

Healthy Families Arizona Annual Evaluation Report FY2009

July 2008 – June 2009



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Executive Summary

The field of child welfare has increasingly examined the long-term costs of child maltreatment and the importance of targeted prevention efforts. The costs of dealing with child abuse and neglect *after* it has occurred are staggering—billions of dollars go to case management, remedial services to families and children, foster care, adoption services, hospitalization, mental health care, and law enforcement. (The Future of Children, 2009). The promotion of the healthy development of children continues to be an important priority, fueled both by research that has supported child abuse prevention, early childhood education, and family support programs and by the high financial costs of not preventing abuse and neglect.

There is broad recognition that there are immense unmet needs among children and families in this country. Many of the most pervasive and intractable problems experienced by children can be found in homes with insufficient income, poor child care, poor parenting skills, and stressful conditions that interfere with effective child rearing and parenting. The long-term consequences of poor care take a toll on many of America's children, among these are: infant mortality, low birth weight, neuro-developmental impairments, child abuse and neglect, and accidental childhood injuries. The toll on parents is also devastating in terms of diminished economic self sufficiency, violence, educational failure and sporadic workforce participation. Every year, a large sum of money is spent by child welfare organizations in response to this myriad of problems.

Effective prevention programs that promote the safe and healthy development of children have the potential to greatly reduce the short and long-term costs of these social conditions. Home visitation programs are being closely examined as a promising approach to reduce these serious problems and a way to embrace the new research in the birth-to-three field by promoting greater health and development among all of our children. Home visitation programs share several common beliefs: the importance of children's early years, a focus on the pivotal role parents can play in shaping the healthy development of children's lives, and a perspective that service delivery works better when bringing services to families rather than expecting them to seek and find assistance in their communities.



The Healthy Families Arizona Program

Healthy Families Arizona (HFAz) serves families experiencing multiple stressors that can put their children at risk for child abuse and neglect. Healthy Families Arizona began in 1991 under the auspices of the Arizona Department of Economic Security (DES) with two funded sites and increased to fifty-eight (58) sites serving over 150 communities around the state by 2006. Budget reductions to DES in spring 2009 significantly decreased the number of DES funded program sites. DES currently (December 2009) provides approximately \$6.1 million annually to agencies around the state to deliver the HFAz program. These dollars come from designated Lottery Funds, The Federal Community-Based Child Abuse Prevention Grant, and a grant from the Governor's Office, Division of Children, Youth, and Families, Parent's Commission on Drug Education and Prevention. This is a reduction from over \$18 million in 2008. Many sites have had to reduce the level of services they provide, and some communities will not be served by the program due to limited capacity, resource, and funding. In April 2009, First Things First (FTF) responded to the state's urgent needs by releasing emergency dollars to agencies providing services consistent with the identified goals of FTF to promote early childhood health and development. Despite additional sites being funded, the Healthy Families Arizona program operates at approximately 65% capacity in 2009 compared to 2008.

HFAz follows the national Healthy Families America® model. The program has received accreditation as a state system since 2000. This credential means that all sites maintained adherence to all of the Critical Elements required by the Healthy Families model. The programs are preparing for re-accreditation in 2010, which is an important step in assuring evidence-based practices are in place.

An evaluation of Healthy Families Arizona has been conducted yearly since the program's inception. The scope of this evaluation report, as in past years, focuses only on the DES-funded Healthy Families sites.

Who Does Healthy Families Arizona Serve?

For the DES funded programs that are the subject of this report, there were 4,417 families actively engaged in the program from July 1, 2008 to June 30, 2009, reflecting a 20% reduction due to funding cuts as of June 2009. The average length of time families remained in the program was just over one year. About 75% of the engaged families entered the program after the birth of their child, with 25% entering during



the prenatal phase. Healthy Families Arizona program participants reported a significant number of risk factors at entry into the program compared to the overall state rates.

Risk Factors of Mothers	HFaz Prenatal Families	HFaz Postnatal Families	Arizona state Rates - 2008
Teen Births (19 years or less)	20%	15%	12%
Births to Single Parents	72%	70%	46%
Less Than High School Education	66%	62%	26%
Not Employed	83%	81%	NA
No Health Insurance	8%	4%	NA
Receives AHCCCS	83%	85%	53%
Late or No Prenatal Care	32%	35%	21%
Median Yearly Income	\$11,040	\$13,926	\$50,958

Additionally, families reported the following risk factors at intake:

- Premature birth – 17% of the infants who entered prenatally were born at less than 37 weeks gestation compared to 21% of infants who entered postnatally;
- Low Birth weight – 11% of the infants who entered prenatally had low birth weight (less than 5.5 pounds) whereas 16% of the infants who entered postnatally had low birth weight.

Outcomes for Families and Children Participating in Healthy Families

The economic recession experienced in the United States throughout this report year has undoubtedly impacted many of the at-risk families served by Healthy Families Arizona. While this study does not address the specific impact of economic insecurity on the health outcomes for children and families, continued awareness of the potential impacts are warranted, as unemployment remains high, health insurance becomes more difficult to attain and maintain, and education and supportive services for families are increasingly cut throughout the state. Despite these challenges, participants in Healthy Families Arizona did show significant positive change in a number of areas related to parenting practices, as shown in the following figure.



Parents in Healthy Families report significant changes in:

- Increased social support
- Increased problem solving
- Decreased depression
- Increased use of resources
- Improved commitment to parent role
- Improved parent child interaction
- Improved home environment
- Increased parenting efficacy

The Healthy Families Parenting Inventory (HFPI) revealed statistically significant improvement on 8 of 9 subscales and on the total HFPI score, suggesting that participation in the program reduced risk factors related to child abuse and neglect. Although the evaluation lacks a comparison group to study program effects, these findings (consistent over 2 years) continue to show that participants consistently report improvements in healthy parenting behaviors. The Healthy Families Longitudinal Evaluation, a separate 5-year study using an experimental design, will be able to provide comparisons with a control group. (see LeCroy & Milligan Associates, forthcoming).

Child Health, Development, and Safety

Timely immunizations remain an important goal for good child health and development outcomes. There continue to be positive results among HFAz participants. For example, there was a reported 85% immunization rate for the children of Healthy Families Arizona participants at 18 months. This is in comparison to a 73% immunization rate for 2-year-olds in Arizona. HFAz helps families adopt and maintain home safety practices. Results show over 98% of participants are using car seats, 97% have poisons locked, and 88% have working smoke alarms. This compares favorably with national trends among the general population (e.g., national estimates of 90% car seat usage and 75% “working” smoke detectors). The program also screens for developmental delays at 6 month intervals and assures that children who need further services are referred appropriately.



Child Abuse and Neglect

Child abuse and neglect incidents (substantiated) were examined for program participants, and the program met its performance goal of 95%. The results determined that the percent of families showing no child abuse or neglect incidences was 98.8 percent, the same as the previous year. This represents 52 families with a substantiated case of child abuse and neglect.

Mothers' Health, Education, and Employment

In addition to the parenting outcomes noted earlier, the HFAz model also seeks to improve the health, education and employment outcomes among mothers so that they are better equipped to meet their families' needs. Research shows that spacing births has positive health benefits for the mother, and results for HFAz show only 4% of mothers with a subsequent pregnancy waited over 24 months, while half the mothers with subsequent pregnancies waited a year or less. This means that a smaller percentage of women are spacing their births in spite of the health benefits, and the program needs to put more emphasis in this area. The number of mothers enrolled in school has greatly decreased in this reporting year, from 30% in 2007-08 to only 7% in 2008-2009 enrolled within 2 years of program participation. Possible explanations could be lack of access to affordable childcare, lack of funds for education, or job responsibilities. HFAz provides initial screening and referral for substance abuse problems, and substance abuse appears to be a difficult problem for more families. Over 34% (compared to 20% in prior year) of the participants were screened as having potential substance abuse problems during the first 2 months of the program.



Introduction

The Healthy Families Arizona program was established in 1991 as an initiative of the Department of Economic Security to develop and implement home visitation services with at-risk families. The program is modeled after the Healthy Families America initiative and is accredited by Prevent Child Abuse America. Healthy Families America began under the auspices of Prevent Child Abuse America (formerly known as the National Committee to Prevent Child Abuse) in partnership with Ronald McDonald House Charities and was designed to promote positive parenting, enhance child health and development, and prevent child abuse and neglect. Healthy Families America grew to over 440 communities in the United States and Canada by 2008.

As described by Prevent Child Abuse America, the Healthy Families program model is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Participating families receive home visits and referrals from trained staff. By providing services to under-resourced, stressed, and overburdened families, the Healthy Families Arizona program fits into a continuum of services provided to Arizona families.

Initially, Healthy Families America drew largely from existing research, and knowledge and experiences gained through the Hawaii Healthy Start program to design the program. Healthy Families America is built on a set of 12 research-based critical elements that provide a benchmark used to measure quality. Healthy Families Arizona (HFAz) became a nationally credentialed, community-based voluntary home visitation program designed to promote positive parenting, child development and wellness, and to prevent child abuse and neglect.

Current Issues in the Evaluation of Home Visitation programs

Evidence-based practice is one of the most common phrases espoused in today's policy debates about which programs to fund and which to eliminate. Home visitation continues to be at the center of that debate. Although home visitation can be traced back to the 1800s, full understanding of its effectiveness remains elusive for the most part. The debate on the effectiveness of home visitation gathered strength when President Obama announced his plan to spend up to 8 billion dollars over the



next ten years on home visitation – but only for programs that had the strongest evidence. Immediately it became clear that some program models would win and others would lose. The issue of which programs had enough “evidence” heated up and eventually the policy was reshaped to declare that the most funding would go to programs that had the most evidence and programs with modest evidence could get some, but less funding (See Haskins, Paxson, & Brooks-Gunn, 2009). Remaining in the legislation is the intent that all programs be subjected to continuous evaluation.

The growing demand for evidence-based home visitation is astonishing. A google search on “evidence-based home visiting programs” provides over 500,000 entries. The Healthy Families Arizona (HFAz) program is in the middle of the evidence-based revolution; the program was on the forefront in 1993 when it was recognized as a “promising program”, in part because of its strong evaluation component. Although a randomized trial had not been conducted at that time the program was focused on continuous program improvement.

While some experts define “evidence-based practice” as hinged on positive outcomes from a randomized clinical trial, many understand evidence-based practice as a set of guidelines and practices that transcend that narrow definition. For example, Gambrill (2003) notes, “evidence-based practice is an effort to draw on practice and policy related research findings as well as an evolving technology for integrating evidentiary, ethical, and practical issues.” Many experts claim evidence-based practice is best thought of as a *systematic* approach to improving the quality of services (Gray, 2001; Sackett et al., 2000). Over the years, the HFAz evaluation effort has conducted several special studies in order to improve the quality of services and program implementation. For example, the “problematic situations” study (LeCroy & Whitaker, 2005) sought to identify very specific problematic situations for home visitors. It was designed to shed additional understanding on what situations were difficult and provide a framework for improving supervision and training to respond to those difficult situations. The overall evaluation model of the Healthy Families Arizona program focuses on quarterly and annual reports in order to meet legislative requirements, measure participant outcomes, describe evolving program components, and provide basic accountability. Furthermore, the ongoing evaluation seeks to provide information for strategic growth and planning by examining program theory and logic as it evolves and ask critical questions to inform progress and growth.



Some action steps in this process include:

1. Working with program directors, program administrators, supervisors, and direct care home visitors to learn about evidence-based processes.
2. Involving participants of home visitation services as informed participants.
3. Reviewing Healthy Families Arizona management and administrative practices and policies that influence practice.
4. Addressing implementation challenges including the implications of scarce resources.

These broader aspects of evidence-based practice acknowledge that achieving evidence-based practice is a complex enterprise and not as simple as just administering a program with “good evidence”. For example, poor morale or high turnover of home visitors could easily undermine the “effectiveness” of an evidence-based practice program.

The evaluation of the Healthy Families Arizona program continues today, necessarily scaled back because of budget cuts, but still a significant aspect to the program. Furthermore, in this time of fewer resources, programs will need to take more initiative to rigorously investigate their program operations and data to keep the process of using evidence active and part and parcel of program improvement. Some key ways in which all programs can engage in evidence review includes:

1. Searching for ongoing research to answer questions about program operations.
2. Critically examining the existing data on the program.
3. Using the program report, quarterly reports and process of data collection to inform ongoing practices.
4. Evaluating the process for improving the program and seeking ways to implement improvements.



Program Reductions in 2009

Healthy Families Arizona began in 1991 with two sites and increased to fifty-eight (58) sites serving over 150 communities around the state by 2006. Budget reductions to DES and the program in 2009 decreased the number of sites. (see Exhibit 1 for currently funded sites). Many sites have had to reduce the level of services they provide, and some communities will not be served by the program due to limited capacity, resources, and funding.

Exhibit 1. Healthy Families Arizona Program Sites as of June 2009

Maricopa County	Santa Cruz County
Central Phoenix	Nogales
Maryvale	Graham County
South Phoenix	Safford
East Valley	Pascua Yaqui Tribe
Sunnyslope	Lake Havasu
Mesa	Coconino County
West Phoenix	Page
Pima County	LaPlaza Vieja
CODAC	Kinlani
La Frontera	Flagstaff
Pima Main	Tuba City
Mojave County	Yavapai County
Kingman	Prescott
Bullhead City	Navajo County
Cochise County	Winslow
Douglas	Yuma
Sierra Vista	Excel

DES currently (December 2009) provides approximately \$6.1 million annually to agencies around the state to deliver the HFAz program. These dollars come from designated Lottery Funds, The Federal Community-Based Child Abuse Prevention Grant, and a grant from the Governor's Office, Division of Children, Youth, and Families, Parent's Commission on Drug Education and Prevention. This is a reduction from over \$18 million in 2008. In April 2009, First Things First (FTF)



onded to the state's urgent needs by releasing emergency dollars to agencies providing services consistent with the identified goals of FTF to promote early childhood health and development. In SFY 2010 FTF provided \$6.3 million to HFAz programs around the state, enabling some sites to be increased in size and 8 additional sites to be funded. Unfortunately, despite this generous funding the HFAz program operates at about 65% capacity in 2009 compared to 2008.

In addition to the reduction in sites and numbers of families being served, funding cuts in early 2009 resulted in the temporary suspension of the HFAz Quality Assurance and Training Services and significant reductions in evaluation services for the state. The impact of the cuts includes decreases in quality assurance site visits, fewer training workshops, fewer support materials being distributed, reduced evaluation data quality checks, a reduction in data collected, entered and analyzed, and the necessity to re-focus and reduce the evaluation to center on data to track only basic outcomes and credentialing data.

Credentialing Update

Healthy Families Arizona programs are working diligently to prepare for accreditation which is scheduled for 2010, after being granted a one-year extension due to the reorganization occurring with the 2009 funding cuts. There are two sets of accreditation standards; one set of standards is designed specifically for the statewide system to assure that the system is performing to best practice measures; the other set of standards is designed to be completed by the individual Healthy Families Arizona (HFAz) programs. In order for Healthy Families Arizona programs to be accredited, both the state system and the programs within the system must meet standards of best practice.

The HFAz state system accreditation criteria include five functional areas. These functional areas include: 1) adherence to a system of statewide policies, 2) provision of both training and technical assistance, 3) monitoring and quality assurance services, 4) utilization of evaluation results to improve practice, and 5) administration services that assure appropriate oversight of service implementation.

The individual programs follow the best practice standards that operationalize the Healthy Families America 12 Critical Elements. These Critical Elements are broken



into three major service activities: 1) initiation of services, 2) home visiting services, and 3) administration. There are 119 standards that indicate best practice-based upon over 30 years of research.

There are three major steps in the accreditation process. First, both the HFAz state system and the individual programs prepare a written self-study that enables HFAz to take a critical look at the services offered and improve practice as needed. This written self-study is submitted to the Healthy Families America national office. The second step requires site visits by nationally trained peer reviewers. The HFAz state system receives a site visit first, followed by visits to individual program sites. The peer reviewers come to Arizona from other states and serve as outside, objective observers. Following the site visit, each program will receive an Accreditation Site Visit Report that will detail the strengths of the program as well as areas in which services can be improved. Finally, each program can demonstrate improvement in practice and formally respond to the Healthy Families America Accreditation Panel, who will make the final decision to accredit. Peer review site visits are tentatively scheduled for June 2010 for the statewide system, and for July through September 2010 for the individual program sites.



In this Report

This annual program evaluation report for Healthy Families Arizona centers on annual participant outcomes, process information, and evaluation information useful for program improvement for the time period July 1, 2008- June 30, 2009. The process evaluation describes how the program is being implemented, the types of services provided, and characteristics of families participating in the program. The outcome (or summative) evaluation examines program outcomes and looks at the program's impact across a number of measures. Detailed appendices provide specific site data on process and outcome variables. The description of evaluation methodology explains the methods used for each part of the report.

Due to reduced funding for the program evaluation, the 2009 Annual Report is limited to reporting of data for basic accountability and credentialing. It should be noted that the impact of the reduction in program will not be fully evident in the data analyzed for this report (July 2008-June 2009) as the reductions were not implemented until March 2009. Currently, the focus of the Healthy Families Arizona evaluation also includes the creation and distribution of quarterly reports for ongoing program monitoring, but detailed process and outcome studies are no longer included.

Evaluation Methodology

This evaluation includes both a basic process evaluation component and an outcome evaluation component. The primary questions for the process evaluation are: Who participates in the program and what are the services provided? The primary question for the outcome evaluation is: What are the short and long term outcomes of the program?

For the process evaluation, evaluation activities focus on obtaining and describing the program "inputs" such as numbers served, participant characteristics, and services received. The goal is to describe the participants involved in the Healthy Families Arizona program and document the services they receive. Also, we provide information relative to critical elements and expected standards from Healthy Families America as a benchmark for assessing some aspects of the implementation. The primary data for the process evaluation comes from the management information system developed to process data for Healthy Families Arizona. Sites



are required to submit data that captures enrollment statistics, number of home visits, administration of assessment and outcome forms, descriptions of program participants, types of services provided, etc.

The overall aim for the outcome study is to examine program effects or outputs, at both the parent and child level on a number of different outcomes. The evaluation team has worked together with program staff to develop and select key program measures that are used to provide feedback and to measure the program's ability to achieve specific outcomes. The primary activities of the outcome evaluation are to: examine the extent to which the program is achieving its overarching goals, examine the program's effect on short term goals, and examine the extent to which participant characteristics, program characteristics, or community characteristics moderate the attainment of the program's outcomes. For most of the outcome measures, Healthy Families home visitors collect pretest or baseline data and follow up data at different time points of program participation at 6 months, 1 year, 18 months, and 24 months. Evaluation funding in prior years allowed for the collection and analysis of data up through 60 months. Part of the outcome evaluation also includes examination of substantiated cases of child abuse and neglect obtained through the Department of Economic Security's CHILDS data base.

The process and outcome components of the evaluation were developed and guided by the logic models for both the prenatal and postnatal programs. Logic models for the prenatal and postnatal components of Healthy Families Arizona are presented in the Appendices.



Healthy Families Arizona Participant Characteristics

During the current study year, July 2008 through June 2009, the total number of families actively engaged by the DES-funded programs was 4,417. This represents a 20% decrease in number of families served, primarily due to funding cuts in the last quarter of the study year. Successful program engagement is defined as those families who complete 4 home visits. Not all families who enroll become actively engaged in the program. Overall the engagement rate among families was 88 percent. This rate is slightly higher than what is reported nationally, with most programs reporting between 70-80 percent engagement (Katzew et al, 2002; Jacobs, et al., 2005; Williams, et al., 2005).

Although programs maintain full caseloads, Healthy Families Arizona served a relatively small percent of the target population across Arizona. As an example, in Arizona in 2008 there were 99,215 births (Arizona Health Statistics and Vital Statistics, 2008), and approximately 15% of this total (14,882 babies) could be *eligible* for HFAz services, according to screening criteria used for the program. During 2008-09 study year, 1534 families with new babies entered the HFAz program – this represents approximately 10% of the eligible births (14,882) statewide.

About one quarter (23%) of the families enter the program in the prenatal period (prenatal participants) and about three quarters (77%) of the families enter the program after the birth of the child (postnatal participants). The data for this report focuses on participants who were “actively engaged” (received 4 or more home visits) in the Healthy Families program regardless of when they entered the program. From July 2008 to June 2009, there were 1,019 families actively engaged as prenatal participants and 3,398 actively engaged as postnatal families. These numbers represent a 20% decrease from last year with 283 fewer prenatal participants and 827 fewer postnatal participants compared to last year.

At the beginning of this evaluation year, there were 58 HFAz program sites. However, this total was significantly reduced as of June 2009 due to funding cuts. Exhibit 2 presents the total numbers of prenatal and postnatal participants actively engaged from July 2008 to June 2009.



Exhibit 2. Participants Actively Engaged July 2008 – June 2009

County	Site	Prenatal	Postnatal	Total
Cochise	Douglas/Bisbee	18	46	64
	Sierra Vista	8	58	66
	Sierra Vista Blake	24	53	77
Coconino	Flagstaff (La Plaza Vieja)	33	34	67
	Page	8	34	42
	Tuba City	22	37	59
	Wellspring	31	46	77
	Williams (Kinlani)	44	35	79
Gila	Globe/Miami	9	31	40
Graham	Safford	12	36	48
Maricopa	Central Phoenix	29	120	149
	Deer Valley	9	62	71
	East Mesa	20	62	82
	East Valley/Phoenix	31	133	164
	El Mirage/Surprise	10	76	86
	Gilbert	15	22	37
	Glendale	8	40	48
	Kyrene	12	53	65
	Maryvale	20	137	157
	Mesa	31	139	170
	Metro Phoenix	9	79	18
	Northwest Phoenix	13	45	58
	Peoria	18	51	69
	Scottsdale	9	72	81
	South Mountain	10	67	77
	South Phoenix	28	113	141
	Southeast Phoenix	12	71	83
	Southwest Phoenix	9	74	83
	Sunnyslope	15	77	92
	Tempe	10	58	68
	Tolleson/Avondale	9	56	65
	West Phoenix	5	48	53
Mohave	Bullhead City	6	44	50
	Kingman	19	43	62
	Lake Havasu City	33	76	109
Navajo	Winslow	8	22	30
Pima	Blake Foundation	19	58	77
	Casa de los Niños	17	81	98
	Casa Family First	28	80	108
	Child & Family Resources	41	85	126
	CODAC	29	57	86
	East/SE Tucson	23	55	78
	La Frontera	26	72	98
	Marana	10	47	57
	Metro Tucson	9	49	58
	Pascua Yaqui	42	25	67
	Southwest Tucson	20	48	68
Pinal	Apache Junction	15	43	58
	Gila River	13	14	27
	Coolidge (Pinal County)	9	72	81
	Stanfield	4	5	9
Santa Cruz	Nogales	27	86	113
Yavapai	Prescott	17	121	138
	Verde Valley	46	42	88
Yuma	Primero Los Niños	4	31	35
	Yuma	13	77	90
Total		1019	3398	4417



Length of time in program and reasons for termination

It is difficult to draw conclusions or comparisons regarding the length of time families stayed in the program for this study cohort due to the fact that the majority of terminations (55%) were caused by program closure. For all families (N=1,429) who closed:

- The median number of days in the program was 268 days.
- The average length of time in the program was 420 days.
- Thirty-seven percent (37%) of families were in the program one year or longer.

Exhibit 3 shows the most frequent reasons families left the program during this year, and a breakout by site is presented in the Appendix A.

Exhibit 3. Most Frequent Reasons for Termination 2009

Reason	Prenatal	Postnatal
Closure in March 2009 due to funding cuts	55.3%	55.5%
Did not respond to outreach efforts	10.2%	12.8%
Moved away	13.2%	9.0%
Family referred to further Services	5.3%	6.5%
Refused worker change	3.4%	3.6%
Other	3.1%	3.9%
Unable to contact	3.4%	2.8%
Completed program	0%	2.2%
Self-sufficiency	2.0%	2.1%

Characteristics of the target population

The Healthy Families Arizona program targets expectant parents and parents with newborn infants who live in high risk communities – those communities with high rates of teen pregnancies, child abuse and neglect reports, poverty, and low birth weight babies. Furthermore, the program seeks to offer services targeted to factors that are consistently correlated with maltreatment – specifically to parents at high risk for parenting difficulties due to high stress, single parenting, low income, or mental health, substance abuse and domestic violence issues.



Exhibit 4 presents selected risk factors for mothers at intake for both prenatal and postnatal families compared with state rates. As the data show, mothers participating in Healthy Families show much greater risk than the overall population in Arizona. Birth mothers are teens in about 20% of all prenatal families and in over 14% of postnatal families. Single parents make up the vast majority of participants – over 70% of the mothers at intake. Over 80% of the mothers are unemployed and receive AHCCCS. With a median annual income of \$11,000-\$14,000, it can be seen that many participants are living in poverty. In relation to the state rates, these data confirm that Healthy Families participants do represent an “at risk” group of mothers. The program has been successful in recruiting families with multiple risk factors associated with child abuse and neglect and poor child health and developmental outcomes. Also, it is noteworthy that mothers who enter the program prenatally exhibit higher risk factors than those entering postnatally, indicating that the program is reaching the mothers who might most benefit from receiving supportive services as early as possible.

Exhibit 4. Selected Risk Factors for Mothers at Intake - 2009

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona state Rates - 2008
Teen Births (19 years or less)	20.4%	14.5%	12.3%*
Births to Single Parents	71.7%	69.5%	45.5%*
Less Than High School Education	65.6%	61.5%	26.3%*
Not Employed	82.6%	80.6%	NA
No Health Insurance	7.7%	3.6%	NA
Receives AHCCCS	83.1%	84.8%	52.9%*
Late or No Prenatal Care	32.4%	34.6%	20.5%**
Median Yearly Income	\$11,040	\$13,926	\$50,958 ***

*Source: 2008 data from the Arizona Department of Health Services Vital Statistics records.

Percent does not include “unknown.”

**Source: 2006 data from the Arizona Department of Health Services Vital Statistics records.

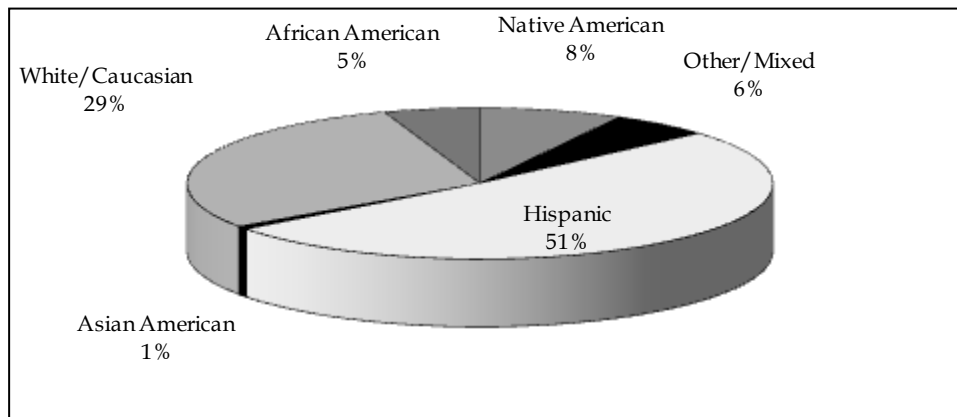
***U.S. Census Bureau, American Community Survey, 2007 and 2008

Note: Percentages for the combined total for prenatal and postnatal families can be found in Appendix A.

The Healthy Families Arizona program continues to serve a culturally diverse population. In the following two exhibits, ethnicity is examined from enrollment data for mothers and fathers, with prenatal and postnatal participants combined. Just over 50% of mothers and fathers enrolled in the program are Hispanic. Site level data is available in Appendix A.

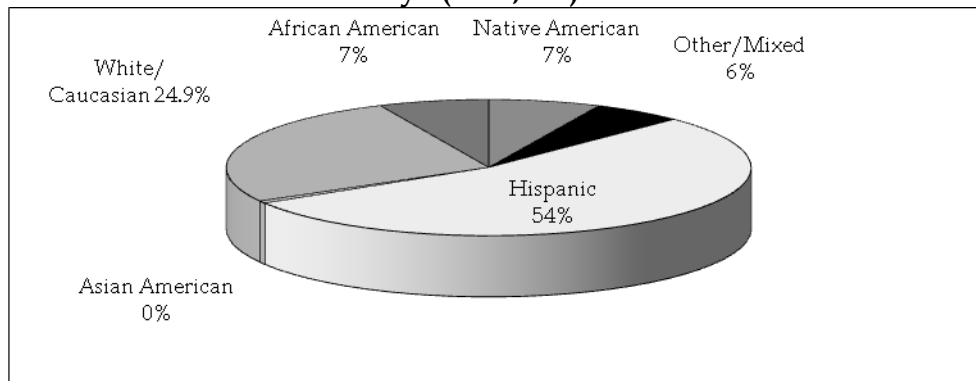


Exhibit 5. Ethnicity of Mothers * (N=4,278)



*This includes all mothers who entered the program either prenatally or postnatally.

Exhibit 6. Father's Ethnicity* (N=3,840)



*This includes all fathers who entered the program either prenatally or postnatally.

Assessment of risk factors

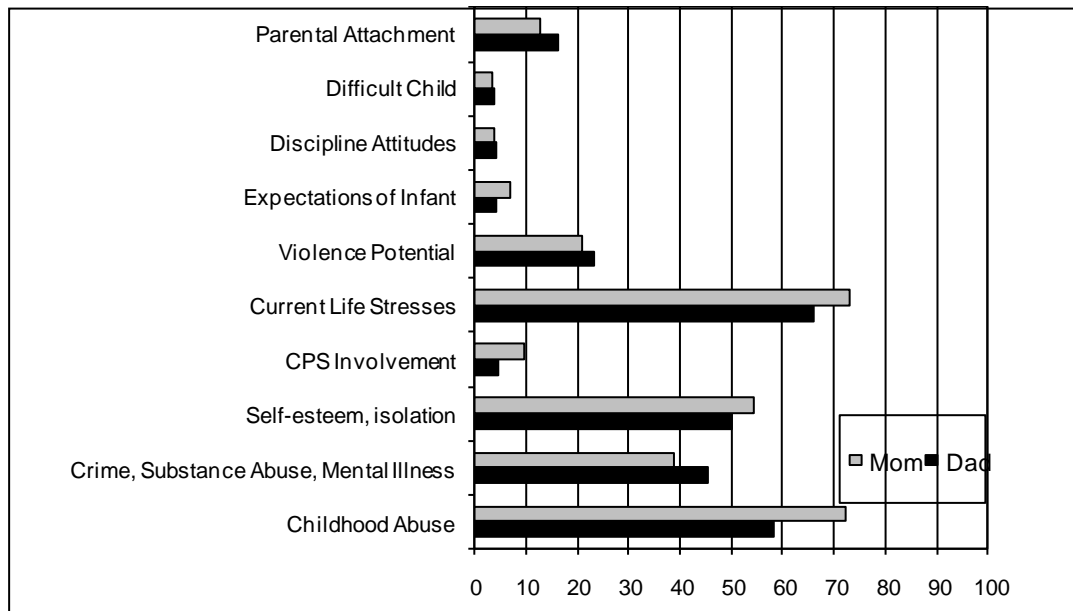
Both mothers and fathers are assessed initially using an interview with the *Parent Survey*¹. The Parent Survey helps the program learn about the family's circumstances and life events that place them at risk for child maltreatment and other adverse outcomes. During the intake process, the Family Assessment Worker evaluates each family across the 10 domains of the Parent Survey. The survey is administered in an interview format and the items are then rated by the worker according to level of severity.

¹ The Family Stress Checklist was revised by the original developer and renamed the Parent Survey to impart a more strengths based perspective, however, the rating scale remains unchanged.



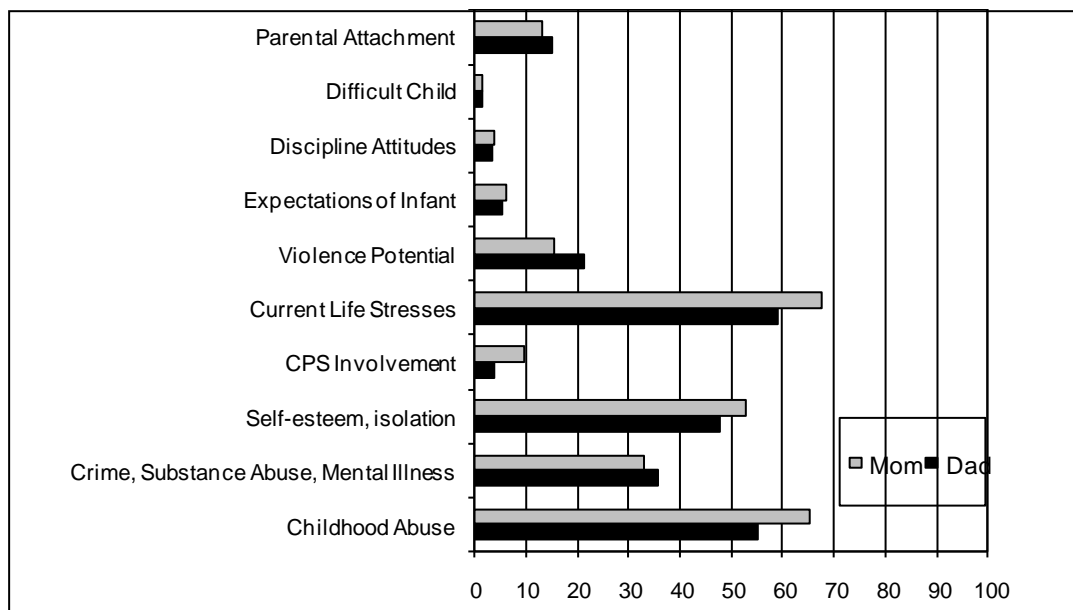
The percentage of parents scoring *severe* on each of the scales is presented for prenatal mothers and fathers and for postnatal mothers and fathers in Exhibits 7 and 8.

Exhibit 7. Percentage of Parents Rated Severe on Parent Survey Items PRENATAL *



*Note: The Ns ranged from 1247-1288 for mothers and from 468-1076 for fathers depending on the item.

Exhibit 8. Percentage of Parents Rated Severe on Parent Survey Items POSTNATAL *



*Note: the Ns ranged from 3888-4193 for mothers and from 1855-3749 for fathers depending on the items



As in previous years, the four factors rated most severe by both mothers and fathers are the same: history of childhood abuse (for the parent), current life stressors, self-esteem and isolation, and a history of crime, substance abuse or mental illness. There are no large differences between prenatal participants and postnatal participants.

Overall, participants in the Healthy Families Arizona program are families that are impoverished, stressed, socially disadvantaged, and lacking in resources to manage the demands of parenting. It would appear that these families are among Arizona's most at-risk for child abuse and neglect and have the greatest potential for benefitting from programs that address long term child development outcomes.

Infant Characteristics

In addition to family risk factors, information about infant risk factors is collected at intake for postnatal families and at birth for prenatal families. This information helps to indicate the level of need of the families served by the program. The following exhibit displays the high-risk characteristics of the newborns among families who entered prenatally and postnatally.

Exhibit 9. Risk Factors for Infants - 2009

Risk Factors for Infants	Prenatal Families*	Postnatal Families**	Arizona State percent***
Born < 37 weeks gestation	17%	20.9%	10.1%
Birth Defects	0.3 %	2.1%	<1%
Low Birth Weight	11.3%	15.6%	7%
Positive Alcohol/Drug Screen	1.6%	5.1%	NA

*The Family Support Specialist collects this information either from the family or a CPS referral for prenatal families.

**Family Assessment Workers collect this information from hospital records for postnatal families.

***2008 data from the Arizona Department of Health Services Vital Statistics records.

The overall risk factors for infants have remained about the same as last year. The percentage of postnatal Healthy Families Arizona program infants born early (less than 37 weeks gestation) is 7% higher than the overall state rate, suggesting that the families being identified for service have a significant level of need. The percentage of low birth weight infants in the program also remains high in comparison to the state rate.

Data suggests the Healthy Families Arizona program is reaching parents and babies who have greater risks of child maltreatment and other unhealthy outcomes.

Healthy Families Arizona home visitors have the opportunity to help mothers



prevent having pre-term or low birth weight babies by encouraging parents to attend regular prenatal visits, to adopt healthy behaviors such as good nutrition habits, and to stop alcohol, drug, and tobacco use. The recent Healthy Families New York randomized control study reports that in a the control group mothers were significantly more likely to deliver low birth weight babies than were the mothers engaged in the Healthy Families program (Mitchell-Herzfeld et al., 2005). These data show that the infants in the Healthy Families Arizona program are at significant risk and can benefit from early support. Both low birth weight children and children born at less than 37 weeks gestation are at more risk for child maltreatment and present special challenges for parents.



Key Healthy Families Arizona Services

To reach the overall goals of reducing child abuse and neglect, success will be more likely when the program ensures that families stay engaged in the program and receive the services and resources they need. An important aspect of the Healthy Families program model is linking families with needed community resources. Nutrition and child development services are the most fully accessed services among families at all data collection time periods (LeCroy & Milligan Associates, 2008). While much of the home visitor's assistance is provided in the home, home visitors connect families with education, employment, and training resources, counseling and support services, public assistance and health care services. The provision of and referral to developmental screening is focused on in this report.

Developmental Screens and Referrals for Children

Developmental screens are regularly provided by home visitors and are used to measure a child's developmental progress and identify potential developmental delays requiring specialist intervention. The program administers the Ages and Stages Questionnaire (ASQ) for physical development and the ASQ-Social Emotional (SE) which focuses on social and emotional difficulties. The program goal is to screen 80% of the children in families served by the program. As Exhibit 10 shows, approximately two-thirds of children are receiving the ASQ at each interval. Rates of screening for this year are approximately 10% lower than the previous year. The reduced rates of screening could be due to the loss and transition of many home visitors due to funding cuts, as well as disruptions in data collection quality during times of program closure. In addition some screenings are missed due to families being on outreach status. It will be important to follow this trend in future years, as the program sites stabilize.

Exhibit 10. ASQ Screening --2009

Interval ASQ Screening	Percent of children Screened with ASQ 2009	Percent screened as delayed 2009
6-month	65.1%	6.2%
12-month	66.2%	7.9%
18-month	64.5%	19.1%
24-month	63.2%	25.8%



Healthy Families Arizona works to insure that children who may have development delays can obtain needed development intervention. Program data tracks what happens after a family's ASQ is scored: 1) the child is screened as having no delays, 2) the child is referred for further assessment and is determined to have no delays upon a more extensive assessment, 3) families are referred to different services such as the Arizona Early Intervention Program (AzEIP) or other early intervention or therapy, or 4) the home visitor may provide developmental intervention or education to the family.

Although from 6-26% of children (depending on their age) are initially screened as delayed in their development, up to one fourth of the children who initially screen as delayed on the ASQ are determined "not delayed" upon *further* assessment (see Exhibit 11 below). For example, of the families at 6 months who screened as delayed on the ASQ and were referred for more assessment, 10 families showed no delay, 12 families were referred to the AzEIP, 3 families were referred to an early intervention program, 31 families received developmental intervention, 1 family received specialized therapy, and 1 declined further referral. The ASQ screening provides a valuable service to families because it enables them to access appropriate services to meet their child's particular needs. The following exhibit shows the outcome of follow-up assessment that is completed with families at the different time intervals.

Exhibit 11. ASQ Follow-Up Services - 2009

	Continued Assessment shows "no delay" % (n)	Referred to AzEIP % (n)	Referred to other Early Intervention % (n)	Provided Developmental Intervention % (n)	Referred to Therapy % (n)	Parent Declined Referral % (n)
6-month Screen	25.6% (10)	30.8% (12)	7.7% (3)	79.5% (31)	2.6% (1)	2.6% (1)
12-month Screen	26.3% (10)	28.9% (11)	21.1% (8)	73.7% (28)	2.6% (1)	15.8% (6)
18-month Screen	29.9% (20)	20.9% (14)	9.0% (6)	86.6% (58)	6.0% (4)	13.4% (9)
24-month Screen	20.0% (13)	24.6% (16)	12.3% (8)	80.0% (52)	3.1% (2)	10.8% (7)

Note: Percents do not equal 100% as multiple referrals can happen for a single child.



Outcomes for Families

The Healthy Families Arizona program focuses the evaluation on the following primary outcome indicators:

- Parent outcomes
- Child development and wellness
- Mother's health, education, and employment
- Child abuse and neglect

Parent outcomes

One of the primary intermediate goals of the Healthy Families Arizona program is to have a positive influence on parenting attitudes and behaviors. While reducing child abuse and neglect is the ultimate outcome, intermediate objectives such as changes in parenting behaviors can inform us about progress toward the ultimate goal. The intermediate goals of the Healthy Families program revolve around a few key factors known to be critical in protecting children from maltreatment (Jacobs, 2005):

- providing support for the family;
- having a positive influence on parent-child interactions;
- improving parenting skills and abilities and sense of confidence; and
- promoting the parents' healthy functioning.

Healthy Families Parenting Inventory reveals positive parent change

In order to evaluate critical intermediate goals the evaluation team developed the Healthy Families Parenting Inventory or the HFPI in 2004. The development of the HFPI was guided by several perspectives and sources: the practice experience of the home visitors in the Healthy Families Arizona program; data gathered directly from home visitors, supervisors, and experts; information obtained from previous studies of the Healthy Families program; and examination of other similar measures. The process included focus groups with home visitors, the development of a logic model, and an extensive review of relevant literature. The final instrument includes 9 scales: Social Support, Problem-solving, Depression, Personal Care, Mobilizing Resources, Role Satisfaction, Parent/child interaction, Home Environment and Parenting Efficacy.



In 2007-2008, the HFPI underwent more extensive testing, specifically, a method called exploratory factor analysis. Essentially, this analysis explores patterns among the survey questions in order to discern relationships and to assess the strength of the HFPI's ability to measure key concepts. The subscale and overall reliability was assessed and found to be adequate to good. A complete report was generated detailing the efforts to establish the initial validation of the HFPI and is available from the evaluation team. Since the HFPI is being implemented in many states and other home visiting programs, further study on the instrument will be forthcoming.

The following section describes the results obtained for each subscale of the HFPI. The level of significance is reported along with the *effect size* which estimates the *magnitude* of the change. The results using this instrument include multiple tests, however, all the findings except two exceed a $p < .000$ level (a very good significance level), therefore, we did not attempt to control for the number of tests being conducted as this would not have changed the findings. These findings are based on data reported from the sites and represent participants who completed both instruments at the baseline and 6 month intervals and participants who had matched instruments at the 12 month interval.

It should be noted that the results from this year's study cohort are similar to the prior year, with most of the subscales showing significant improvement from baseline to post testing.

Social Support

Research has found that communities with low rates of social support and mutual caring have higher rates of child maltreatment (Gelles, 1992; MacMillan et al., 1995; Wolfe, 1998). In essence, effective parenting is compromised by limited social ties to extended family, neighbors, and informal community resources. Too often parents are left without the needed support. The HFPI measurement of social support tries to examine the emotional support available to the parent. As the following exhibit shows, changes were significant from baseline to 6 months and from baseline to 12 months. However, it is noteworthy that aside from findings on the Personal Care subscale, the results on Social Support show the least impact from the program. This suggests that efforts to re-examine social support and examine new ways of helping families develop meaningful and helpful relationships is warranted.



Exhibit 12. Change in Social Support

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Social support	✓	.018	(.05)	None		

Problem Solving

The development of strong problem solving skills is a foundation for healthy functioning. Healthy Families Arizona seeks to help parents increase their abilities to solve problems and make decisions. A focus on problem solving was extended to parenting by one of the original researchers on the study of *Interpersonal Cognitive Problem Solving* and was published in *Problem Solving Techniques in Child Rearing* (1978) and revised in *Thinking Child, Thinking Parent* (2004). Quite simply, if parents, when confronted with parenting conflicts, can learn to use problem solving skills rather than respond with immediate reactions, they can more effectively eliminate ineffective parenting responses like anger and physical punishment. Research indicates that coping and problem solving activities play a role in well being and help to reduce stress and increase effective parenting (Heppner, Cooper, Mulholland, & Wei, 2001; Heppner & Lee, 2002; Shure, 2004). As the following exhibit shows, changes in problem-solving were significant from baseline to 6 months and from baseline to 12 months.

Exhibit 13. Change in Problem Solving

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Problem solving	✓	.000	(.27)	✓	.000	(.27)

Depression

When combined with the demands of being a parent, the characteristics of adult depression, such as feeling helpless or useless, being unable to function effectively, poor concentration, and interpersonal disinterest, make it highly unlikely that a



positive and productive relationship will develop between parent and child (Factor and Wolfe 1990). Depression has been associated with child physical abuse (Whipple & Webster-Stratton, 1991). Mothers with depression are less able to interact effectively with their children, and irritability and anger often result when interacting with children (Myers, 2002). Weissman, Paykel and Klerman (1972) conducted a number of observational studies of the interactions between depressed mothers and their offspring. They concluded that these children were deprived of normal involvement with their parents. Parent-child interactions in these families were marked by disinterest, less involvement, and poor communication. Furthermore, studies (Leschied, et al., 2005) have found that maternal depression is related to increased involvement with child welfare agencies and with poor child outcomes such as attention deficit disorder, conduct disorder, and poor emotional adjustment. Postpartum depression can be common in women. Across Healthy Families sites, depression is frequently present with about 20% of mothers reporting depression (Diaz, et al., 2004; Jacobs et al., (2005) report that half of teen mothers served in the Massachusetts Healthy Families program reported depressive symptoms in the clinical range. Reducing depression can have a wide range of positive outcomes for both mothers and children. As the following exhibit shows, changes in depression were significant from baseline to 6 months and from baseline to 12 months for HFAz program participants.

Exhibit 14. Change in Depression

Sub- scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Depression	✓	.000	(.14)	✓	.000	(.20)

Personal Care

Home visitors identified increasing the parents' abilities to care for themselves as an important goal in their work with families in the Healthy Families program. The personal care subscale provides information about the extent to which the mother is taking care of herself and meeting some of her own wants and needs. Often parents feel trapped by the birth of a child and have not made the adjustments necessary to feel good about themselves in their new role as parents – enhancing their sense of personal care can help address this concern. Research that suggests children are at



higher risk for maltreatment during times of instability and stress (Wolfe, 1998), and if parents are unable to care adequately for themselves, their stress may be higher. There were significant improvements from baseline to 6 month assessment, however, no significant improvements from baseline to 12 month assessment on the Personal Care subscale. This suggests workers should focus additional efforts on creative ways to support personal care. However, it is also likely that the baby's development interacts with the mother's attention to personal care – as the baby changes, he or she will require different kinds of parenting effort and it will affect available time for personal care.

Exhibit 15. Change in Personal Care

Sub scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Personal care	✓	.000	(-.14)	None		

Mobilizing Resources

The prevailing social, cultural, and economic pressures that challenge families should be examined when developing strategies to support families. There are many factors at the societal level, such as poverty, unemployment, and norms that support violence, that combine to make child-rearing difficult. (Wolfe, 1998: Prilletensky, et al, 2001). Being a single parent, living in poverty, being unemployed, and/or living in a stressed environment are even more difficult when there are few resources to help family members cope with these stressors. Social services often emphasize “wrap around” services and resources that can be brought to families to help them cope and parent more effectively. Research has demonstrated that having multiple risk factors increases the likelihood of child maltreatment and promotes conditions that may foster poor child development outcomes (Prilletensky, et al., 2001). Helping families to mobilize resources can reduce the number and impact of risks. As the following exhibit shows, changes in Mobilizing Resources were significant from baseline to 6 months and from baseline to 12 months for HFaz participants.



Exhibit 16. Change in Mobilizing Resources

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Mobilizing resources	✓	.000	(.28)	✓	.000	(.41)

Commitment to Parent Role

Parents lacking a strong commitment to the parent role have a more difficult time being effective parents. Some parents may not see being a parent as part of their own identity and can perceive it as restricting opportunities for themselves. Children have many needs and parents can sometimes feel controlled by these demands and may develop feelings of resentment toward the child. Research studies have shown that maternal and infant attachment can predict positive outcomes for children (Ali, & Larry, 1981; Armstrong, et al., 2000; Field, 1995; Van den Boom, 1994). Efforts at improving parent and child attachment should be reflected by changes in this subscale. As the following exhibit shows, changes in Commitment to Parent Role were significant from baseline to 6 months and from baseline to 12 months for HFAz participants.

Exhibit 17. Change in Commitment to Parent Role

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Commitment To Parent Role	✓	.000	(.10)	✓	.000	(.18)

Parent/child Interaction

Increasing the quantity and quality of parent child interaction is an important Healthy Families goal because this interaction will help facilitate child health, growth, and development. Also, parents who are not functioning well due to stress, depression, or other problems are less sensitive to the interactions they have with their children. Research has found that parents who are having personal difficulties



have more difficult parent child interactions, i.e., their children are less involved and less responsive (Jacobs, 2005). Research has found that the potential for child maltreatment increases when frustrated parents rely on punitive discipline strategies such as yelling, threatening, pushing or grabbing to control their children (Pranksy, 1991; Whipple & Webster-Stratton, 1991). When parents develop parenting skills and enhance their parenting efficacy they are less likely to resort to poor parenting approaches and thus are more likely to promote positive child development outcomes. As the following exhibit shows, changes in Parent/Child Interaction were significant from baseline to 6 months and from baseline to 12 months for HFAz participants.

Exhibit 18. Change in Parent/child Interaction

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Parent/child Behavior	✓	.000	(.17)	✓	.000	(.16)

Home environment

Ensuring that parents have the knowledge required to create a home environment that promotes positive child development and safety for their children is one of the many strategies to promote child health and wellness. A well organized and positive home environment also promotes parents' confidence in their parenting abilities. Home visitors help to encourage a home environment that has developmentally stimulating experiences available for the child. Research has found that mothers who had better play area conditions also had better parent/child interactions, were more involved in play, and were more responsive (Jacobs, et al., 2005). The home environment can influence child development outcomes.

As the following exhibit shows, changes in Home Environment were significant from baseline to 6 months and from baseline to 12 months for HFAz participants.



Exhibit 19. Change in Home Environment

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Home Environment	✓	.000	(.33)	✓	.000	(.49)

Parenting Efficacy

The Healthy Families program also attempts to impact each parent's sense of competence and self-confidence. A high level of parenting efficacy sets the context for positive and productive parent child interactions. Many parents lack parenting efficacy. One way to increase their efficacy is to help them develop better knowledge and skills related to childrearing. Child management, family organization, and discipline, for example, are areas in which parents frequently report needing help (Prilleltensky, et al., 2001). As the following exhibit shows, changes in Parenting Efficacy were significant from baseline to 6 months and from baseline to 12 months for HFAz participants.

Exhibit 20. Change in Parenting Efficacy

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Parenting Efficacy	✓	.000	(.14)	✓	.000	(.16)

Total change score on the HFPI

In order to provide a more comprehensive understanding of changes in parenting during participation in the Healthy Families program, it is also useful to examine the total score on the Healthy Families Parenting Inventory and to determine the significance of change across all subscales. As the exhibit below shows, there were significant changes from baseline to 6 months and from baseline to 12 months. This significance and the effect sizes support the conclusion that important changes were



taking place among families. Overall, the percent of individuals who showed positive change from baseline to 12 months on the total score was 66 percent.

Exhibit 21. Overall Change in Healthy Families Parenting Inventory outcomes

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Total Scale	✓	.000	(.23)	✓	.000	(.30)

Child abuse and neglect

This report includes data from CHILDS on the rates of child abuse and neglect for Healthy Families Arizona participants. It is important to acknowledge that using official child abuse data as an indicator of program success is complex and is unlikely to fully answer the question about the effectiveness of Healthy Families in preventing child abuse. The shortcomings in using official child abuse rates to assess the effectiveness of home visiting programs have been discussed in numerous journal articles (see for example, *The Future of Children*, 2009).

There are several reasons the use of child abuse data is believed to have limitations. First, child abuse is an event that occurs infrequently and, therefore, changes are difficult to detect with statistical methods. Second, using official incidents of child abuse and neglect does not necessarily reflect actual behavior – there are many variations in what constitutes abuse and neglect and using only reported and substantiated incidents of abuse only captures incidents that rise to that level. Some incidents of child abuse or neglect are undetected or may not meet some definitional standard and thus an accurate count is not possible. Third, using official data requires a process whereby cases are “matched” on available information such as mother’s name, social security number, and date of child’s birth. When any of this information is missing such as the legal name, the accuracy of the match decreases. Finally, because home visitors are trained in the warning signs of abuse and neglect and are required to report abuse or neglect when it is observed, this creates a “surveillance” effect – what might have gone unreported had there been no home visitor shows up in the official data. Because of these issues, many programs are beginning to not only count on actual rates of child abuse and neglect as the standard,



but instead rely on measures that document reducing risk factors and increasing protective factors – factors shown to predict child maltreatment (Howard and Brooks-Gunn, 2009).

For this year's report, 98.8% of the Healthy Families matched cases were without a substantiated report as can be seen in Exhibit 22. A substantiated finding means that "Child Protective Services has concluded that the evidence supports that an incident of abuse or neglect occurred based upon a probable cause standard" (see DES substantiation guidelines for further detail). Although 98.8% of the Healthy Families participants have no substantiated reports, 52 of the families did have a substantiated report of abuse or neglect (1.2% of families), similar to the previous year.

Exhibit 22. Percent of families showing no child abuse and neglect incidences –2007, 2008, and 2009

Group	Percent Without Substantiated Report 2006-2007 (n = 3,301)	Percent Without Substantiated Report 2007-2008 (n = 3,885)	Percent Without Substantiated Report 2008-2009 (n = 4,247)
All Families	99.7%	98.9%	98.8%

Child Development and Wellness

While it has been challenging to find adequate ways to accurately measure child abuse and neglect, researchers do point to the benefits and impact that home visitors and home visiting can have on promoting optimal child growth and development in the families served. Home visitors are in a strategic position to help families obtain access to health resources and promote wellness. Immunizations and safety practices in the home are two indicators of child development and wellness reported this year.

Immunizations

The Arizona Department of Health Services set a Healthy People 2010 goal to have at least 90% of all Arizona children immunized. As of March 2008, the Arizona rate was 73%, and the U.S. rate was 78%. (www.ADHS.gov) Healthy Families Arizona supports children obtaining all their necessary immunizations as a key in preventing



debilitating diseases. HFAz home visitors regularly check each family's immunization booklet to assess completion of immunizations. Exhibit 23 presents the past three years of data on immunization rates for the 2, 4, 6, and 12 month immunization periods. For 2009 study year, 85% of the children in the Healthy Families Arizona program, for whom we had data on immunizations, were reported to have received all 4 immunizations in the recommended series given by 18 months of age. This percentage exceeds the immunization rate for 2-year olds in Arizona and nationally. Overall, this finding suggests the program is successfully promoting immunization for the children served by Healthy Families Arizona.

Exhibit 23. Immunization Rate of Healthy Families Arizona Children

Immunization Period	Percent Immunized 2007	Percent Immunized 2008	Percent Immunized 2009	Immunization Rate for 2-year-olds in Arizona (2008)*
2 month	91.3%	91.3%	80.3%	
4 month	88.4%	88.5%	78.0%	
6 month	77.7%	75.9%	65.9%	
12 month	87.4%	90.2%	88.6%	
Received all 4 in the series by 18 months of age	87.5%	87.4%	85.0%	

*Source: 2008 data from the Arizona Department of Health Services

Safety Practices in the Home

Unintentional injuries are the leading cause of death for children and adolescents ages 1 to 19. Each year over 13,000 children die from unintentional injuries. A recent report, *What works for children, 2008*, concluded that home visits can reduce the risk of accidental injuries in the home by approximately 26 percent. Safety practices help prevent accidents and promote injury prevention – important goals for promoting child health and wellness. Healthy Families Arizona assesses and promotes safe environments for children through education about safety practices and by monitoring safety in the home through the completion of the safety checklist. The following exhibits show results for families that had data in these areas. Exhibit 24 reports the use of four key safety practices across five time points for postnatal



participants. As the data show, safety practices increase over time spent in the program and reach high rates, for example, 98% use of car seats and 96% of poisons properly locked. Car seat use has been estimated to be 90% for a similar age group (Glassbrenner & Ye, 2007) and the data reported for the Healthy Families program exceeds this percent. Furthermore, studies have found that smoke alarms are present in only 69% of homes with reported fires and one fifth of those alarms do not work properly (Ahrens, 2009). Similarly, one study in an inner city (Rowland, et al., 2002) reports that 54% of Americans have “working alarms” and this is much lower than the 92% working alarm data reported by the Healthy Families program.

Exhibit 24. Percent of all postnatal families implementing safety practices

	2-Month (n = 934)	6-Month (n = 1,467)	12-Month (n = 910)	18-Month (n = 601)	24-Month (n = 393)
Outlets Covered	43.9%	59.1%	71.0%	76.1%	80.8%
Poisons Locked	81.7%	87.6%	93.4%	95.7%	96.7%
Smoke Alarms	85.5%	90.4%	90.3%	91.7%	88.1%
Car Seats	99.7%	98.7%	99.5%	98.7%	98.6%

Mothers' Health, Education, and Employment

The Healthy Families' model extends beyond parenting outcomes and also attempts to influence maternal life course outcomes. The Healthy Families program has the opportunity to encourage and support families to seek new educational opportunities, complete their high school education, obtain greater economic self-sufficiency, and obtain better paying and better quality jobs.

Subsequent Pregnancies and Birth Spacing

The goal of promoting mothers' health is addressed by efforts to prevent repeat pregnancies and promote longer birth spacing for mothers. Multiple births for some families can represent increased stress and parenting difficulties, especially if the birth is unwanted or unplanned. The following exhibit shows that the percent of HFAz mothers who reported subsequent pregnancies has decreased from last year.



Exhibit 25. Percentage of Mothers who reported subsequent pregnancies

	2006	2007	2008	2009
Percent of mothers with subsequent pregnancies	11.8%	10.4%	11.5%	9.9%

Mothers with greater birth spacing have fewer pregnancy complications and are less likely to give birth to low birth weight or premature babies (Kallan, 1997). The health benefits of birth spacing are considerable and Healthy Families can support the new public campaign about birth spacing that says, “three to five years saves lives” by educating families about the benefits of longer time periods between births. The following exhibit shows the length of time to subsequent pregnancy for those mothers who do have subsequent births. The most important data is the percent of mothers who waited over 24 months between births. This percent decreased 8.3% from 2006 to 2008, and decreased by another 11.9% from 2008 to 2009, which means that a smaller percentage of women are adhering to the “three to five years saves lives” philosophy. Because this health benchmark has not gone in the desired direction, more training for home visitors to better address this issue should be considered.

Exhibit 26. Length of Time to Subsequent Pregnancy for Those Families with Subsequent Births

Length of Time to Subsequent Pregnancy	2005 Percent of Mother	2006 Percent of Mother	2007 Percent of Mother	2008 Percent of Mother	2009 Percent of Mother
1 to 12 mos.	33.3%	37.7%	42.1%	40.2%	49.3%
13 to 24 mos.	42.3%	38.1%	39.3%	43.9%	46.8%
Over 24 mos.	24.4%	24.2%	18.6%	15.9%	4.0%

School, Educational enrollment, and Employment

School and educational obtainment are also important to consider when examining the program’s potential impact on maternal life course outcomes. Increased education is associated with better overall well-being and greater family stability. As the following exhibit shows, at each interval, from 12-16% of the mothers are enrolled in school either full- or part-time. Fulltime school enrollment is much lower than the 2008 report, down by 10- 24%. A variety of factors could be significant during this



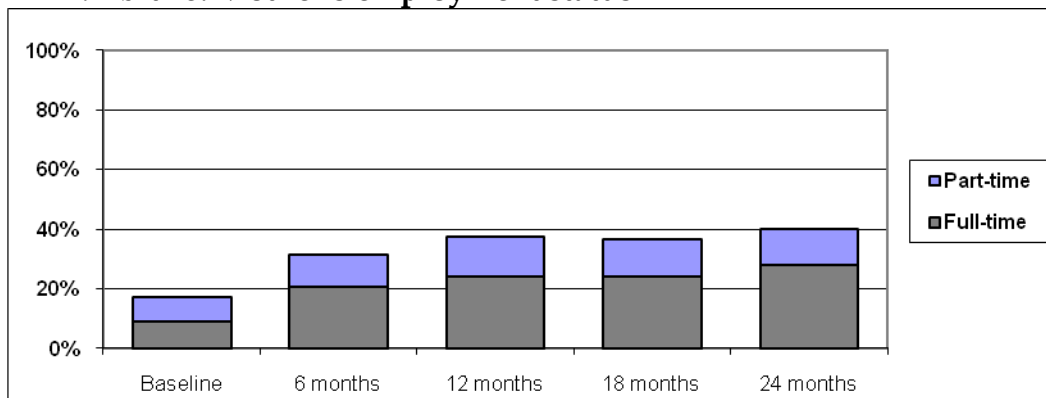
year of recession, including difficulty accessing or affording childcare to enable the parent to attend school, inability to afford school, or the need to seek employment.

Exhibit 27. Percent of Mothers enrolled in school – 2009

	Percent enrolled full-time (2008-prior report)	Percent enrolled part-time (2009)	Percent enrolled full-time (2009)
6 month	21.2%	5.8%	9.3%
12 month	24.9%	5.2%	10.4%
18 month	30.8%	6.1%	10.6%
24 month	31.7%	5.4%	7.3%

Mothers who are actively engaged in the program show an increasing rate of employment from initial assessment to 12 months of program participation. Almost 40% of the mothers are employed at 12 months and this is similar to the national estimate of employment for mothers of young children, which is approximately 50%. While increasing employment and income is fundamental for family well-being there are complex realities facing families as they begin to increase their earnings. One concern is that as mothers increase their income, there is the potential for families to become ineligible for AHCCCS health insurance and also not be covered by employers. Furthermore, the importance of home visitors working with families in obtaining quality child care is critical given the limited child care options for families with low incomes. The rate of employment for HFAZ mothers is similar to the previous year's report.

Exhibit 28. Mother's employment status



Substance Abuse Screening

Research finds a strong relationship between substance abuse and risk for child maltreatment (Pan, et al., 1994; Widom, 1992; Wolfe, 1998). When a family member suffers from substance abuse it is not surprising to find that the individual is not able to adequately care for and supervise children. Successful treatment of substance abuse is a difficult outcome that usually requires intensive treatment, but home visitors play a critical role in the initial screening and education to families about substance abuse and they make referrals for treatment services. Exhibit 29 presents data on the percent of families screened with the CRAFFT substance abuse screening tool and the percent of those families who screened positive for drug use. The percent screened at the 2 month interval has increased steadily over the past several years and continues to show that home visitors are focusing on providing an early screening to families entering the program. While about 95% of all families were screened at 2 months, only about two-thirds of families received screenings in later months. This is a decrease of 10-15% from last year, potentially an effect of program changes due to funding cuts. However, a 34.8% positive screen at 2 months is high and suggests the CRAFFT is screening a large number of families as positive and who are potentially in need of substance abuse information or treatment. The New York Healthy Families study, using the AUDIT for assessment, found 16% of the Healthy Families participants reported drug use.

Exhibit 29. Percent screened and assessed positive on the CRAFFT

Time at assessment	Percent Screened	Percent Assessed Positive
2 months	94.9%	34.8%
6 months	68.3%	6.1%
12 months	66.1%	4.4%

Note: The 2 month screen asks about lifetime substance use; later screens ask about use in the past 6 months.



Conclusions and Recommendations

While it has been a year of major change and reduced financial resources in the Healthy Families Arizona program, evaluation results highlight useful data for program accountability and help to maintain the focus of the program as it changes. While there are multiple outcomes that could be measured in home visitation programs, the Healthy Families Arizona program focuses the evaluation on the following primary outcome indicators: parent outcomes, child health and wellness, and child abuse and neglect. Based on results from such measures as the Healthy Families Parenting Inventory, participant tracking data, safety checklists, screening tools, child abuse and neglect rates, and participant satisfaction surveys, Healthy Families Arizona continued to address and reach most of its goals. Despite efforts to consolidate programs and find alternative funding to sustain the HFAz program, it now operates at about half the capacity it had in early 2008. The funding cuts resulted in the suspension of training and quality assurance services for HFAz and reductions in the evaluation of the program.

Within the context of these challenges, there remains an increasing demand for evidence-based practices to guide the practice of home visitation. In this time of limited resources, the Healthy Families Arizona program needs to maintain efforts to rigorously investigate the program and insure that using evidence is part and parcel of program improvement.

Recommendations for this year are focused on ways the program can continue to emphasize quality programming, making decisions based on evidence and data, and focusing on the most critical services to the highest risk families.

- **Identify the families that are most high-risk and insure they receive the services they need in a resource deficient environment.** Screening and supervision are vital in this regard. Supervisors can help guide home visitors to focus on the most important needs and develop strong connections with community resources to help meet those needs. Work should continue in defining high risk families and developing protocols that match the level of risk the family is facing.



- **A review of the outcome results from this report suggest a need for focus on several key aspects of the program:**
 - Enhance the level of social support to reduce stress felt by parents
 - Provide timely substance abuse screening and referral
 - Assist families in finding resources to support education and training so that they can be better prepared for the workforce
 - Increase effort toward increasing the time between births
 - Increase numbers of developmental screenings completed with families at all intervals

- **Attention to recruiting and serving families during the prenatal period and during the first year of life should be maintained.** The highest occurrence of child abuse and neglect occurs among infants in their first year of life. With limited resources, a strong focus during the first year of program enrollment could reap long-range benefits for children.

- **More evidence-based decision making should be included in the work with families from both the home visitors and supervisors.** While compliance with outcome assessments like the HFPI has improved over time, significant improvement should be an ongoing goal. Using the HFPI results with families can help identify focus of service for the family. Training and supervision should emphasize how to think about components of practice that can be better guided by evidence.

- **Attention to data collection and data submission should be maintained to assure the program and demonstrate results and build a body of data for credentialing and program improvement.**



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Appendix A: Site Level Data

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Age of Child at Entry by Site - 2009
(Age in Days)

Site	Mean (Age in Days)	Number	Standard Deviation
Douglas	18.02	43	17.33
Central Phoenix/Sunnyslope	36.36	121	25.98
Maryvale	30.27	136	23.46
South Phoenix	35.70	114	26.49
East Valley	34.44	131	21.81
Nogales	19.55	75	18.06
Page	24.93	29	19.28
Casa de los Niños	37.47	88	26.20
CODAC	35.82	61	26.01
La Frontera	37.72	71	27.33
Child and Family Resources	36.11	90	29.06
Sierra Vista	8.24	58	11.05
Tuba City	32.07	28	23.96
Verde Valley	10.93	42	14.82
Yuma	21.45	74	21.42
Pascua Yaqui	33.82	22	27.83
Lake Havasu City	22.71	72	15.36
Flagstaff	17.97	38	23.48
Sunnyslope	29.91	76	21.40
Prescott	23.94	121	24.32
Pinal County (Coolidge)	22.85	66	22.17
Mesa	27.49	139	20.92
Southeast Phoenix	29.77	70	23.92
El Mirage	35.41	75	27.48
Blake Foundation	41.46	56	27.46
Marana	37.80	54	25.57
Safford	26.71	38	31.12
Stanfield	20.20	5	16.60
Apache Junction	36.84	43	29.22
Gila River	30.25	12	26.22
Winslow	22.70	20	17.55
Kingman	29.10	39	22.27
Globe/Miami	40.61	31	24.18
Kyrene	35.76	54	25.21
Metro Phoenix	37.65	81	34.44
Tolleson	36.27	56	23.18



Site	Mean (Age in Days)	Number	Standard Deviation
South Mountain	28.68	66	22.62
Glendale	24.50	42	16.48
Deer Valley	31.62	61	23.27
East/SE Tucson	34.45	58	25.21
SW Tucson	37.43	51	25.01
Bullhead City	20.87	40	15.13
Northwest Phoenix	27.21	42	22.70
Tempe	32.65	60	23.84
Gilbert	43.14	22	22.17
Scottsdale	35.00	70	26.45
West Phoenix	34.33	46	27.76
East Mesa	36.28	57	21.93
Williams (Kinlani)	22.48	40	26.40
Southwest Phoenix	33.10	73	25.59
Peoria	30.55	51	26.90
Metro Tucson	32.02	51	23.17
Casa Family First	35.76	84	26.60
Wellspring	18.10	50	25.00
Primero Los Niños	21.41	29	19.92
Sierra Vista Blake	14.27	55	22.84
Total	30.22	3377	25.04

Note: total does not include missing data for 101 participant files.



Days to Program Exit by Site – 2009
(For families who left the program)

Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Douglas	384.00	493.43	349.93	7	416.00	717.79	671.23	14
Central Phoenix	295.00	306.40	221.74	5	315.50	393.50	333.20	32
Maryvale	353.00	267.67	160.08	3	205.00	231.29	231.29	23
South Phoenix	201.00	322.88	248.51	17	246.50	228.52	228.52	48
East Valley	374.00	440.75	284.57	4	297.00	470.47	470.47	28
Nogales	178.50	172.83	49.36	6	474.00	599.39	599.39	22
Page	34.00	510.67	827.34	3	177.50	236.86	236.86	8
Casa de los Niños	254.00	322.36	229.13	14	236.00	236.88	236.87	59
CODAC	337.00	396.29	174.93	7	347.00	211.84	211.84	11
La Frontera	255.00	352.00	234.29	5	371.00	530.85	530.85	19
Sierra Vista	362.50	362.50	99.70	2	167.00	108.44	108.44	15
Tuba City	210.00	463.83	562.31	6	847.00	679.39	679.39	12
Verde Valley	285.50	385.10	361.47	10	289.00	479.61	541.27	18
Yuma	369.00	346.00	49.67	3	375.00	436.30	393.64	20
Pascua Yaqui	530.00	516.45	370.88	11	234.50	123.82	123.82	4
Lake Havasu City	240.50	357.64	324.45	14	264.00	537.26	537.26	25
Flagstaff	146.00	157.00	65.20	3	151.50	507.06	507.06	10
Sunnyslope	302.00	400.90	327.15	10	408.00	463.91	463.91	30
Prescott	247.50	351.25	347.86	4	194.00	378.23	378.23	30
Pinal County (Coolidge)	384.00	460.29	368.97	7	463.00	587.53	587.53	46
Mesa	613.00	646.33	370.17	6	378.00	468.02	468.02	35
Southeast Phoenix	457.50	457.50	430.63	2	253.00	475.08	440.07	13
El Mirage	275.50	435.75	433.01	4	328.00	376.76	270.98	17
Blake Foundation	176.00	304.80	690.04	5	440.00	605.26	483.83	23
Marana	328.00	578.67	342.99	3	134.00	200.74	259.23	23
Safford	670.00	687.33	466.24	3	581.00	582.10	429.27	10
Stanfield	191.00	248.00	133.25	4	340.00	336.80	83.60	5
Apache Junction	506.00	739.69	548.39	13	510.00	585.33	418.52	43
Gila River	287.00	299.20	118.51	5	235.00	318.29	212.27	7
Winslow	273.00	273.00		1	178.00	209.33	114.40	6
Kingman	128.00	124.75	53.67	4	205.00	314.73	283.83	11
Globe/Miami	147.00	234.00	195.59	3	295.00	308.89	198.08	9
Kyrene	249.00	297.57	152.15	7	291.50	327.85	279.34	26
Metro Phoenix	232.50	232.50	204.35	2	217.50	277.32	210.15	34
Tolleson	218.00	223.33	9.23	3	225.00	395.80	450.69	25



Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
South Mountain	290.00	312.00	91.02	3	225.00	267.87	211.05	15
Glendale	112.00	135.75	74.08	4	283.00	493.59	421.06	29
Deer Valley	374.00	303.33	234.14	3	140.00	222.76	236.77	21
East/SE Tucson	243.00	273.50	159.81	8	169.50	389.70	368.18	20
SW Tucson	415.00	463.00	269.24	7	814.00	691.31	422.99	13
Bullhead City	154.00	248.67	297.52	3	206.00	249.30	205.65	17
Northwest Phoenix	382.50	382.50	127.99	2	246.00	433.00	460.52	23
Tempe	521.00	627.20	464.58	5	212.50	359.33	390.96	30
Gilbert	599.50	572.67	294.58	6	684.00	736.43	310.07	7
Scottsdale	176.00	347.20	351.64	5	173.00	314.06	377.77	34
West Phoenix	568.00	568.00	424.26	2	170.00	406.71	453.71	21
East Mesa	628.00	638.33	351.26	9	571.00	834.54	610.16	13
Williams (Kinlani)	342.00	552.47	405.53	19	402.00	547.00	467.31	14
Southwest Phoenix	116.50	116.50	17.68	2	163.50	171.06	101.96	18
Peoria	184.00	439.00	451.76	5	158.00	189.44	125.15	9
Metro Tucson	354.00	354.00	166.88	2	179.50	377.38	426.03	16
Casa Family First	537.00	458.29	187.34	7	266.00	407.74	295.39	19
Wellspring	272.00	352.92	301.44	13	155.00	235.07	252.58	15
Primero Los Niños					453.00	476.25	129.74	4
Sierra Vista Blake	349.00	360.50	128.69	6	226.00	377.50	354.00	12
Total	292.00	408.87	332.17	317	263.00	424.56	416.29	1111



Top Four Reasons for Exit by Site – 2009
Percent and number within site

Site	Overall (Prenatal and Postnatal Combined)									
	#1 Closure in March 2009 due to funding cuts		#2 Did Not Respond to Outreach Efforts		#3 Moved Away		#4 Family Refused Further Services		Completed Program (ranked #8)	
	%	n	%	n	%	n	%	n	%	n
Douglas	60.0	33	10.9	6	14.5	8	1.8	1	3.6	2
Central Phoenix	54.5	48	11.4	10	9.1	8	5.7	5	1.1	1
Maryvale	65.2	58	7.9	7	13.5	12	4.5	4	0	0
South Phoenix	39.0	41	13.3	14	6.7	7	5.7	6	0	0
East Valley	57.0	53	9.7	9	7.5	7	8.6	8	2.2	2
Nogales	71.6	73	13.7	14	2.0	2	5.9	6	3.9	4
Page	0.0	0	15.4	2	30.8	4	30.8	4	0	0
Casa de los Niños	18.9	17	10.0	9	8.9	8	8.9	8	0	0
CODAC	75.6	65	8.1	7	3.5	3	0	0	0	0
La Frontera	72.4	71	7.1	7	7.1	7	2.0	2	2.0	2
Sierra Vista	61.7	37	15.0	9	10.0	6	3.3	2	0	0
Tuba City	56.3	27	14.6	7	6.3	3	0	0	8.3	4
Verde Valley	64.0	55	8.1	7	18.6	16	4.7	4	2.3	2
Yuma	52.1	25	12.5	6	14.6	7	14.6	7	2.1	1
Pascua Yaqui	27.3	6	31.8	7	31.8	7	9.1	2	0	0
Lake Havasu City	52.3	46	4.5	4	18.2	16	18.2	16	3.4	3
Flagstaff	0.0	0	20.0	3	20.0	3	26.7	4	0	0
Sunnyslope	45.1	32	15.5	11	5.6	4	7.0	5	2.8	2
Prescott	0.0	0	20.0	9	33.3	15	8.9	4	4.4	2
Pinal County (Coolidge)	25.6	20	11.5	9	11.5	9	5.1	4	7.7	6
Mesa	57.3	59	9.7	10	8.7	9	6.8	7	2.9	3
Southeast Phoenix	77.1	64	10.8	9	6.0	5	1.2	1	0	0
El Mirage	70.6	60	12.9	11	3.5	3	4.7	4	1.2	1
Blake Foundation	57.9	44	9.2	7	5.3	4	6.6	5	6.6	5
Marana	50.0	28	21.4	12	7.1	4	12.5	7	0	0
Safford	70.7	29	4.9	2	9.8	4	0	0	2.4	1
Stanfield (Pinal)	0	0	33.3	3	33.3	3	0	0	0	0
Apache Junction	3.5	2	14.0	8	12.3	7	3.5	2	0	0
Gila River	48.1	13	14.8	4	14.8	4	11.1	3	0	0
Winslow	61.1	11	11.1	2	11.1	2	0	0	0	0
Kingman	64.6	31	22.9	11	6.3	3	2.1	1	0	0
Globe/Miami	70.0	28	12.5	5	7.5	3	0	0	0	0
Kyrene	48.4	30	9.7	6	19.4	12	8.1	5	0	0
Metro Phoenix	55.2	48	17.2	15	3.4	3	10.3	9	0	0
Tolleson	55.4	36	18.5	12	1.5	1	12.3	8	1.5	1
South Mountain	68.4	52	13.2	10	1.5	5	6.6	5	0	0
Glendale	31.9	15	25.5	12	12.8%	6	8.5%	4	2.1%	1



Site	Overall (Prenatal and Postnatal Combined)									
	#1 Closure in March 2009 due to funding cuts		#2 Did Not Respond to Outreach Efforts		#3 Moved Away		#4 Family Refused Further Services		Completed Program (ranked #8)	
	%	n	%	n	%	n	%	n	%	n
Deer Valley	54.3	38	8.6	6	11.4%	8	1.4%	1	0	0
East/SE Tucson	65.3	49	4.0	3	4.0	3	8.0	6	4.0	3
SW Tucson	70.8	46	6.2	4	10.8	7	0	0	4.6	3
Bullhead City	28.6	14	8.2	4	18.4	9	16.3	8	0	0
Northwest Phoenix	51.7	30	10.3	6	12.1	7	19.0	11	1.7	1
Tempe	44.8	30	16.4	11	7.5	5	16.4	11	0	0
Gilbert	57.1	20	2.9	1	11.4	4	8.6	3	0	0
Scottsdale	43.2	35	25.9	21	14.8	12	4.9	4	1.2	1
West Phoenix	52.8	28	18.9	10	11.3	6	9.4	5	3.8	2
East Mesa	69.1	56	13.6	11	11.1	9	0	0	3.7	3
Williams (Kinlani)	8.1	3	24.3	9	48.6	18	2.7	1	5.4	2
Southwest Phoenix	74.4	61	9.8	8	6.1	5	2.4	2	0	0
Peoria	72.5	50	13.0	9	2.9	2	4.3	3	0	0
Metro Tucson	61.4	35	17.5	10	1.8	1	0	0	0	0
Casa Family First	77.9	81	1.9	2	2.9	3	1.9	2	1.0	1
Wellspring	3.0	1	9.1	3	42.4	14	21.2	7	0	0
Primero Los Niños	85.7	30	5.7	2	8.6	3	0	0	0	0
Sierra Vista Blake	71.4	55	11.7	9	1.3	1	2.6	2	0	0
Total	55.4	1933	12.2	425	9.9	347	6.3	219	1.7	59



Health Insurance by Site at Intake – 2009
Percent and number within Site*

Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	5.9	1	88.2	15	0	0	0	0	97.7	42	2.3	1
Central Phoenix	3.4	1	93.1	27	3.4	1	4.2	5	87.4	104	7.6	9
Maryvale	10.0	2	90.0	18	0	0	4.4	6	80.1	109	15.4	21
South Phoenix	11.1	3	85.2	23	0	0	4.4	5	83.2	94	12.4	14
East Valley	10.7	3	89.3	25	0	0	3.9	5	75.2	97	20.2	26
Nogales	24.0	6	72.0	18	0	0	8.3	6	84.7	61	5.6	4
Page	0	0	87.5	7	12.5	1	0	0	100.0	29	0	0
Casa de los Niños	5.9	1	94.1	16	0	0	1.3	1	92.4	73	1.3	1
CODAC	11.1	3	81.5	22	7.4	2	0	0	87.5	49	12.5	7
La Frontera	3.8	1	92.3	24	0	0	1.5	1	91.0	61	6.0	4
Child and Family Resources	5.0	2	77.5	31	15.0	6	3.6	3	86.9	73	7.1	6
Sierra Vista	0	0	71.4	5	28.6	2	0	0	86.8	46	13.2	7
Tuba City	0	0	95.2	20	0	0	3.2	1	93.5	29	0	0
Verde Valley	15.2	7	73.9	34	10.9	5	5.3	2	84.2	32	10.5	4
Yuma	10.0	1	80.0	8	10.0	1	1.3	1	93.3	70	5.3	4
Pascua Yaqui	0	0	95.0	38	2.5	1	0	0	95.0	19	5.0	1
Lake Havasu City	3.1	1	84.4	27	12.5	4	5.6	4	86.1	62	8.3	6
Flagstaff	18.5	5	66.7	18	11.1	3	3.3	1	73.3	22	23.3	7
Sunnyslope	7.1	1	85.7	12	0	0	4.1	3	85.1	63	9.5	7
Prescott	13.3	2	66.7	10	20.0	3	9.8	11	81.3	91	7.1	8
Pinal County (Coolidge)	11.1	1	77.8	7	11.1	1	4.5	3	81.8	54	13.6	9
Mesa	3.3	1	83.3	25	13.3	4	4.4	6	75.7	103	19.1	26
Southeast Phoenix	9.1	1	90.9	10	0	0	0	0	90.1	64	9.9	7
El Mirage	0	0	90.0	9	10.0	1	1.3	1	68.0	51	29.3	22
Blake Foundation	5.3	1	78.9	15	15.8	3	1.8	1	92.9	52	1.8	1
Marana	0	0	90.0	9	10.0	1	4.3	2	80.4	37	8.7	4
Safford	0	0	75.0	9	25.0	3	0	0	88.2	30	11.8	4
Stanfield (Pinal)	25.0	1	50.0	2	25.0	1	20.0	1	80.0	4	0	0
Apache Junction	6.7	1	86.7	13	6.7	1	2.4	1	83.3	35	11.9	5
Gila River	0	0	83.3	10	16.7	2	0	0	100.0	14	0	0
Winslow	0	0	100.0	8	0	0	0	0	100.0	22	0	0
Kingman	5.9	1	70.6	12	23.5	4	0	0	83.7	36	16.3	7
Globe/Miami	12.5	1	87.5	7	0	0	3.2	1	83.9	26	12.9	4
Kyrene	8.3	1	83.3	10	8.3	1	5.9	3	78.4	40	13.7	7
Metro Phoenix	0	0	100.0	9	0	0	5.1	4	84.6	66	10.3	8
Tolleson	0	0	100.0	9	0	0	14.8	8	74.1	40	11.1	6
South Mountain	10.0	1	70.0	7	20.0	2	1.5	1	86.6	58	9.0	6
Glendale	12.5	1	87.5	7	0	0	2.6	1	86.6	33	10.5	4
Deer Valley	11.1	1	55.6	5	33.3	3	3.2	2	88.7	55	8.1	5
East/SE Tucson	8.7	2	69.6	16	17.4	4	3.7	2	85.2	46	7.4	4
SW Tucson	10.5	2	89.5	17	0	0	6.3	3	89.6	43	4.2	2



Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Bullhead City	0	0	83.3	5	16.7	1	4.9	2	87.8	36	7.3	3
Northwest Phoenix	15.4	2	53.8	7	30.8	4	4.9	2	85.4	35	9.8	4
Tempe	10.0	1	90.0	9	0	0	1.7	1	75.9	44	22.4	13
Gilbert	0	0	100.0	13	0	0	4.5	1	63.6	14	27.3	6
Scottsdale	0	0	87.5	7	12.5	1	2.8	2	87.3	62	9.9	7
West Phoenix	0	0	100.0	5	0	0	2.1	2	93.6	44	4.3	2
East Mesa	11.1	2	83.3	15	5.6	1	0	0	90.9	50	7.3	4
Williams (Kinlani)	7.5	3	92.5	37	0	0	0	0	84.4	27	15.6	5
Southwest Phoenix	11.1	1	77.8	7	0	0	2.7	2	90.5	67	6.8	5
Peoria	16.7	3	77.8	14	5.6	1	4.2	2	77.1	37	16.7	8
Metro Tucson	11.1	1	88.9	8	0	0	4.3	2	87.2	41	6.4	3
Casa Family First	10.7	3	82.1	23	3.6	1	0	0	94.9	74	3.8	3
Wellspring	7.1	2	89.3	25	3.6	1	0	0	95.5	42	4.5	2
Primero Los Niños	25.0	1	75.0	3	0	0	10.7	3	89.3	25	0	0
Sierra Vista Blake	0	0	63.2	12	31.6	6	6.1	3	65.3	32	24.5	12
Total	7.7	75	83.1	804	7.9	76	3.6	116	84.8	2765	10.6	345

*"Other" insurance percentages are not listed in this table but can be estimated by subtracting the sum of the other insurance categories from 100.



**Late or No Prenatal Care or Poor Compliance at Intake
2009 by Site**

Percent and number () within Site

Did the mother have late or no prenatal care or poor compliance with prenatal care?

Site	PRENATAL			POSTNATAL		
	Yes	No	Unknown	Yes	No	Unknown
Douglas	44.4% (8)	55.6% (10)	0	37.2% (16)	62.8% (27)	0
Central Phoenix	20.7% (6)	75.9% (22)	3.4% (1)	28.8% (34)	66.9% (79)	4.2% (5)
Maryvale	50.0% (10)	45.0% (9)	5.0% (1)	25.5% (35)	71.5% (98)	2.9% (4)
South Phoenix	35.7% (10)	64.3% (18)	0	27.4% (31)	67.3% (76)	5.3% (6)
East Valley	38.7% (12)	61.3% (19)	0	30.5% (39)	64.1% (82)	5.5% (7)
Nogales	18.5% (5)	74.1% (20)	7.4% (2)	46.8% (36)	46.8% (36)	6.5% (5)
Page	25.0% (2)	75.0% (6)	0	34.5% (10)	65.5% (19)	0
Casa de los Niños	23.5% (4)	76.5% (13)	0	18.5% (15)	81.5% (66)	0
CODAC	31.0% (9)	69.0% (20)	0	30.4% (17)	67.9% (38)	1.8% (1)
La Frontera	42.3% (11)	57.7% (15)	0	35.8% (24)	64.2% (43)	0
Child and Family Resources	39.0% (16)	58.5% (24)	2.4% (1)	23.5% (20)	76.5% (65)	0
Sierra Vista	62.5% (5)	37.5% (3)	0	32.8% (19)	67.2% (39)	0
Tuba City	18.2% (4)	81.8% (18)	0	46.9% (15)	53.1% (17)	0
Verde Valley	21.7% (10)	76.1% (35)	2.2% (1)	36.8% (14)	60.5% (23)	2.6% (1)
Yuma	30.8% (4)	69.2% (9)	0	32.4% (24)	67.6% (50)	0
Pascua Yaqui	14.3% (6)	85.7% (36)	0	9.1% (2)	90.9% (20)	0
Lake Havasu City	33.3% (11)	60.6% (20)	6.1% (2)	34.7% (25)	59.7% (43)	5.6% (4)
Flagstaff	21.2% (7)	75.8% (25)	3.0% (1)	21.2% (7)	78.8% (26)	0
Sunnyslope	33.3% (5)	60.0% (9)	6.7% (1)	38.7% (29)	58.7% (44)	2.7% (2)
Prescott	35.3% (6)	52.9% (9)	11.8% (2)	56.3% (67)	39.5% (47)	4.2% (5)
Coolidge	62.5% (5)	37.5% (3)	0	51.5% (34)	47.0% (31)	1.5% (1)
Mesa	45.2% (14)	48.4% (15)	6.5% (2)	35.6% (48)	60.0% (81)	4.4% (6)
Southeast Phoenix	27.3% (3)	72.7% (8)	0	35.2% (25)	64.8% (46)	0
El Mirage	10.0% (1)	90.0% (9)	0	29.3% (22)	68.0% (51)	2.7% (2)
Blake Foundation	26.3% (5)	73.7% (14)	0	35.7% (20)	58.9% (33)	5.4% (3)
Marana	20.0% (2)	80.0% (8)	0	19.1% (9)	80.9% (38)	0
Safford	16.7% (2)	83.3% (10)	0	19.4% (7)	80.6% (29)	0
Stanfield (Pinal)	50.0% (2)	50.0% (2)	0	60.0% (3)	40.0% (2)	0
Apache Junction	40.0% (6)	46.7% (7)	13.3% (2)	37.2% (16)	62.8% (27)	0
Gila River	30.8% (4)	69.2% (9)	0	53.8% (7)	46.2% (6)	0
Winslow	50.0% (4)	50.0% (4)	0	40.9% (9)	59.1% (13)	0
Kingman	21.1% (4)	73.7% (14)	5.3% (1)	29.3% (12)	63.4% (26)	7.3% (3)
Globe/Miami	44.4% (4)	55.6% (5)	0	48.4% (15)	48.4% (15)	3.2% (1)
Kyrene	33.3% (4)	58.3% (7)	8.3% (1)	41.5% (22)	56.6% (30)	1.9% (1)
Metro Phoenix	22.2% (2)	77.8% (7)	0	48.1% (38)	49.4% (39)	2.5% (2)
Tolleson	66.7% (6)	33.3% (3)	0	47.3% (26)	50.9% (28)	1.8% (1)
South Mountain	60.0% (6)	40.0% (4)	0	47.8% (32)	49.3% (33)	3.0% (2)
Glendale	0	87.5% (7)	12.5% (1)	20.5% (8)	66.7% (26)	12.8% (5)
Deer Valley	11.1% (1)	77.8% (7)	11.1% (1)	33.9% (26)	50.9% (28)	1.8% (1)



Site	PRENATAL			POSTNATAL		
	Yes	No	Unknown	Yes	No	Unknown
East/SE Tucson	26.1% (6)	73.9% (17)	0	16.7% (9)	77.8% (42)	5.6% (3)
SW Tucson	40.0% (8)	60.0% (12)	0	35.4% (17)	64.6% (31)	0
Bullhead City	16.7% (1)	83.3% (5)	0	27.3% (12)	72.7% (32)	0
Northwest Phoenix	15.4% (2)	84.6% (11)	0	44.2% (19)	55.8% (24)	0
Tempe	40.0% (4)	60.0% (6)	0	39.7% (23)	58.6% (34)	1.7% (1)
Gilbert	60.0% (9)	40.0% (6)	0	27.3% (6)	72.7% (16)	0
Scottsdale	11.1% (1)	88.9% (8)	0	36.6% (26)	59.2% (42)	4.2% (3)
West Phoenix	20.0% (1)	80.0% (4)	0	38.3% (18)	57.4% (27)	4.3% (2)
East Mesa	55.0% (11)	40.0% (8)	5.0% (1)	51.7% (30)	44.8% (26)	3.4% (2)
Williams (Kinlani)	25.5% (13)	70.5% (31)	0	32.4% (11)	67.6% (23)	0
Southwest Phoenix	55.6% (5)	44.4% (4)	0	39.2% (29)	55.4% (41)	5.4% (4)
Peoria	50.0% (9)	44.4% (8)	5.6% (1)	28.6% (14)	71.4% (35)	0
Metro Tucson	33.3% (3)	66.7% (6)	0	33.3% (16)	66.7% (32)	0
Casa Family First	46.4% (13)	53.6% (15)	0	27.8% (22)	70.9% (56)	1.3% (1)
Wellspring	29.0% (9)	71.0% (22)	0	23.9% (11)	76.1% (35)	0
Primero Los Niños	75.0% (3)	25.0% (1)	0	40.0% (12)	60.0% (18)	0
Sierra Vista Blake	20.8% (5)	75.0% (18)	4.2% (2)	32.1% (17)	64.2% (34)	3.8% (2)
Total	32.4% (329)	65.4% (665)	2.3% (23)	34.6% (1145)	62.8% (2079)	2.6% (87)



PRENATAL Ethnicity of Mother by Site - 2009
Percent and number () within Site

Site	Mixed/Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	11.1	2	11.1	2	77.8	14	0	0	0	0	0	0
Central Phoenix	3.4	1	37.9	11	51.7	15	6.9	2	0	0	0	0
Maryvale	5.0	1	15.0	3	70.0	14	10.0	2	0	0	0	0
South Phoenix	3.6	1	10.7	3	71.4	20	14.3	4	0	0	0	0
East Valley	19.4	6	19.4	6	41.9	13	12.9	4	0	0	6.5	2
Nogales	0	0	7.4	2	88.9	24	3.7	1	0	0	0	0
Page	0	0	14.3	1	0	0	0	0	0	0	85.7	6
Casa de los Niños	0	0	29.4	5	58.8	10	11.8	2	0	0	0	0
CODAC	6.9	2	10.3	3	75.9	22	3.4	1	0	0	3.4	1
La Frontera	0	0	0	0	84.0	21	12.0	3	0	0	4.0	1
Chaild and Family Resources	2.4	1	39.0	16	53.7	22	2.4	1	2.4	1	0	0
Sierra Vista	12.5	1	25.0	2	62.5	5	0	0	0	0	0	0
Tuba City	0	0	0	0	0	0	0	0	0	0	100.0	22
Verde Valley	4.5	2	59.1	26	34.1	15	0	0	0	0	2.3	1
Yuma	0	0	7.7	1	84.6	11	7.7	1	0	0	0	0
Pascua Yaqui	7.5	3	0	0	7.5	3	0	0	2.5	1	82.5	33
Lake Havasu City	3.0	1	72.7	24	18.2	6	3.1	1	0	0	3.0	1
Flagstaff	3.0	1	30.3	10	48.5	16	6.1	2	0	0	12.1	4
Sunnyslope	6.7	1	40.0	6	33.3	5	20.0	3	0	0	0	0
Prescott	0	0	70.6	12	29.4	5	0	0	0	0	0	0
Pinal County (Coolidge)	11.1	1	22.2	2	55.6	5	11.1	1	0	0	0	0
Mesa	6.5	2	32.3	10	58.1	18	0	0	0	0	3.2	1
Southeast Phoenix	8.3	1	8.3	1	66.7	8	16.7	2	0	0	0	0
El Mirage	10.0	1	40.0	4	40.0	4	0	0	0	0	10.0	1
Blake Foundation	10.5	2	5.3	1	68.4	13	10.5	2	5.3	1	0	0
Marana	10.0	1	40.0	4	40.0	4	0	0	0	0	10.0	1
Safford	0	0	58.3	7	33.3	4	8.3	1	0	0	0	0
Stanfield	0	0	25.0	1	50.0	2	25.0	1	0	0	0	0
Apache Junction	0	0	73.3	11	26.7	4	0	0	0	0	0	0
Gila River	0	0	15.4	2	0	0	0	0	0	0	84.6	11
Winslow	0	0	42.9	3	28.6	2	0	0	0	0	28.6	2
Kingman	0	0	94.7	18	0	0	0	0	5.3	1	0	0
Globe/Miami	0	0	50.0	3	0		0	0	0	0	50.0	3
Kyrene	8.3	1	16.7	2	66.7	8	0	0	0	0	8.3	1
Metro Phoenix	22.2	2	22.2	2	44.4	4	11.1	1	0	0	0	0
Tolleson	0	0	22.2	2	77.8	7	0	0	0	0	0	0
South Mountain	10.0	1	20.0	2	70.0	7	0	0	0	0	0	0
Glendale	0	0	37.5	3	50.0	4	12.5	1	0	0	0	0
Deer Valley	22.2	2	33.3	3	33.3	3	11.1	1	0	0	0	0
East/SE Tucson	4.3	1	39.1	9	39.1	9	17.4	4	0	0	0	0
SW Tucson	5.0	1	5.0	1	90.0	18	0	0	0	0	0	0
Bullhead City	16.7	1	50.0	3	33.3	2	0	0	0	0	0	0
Northwest Phoenix	0	0	15.4	2	69.2	9	7.7	1	7.7	1	0	0
Tempe	10.0	1	30.0	3	50.0	5	10.0	1	0	0	0	0
Gilbert	6.7	1	66.7	10	20.0	3	0	0	0	0	6.7	1
Scottsdale	11.1	1	22.2	2	55.6	5	11.1	1	0	0	0	0



Site	Mixed/Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
West Phoenix	0	0	20.0	1	80.0	4	0	0	0	0	0	0
East Mesa	10.0	2	20.0	4	70.0	14	0	0	0	0	0	0
Williams (Kinlani)	0	0	11.4	5	52.3	23	0	0	0	0	36.4	16
Southwest Phoenix	0	0	11.1	1	66.7	6	22.2	2	0	0	0	0
Peoria	5.6	1	33.3	6	55.6	10	5.6	1	0	0	0	0
Metro Tucson	11.1	1	33.3	3	44.4	4	11.1	1	0	0	0	0
Casa Family First	0	0	18.5	5	81.5	22	0	0	0	0	0	0
Wellspring	6.5	2	16.1	5	32.3	10	0	0	0	0	45.2	14
Primeros Los Niños	0	0	0	0	100.0	4	0	0	0	0	0	0
Sierra Vista Blake	4.2	1	75.0	18	8.3	2	12.5	3	0	0	0	0
Total	4.9	50	29.0	292	48.4	488	5.1	51	.5	5	12.1	122



POSTNATAL Ethnicity of Mother by Site – 2009
Percent and number () within Site

Site	Mixed/Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	4.6	2	9.3	4	83.7	36	0	0	2.3	0	0	0
Central Phoenix	5.0	6	30.3	36	52.9	63	3.4	4	2.5	3	5.9	7
Maryvale	4.4	6	23.4	32	62.8	86	8.8	12	0	0	0.7	1
South Phoenix	3.6	4	9.7	11	68.1	77	15.9	18	0.9	1	1.8	2
East Valley	5.4	7	41.9	54	45.7	59	5.4	7	0	0	1.6	2
Nogales	0	0	2.6	2	96.1	74	0	0	0	0	1.3	1
Page	0	0	3.6	1	0	0	0	0	0	0	96.4	27
Casa de los Niños	5.1	4	25.3	20	62.0	49	2.5	2	2.5	2	2.5	2
CODAC	5.4	3	29.1	16	56.4	31	3.6	2	1.8	1	3.6	2
La Frontera	4.5	3	23.9	16	65.7	44	4.5	3	0	0	1.5	1
Child and Family Resources	8.3	7	33.3	28	45.2	38	8.3	7	2.4	2	2.4	2
Sierra Vista	5.2	3	51.7	30	37.9	22	3.4	2	0	0	1.7	1
Tuba City	3.1	1	0	0	0	0	0	0	3.1	1	93.8	30
Verde Valley	0	0	55.6	20	33.3	12	2.8	1	0	0	8.3	3
Yuma	3.0	2	4.5	3	89.4	59	0	0	3.0	2	0	0
Pascua Yaqui	4.8	1	0	0	14.3	3	9.5	2	0	0	71.4	15
Lake Havasu City	7.0	5	58.3	42	33.3	24	0	0	0	0	1.4	1
Flagstaff	3.0	1	48.5	16	27.3	9	0	0	0	0	21.2	7
Sunnyslope	4.0	3	54.7	41	36.0	27	4.0	3	0	0	1.3	1
Prescott	3.2	4	50.0	59	45.8	54	0	0	0	0	0.8	1
Pinal County (Coolidge)	1.6	1	32.8	21	53.1	34	3.1	2	0	0	9.4	6
Mesa	3.7	5	34.8	47	57.8	78	3.0	4	0	0	0.7	1
Southeast Phoenix	5.7	4	17.1	12	67.1	47	7.1	5	0	0	2.9	2
El Mirage	10.9	8	35.1	26	40.5	30	9.5	7	2.7	2	1.4	1
Blake Foundation	7.2	4	23.2	13	57.1	32	12.5	7	0	0	0	0
Marana	12.8	6	34.0	16	44.7	21	6.4	3	2.1	1	0	0
Safford	8.8	3	61.	21	23.5	8	5.9	2	0	0	0	0
Stanfield	20.0	1	20.0	1	60.0	3	0	0	0	0	0	0
Apache Junction	2.3	1	55.8	24	39.5	17	0	0	0	0	2.3	1
Gila River	0	0	14.3	2	0	0	0	0	0	0	85.7	12
Winslow	13.6	3	13.6	3	13.6	3	4.5	1	4.5	1	50.0	11
Kingman	2.5	1	72.5	29	17.5	7	0	0	0	0	2.5	1
Globe/Miami	8.0	2	32.0	8	20.0	5	0	0	0	0	40.0	10
Kyrene	3.8	2	30.2	16	58.5	31	0	0	1.9	1	5.7	3
Metro Phoenix	3.8	3	26.6	21	57.0	45	8.9	7	0	0	3.8	3
Tolleson	7.2	4	5.5	3	72.7	40	10.9	6	0	0	3.6	2
South Mountain	3.0	2	15.2	10	74.2	49	6.1	4	0	0	1.5	1
Glendale	5.1	2	33.3	13	48.7	19	7.7	3	0	0	5.1	2
Deer Valley	9.6	7	43.5	27	37.1	23	8.1	5	1.6	1	0	0
East/SE Tucson	9.5	5	32.7	17	50.0	26	5.8	3	1.9	1	0	0
SW Tucson	2.1	1	6.4	3	83.0	39	4.3	2	0	0	4.3	2
Bullhead City	9.4	4	65.1	28	20.9	9	2.3	1	0	0	2.3	1
Northwest Phoenix	6.9	3	25.6	11	51.2	22	11.6	5	0	0	4.7	2
Tempe	13.8	8	31.0	18	44.8	26	5.2	3	1.7	1	3.4	2
Gilbert	9.1	2	59.1	13	9.1	2	18.2	4	0	0	4.5	1



Site	Mixed/Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Scottsdale	8.4	6	28.2	20	40.8	29	11.3	8	1.4	1	9.9	7
West Phoenix	6.4	3	12.8	6	72.3	34	4.3	2	4.3	2	0	0
East Mesa	0	0	13.6	8	83.1	49	1.7	1	0	0	1.1	1
Kinlani-Flagstaff	5.9	2	23.5	8	23.5	8	0	0	0	0	47.1	16
Southwest Phoenix	9.5	7	10.8	8	60.8	45	16.2	12	0	0	2.7	2
Peoria	6.0	3	30.0	15	58.0	29	2.0	1	0	0	4.0	2
Metro Tucson	10.5	5	23.4	11	55.3	26	2.1	1	2.1	1	6.4	3
Casa Family First	5.1	4	21.8	17	67.9	53	5.1	4	0	0	0	0
Wellspring	20.5	9	31.8	14	18.2	8	0	0	0	0	29.5	13
Primero Los Niños	0	0	4.2	1	95.8	23	0	0	0	0	0	0
Sierra Vista Blake	7.6	4	42.3	22	26.9	14	17.3	9	3.8	2	1.9	1
Total	5.8	188	29.5	964	52.0	1701	5.4	175	0.8	27	6.6	215



Gestational Age by Site - 2009
(Number and Percent within Site)
Was the gestational age less than 37 weeks?

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Douglas	100	1	0	0	66.7	2	33.3	1
Central Phoenix	78.6	11	21.4	3	63.4	59	36.6	34
Maryvale	88.2	15	11.8	2	70.6	84	29.4	35
South Phoenix	73.7	14	26.3	5	80.6	87	19.4	21
East Valley	85.0	17	15.0	3	71.6	83	28.4	33
Nogales	91.7	11	8.3	1	89.2	33	10.8	4
Page	100	5	0	0	96.4	27	3.6	1
Casa de los Niños	84.6	11	15.4	2	78.5	51	21.5	14
CODAC	81.8	18	18.2	4	90.5	38	9.5	4
La Frontera	92.9	13	7.1	1	78.8	41	21.2	11
Child and Family Resources	73.9	17	26.1	6	80.0	56	20.0	14
Sierra Vista	100	6	0	0	86.3	44	13.7	7
Tuba City	80.0	8	20.0	2	81.0	17	19.0	4
Verde Valley	86.1	31	13.9	5	88.5	23	11.5	3
Yuma	100	5	0	0	95.2	59	4.8	3
Pascua Yaqui	100	10	0	0	88.9	8	11.1	1
Lake Havasu City	95.8	23	4.2	1	82.3	51	17.7	11
Flagstaff	82.8	24	17.2	5	63.0	17	37.0	10
Sunnyslope	100	4	0	0	68.2	45	31.8	21
Prescott	75.0	9	25.0	3	90.7	97	9.3	10
Pinal County (Coolidge)	75.0	3	25.0	1	84.6	44	15.4	8
Mesa	81.3	13	18.8	3	74.4	90	25.6	31
Southeast Phoenix	80.0	4	20.0	1	66.1	39	33.9	20
El Mirage	75.0	6	25.0	2	69.7	46	30.3	20
Blake Foundation	71.4	10	28.6	4	87.8	36	12.2	5
Marana	83.3	5	16.7	1	84.8	28	15.2	5
Safford	88.9	8	11.1	1	95.2	20	4.8	1
Stanfield	50.0	1	50.0	1	75.0	3	25.0	1
Apache Junction	100	7	0	0	74.4	29	25.6	10
Gila River	80.0	8	20.0	2	100	14	0	0
Winslow	100	6	0	0	85.7	18	14.3	3
Kingman	83.3	5	16.7	1	91.4	32	8.6	3
Globe/Miami	50.0	1	50.0	1	88.9	24	11.1	3



Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Kyrene	80.0	8	20.0	2	89.6	43	10.4	5
Metro Phoenix	66.7	4	33.3	2	76.1	54	23.9	17
Tolleson	100	3	0	0	79.2	38	20.8	10
South Mountain	71.4	5	28.6	2	78.7	48	21.3	13
Glendale	100	1	0	0	73.3	22	26.7	8
Deer Valley	100	3	0	0	75.5	40	24.5	13
East/SE Tucson	73.7	14	26.3	5	71.1	27	28.9	11
SW Tucson	72.7	8	27.3	3	92.3	36	7.7	3
Bullhead City					80.0	8	20.0	2
Northwest Phoenix	87.5	7	12.5	1	76.3	29	23.7	9
Tempe	60.0	3	40.0	2	75.0	39	25.0	13
Gilbert	100	13	0	0	50.0	10	50.0	10
Scottsdale	66.7	2	33.3	1	75.4	49	24.6	16
West Phoenix	100	4	0	0	74.4	29	25.6	10
East Mesa	83.3	10	16.7	2	80.4	41	19.6	10
Kinlani-Flagstaff	77.8	28	22.2	8	85.7	18	14.3	3
Southwest Phoenix	50.0	2	50.0	2	78.9	56	21.1	15
Peoria	55.6	5	44.4	4	87.5	42	12.5	6
Metro Tucson	100	7	0	0	87.8	36	12.2	5
Casa Family First	78.3	18	21.7	5	84.4	54	15.6	10
Wellspring	95.2	20	4.8	1	72.4	21	27.6	8
Primerio Los Niños	100	3	0	0	81.0	17	19.0	4
Sierra Vista Blake	76.9	10	23.1	3	77.3	34	22.7	10
Total	83.0	508	17.0	104	79.1	2136	20.9	563



Low Birth Weight by Site - 2009
(Number and Percent within Site)
Did the child have low birth weight?
(less than 2500 grams, 88 ounces, or 5.5 pounds)

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Douglas	100	3	0	0	83.7	36	16.3	7
Central Phoenix	85.7	18	14.3	3	74.6	88	25.4	30
Maryvale	100	15	0	0	73.7	101	26.3	36
South Phoenix	88.2	15	11.8	2	81.1	90	18.9	21
East Valley	78.9	15	21.1	4	83.7	108	16.3	21
Nogales	80.0	12	20.0	3	87.0	67	13.0	10
Page	100	4	0	0	100	29	0	0
Casa de los Niños	91.7	11	8.3	1	82.3	65	17.7	14
CODAC	95.8	23	4.2	1	90.9	50	9.1	5
La Frontera	94.1	16	5.9	1	81.8	54	18.2	12
Child and Family Resources	91.3	21	8.7	2	90.1	73	9.9	8
Sierra Vista	100	8	0	0	86.0	49	14.0	8
Tuba City	86.7	13	13.3	2	90.6	29	9.4	3
Verde Valley	97.2	35	2.8	1	89.5	34	10.5	4
Yuma	100	8	0	0	92.0	69	8.0	6
Pascua Yaqui	90.9	20	9.1	2	95.2	20	4.8	1
Lake Havasu City	96.2	25	3.8	1	87.5	63	12.5	9
Flagstaff	87.1	27	12.9	4	63.6	21	36.4	12
Sunnyslope	80.0	4	20.0	1	78.4	58	21.6	16
Prescott	75.0	9	25.0	3	90.8	108	9.2	11
Pinal County (Coolidge)	100	6	0	0	87.7	57	12.3	8
Mesa	84.2	16	15.8	3	84.6	115	15.4	21
Southeast Phoenix	100	5	0	0	80.9	55	19.1	13
El Mirage	88.9	8	11.1	1	81.1	60	18.9	14
Blake Foundation	71.4	10	28.6	4	86.8	46	13.2	7
Marana	75.0	6	25.0	2	93.6	44	6.4	3
Safford	77.8	7	22.2	2	88.9	32	11.1	4
Stanfield	0	0	100	2	80.0	4	20.0	1
Apache Junction	88.9	8	11.1	1	83.7	36	16.3	7
Gila River	81.8	9	18.2	2	100.0	14	0	0
Winslow	100	4	0	0	90.9	20	9.1	2
Kingman	100	7	0	0	90.2	37	9.8	4
Globe/Miami	100	3	0	0	93.3	28	6.7	2



Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Kyrene	91.7	11	8.3	1	86.8	46	13.2	7
Metro Phoenix	100	4	0	0	78.5	62	21.5	17
Tolleson	100	3	0	0	79.6	43	20.4	11
South Mountain	87.5	7	12.5	1	89.2	58	10.8	7
Glendale	100	4	0	0	84.6	33	15.4	6
Deer Valley	100	5	0	0	80.6	50	19.4	12
East/SE Tucson	92.3	12	7.7	1	78.8	41	21.2	11
SW Tucson	74.4	17	5.6	1	89.6	43	10.4	5
Bullhead City	100	4	0	0	90.2	37	9.8	4
Northwest Phoenix	75.0	6	25.0	2	90.7	39	9.3	4
Tempe	71.4	5	28.6	2	74.1	43	25.9	15
Gilbert	100	12	0	0	50.0	11	50.0	11
Scottsdale	100	5	0	0	85.7	60	14.3	10
West Phoenix	100	4	0	0	82.6	38	17.4	8
East Mesa	84.6	11	15.4	2	82.1	46	17.9	10
Kinlani-Flagstaff	81.6	31	18.4	7	91.2	31	8.8	3
Southwest Phoenix	50.0	2	50.0	2	83.8	62	16.2	12
Peoria	100	8	0	0	83.7	41	16.3	8
Metro Tucson	87.5	7	12.5	1	89.1	41	10.9	5
Casa Family First	79.2	19	20.8	5	89.7	70	10.3	8
Wellspring	95.5	21	4.5	1	86.7	39	13.3	6
Primeros Los Niños	66.7	2	33.3	1	93.3	28	6.7	2
Sierra Vista Blake	86.7	13	13.3	2	83.0	44	17.0	9
Total	88.7	604	11.3	77	84.4	2766	15.6	511



Yearly Income by Site – 2009

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Douglas	\$1,500	15	\$3,876	42
Central Phoenix	\$4,824	21	\$12,992	80
Maryvale	\$16,074	16	\$11,520	88
South Phoenix	\$14,400	19	\$14,400	80
East Valley	\$2,448	21	\$14,400	92
Nogales	\$9,600	24	\$13,200	63
Page	\$7,200	7	\$15,600	28
Casa de los Niños	\$10,400	14	\$12,000	59
CODAC	\$8,400	27	\$14,200	47
La Frontera	\$12,000	23	\$13,000	55
Child and Family Resources	\$12,600	40	\$12,000	71
Sierra Vista	\$8,082	6	\$11,148	54
Tuba City	\$7,200	11	\$11,000	18
Verde Valley	\$11,520	43	\$14,400	37
Yuma	\$12,000	12	\$10,400	61
Pascua Yaqui	\$6,600	38	\$8,880	18
Lake Havasu City	\$15,600	30	\$19,200	67
Flagstaff	\$18,600	30	\$16,200	32
Sunnyslope	\$10,400	11	\$15,300	58
Prescott	\$21,000	10	\$13,500	46
Pinal County (Coolidge)	\$18,200	3	\$7,200	37
Mesa	\$14,400	25	\$15,120	93
Southeast Phoenix	\$12,000	11	\$12,000	50
El Mirage	\$6,180	8	\$24,000	45
Blake Foundation	\$12,000	17	\$13,000	39
Marana	\$18,000	9	\$12,000	31
Safford	\$5,880	10	\$13,200	34
Stanfield	\$12,000	2	\$18,000	5
Apache Junction	\$14,400	13	\$14,480	36
Gila River	\$4,080	12	\$7,800	12
Winslow	\$6,192	8	\$8,040	19
Kingman	\$20,400	11	\$13,490	32
Globe/Miami	\$8,400	6	\$4,100	23
Kyrene	\$11,952	10	\$11,750	34
Metro Phoenix	\$2,400	7	\$12,000	59
Tolleson	\$19,200	8	\$17,682	47
South Mountain	\$18,600	4	\$14,400	47
Glendale	\$6,300	6	\$15,600	25
Deer Valley	\$10,200	8	\$14,400	43
East/SE Tucson	\$14,400	20	\$13,000	37
SW Tucson	\$12,000	17	\$13,000	43



Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Bullhead City	\$17,400	4	\$14,560	37
Northwest Phoenix	\$18,720	13	\$12,000	34
Tempe	\$7,644	9	\$17,184	41
Gilbert	\$0*	7	\$19,200	13
Scottsdale	\$7,200	5	\$14,400	45
West Phoenix	\$18,000	3	\$15,360	37
East Mesa	\$16,800	13	\$16,200	44
Kinlani-Flagstaff	\$12,000	38	\$12,000	31
Southwest Phoenix	\$19,800	6	\$14,400	53
Peoria	\$7,200	14	\$14,400	41
Metro Tucson	\$7,668	5	\$14,400	41
Casa Family First	\$10,800	25	\$14,400	65
Wellspring	\$10,800	29	\$9,360	41
Primero Los Niños	\$12,000	3	\$10,200	27
Sierra Vista Blake	\$7,476	22	\$14,400	49
Total	\$11,040	829	\$13,926	2486

*7 families reported no income



Parent Survey Score by Site - 2009

Site	PRENATAL			POSTNATAL		
	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40
Douglas	40.00	61.1	11	35.47	37.2	16
Central Phoenix	51.90	82.8	24	46.05	69.7	83
Maryvale	52.00	80.0	16	43.91	65.0	89
South Phoenix	42.14	50.0	14	42.48	59.3	67
East Valley	54.68	83.9	26	43.33	63.6	82
Nogales	42.22	55.6	15	35.45	36.4	28
Page	51.25	87.5	7	39.66	51.7	15
Casa de los Niños	48.82	70.6	12	39.26	46.9	38
CODAC	42.41	55.2	16	38.66	55.4	31
La Frontera	37.50	38.5	10	39.93	52.2	35
Child and Family Resources	45.37	73.2	30	43.06	62.4	53
Sierra Vista	39.38	50.0	4	39.57	51.7	30
Tuba City	34.55	50.0	11	38.91	56.3	18
Verde Valley	37.83	47.8	22	40.53	60.5	23
Yuma	35.00	30.8	4	32.89	25.0	19
Pascua Yaqui	30.60	19.0	8	35.00	31.8	7
Lake Havasu City	48.33	72.7	24	37.22	45.8	33
Flagstaff	36.52	42.4	14	41.21	54.5	18
Sunnyslope	44.00	66.7	10	46.13	74.7	56
Prescott	48.82	70.6	12	38.82	40.3	48
Pinal County (Coolidge)	36.11	44.4	4	37.35	47.0	31
Mesa	45.97	74.2	23	42.23	57.7	79
Southeast Phoenix	41.67	50.0	6	43.80	66.2	47
El Mirage	41.00	90.0	9	44.07	70.7	53
Blake Foundation	43.95	57.9	11	41.43	48.2	27
Marana	48.50	80.0	8	41.60	59.6	28
Safford	34.17	41.7	5	30.56	25.0	9
Stanfield	40.00	75.0	3	34.00	40.0	2
Apache Junction	51.67	86.7	13	43.37	57.4	29
Gila River	42.31	53.8	7	38.57	50.0	7
Winslow	47.14	57.1	4	40.00	57.1	12
Kingman	46.32	78.9	15	44.19	60.5	26
Globe/Miami	42.78	77.8	7	42.10	54.8	17



Site	PRENATAL			POSTNATAL		
	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40
Kyrene	46.67	66.7	8	44.53	67.9	36
Metro Phoenix	35.56	55.6	5	46.77	72.2	57
Tolleson	40.00	55.6	5	41.45	50.9	28
South Mountain	43.00	80.0	8	44.18	62.7	42
Glendale	51.25	62.5	5	45.13	69.2	27
Deer Valley	44.44	66.7	6	46.85	69.4	43
East/SE Tucson	38.91	47.8	11	38.80	44.4	24
SW Tucson	37.50	45.0	9	33.85	33.3	16
Bullhead City	45.00	66.7	4	44.77	68.2	30
Northwest Phoenix	38.85	61.5	8	46.28	74.4	32
Tempe	49.00	70.0	7	46.12	75.9	44
Gilbert	59.00	93.3	14	47.95	77.3	17
Scottsdale	52.78	77.8	7	43.10	60.6	43
West Phoenix	39.00	80.0	4	42.87	59.6	28
East Mesa	48.00	70.0	14	42.03	62.7	37
Kinlani-Flagstaff	42.39	61.4	27	43.24	64.7	22
Southwest Phoenix	57.78	88.9	8	44.80	71.6	53
Peoria	41.39	55.6	10	42.30	54.0	27
Metro Tucson	42.22	66.7	6	40.94	52.1	25
Casa Family First	42.68	60.7	17	37.85	40.5	32
Wellspring	40.97	61.3	19	43.80	67.4	31
Primero Los Niños	32.50	25.0	1	34.83	40.0	12
Sierra Vista Blake	43.96	54.2	13	39.15	56.6	30
Total	43.19	61.0	621	41.56	57.0	1892



**Trimester of Enrollment into Prenatal Program
July 2008 to June 2009**

Site	1 st Trimester		2 nd Trimester		3 rd Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
Douglas	1	5.6	5	27.8	8	44.4	4	22.2	18
Central Phoenix	3	10.3	4	13.8	16	55.2	6	20.7	29
Maryvale	0	0	7	35.0	11	55.0	2	10.0	20
South Phoenix	1	3.6	10	35.7	15	53.6	2	7.1	28
East Valley	1	3.2	8	25.8	18	58.1	4	12.9	31
Nogales	3	11.1	5	18.5	11	40.7	8	29.6	27
Page	2	25.0	2	25.0	2	25.0	2	25.0	8
Casa de los Niños	2	11.8	6	35.3	7	41.2	2	11.8	17
CODAC	1	3.4	13	44.8	12	41.4	3	10.3	29
La Frontera	1	3.8	8	30.8	11	42.3	6	23.1	26
Child and Family Resources	0	0	8	19.5	23	56.1	10	24.4	41
Sierra Vista	0	0	1	12.5	7	87.5	0	0	8
Tuba City	0	0	5	22.7	12	54.5	5	22.7	22
Verde Valley	4	8.7	13	28.3	26	56.5	3	6.5	46
Yuma	0	0	3	23.1	8	61.5	2	15.4	13
Pascua Yaqui	2	4.8	15	35.7	18	42.9	7	16.7	42
Lake Havasu City	4	12.1	12	36.4	12	36.4	5	15.2	33
Flagstaff	7	21.2	6	18.2	19	57.6	1	3.0	33
Sunnyslope	1	6.7	2	13.3	10	66.7	2	13.3	15
Prescott	3	17.6	4	23.5	8	47.1	2	11.8	17
Pinal County (Coolidge)	0	0	4	44.4	4	44.4	1	11.1	9
Mesa	2	6.5	9	29.0	17	54.8	3	9.7	31
Southeast Phoenix	0	0	6	50.0	1	8.3	5	41.7	12
El Mirage	0	0	3	30.0	6	60.0	1	10.0	10
Blake Foundation	2	10.5	5	26.3	10	52.6	2	10.5	19
Marana	1	10.0	2	20.0	3	30.0	4	40.0	10
Safford	0	0	6	50.0	5	41.7	1	8.3	12
Stanfield	0	0	0	0	3	75.0	1	25.0	4
Apache Junction	3	20.0	5	33.3	7	46.7	0	0	15
Gila River	0	0	3	23.1	9	69.2	1	7.7	13
Winslow	0	0	3	37.5	4	50.0	1	12.5	8
Kingman	3	15.8	4	21.1	3	15.8	9	47.4	19
Globe/Miami	0	0	0	0	5	55.6	4	44.4	9
Kyrene	0	0	3	25.0	8	66.7	1	8.3	12
Metro Phoenix	0	0	1	11.1	6	66.7	2	22.2	9
Tolleson	0	0	0	0	9	100.0	0	0	9



Site	1 st Trimester		2 nd Trimester		3 rd Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
South Mountain	1	10.0	3	30.0	6	60.0	0	0	10
Glendale	0	0	1	12.5	4	50.0	3	37.5	8
Deer Valley	0	0	3	33.3	3	33.3	3	33.3	9
East/SE Tucson	2	8.7	4	17.4	9	17.4	8	34.8	23
SW Tucson	2	10.0	10	50.0	6	50.0	2	10.0	20
Bullhead City	1	16.7	3	50.0	1	50.0	1	16.7	6
Northwest Phoenix	2	15.4	3	23.1	8	61.5	0	0	13
Tempe	2	20.0	2	20.0	5	50.0	1	10.0	10
Gilbert	0	0	4	26.7	8	53.3	3	20.0	15
Scottsdale	1	11.1	3	33.3	3	33.3	2	22.2	9
West Phoenix	0	0	3	60.0	2	40.0	0	0	5
East Mesa	3	15.0	7	35.0	10	50.0	0	0	20
Kinlani-Flagstaff	8	18.2	8	18.2	28	63.6	0	0	44
Southwest Phoenix	0	0	2	22.2	5	55.6	2	22.2	9
Peoria	3	16.7	1	5.6	9	50.0	5	27.8	18
Metro Tucson	0	0	3	33.3	4	44.4	2	22.2	9
Casa Family First	6	21.4	7	25.0	15	53.6	0	0	28
Wellspring	5	16.1	4	12.9	19	61.3	3	9.7	31
Primero Los Niños	0	0	1	25.0	3	75.0	0	0	4
Sierra Vista Blake	4	16.7	5	20.8	7	29.2	8	33.3	24
Total	87	8.5	268	26.3	509	50.0	155	15.2	1019



**Engaged Prenatal Families that Exited Before Baby's Birth
By Site - July 2008 through June 2009**

Site	Total Families	# Closed before birth	% Closed before birth
Douglas	18	0	0
Central Phoenix	29	1	3.4
Maryvale	20	1	5.0
South Phoenix	28	2	7.1
East Valley	31	0	0
Nogales	27	1	3.7
Page	8	1	12.5
Casa de los Niños	17	2	11.8
CODAC	29	0	0
La Frontera	26	1	3.8
Child and Family Resources	41	0	0
Sierra Vista	8	0	0
Tuba City	22	2	9.1
Verde Valley	46	0	0
Yuma	13	0	0
Pascua Yaqui	42	2	4.8
Lake Havasu City	33	5	15.2
Flagstaff	33	1	3.0
Sunnyslope	15	0	0
Prescott	17	1	5.9
Pinal County (Coolidge)	9	0	0
Mesa	31	0	0
Southeast Phoenix	12	0	0
El Mirage	10	0	0
Blake Foundation	19	0	0
Marana	10	2	20.0
Safford	12	0	0
Stanfield	4	0	0
Apache Junction	15	0	0
Gila River	13	0	0
Winslow	8	0	0
Kingman	19	3	15.8
Globe/Miami	9	2	22.2
Kyrene	12	0	0
Metro Phoenix	9	0	0
Tolleson	9	0	0
South Mountain	10	0	0
Glendale	8	1	15.5
Deer Valley	9	1	11.1
East/SE Tucson	23	0	0
SW Tucson	20	0	0
Bullhead City	6	1	16.7



Site	Total Families	# Closed before birth	% Closed before birth
Northwest Phoenix	13	0	0
Tempe	10	0	0
Gilbert	15	0	0
Scottsdale	9	1	11.1
West Phoenix	5	0	0
East Mesa	20	0	0
Kinlani-Flagstaff	44	0	0
Southwest Phoenix	9	1	11.1
Peoria	18	1	5.6
Metro Tucson	9	0	0
Casa Family First	28	0	0
Wellspring	31	2	6.5
Primerio Los Niños	4	0	0
Sierra Vista Blake	24	1	4.2
Total	1019	36	3.5



Appendix B. Instrument Properties

Parent Survey*

Problem Areas and Interpretation (Mother & Father)

Areas (Scales)	Range	Interpretation/ Administration
1. Parent Childhood Experiences (e.g., Childhood history of physical abuse and deprivation)	0, 5, or 10	<p>The <i>Parent Survey</i> comprises a 10-item rating scale. A score of 0 represents normal, 5 represents a mild degree of the problem and a 10 represents severe for both the Mother and Father Parent Survey Checklist items.</p> <p>The <i>Parent Survey</i> is an assessment tool and is administered to the mother and father prior to enrollment through an interview by a Family Assessment Worker from the Healthy Families Arizona Program. A family is considered eligible to receive the Healthy Families Arizona program if either parent scores 25 or higher.</p>
2. Lifestyle, Behaviors and Mental Health (e.g., substance abuse, mental illness, or criminal history)	0, 5, or 10	
3. Parenting Experiences (e.g., Previous or current CPS involvement)	0, 5, or 10	
4. Coping Skills and Support Systems (e.g., Self-esteem, available lifelines, possible depression)	0, 5, or 10	
5. Stresses (e.g., Stresses, concerns, domestic violence)	0, 5, or 10	
6. Anger Management Skills (e.g., Potential for violence)	0, 5, or 10	
7. Expectations of Infant's Developmental Milestones and Behaviors	0, 5, or 10	
8. Plans for Discipline (e.g., infant, toddler, and child)	0, 5, or 10	
9. Perception of New Infant	0, 5, or 10	
10. Bonding/Attachment Issues	0, 5, or 10	
Total Score	0 - 100	<p>A score over 25 is considered medium risk for child abuse and neglect, and a score over 40 is considered high-risk for child abuse.</p>

* Modified from the Family Stress Checklist



Healthy Families Parenting Inventory Cronbach's Alpha Scores

Subscale	Alpha* 2 month	Alpha* 6 month	Alpha* 12 month
Social Support	r=.84	r=.86	r=.88
Problem Solving	r=.81	r=.80	r=.86
Depression	r=.84	r=.82	r=.85
Personal Care	r=.82	r=.80	r=.83
Mobilizing Resources	r=.78	r=.81	r=.82
Accepting the parent role	r=.77	r=.80	r=.81
Parent Child Behaviors	r=.78	r=.79	r=.82
Home Environment	r=.78	r=.80	r=.83
Parenting Efficacy	r=.84	r=.87	r=.88

*Alpha scores represent the correlation of items on a scale, and indicate how well the items in a subscale related to each other.



Appendix C. Healthy Families Arizona Prenatal Logic Model

Long Term Outcomes					Program Resources			
€ Reduced child abuse and neglect ⚡ Increased child wellness and development ∠ Strengthened family relations ▽ Enhanced family unity Ⓜ Reduced abuse of drugs and alcohol					Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., prenatal support & education programs, hospital programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services			
Prenatal Program Objectives								
Increase the family's support network	Improve mother's mental health	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve nutrition	Increase empathy for the unborn baby	Increase father involvement	Increase safety in the home environment	Increase the delivery of healthy babies, free from birth complications
Program Activities and Strategies								
Assess family's support systems Model relationship skills Foster connections to positive support sources	Identify signs and history of depression, abuse, mental illness, substance abuse Review history of birthing Encourage medical assessment, referral and treatment if needed Encourage exercise, personal care, rest Educate on post partum depression	Assess personal risk behaviors Educate on risk behaviors, lifestyle choices, community resources, affect of drugs, medicines on fetus Explore domestic violence, form safety plan Encourage help seeking and adoption of healthy behaviors	Identify major life stressors Educate on problem-solving, goal setting. Use IFSP to review progress Educate on access to community resources, how to reach out Make referrals as needed for anger and stress management Teach stress reduction	Educate and provide materials on nutrition during pregnancy, buying and choosing healthy foods, and requirements for healthy fetal development Provide referrals to WIC, other resources Encourage healthy celebrations	Explore and assess issues around pregnancy, relationships, hopes, fears Discuss and educate about changes in body, sexuality during pregnancy Share developmental information about stages of development of fetus Encourage pre-birth bonding and stimulation exercises (reading, touch, etc)	Explore father's feelings, childhood experiences, expectations, hopes and fears about baby and goals for fatherhood Educate about changes in intimacy, ways father can support mother Encourage supportive relationships for father Educate on father's legal rights and responsibilities	Assess, encourage and guide family in making needed safety arrangements, e.g. crib safety, car seat, pets, SIDS, child care, feeding Educate on baby temperaments, how to calm baby, Shaken Baby Syndrome, medical concerns Refer to parenting workshops Explore cultural beliefs about discipline	Connect mother to prenatal care and encourage compliance with visits Encourage STD testing Educate on symptoms requiring medical attention Promote breastfeeding and refer to resources
Outcome Evaluation Measures								
H.F. Parenting Inventory-Prenatal (HFPIP): FSS-23	HFPIP; FSS-23	HFPIP; FSS-23; CRAFFT	HFPIP; FSS-23	HFPIP; FSS-23	HFPIP; FSS-23	HFPIP; FSS-23; father involvement scale	HFPIP; FSS-23; Safety checklist	HFPIP; FSS-23; FSS20P



Appendix D. Healthy Families Arizona Postnatal Logic Model

Long Term Outcomes					Program Resources			
∈ Reduced child abuse and neglect ∉ Increased child wellness and development ∠ Strengthened family relations ∇ Enhanced family unity ® Reduced abuse of drugs and alcohol					Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., parenting support & education programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services			
Postnatal Program Objectives								
Increase the family's support network	Improve mother's mental health	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve family stability	Increase parental competence	Increase positive parent-child interaction	Improve child health and Optimize child development	Prevent child abuse and neglect
Program Activities and Strategies								
Assess family's support systems Model relationship skills Foster connections to positive support sources Educate on communication skills	Identify signs and history of depression, abuse, mental illness, substance abuse Address issues of grief and loss Encourage medical assessment, referral and treatment if needed Encourage/coach on exercise, personal care, rest Educate on post-partum depression	Assess personal risk behaviors; Educate on dangers of specific risk behaviors Support family in making lifestyle changes and adopting healthy behaviors Educate on community resources Explore domestic violence, create safety plan	Identify major life stressors Educate on problem-solving, goal setting. Use IFSP to review progress Educate on access to community resources, how to reach out Make referrals as needed for anger and stress management Educate about effect of stress on child	Assess basic living skills and needs; help family access housing, education, job, and budget management services. Coach parent to set and evaluate goals; teach basic living skills Promote use of community resources for self sufficiency Explore family planning decisions	Provide empathy and support to parent in parenting role Teach child development, early brain development, temperament Address parental expectations of child Educate about importance of routines and rules Refer to parenting groups and classes	Promote and teach developmentally appropriate stimulation activities Educate about rhythm and reciprocity, reading baby's cues Promote reading, bonding during feeding Encourage family activities, celebrations Coach on father involvement	Complete developmental assessments and make referrals Address medical screenings, support well child checks, immunizations, and good nutrition habits Promote play, reading; provide links to early childhood programs Assess and Guide family in making safety arrangements, e.g., home and car safety	Assess risk of child abuse and neglect Coach and guide in choices for child care Educate about consequences of child abuse and neglect
Outcome Evaluation Measures								
Healthy Families Parenting Inventory (HFPI): FSS-23	HFPI; FSS-23	HFPI; FSS-23; CRAFFT	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23; father involvement scale	HFPI; FSS-23; Safety checklist; ASQ	HFPI; FSS-23; FSS20



