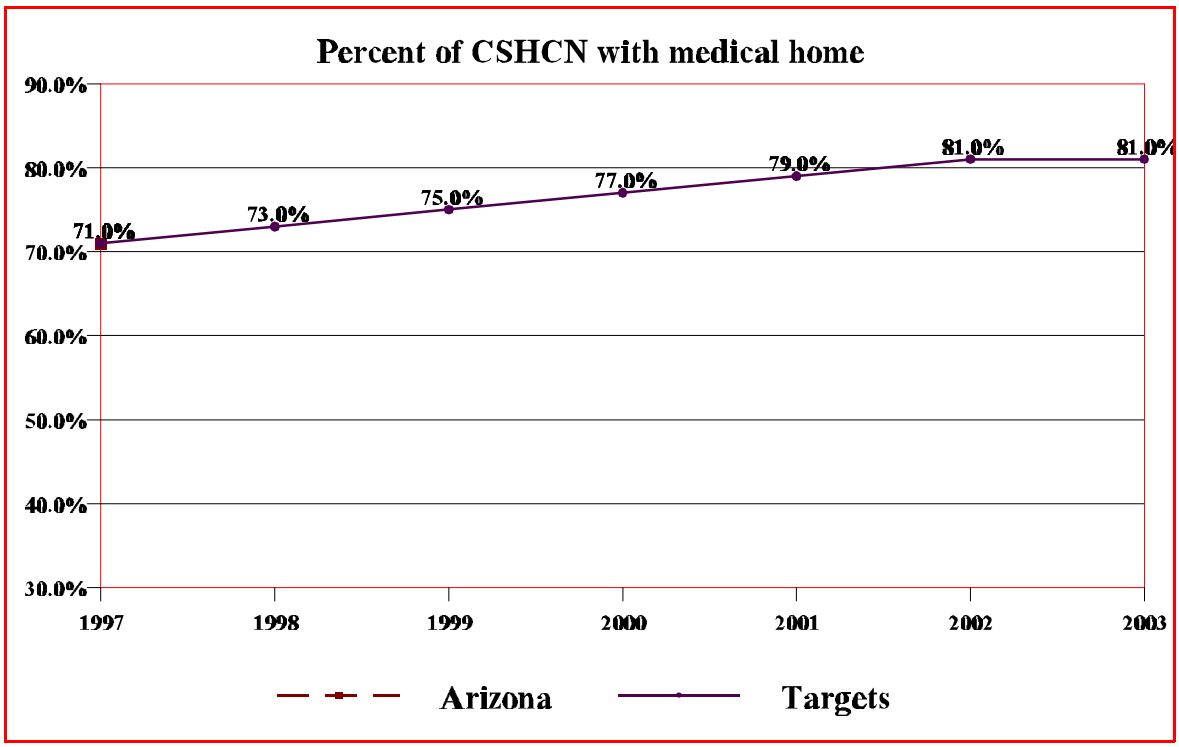
TYPE: Capacity **Category: Enabling**	**The percent of children with special health care needs in the state who have a "medical/health home."**

Healthy People 2000 Objective	**Related to Objective 17.20** **Increase to 50 the number of states that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.**

Status

1999 Target: **75.0**
1999 Actual: **No new figures available since 1997 estimate.**

Note: **Medical home is approximated from percent of children under age 18 with report of "regular check-ups" or reporting a check-up in the last 18 months for those ages 18, 19 or 20.**



04
PERFORMANCE MEASURE

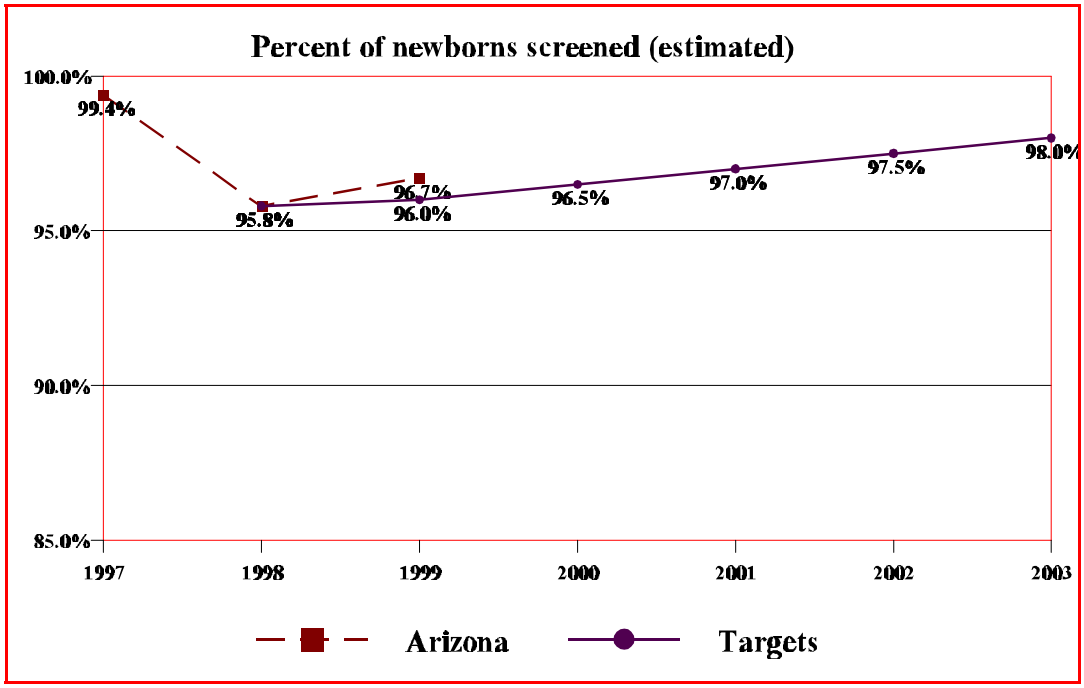
TYPE: Capacity Category: Population-Based	Percent of newborns in the State with at least one screening for each of PKU, hypothyroidism, galactosemia, hemoglobinopathies [(e.g. the sickle cell disease) (combined)].

Healthy People 2000 Objective	Objective 14.15 Increase to at least 95% the proportion of newborns screened by State-sponsored programs for genetic disorders and other disabling conditions.

Status

1999 Target: 96.0
1999 Actual: 96.7

Note: The count of initial screens in 1997 was inflated due to the inability to reliably isolate initial specimens. For later years, infants in the screening data base are matched with infants in the Vital Statistics data base to yield more accurate screening rate data. Performance objectives were revised to reflect the improved methodology.



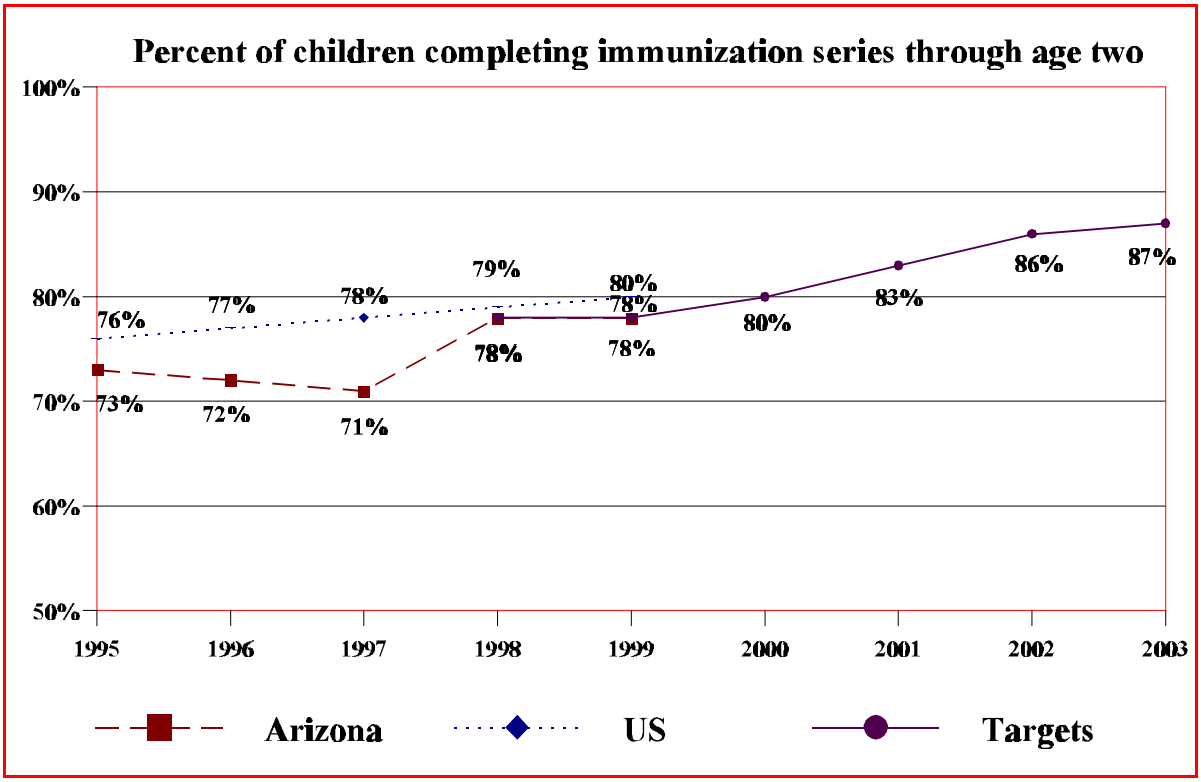
05
PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population Based**	**Percent of children through age 2 who have completed immunizations for Measles, Mumps, Rubella, Polio, Diptheria, Tetanus, Pertussis, Haemophilus Influenza, Hepatitis B.**

Healthy People 2000 Objective	**Revised Objective 20.11** **90% of children will have completed the full immunization schedule through age 2 (19-35 months).**
Data Source:	**CDC National Immunization Survey**
Note:	**Measure includes those children who received at least 4 DTP, 3 IPV/OPV and 1 MMR**

Status

1999 Target: 78.0
1999 Actual: 78.0



06
PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population-Based**	**The rate of birth (per 1,000) for teenagers aged 15 through 17 years.**

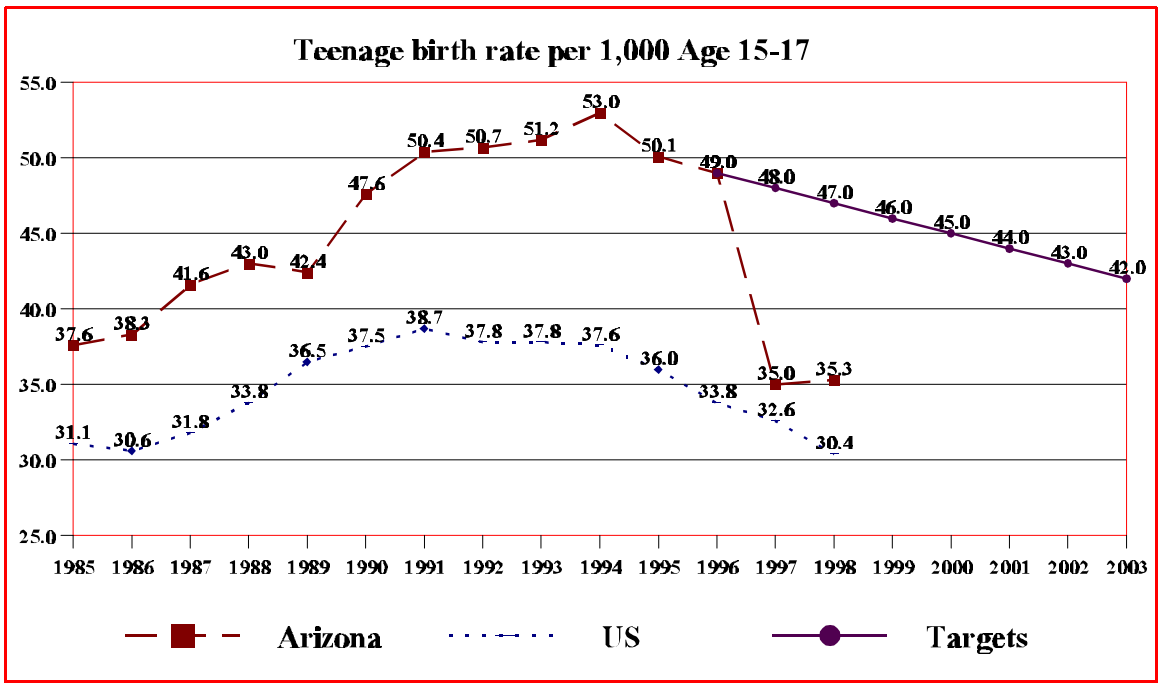
Healthy People 2000 Objective

Related Objective 5.1
Reduce pregnancies among females aged 15-17 to no more than 50 per 1,000 females aged 15-17.

Note: Objective is stated in terms of "pregnancies," but measure is "births."

Status

1998 Target: 47.0
1998 Actual: 35.3



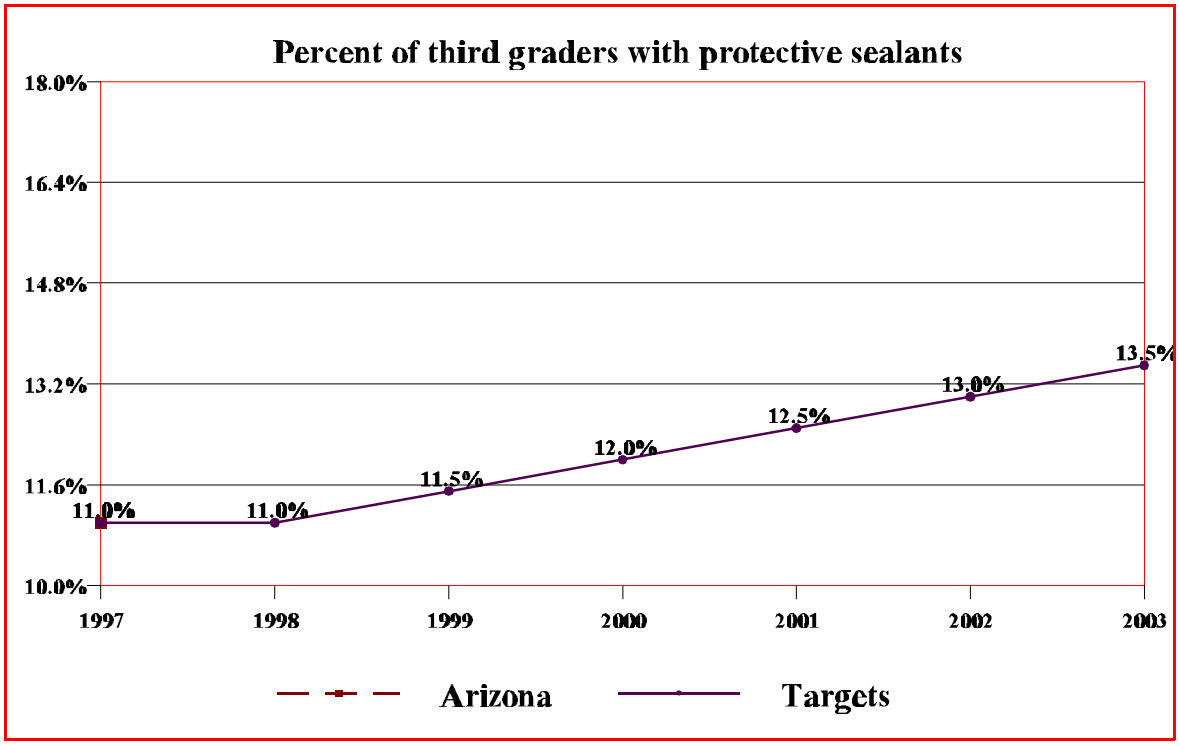
07
PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population-Based**	**Percentage of third grade children who have received protective sealants on at least one permanent molar tooth.**

Healthy People 2000 Objective	**Objective 13.8** **Increase to at least 50 percent the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.**

Status

1998 Target: **11.0**
1998 Actual: **No new figures available since 1997 estimate.**



08
PERFORMANCE MEASURE

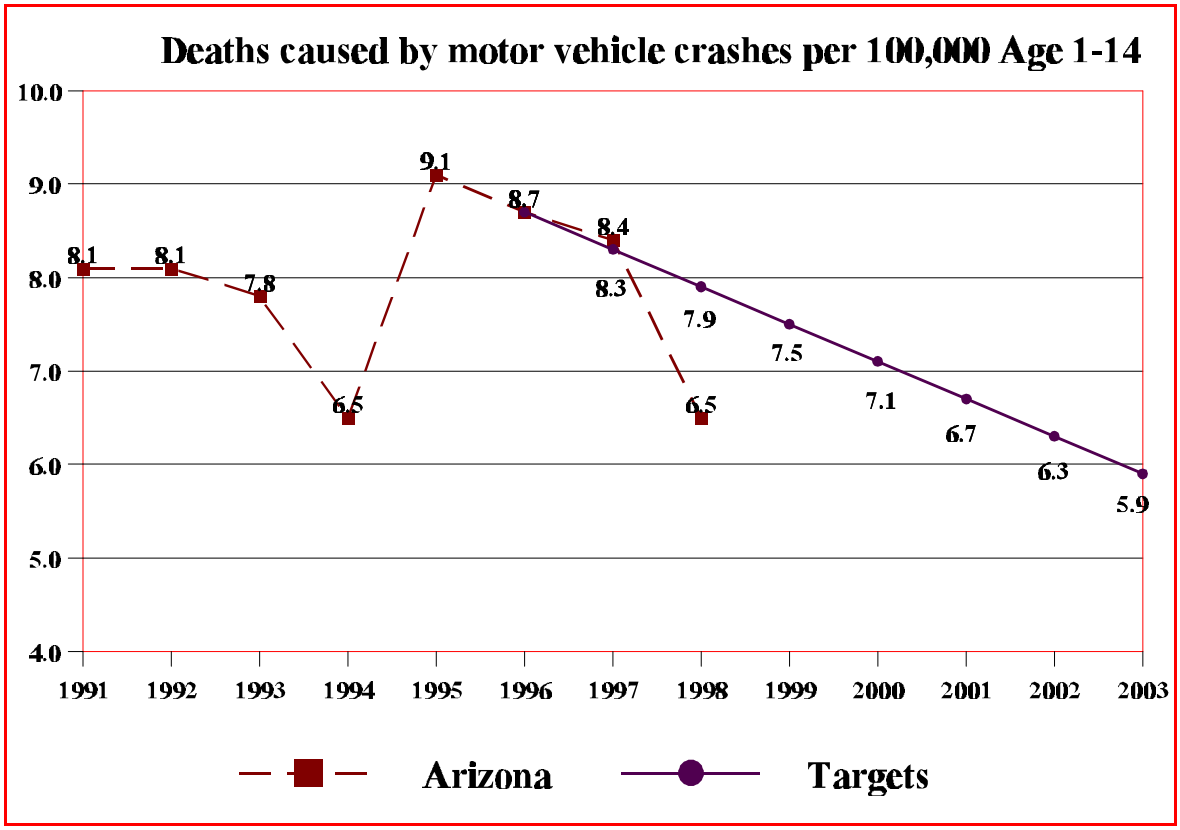
TYPE: Risk Factor **Category: Population-Based**	**The rate of deaths to children aged 1-14 caused by motor vehicle crashes per 100,000 children.**

Healthy People 2000 Objective

Objective 9.3a
Reduce deaths to children aged 1-14 caused by motor vehicle crashes to no more than 3.5 per 100,000 children aged 1-14.

Status

1998 Target: 7.9
1998 Actual: 6.5



09
PERFORMANCE MEASURE

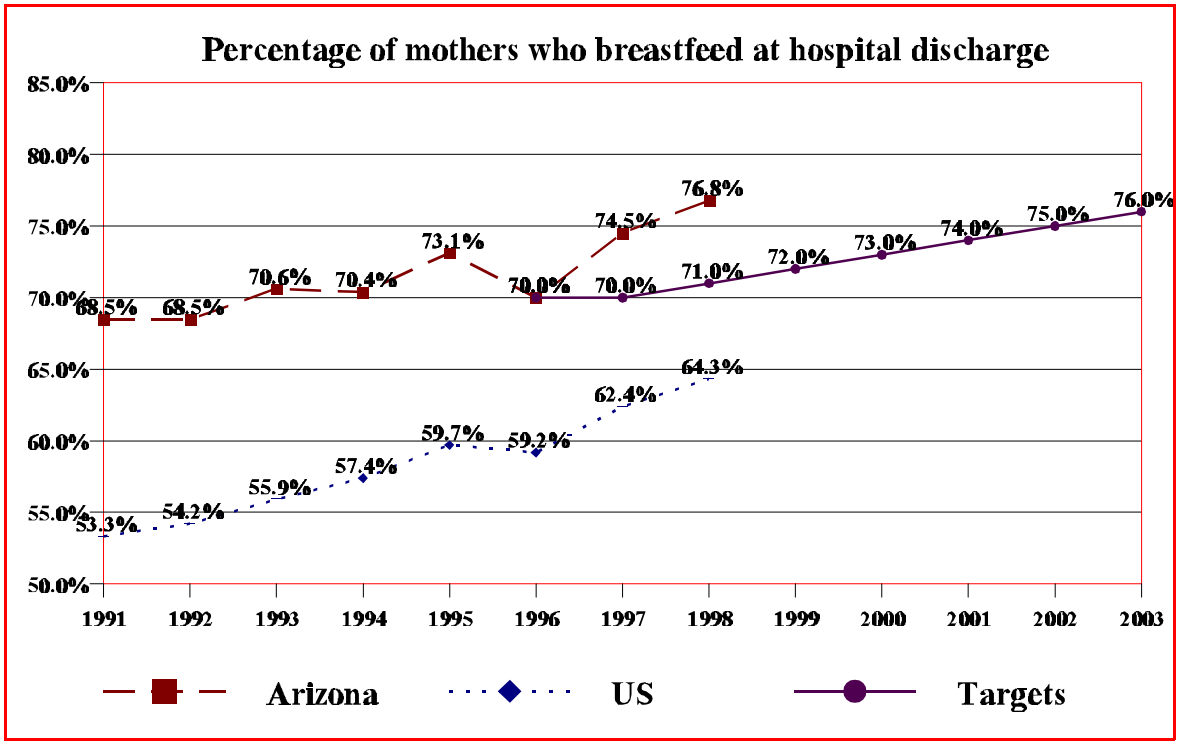
TYPE: Risk Factor **Category: Population-Based**	**Percentage of mothers who breastfeed at hospital discharge.**

Healthy People 2000 Objective

Objective 2.11
Increase to at least 75% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50% the proportion who continue breastfeeding until 5 to 6 months old.

Status

1998 Target: 71.0
1998 Actual: 76.8



10
PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Population-Based

The rate of newborns who have been screened for hearing impairment before hospital discharge.

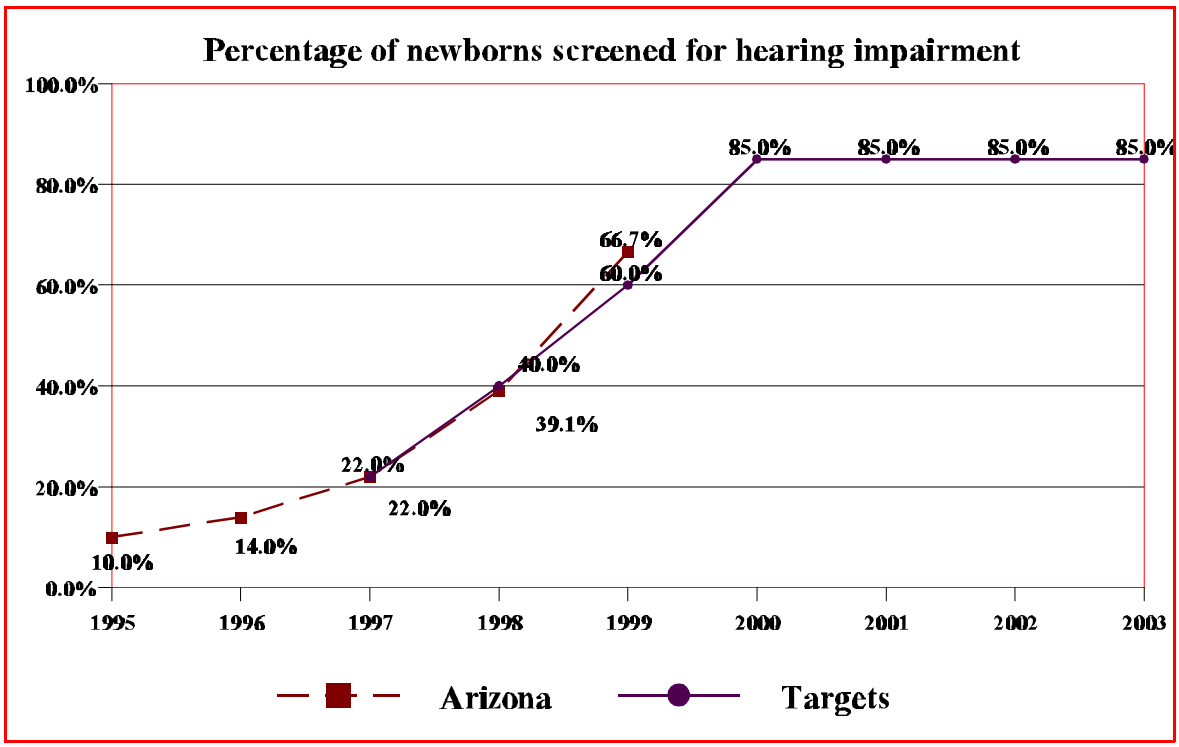
Healthy People 2000 Objective

Objective 17.6
Reduce significant hearing impairment to a prevalence of no more than 82 per 1,000 people.

Objective 17.16
Reduce the average age at which children with significant hearing impairment are identified to no more than 12 months.

Status

1999 Target: 60.0
1999 Actual: 66.7



11
PERFORMANCE MEASURE

TYPE: Capacity **Category: Infrastructure Building**	**The percent of CSHCN in the State CSHCN program with a source of insurance for primary and specialty care.**

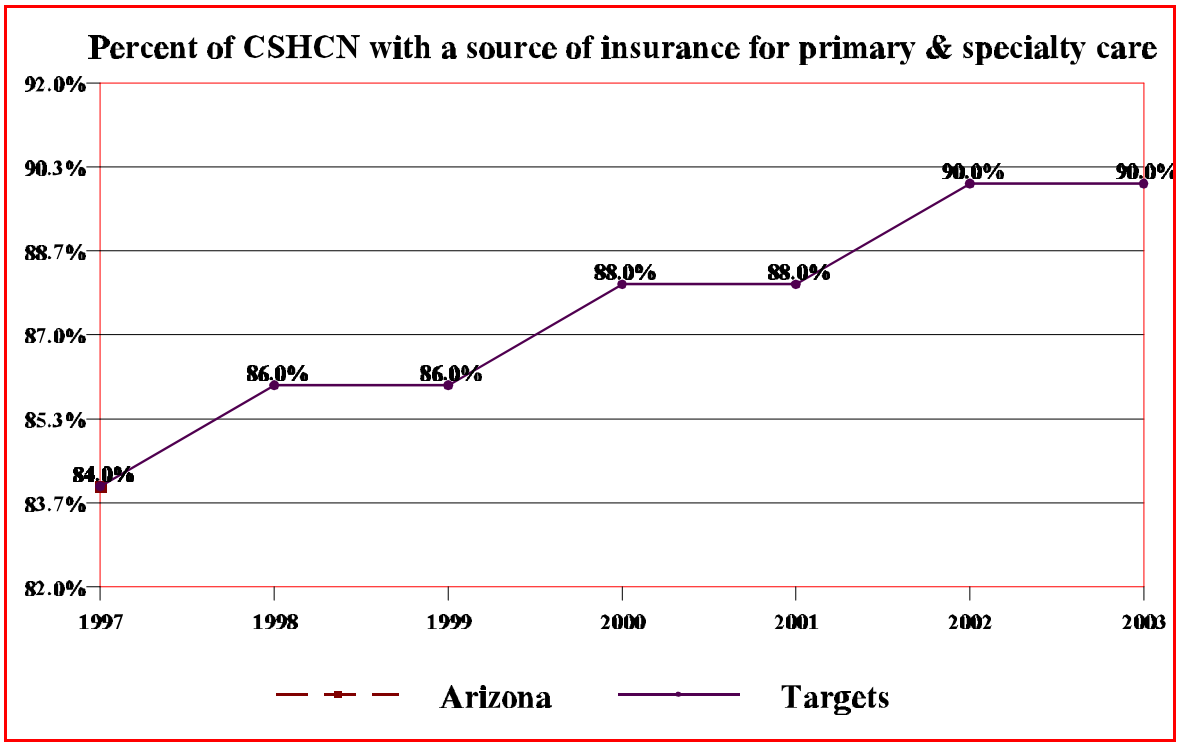
Healthy People 2000 Objective

Objective 17.20

Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.

Status

1998 Target: **86.0**
1998 Actual: **No new figures available since 1997 estimate.**



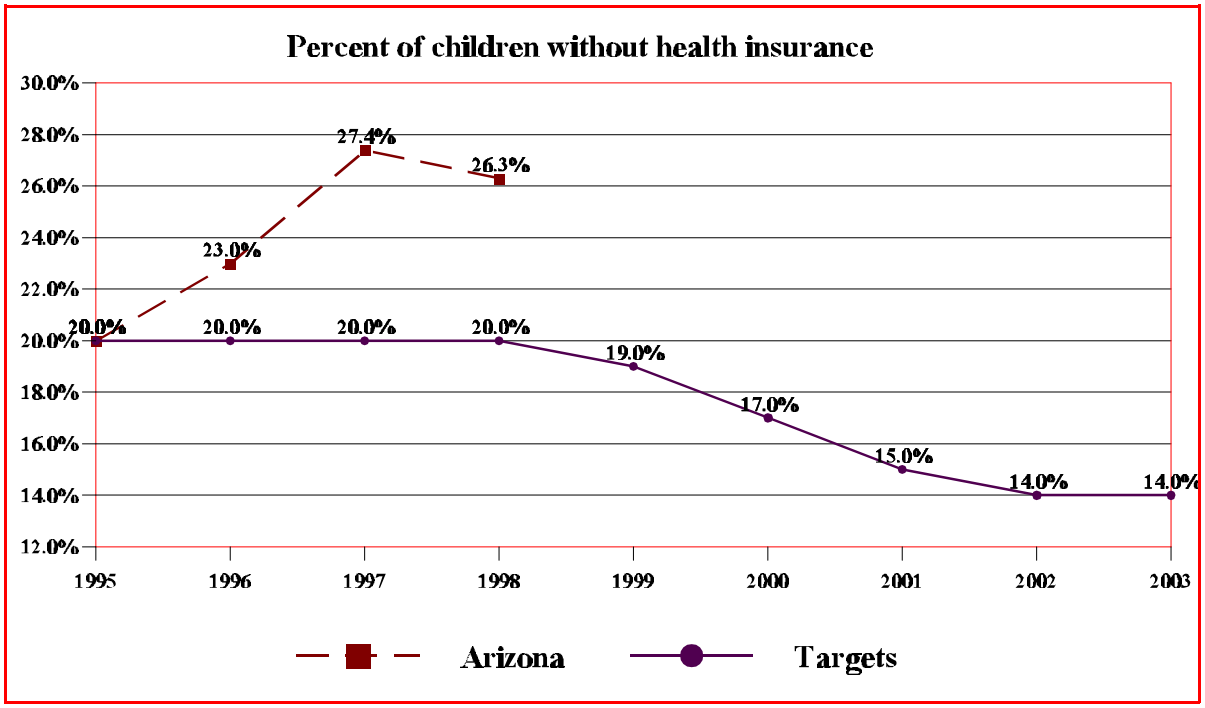
12
PERFORMANCE MEASURE

TYPE: Capacity
Category: Infrastructure Building **Percent of children without health insurance.**

Healthy People 2000 Objective **No HP 2000 Objective**

Status

1998 Target: 20.0
1998 Actual: 26.3



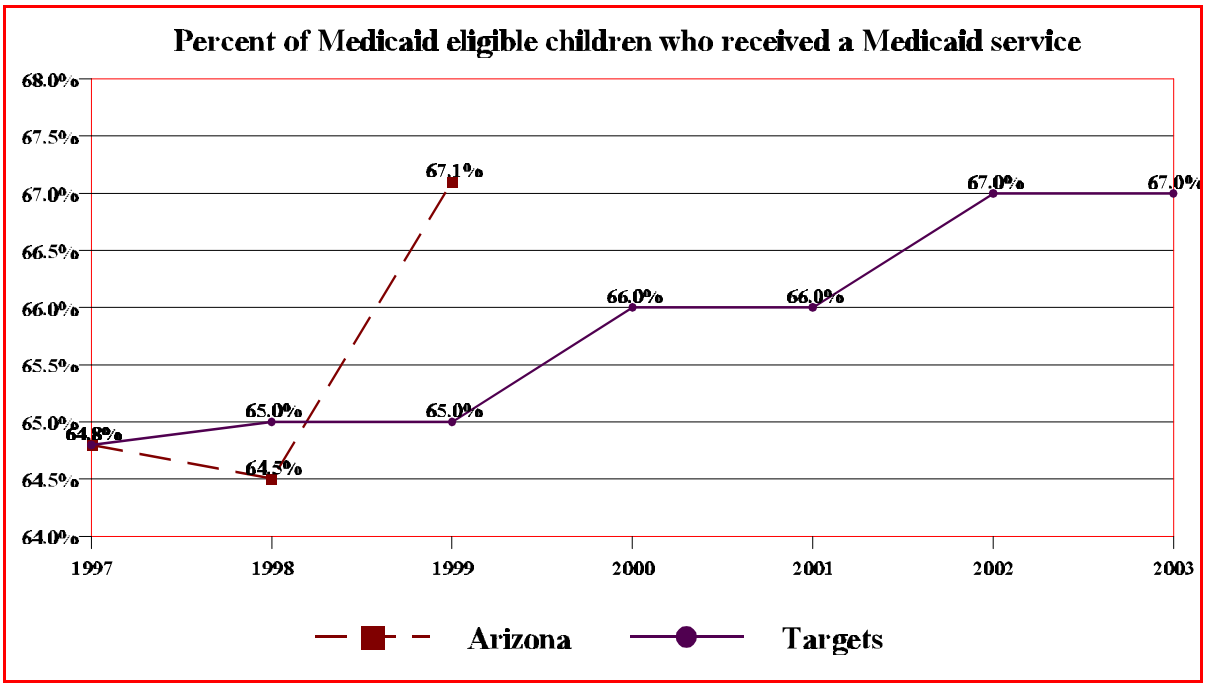
13
PERFORMANCE MEASURE

TYPE: Process **Category: Infrastructure Building**	**Percent of potentially Medicaid eligible children who have received a service paid by the Medicaid Program.**

Healthy People 2000 Objective **No HP 2000 Objective**

Status

1999 Target: 65.0
1999 Actual: 67.1



14
PERFORMANCE MEASURE

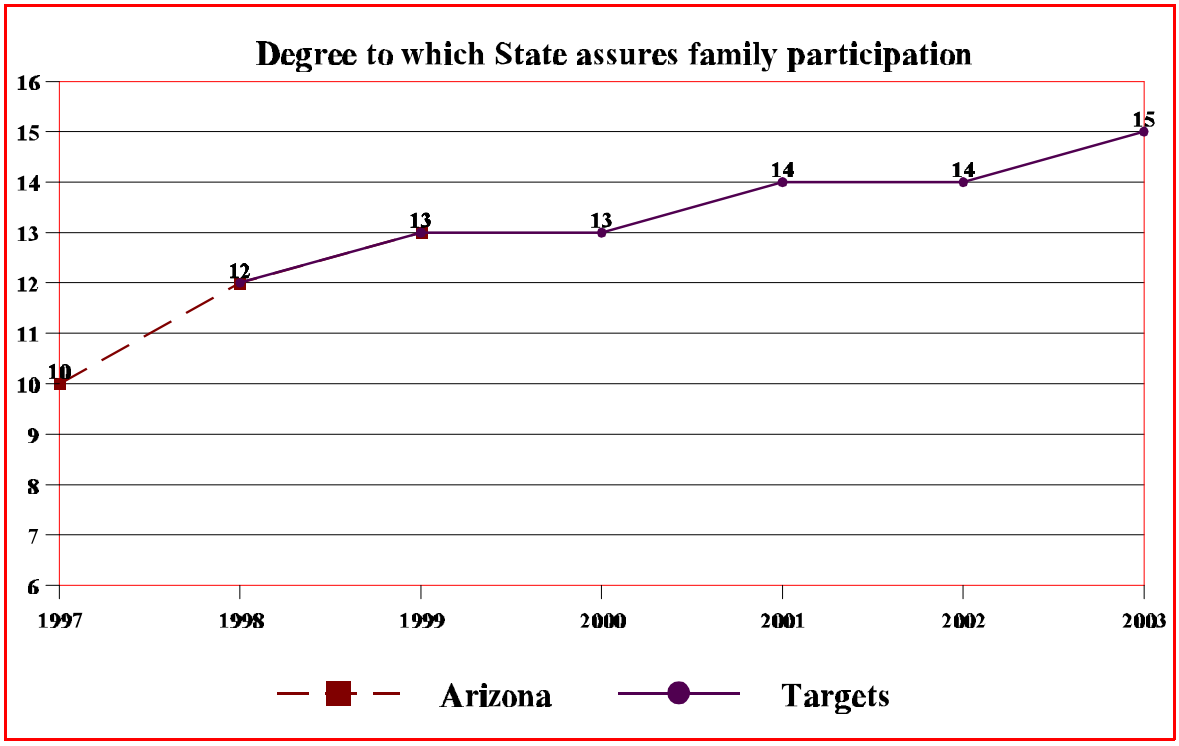
TYPE: Process **Category: Infrastructure Building**	**The degree to which the State assures family participation in program and policy activities in the State CSHCN program.**

Healthy People 2000 Objective	**Related to Objective 17.20** **Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.**

Status

1999 Target: 13
1999 Actual: 13

Note: 18 point scale



15
PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Infrastructure Building **Percent of very low birth weight live births.**

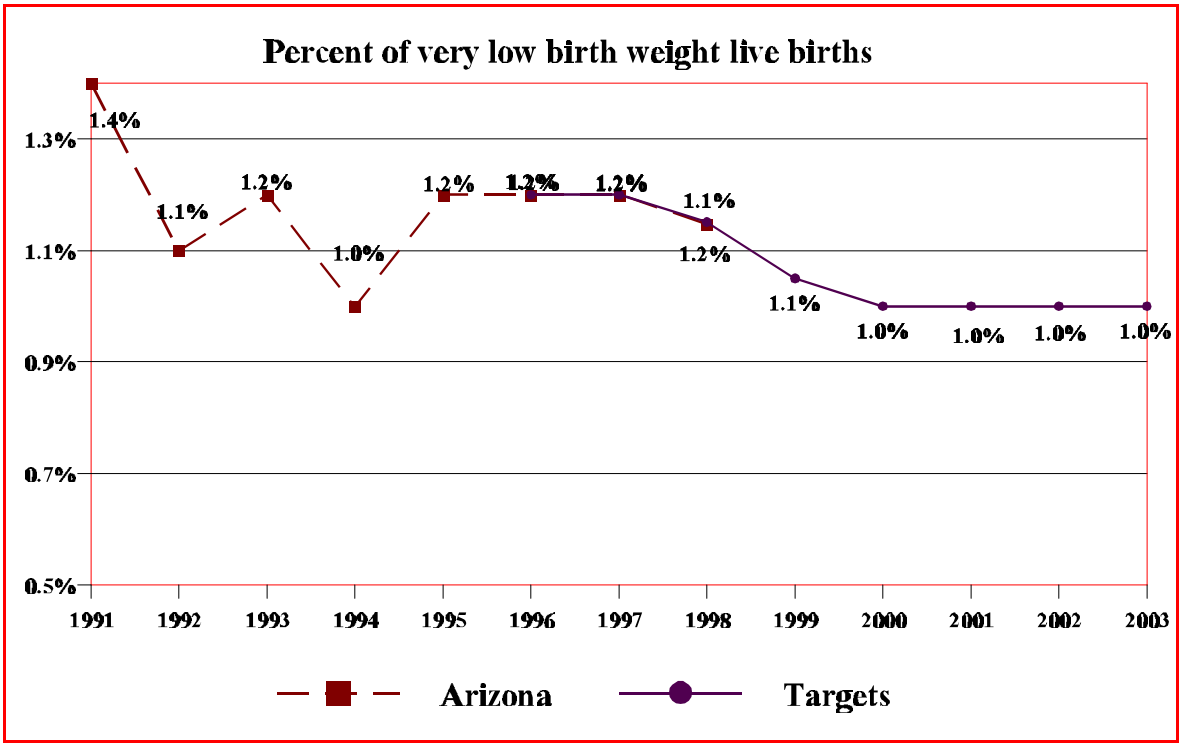
Healthy People 2000 Objective

Objective 14.15
Overall Goal: Reduce very low birth weight to no more than 1 percent of all live births.

(Very low birth weight is any weight less than 1500 grams.)

Status

1998 Target: 1.2
1998 Actual: 1.1



16
PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Infrastructure Building

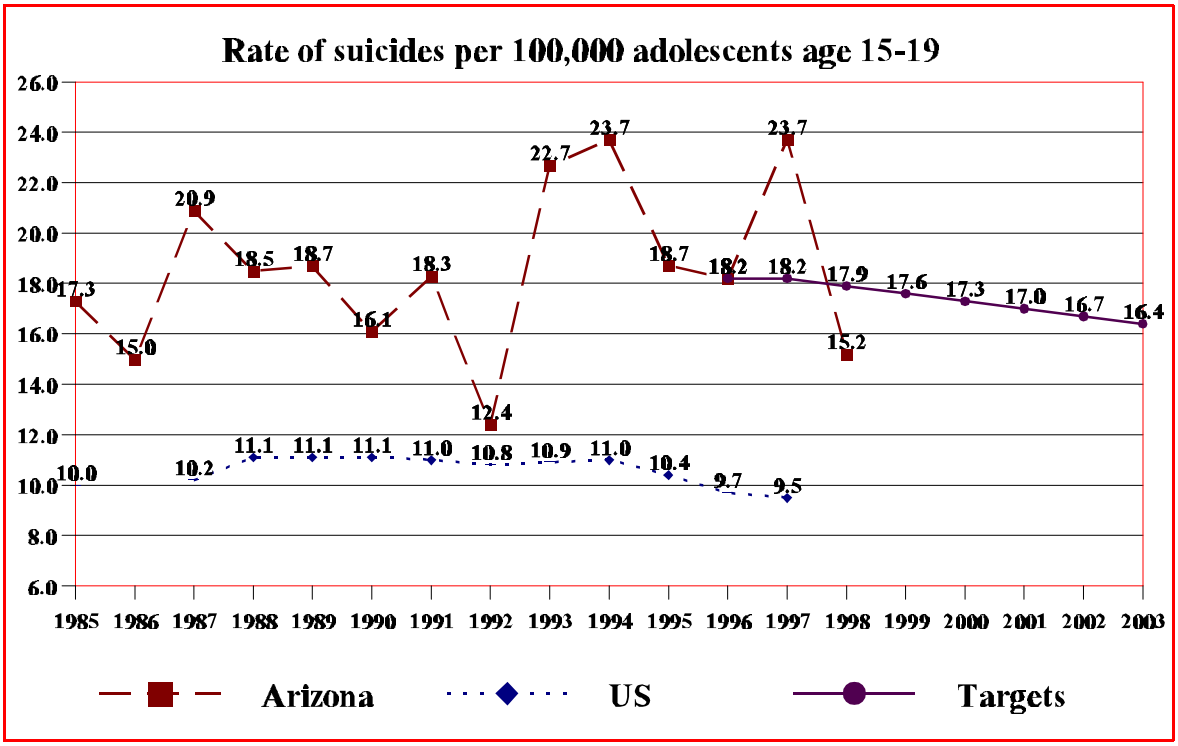
The rate (per 100,000) of suicide deaths among youths aged 15-19.

Healthy People 2000 Objective

Related to Objectives 6.1 and 7.2a
Reduce suicides to no more than 8.2 per 100,000 youths aged 15-19.

Status

1998 Target: 17.9
1998 Actual: 15.2



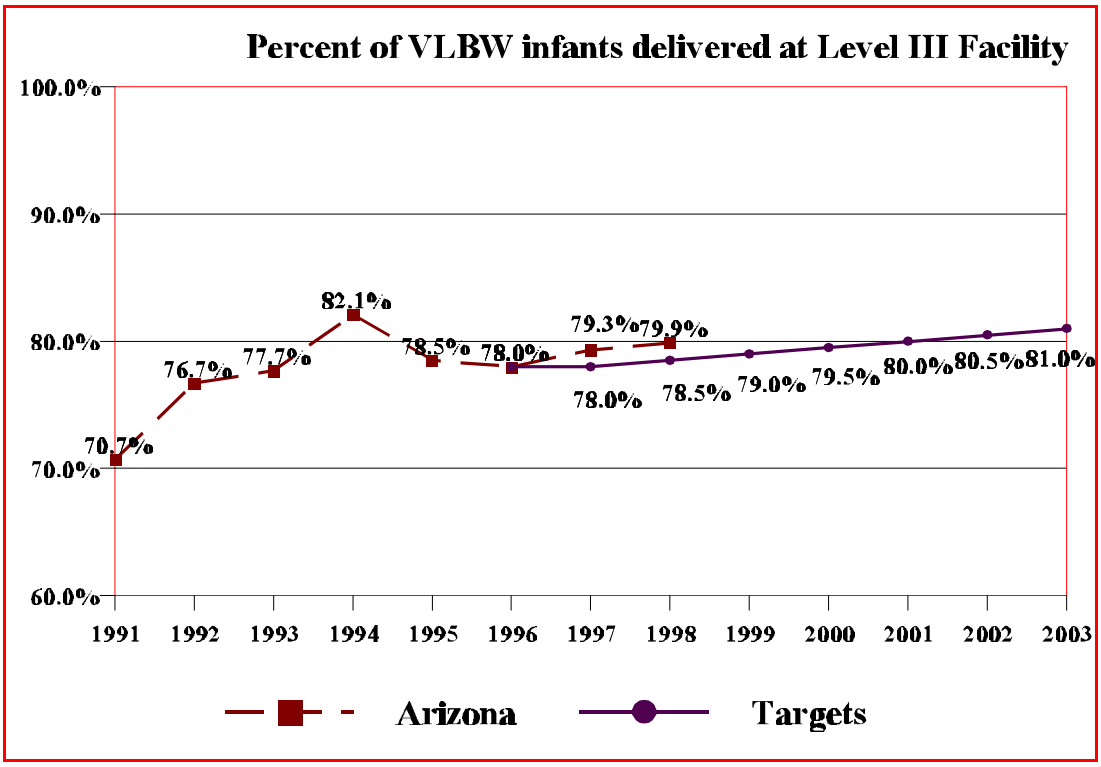
17
PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population-Based**	**Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.**

Healthy People 2000 Objective	**Objective 14.14** **Increase to at least 90% the proportion of pregnant women and infants who receive risk appropriate care.**
Numerator:	**Number of infants with a birth weight less than 1,500 grams born at subspecialty facilities (Level III facility).**
Denominator:	**Total number of infants born with a birth weight of less than 1,500 grams.**

Status

1998 Target: 78.5
1998 Actual: 79.9



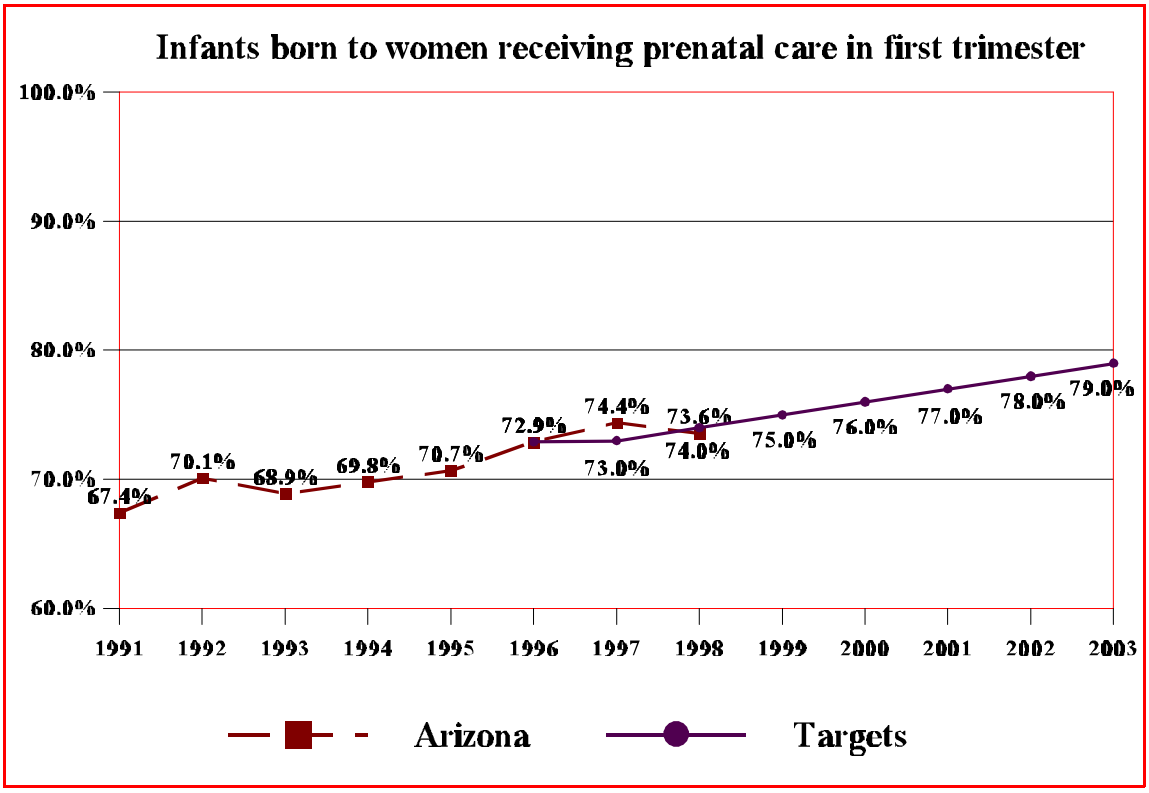
18
PERFORMANCE MEASURE

TYPE: Risk Factor Category: Population-Based	Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.

Healthy People 2000 Objective	Objective 14.11 Increase to at least 90% the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

Status

1998 Target: 74.0
1998 Actual: 73.6



Appendix F

State of Arizona

Negotiated Performance Measures: Status and History

01
STATE PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Direct Health Care

Proportion of low-income women who receive reproductive health/family planning services.

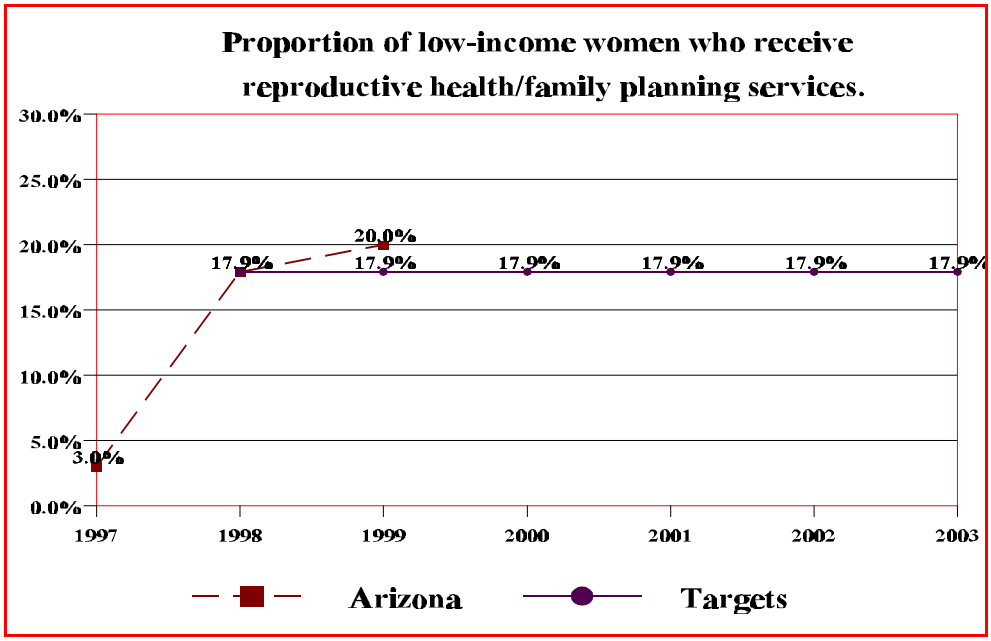
Healthy People 2000 Objective

Objective 5.12
Increase to at least 95% the proportion of all females aged 15-44 with incomes less than 100% of poverty at risk of unintended pregnancy who use contraception.

Status

1999 Target: 17.9%
1999 Actual: 20.0%

Note: The large increase from three percent in 1997 to 17.9 percent in 1998 is due in part to the addition of Family Planning Council Data, which had not been used in the 1997 measure. Targets for upcoming years were revised to reflect the addition of this data source.



02
STATE PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population-Based**	**Hospitalizations for nonfatal injuries and poisonings per 100,000 adolescents age 15-19.**

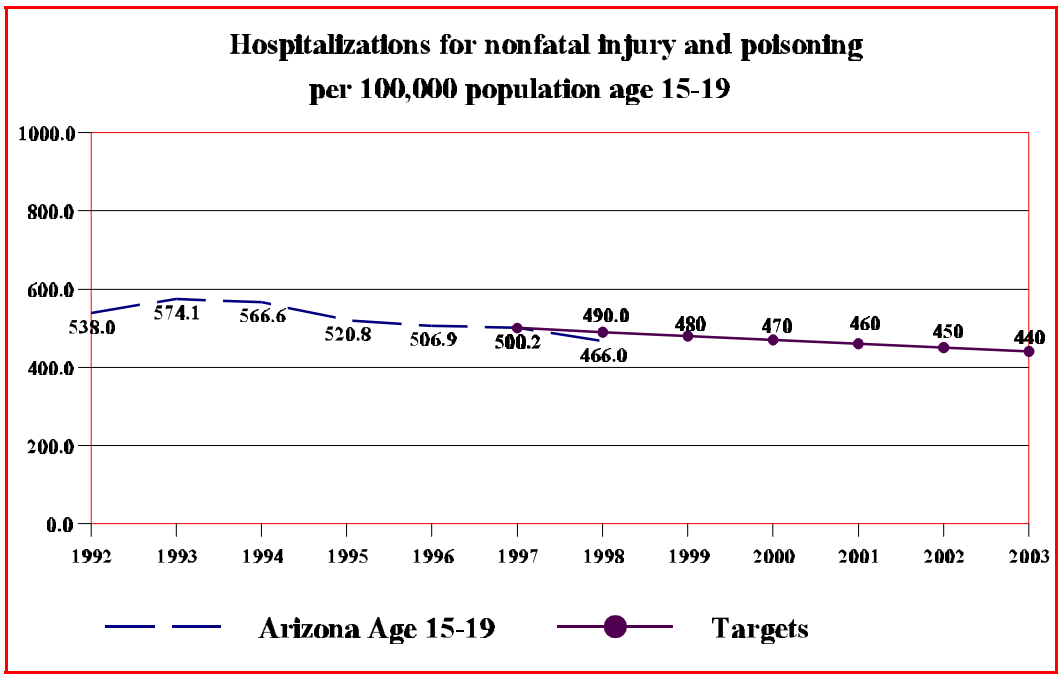
Healthy People 2000 Objective

Related to Objective 9.2
Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000.

Note: **Measure includes injuries and poisonings for Arizona residents only, principle dianosis codes 800-944, excluding rehabilitation-related facilities and DRGs.**

Status

1998 Target: **490.0**
1998 Actual: **466.0**



03
STATE PERFORMANCE MEASURE

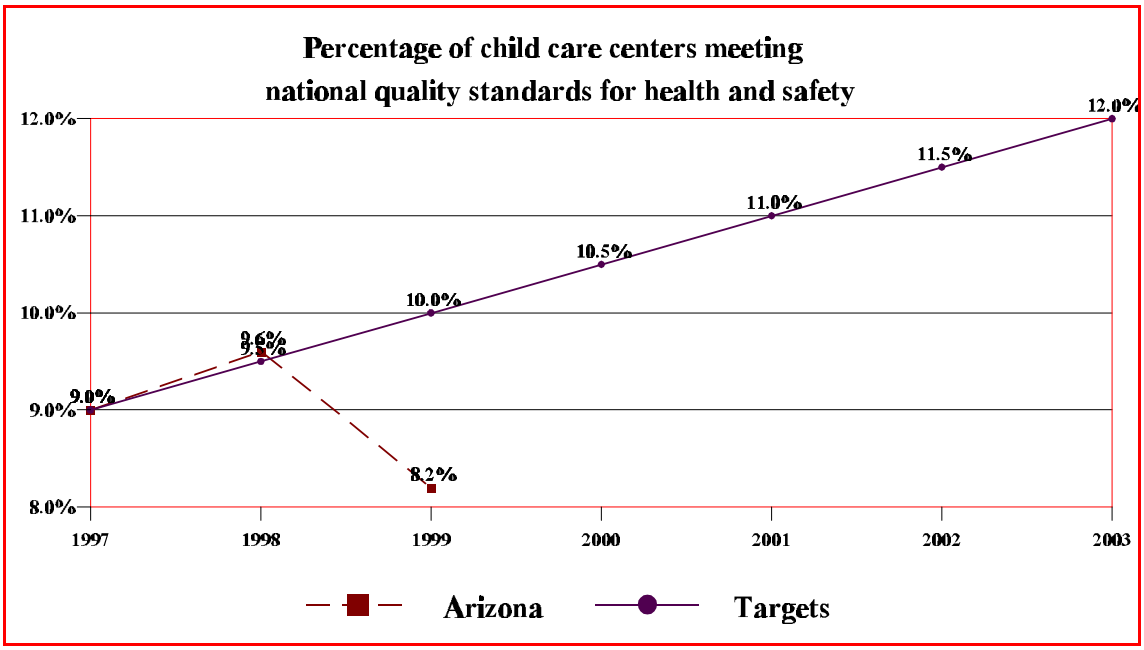
TYPE: Process
Category: Infrastructure Building

Percentage of child care centers meeting national quality standards for health and safety.

Healthy People 2000 Objective **No related Healthy People 2000 goal.**

Status

1999 Target: 10.0%
1999 Actual: 8.2%



04
STATE PERFORMANCE MEASURE

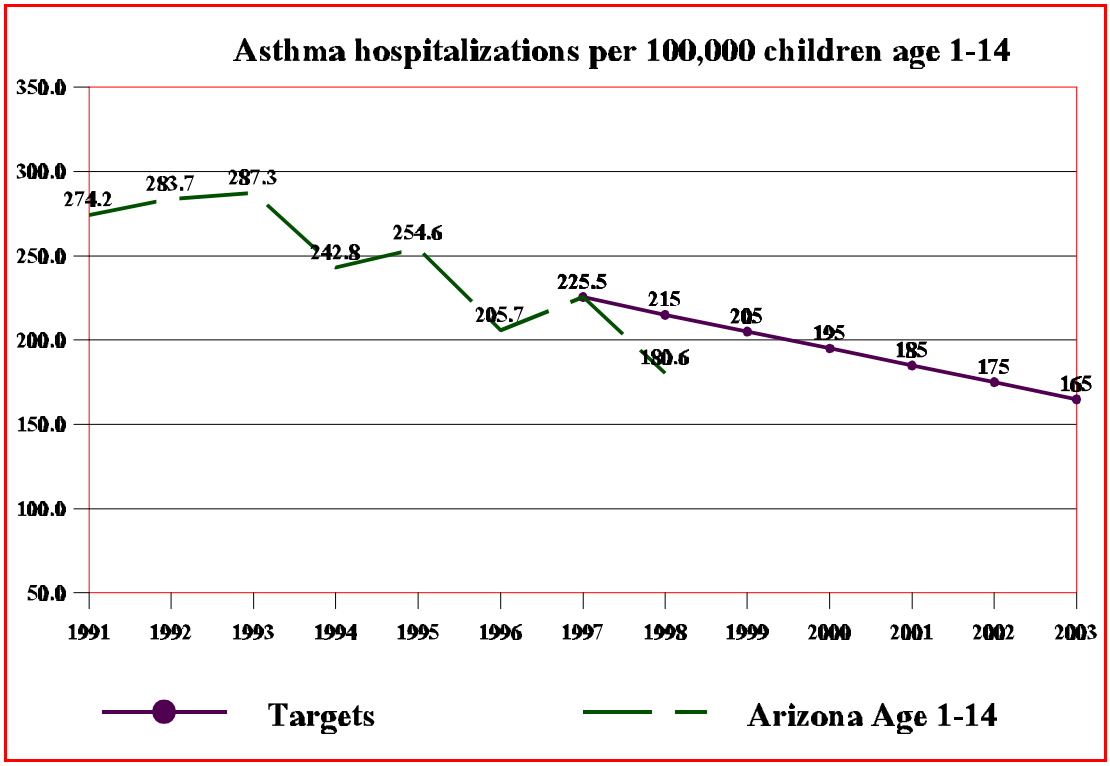
TYPE: Risk Factor
Category: Population-Based **Asthma hospitalizations per 100,000 children age 1-14.**

Healthy People 2000 Objective **Related to Objective 11.1**
Reduce asthma morbidity, as measured by a reduction in asthma hospitalizations to no more than 160 per 100,000 people.

Note: **No specific goal for age 1-14.**

Status

1998 Target: **215**
1998 Actual: **180.6**



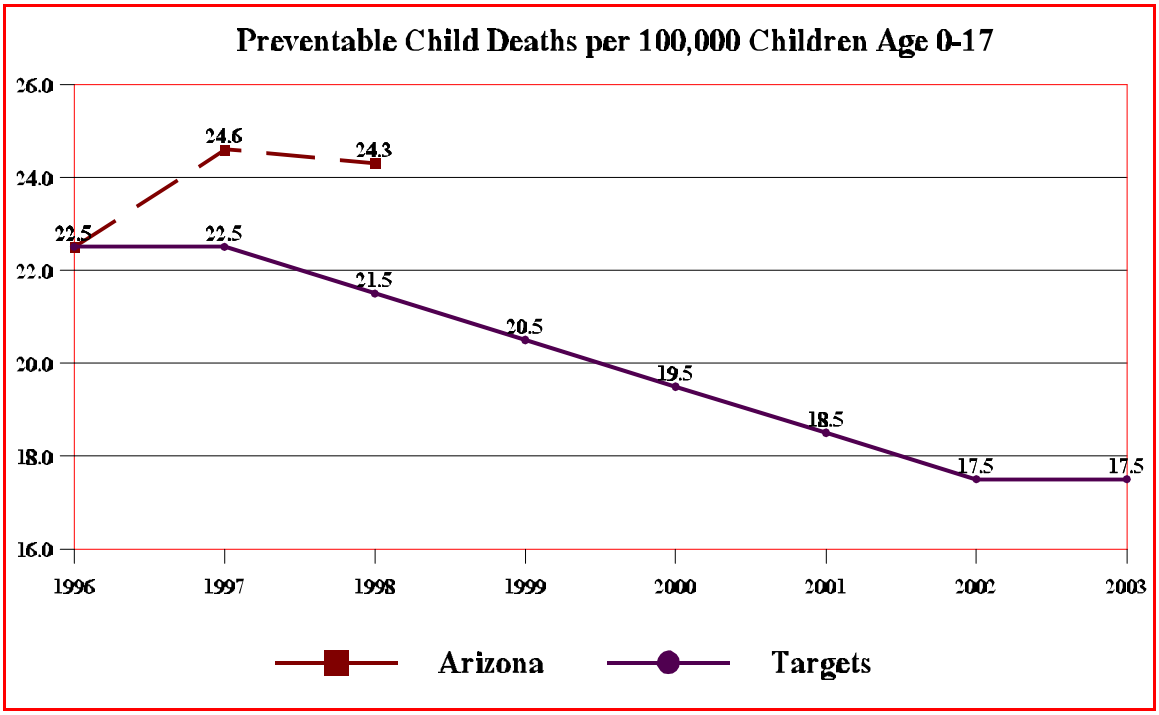
05
STATE PERFORMANCE MEASURE

TYPE: Risk Factor **Preventable child deaths per 100,000 children under age 18.**
Category: Infrastructure Building

Healthy People 2000 Objective **No related Healthy People 2000 goal.**

Status

1998 Target: 21.5
1998 Actual: 24.3



06
STATE PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Infrastructure Building

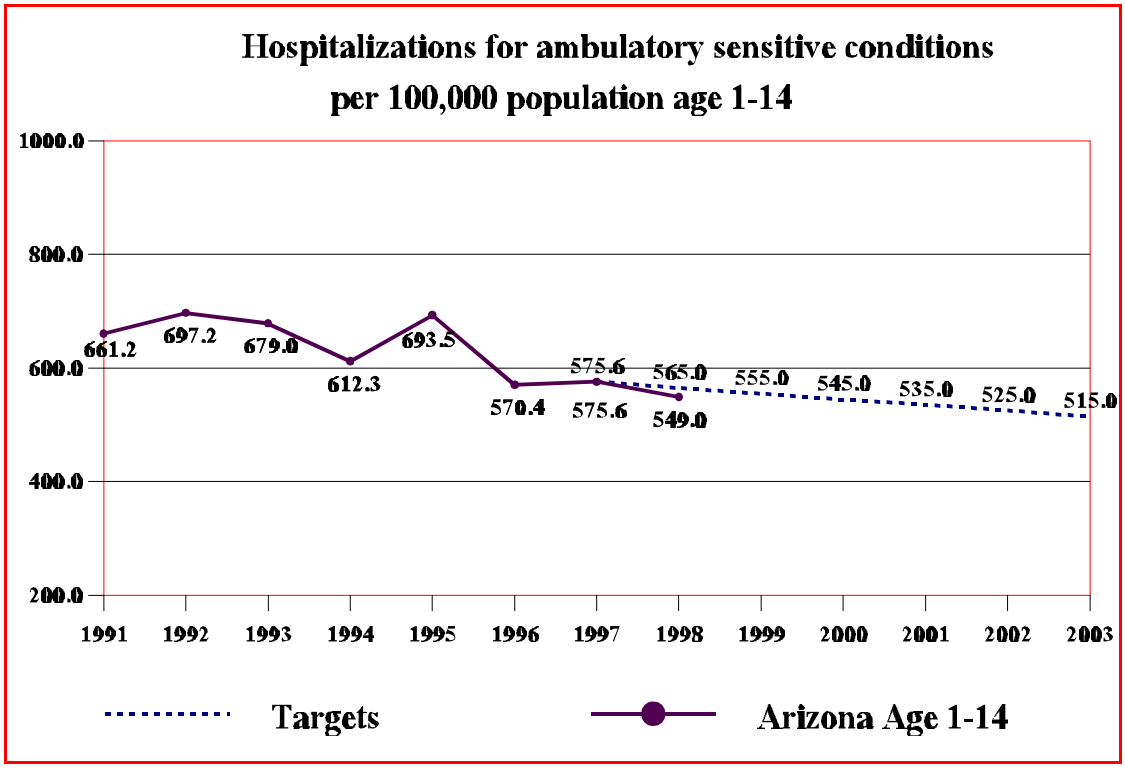
Hospitalizations for ambulatory care sensitive conditions* per 100,000 children age 1-14.

Healthy People 2000 Objective **No related Healthy People 2000 goal.**

Note: **Proxy for primary care services/medical home.**

Status

1998 Target: **565**
1998 Actual: **549**



* Includes diagnosis codes indicating immunization preventable conditions, convulsions, severe ENT infections (suppurative and unspecified otitis media, pharyngitis, tonsillitis, URI), tuberculosis, COPD, bacterial pneumonia, asthma, diabetes, hypoglycemia, gastroenteritis, kidney/urinary infection, dehydration, iron deficiency anemia, nutritional deficiencies, pelvic inflammatory disease, and dental conditions.

07
STATE PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Infrastructure Building

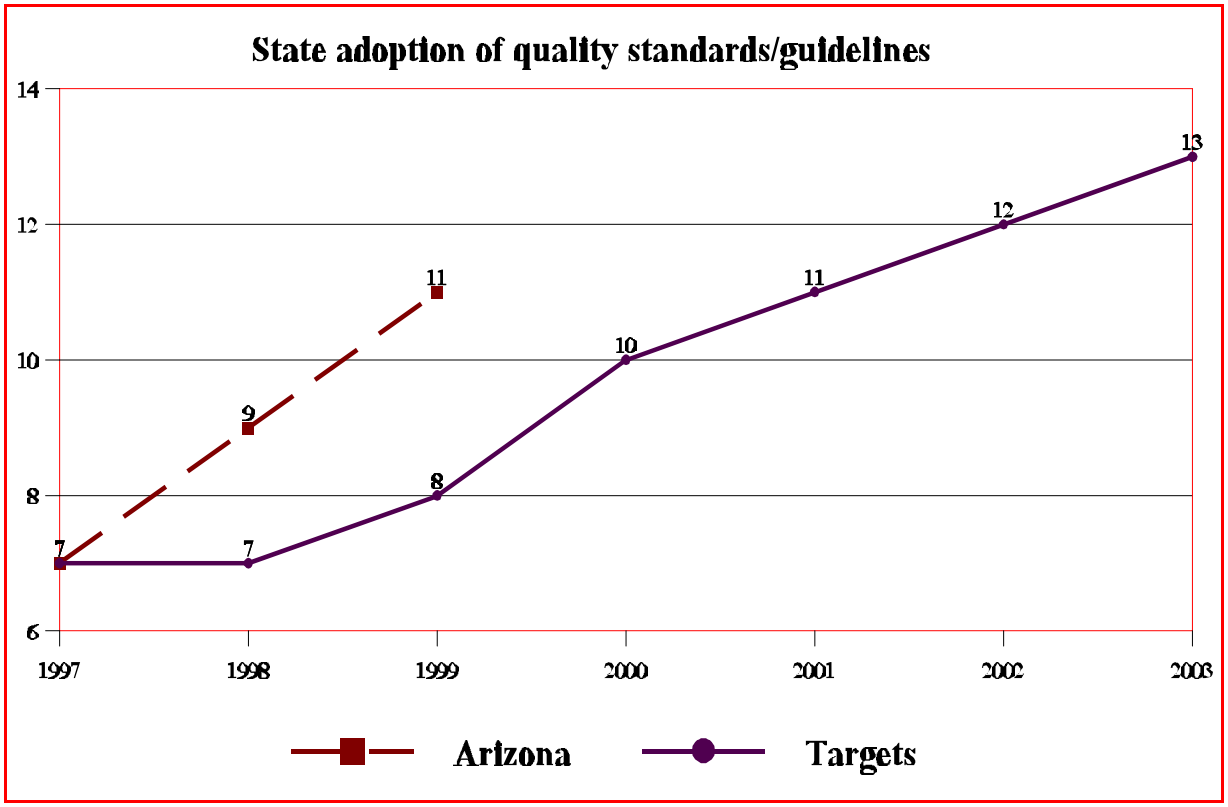
The State Title V program has adopted and recommended a set of quality standards/guidelines for the health care of the MCH population.

Healthy People 2000 Objective **No HP 2000 Objective.**

Note: 21 points are possible

Status

1999 Target: 8
1999 Actual: 11



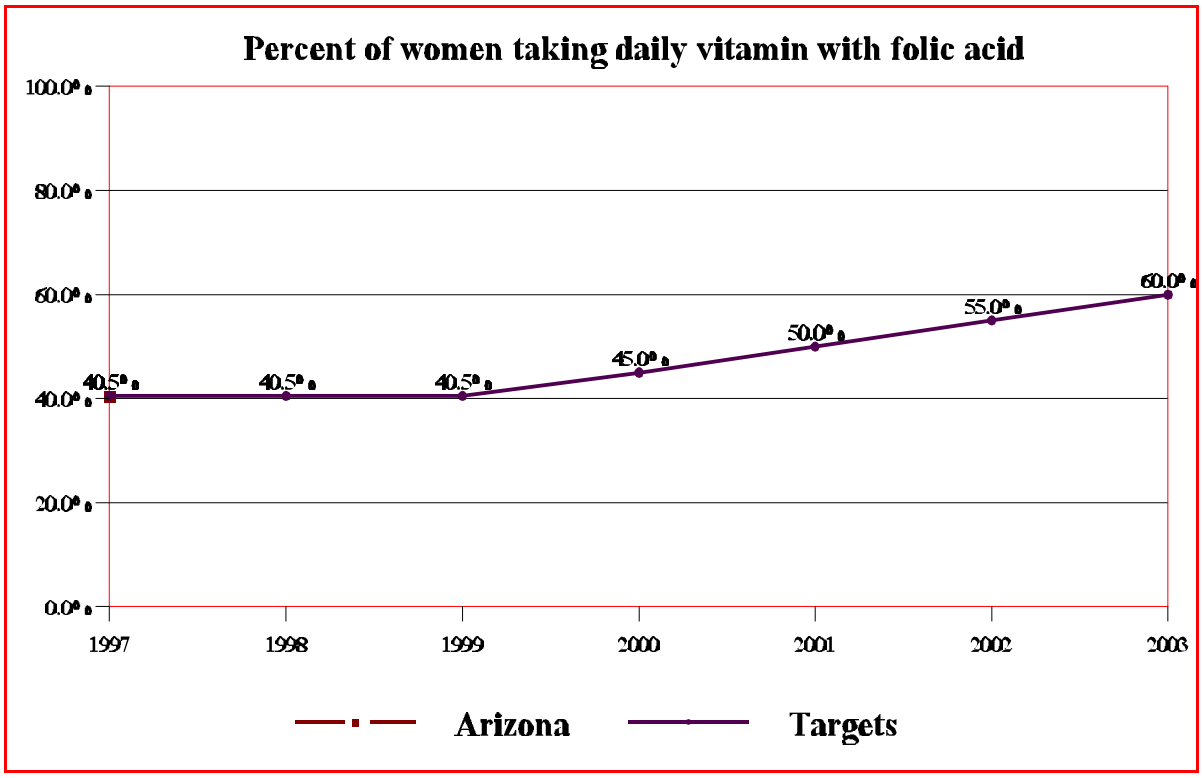
08
STATE PERFORMANCE MEASURE

TYPE: Risk Factor **Category: Population Based Services**	**Percent of women of childbearing age (18-44) who take a vitamin with the recommended 0.4 mg. of folic acid daily.**

Healthy People 2000 Objective **No HP 2000 Objective.**

Status

1998 Target: **Measure is discontinued. Replaced with State Performance**
1998 Actual: **Measure #09.**



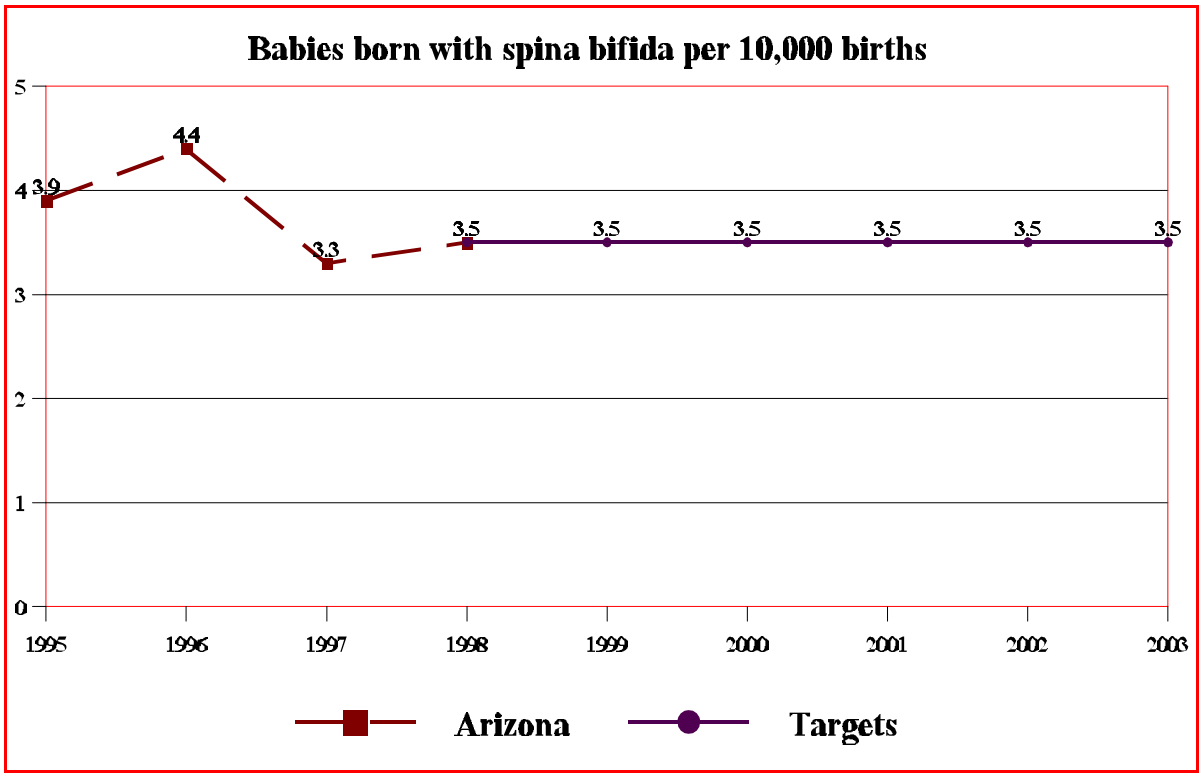
09
STATE PERFORMANCE MEASURE

TYPE: Risk Factor
Category: Population Based Services **Number of babies born with spina bifida per 10,000 live births.**

Healthy People 2000 Objective **No HP 2000 Objective.**

Status

1998 Target: 3.5 (baseline year)
1998 Actual: 3.5



Appendix G

Outcome Measures: Status and History

01
OUTCOME MEASURE

TYPE: Outcome
Category: N/A **The infant mortality rate per 1,000 live births.**

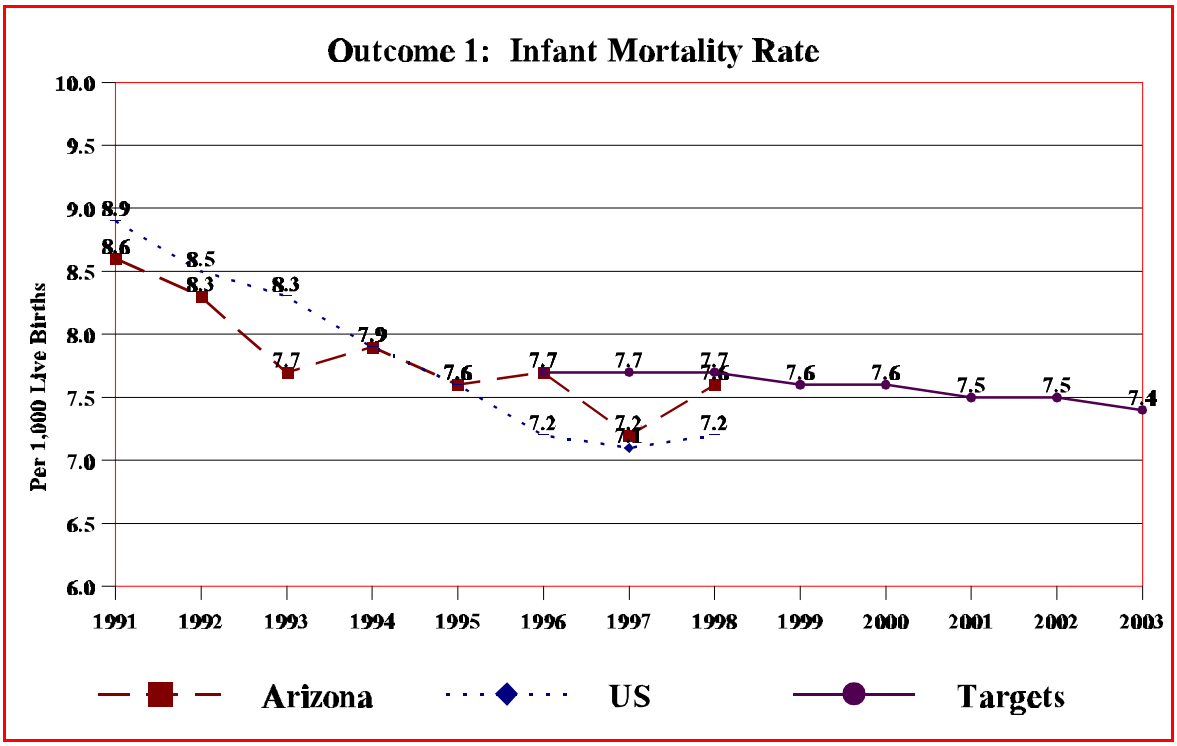
Healthy People 2000 Objective

Objective 14.1

Reduce the infant mortality rate to no more than 7/1,000 live births.

Status

1998 Target: 7.7
1998 Actual: 7.6



02
OUTCOME MEASURE

TYPE: Outcome Category: N/A	The ratio of the black infant mortality rate to the white infant mortality rate.

Healthy People 2000 Objective

Objective 14.1 and 14.1a.
Reduce the infant mortality rate to no more than 7/1,000 live births.
Reduce the Black infant mortality rate to no more than 11/1,000 live births.

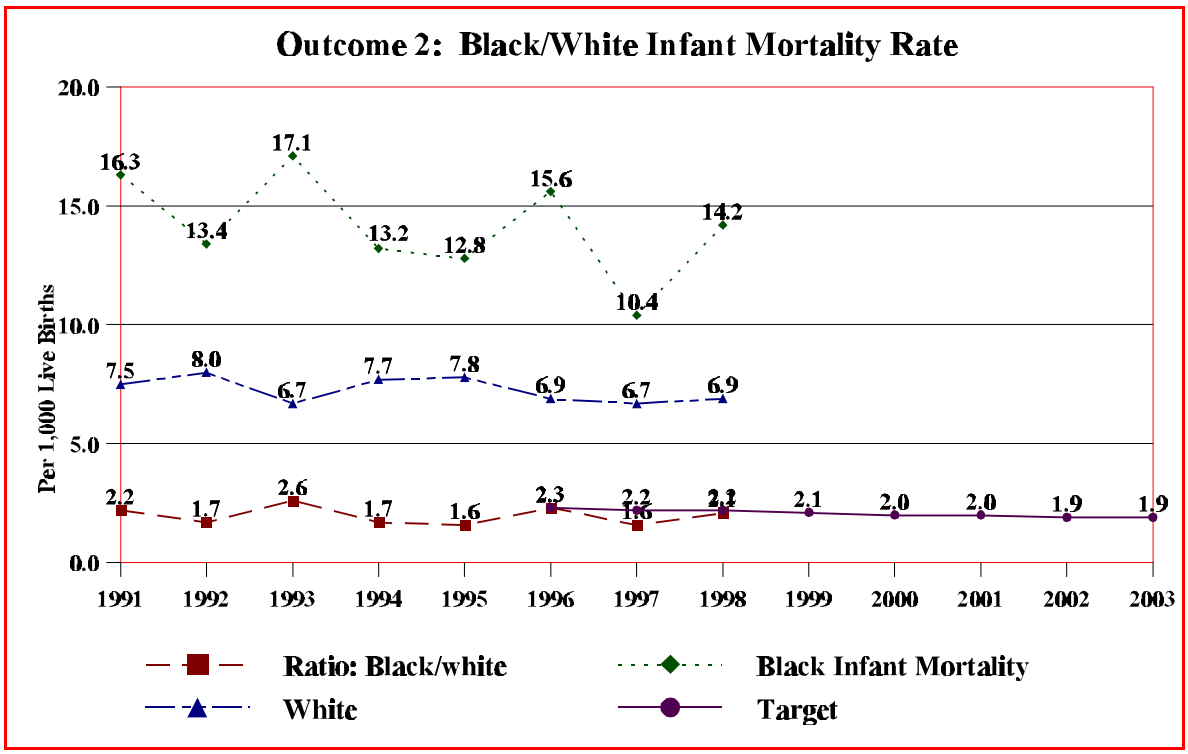
Note: If Black rate = 11 and White rate = 7
Ratio would be 1.6.

Arizona

	1996	1997	1998
Black:	15.6	10.4	14.2
American Indian:	9.4	8.4	11.5
Hispanic:	7.5	7.3	7.3
Non Hispanic White:	6.9	6.7	6.9
Asian:	3.5	3.9	3.5

Status

1998 Target: 2.2
1998 Actual: 2.1



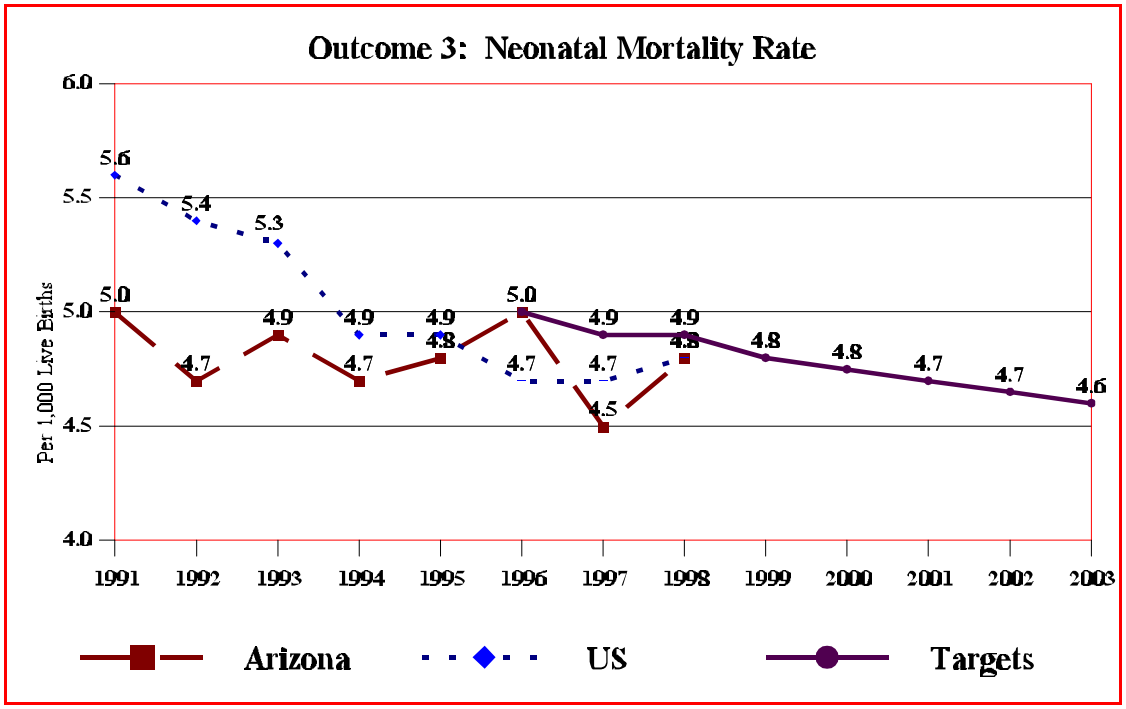
03
OUTCOME MEASURE

TYPE: Outcome
Category: N/A **The neonatal mortality rate per 1,000 live births.**

Healthy People 2000 Objective **Objective 14.1**
Reduce the neonatal mortality rate to no more than 4.5/1,000 live births.

Status

1998 Target: 4.9
1998 Actual: 4.8



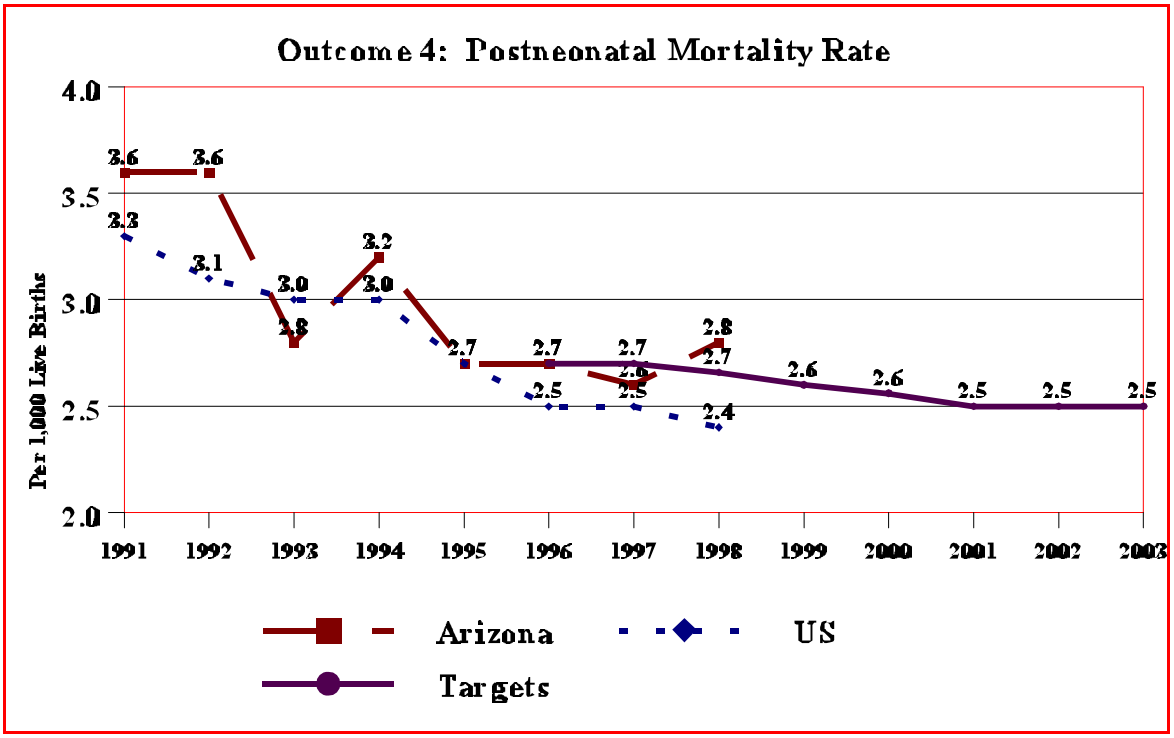
04
OUTCOME MEASURE

TYPE: Outcome
Category: N/A **The postneonatal mortality rate per 1,000 live births.**

Healthy People 2000 Objective **Objective 14.1g**
Reduce the postneonatal (28-365) deaths to 2.5 / 1,000 live births or less.

Status

1998 Target: 2.7
1998 Actual: 2.8



05
OUTCOME MEASURE

TYPE: Outcome
Category: N/A **The perinatal mortality rate per 1,000 live births.**

Calculation of rate:

$$\frac{\text{neonatal deaths (<7 days) + fetal deaths}}{\text{live births + fetal deaths}}$$

Healthy People 2000 Objective

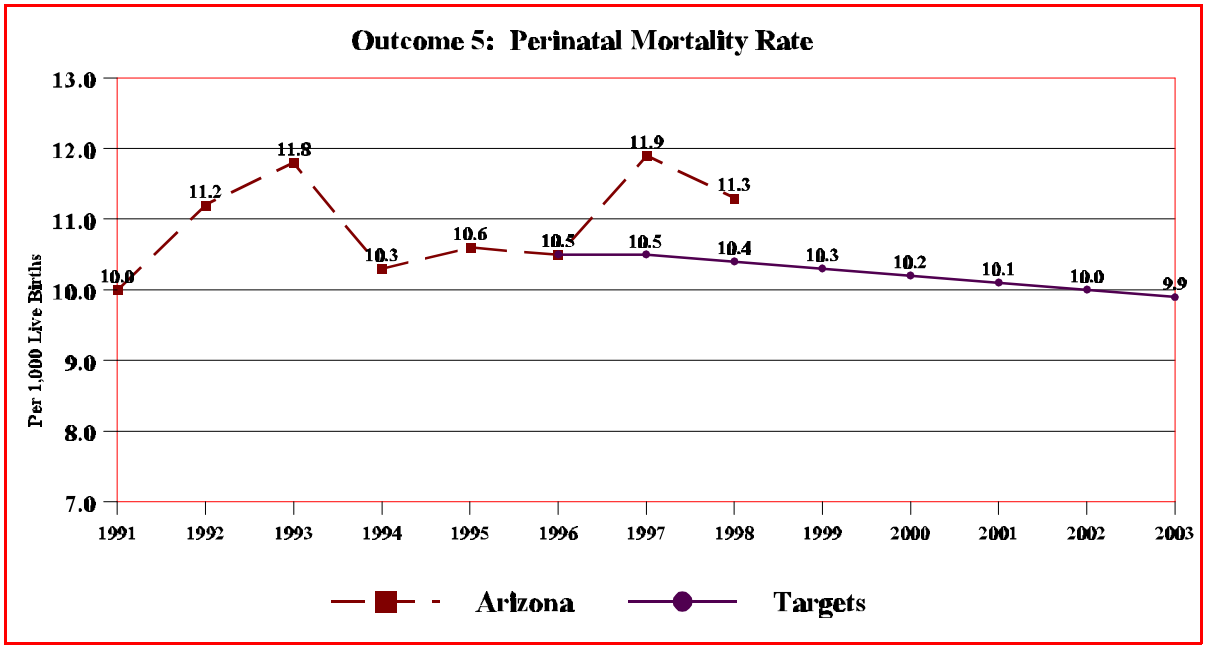
Related to Objective 14.1d and 14.2

Reduce the neonatal mortality to no more than 4.5 per 1,000 live births.
Reduce the fetal death rate (20 or more weeks gestation) to no more than 5 per 1,000 live births plus fetal deaths.

Note: if neonatal deaths = 4.5 per 1,000 and fetal deaths = 5 per 1,000;
perinatal death rate would be 9.5 per 1,000.

Status

1998 Target: 10.4
1998 Actual: 11.3



06
OUTCOME MEASURE

TYPE: Outcome
Category: N/A

Child death rate per 100,000 children aged 1-14.

Healthy People 2000 Objective

Age-related objective:

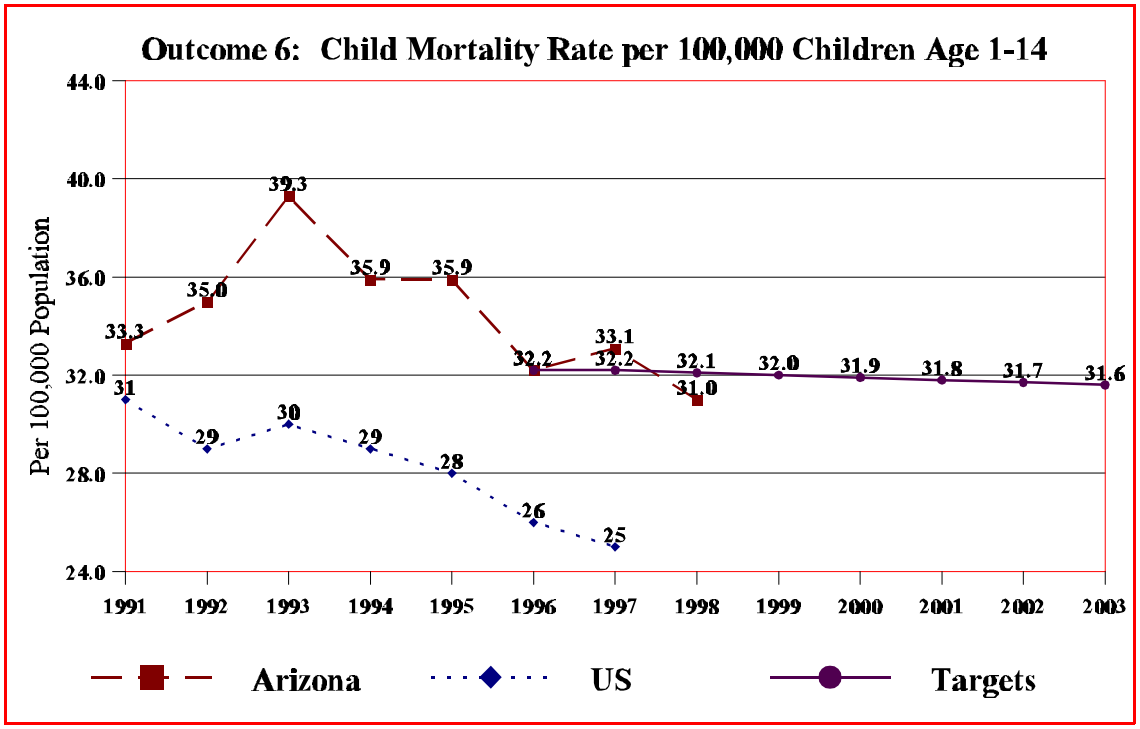
Reduce the death rate for children by 15% to no more than 28 per 100,000 children age 1-14.

Arizona:

	1996	1997	1998
American Indian:	72.9	39.2	55.4
Black	38.8	40.4	27.8
Hispanic:	29.8	36.3	35.2
Non Hispanic White:	26.6	27.5	23.4

Status

1998 Target: 32.1
1998 Actual: 31.0



07
OUTCOME MEASURE

TYPE: Outcome **Category: N/A**	**Disparity in the percent of families of CSHCN whose out-of-pocket medical expenses exceed 5% of annual income compared to other families with children.**

Healthy People 2000 Objective

Related to Objective 17.20

Increase to 50 the number of states that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.

Numerator: **The percent of families of CSHCN whose out-of-pocket medical expenses exceed 5% of their family income.**

Denominator: **The percent of other families with children whose out-of-pocket medical expenses exceed 5% of their family income.**

Baseline data for: 1997*

Families with CSHCN:	**7%**
other families with children:	**4%**

7% / 4% = 1.8

Statewide goals:

1998	**1.8**
1999	**1.8**
2000	**1.8**
2001	**1.7**
2002	**1.7**
2003	**1.6**

***Note: No information is yet available beyond the 1997 baseline.**

5.4

Core Health Status Indicator Forms

5.5

Core Health Status Indicator Detail Sheets

5.6

Developmental Health Status Indicator Forms

5.7

Developmental Health Status Indicator Detail Sheets

5.8

All Other Forms

5.9

National “Core” Performance Measure Detail Sheets

5.10

State "Negotiated" Performance Measure Detail Sheets

5.11

Outcome Measure Detail Sheets

Attachment - State Performance Measure #07

SEVEN CHARACTERISTICS DOCUMENTING THE DEVELOPMENT OF STANDARDS OR GUIDELINES

0 1 2 3*
9 9 9 : 1. MCH identifies issues requiring standards and guidelines.

0 1 2 3*
9 : 9 9 2. MCH obtains meaningful input from literature and stakeholders (i.e., the professional community, consumers, and other state agencies).

0 1 2 3*
9 9 : 9 3. MCH drafts standards and guidelines and circulates them for all programs and major initiatives.

0 1 2 3*
9 : 9 9 4. MCH facilitates the development of community consensus on standards and guidelines.

0 1 2 3*
9 9 : 9 5. Standards and guidelines are institutionalized and published.

0 1 2 3*
9 : 9 9 6. MCH has implemented standards and guidelines covering all of its programs and major initiatives.

0 1 2 3*
9 : 9 9 7. MCH evaluates the effectiveness and usefulness of existing standards and guidelines.

*0 - Not Met; 1 - Partially Met; 2 - Mostly Met; 3 - Completely Met

Total the numbers in the boxes (possible 0-21) and enter the number on the appropriate Performance Indicator row on Form 11 “Tracking Performance Measures by Service Levels of the Pyramid.”

11