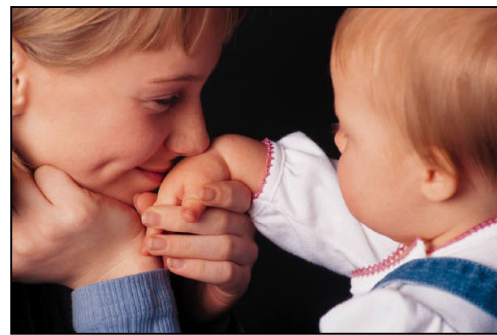




# Healthy Families Arizona Evaluation Report FY2007

(July 1, 2006-June 30, 2007)



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# Healthy Families Arizona 2007 Evaluation Report

## Highlights

### Who Does Healthy Families Arizona Serve?

- The number of sites increased from 51 to 58 sites in FY2007. The expansion included increased numbers of new families, new staff, and the services to meet their needs.
- 5,869 families were served by the program from July 1, 2006, to June 30, 2007.
- 86% of the families engaged with the program (4 or more home visits) and 56% of the families remained in the program 1 year or longer. The average length of stay in the program was just over one year.
- 3,910 of these engaged families entered after the birth of their child and 1,116 entered during the prenatal phase. This represented a 50% increase in prenatal families served (e.g., in 2006 the program served 3,185 postnatal and 772 prenatal families).
- Healthy Families Arizona screens and assesses families at intake to determine the level of risk factors they experience. The results showed that the families screened into the program did exhibit the type of stressors that made them appropriate for program services.

### What Difference Does Healthy Families Arizona Make for Families and Children?

- Parents improved in areas such as mobilizing resources, social support, increased parenting competence, improved problem-solving, improved parent-child interactions, and decreased depression as shown by increases on 9 of 10 subscales of the Healthy Families Parenting Inventory.
- Healthy behaviors improved. For example, immunization rates were high and exceeded the statewide and AHCCCS rates. The percent of eighteen-month olds with all immunizations was 88% (vs. state average of 79% for 2 year olds and 82% for AHCCCS), 95% of children were linked to a medical doctor and 90% of families did not use an emergency room visit without a doctor's referral.
- Safety practices (e.g., car seats, pool safety) improved and in some cases were higher than national averages.
- 10.4% of postnatal, engaged mothers had subsequent pregnancies (28.6% of these were 18 years old or younger).



# Executive Summary

## The Healthy Families Arizona Program

Healthy Families Arizona serves families experiencing multiple stressors that can put their children at risk for child abuse and neglect. The program has operated in Arizona since 1991 and follows the national Healthy Families America® model.

Healthy Families Arizona continued program expansion activities, which began in fall 2004 (23 sites). As a result of this work, program sites increased in number from 51 to 58 in FY2007. The program also continues to enhance its expansion of prenatal services for pregnant women and their families, including collaboration with the Women, Infants and Children program (WIC) to provide early referrals. The program has also increased its professional development support for staff by updating web-based orientation training and providing specialty training in substance abuse.

## Who Does Healthy Families Arizona Serve?

- 5,869 families were served by the program from July 1, 2006 to June 30, 2007, with 86% of the families engaging with the program (4 or more home visits) and 56% of the families remaining in the program 1 year or longer.
- 3,910 of the engaged families entered service after the birth of their child and 1,116 entered during the prenatal phase.

Program participants report a significant number of risk factors at entry into program (prenatal & postnatal percentages respectively), such as:

- 79% and 77% were single mothers
- 84% and 87% of the families utilized AHCCCS
- 68% and 63% of mothers had not finished high school.

In particular, postnatal families presented with the following risk factors at intake:

- 20% of the infants were born at less than 37 weeks gestation
- 15% of the infants had low birth weight (less than 5.5 pounds)
- 36% of the mothers received late (after 3 months) or no prenatal care.



## What Difference Does Healthy Families Arizona Make for Families and Children?

### Healthy Parenting Behavior

Areas of parental improvement included the following:

- increased problem solving
- decreased depression
- increased use of resources
- improved parent child behavior
- improved home environment
- increased parenting competence
- increased parenting efficacy.

The Healthy Families Parenting Inventory (HFPI) also revealed statistically significant improvement on 9 of 10 subscales and on the total HFPI score, suggesting that program participants reduced risk factors related to child abuse and neglect. Furthermore, the effects of the program seemed to increase with time as revealed by the moderate levels of “effect sizes”<sup>1</sup> for the 12-month measures. These results, even stronger than last year’s, continue to be considered promising for a home visitation program. Although the evaluation lacks a comparison group to study program effects, these findings continue to show that participants consistently report improvements in healthy parenting behavior. Furthermore, the Longitudinal Evaluation, a separate 5-year study using an experimental design, will be able to provide definitive results regarding program effectiveness.

### Child Health, Development, and Safety

Child health and development indicators show positive results for the program. For example, there was a reported 88% immunization rate for the children of Healthy Families Arizona participants at 18 months. This is in comparison to a 79% immunization rate for 2-year-olds in Arizona and 82% for those on Arizona Health Care Cost Containment System (AHCCCS) coverage. A large percentage (95%) of families reported having a consistent medical doctor and only 10% visited an emergency room without a doctor’s

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<sup>1</sup> Effect size is a descriptive statistic that measures the magnitude of the difference between two scores. In this report, Cohen’s *d*, i.e., the standardized difference between two means, is used to report effect sizes.



referral. Assessment of home safety practices shows over 90% of participants are reducing risks at the 24 month assessment (e.g., use of car seats, poisons locked, and smoke alarms installed). This compares favorably with national trends (e.g., national estimates of 90% car seat usage and 75% “working” smoke detectors). The program also screens for developmental delays and provides referrals for further services.

### **Child Abuse and Neglect**

Child abuse and neglect incidents (substantiated) were examined for program participants. The results estimate that child abuse and neglect rates were low (<1%) and met the program goal of having no higher than a 5% rate of child abuse and neglect.

### **Program Learning and Special Studies**

A follow-up special study looked at staff retention because of its vital role for family engagement and participant retention. The study used results from a survey administered in 2006 to predict actual staff attrition in 2007 to further explore the relationship between job satisfaction and employment expectations. Results showed predictors of staff attrition include personal/professional fit, professional efficacy, feelings of belonging and value, and perception of workload. Time employed and intent to leave were also significant predictors of actual attrition from the program.

The *Building Bridges* newsletter continued to provide information on key topics such as domestic violence, working with teen mothers, quality child care, and positive child development. The purpose of the newsletter is to provide examples of the link between practice and research for home visitation. The newsletter is distributed to over a 1000 individuals and is available to others on the web.

### **Conclusions and Recommendations**

The program reached nearly 700 more families and provided additional services to families and staff in the FY2007 program year than in past years. Parent outcome measures including parenting behaviors and health outcomes showed significant gains at 6-month and 12-month intervals.



Recommendations include increasing enrollment of prenatal families, refining the definition of prenatal families, investigating the phases of engagement (e.g., reviewing “creative outreach” families), reviewing the utility of measures such as the substance abuse screening tool, emphasizing the importance of greater spacing between subsequent pregnancies, and using a collaborative approach to prioritize special studies that can address these recommendations.



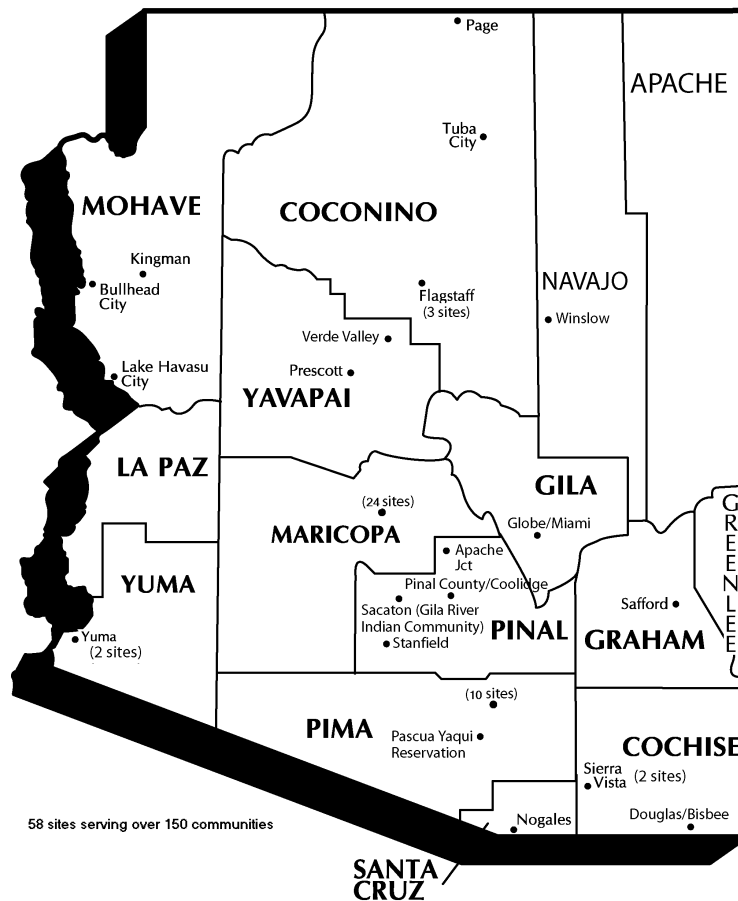
## Introduction

Healthy Families Arizona (HFAz) is 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. The program was established in Arizona in 1991 and has since expanded statewide to serve pregnant women and families who have risk factors that may result in abuse and neglect of their children. In 2006, the program services increased to 55 program sites and 3 intake sites (58 total sites) serving over 150 communities (see Exhibit 1).

**Exhibit 1. Healthy Families Arizona Map**

### Healthy Families Arizona Program

9-1-06



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The program model of Healthy Families Arizona incorporates critical elements identified by Healthy Families America® (HFA) as well as the mandated services established by Arizona legislation. The overarching goals of the program include the following:

- To promote positive parent/child interaction
- To improve child health and development
- To prevent child abuse and neglect.

Highlights of the critical elements of HFA include the following:

- Services initiated prenatally or at birth
- Use of a standardized assessment tool to systematically identify families most in need of services (e.g., assessment of risk factors such as social isolation, substance abuse, parental history of abuse in childhood, etc.)
- Services offered voluntarily and use of positive outreach efforts to build family trust
- Culturally competent services
- Comprehensive services focused on supporting parents, parent-child interactions, and child development
- All families should be linked to a medical provider and may be referred to additional services
- Service providers receive basic training and ongoing, effective supervision so that they are able to develop realistic and effective plans to empower families to meet their objectives; to understand why a family may not be making progress and how to work with the family more effectively.

Following this model, Healthy Families Arizona's home visitors provide supportive services and education to parents of newborns and to expectant parents who might benefit from support to strengthen their families at this crucial time. Families are selected via a screening process that begins in the hospital or community organization serving families in the prenatal period. If the parent experiences multiple risks known to be associated with child abuse and neglect, the family is offered program services. The program is voluntary and the families may remain in the program for up to five years.



This year's evaluation report includes information on the continued expansion of these services. The annual evaluation serves to assist the program in learning and decision making as it expands to new areas and refines its approach. This annual report summarizes key results relevant for legislative and program goals and objectives and provides accountability for program services. Special substudies provide additional information on special "topics" to further assist in program learning and to build knowledge among program providers and funders. For example, this year's report includes a section on staff retention.

### **Research Update**

A separate research study that incorporates a randomized-control design to track long-term impact of Healthy Families Arizona completed its second of five study years in 2007. In addition to the annual evaluation results reported here, this five-year longitudinal study, initiated in 2004, will be able to definitively describe the effectiveness of the program. Key features of the longitudinal study include the following: It follows the same 190 families for five years and uses additional measures to test a full-range of potential outcomes. For instance, domestic violence, substance abuse, mental health, and discipline are assessed on a regular and ongoing basis for both the treatment (Healthy Families Arizona participants) and control group. Participants in the longitudinal study are assessed at least once each year from their enrollment in the study until their child's fifth birthday. By age five, the children will be approaching elementary school, allowing for an assessment of school readiness. Zero to five years of age is the period in which children are the most vulnerable to child abuse and neglect, and thus the most relevant for the study. Readers are encouraged to refer to the separate longitudinal evaluation report for details on the progress of the study (see the Healthy Families Arizona Longitudinal Reports for 2006 and 2007, LeCroy & Milligan Associates, Inc.).

A special volume of the *Journal of Prevention and Intervention in the Community* summarized results and lessons learned about the Healthy Families America model by focusing on successful evaluation results from programs around the country. Healthy Families Arizona was featured in several of the articles and its results were described as "...exciting because it is grounded in theory and



research but also recognizes the practical constraints and complexities of conducting action-oriented evaluation research in a real-world setting” (Galano, 2007, p. 6). Furthermore, Friedman & Schreiber (2007) noted that Healthy Families Arizona has exhibited a shared vision considered critical for successful program implementation. They also indicated that Healthy Families is an important piece of prevention in the continuum of child welfare services. Finally, an entire article devoted to Healthy Families Arizona (Krysik & LeCroy, 2007) featured the five-year evaluation results and described the collaborative relationship among the evaluation team, quality assurance/technical assistance staff, and the state coordinators in the Department of Economic Security’s Division of Children, Youth and Families Office of Prevention and Family Support.



## **In this Report**

### **Program Participant Characteristics, Program Services, and Outcomes**

The main sections of this report focus on data related to participant characteristics, service delivery, and outcomes for participants who received HFAz services between the period of July 1, 2006 – June 30, 2007. This includes all families who received services at any time during the study period regardless of when they entered the program. Information about families who enter prenatally are presented separately when the results were different for those families compared to families entering the program after the birth of their baby (postnatal). Unless otherwise noted, the results presented include all families regardless of program entry date. The main sections include aggregate data that is summarized across all sites that make up the Healthy Families Arizona program. Separate site reports are produced quarterly and provided to each site for quality management purposes. Site level data are provided in Appendix B. The service delivery section is followed by the outcome results (e.g., Healthy Families Parenting Inventory results, child abuse and neglect data, safety behaviors, etc.).

### **Information for Program Improvement and Learning**

A main function of the annual evaluation is to facilitate program learning by sharing data and information that helps program planning, implementation, and decision making. The final sections of the report provide updates on program changes and information on special studies that were conducted in the previous year. A program and policy update reviews major changes and challenges in the Healthy Families Arizona (HFAz) program implementation and policy over the last year as the statewide effort has continued its expansion of sites and new training curricula. One of the program implementation special studies looks at the relationship between staff perceptions of their work and staff turnover. This study is a follow-up to a “workforce survey” conducted in April 2006. Last year’s report discussed “intent to leave” among program staff. This year’s report describes *factors* that may contribute to actual decisions to leave among program staff.



## **Recommendations**

The final section of the report describes recommendations for continued program improvement as well as potential evaluation topics for the next program year.



## Who Does Healthy Families Arizona Serve?

Families who participate in Healthy Families Arizona voluntarily enter the program via a screening process that begins in the hospital or community organization serving families in the prenatal period or at birth (See Appendix A for screening question categories). Services are offered to those who experience multiple risks for child abuse and neglect. Parents can receive home visitation and support services for up to five years. This section describes the characteristics of families at intake and the following section reports on the services received by the families.

### Program Participants – Risk Factors and Enrollment

During the period of July 2006 through June 2007, a total of 5,869 families (4,590 as postnatal and 1,279 prenatal) were served in the Healthy Families Arizona program. Of these, 5,026 families became actively engaged in the program,<sup>2</sup> with 3,910 engaging after the birth of their child and 1,116 engaging during the prenatal period. This represented an overall 86% engagement rate.

During FY2007, Healthy Families Arizona expanded the numbers of families served in its 55 program sites. More than 800 additional families were actively engaged than last year. Exhibit 2 shows the number of participants served by each site during FY2007. The number of participants continued to vary widely as some sites initiated start-up and some continued their implementation progress. The program sites, covering a statewide area, also served different urban and rural area needs.

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<sup>2</sup> Actively engaged families are defined as those who participate in four or more visits.



**Exhibit 2. Participants Enrolled and Actively Engaged July 2006- June 2007**

County	Site*	Prenatal	Postnatal
Cochise	Douglas/Bisbee	20	82
	Sierra Vista	18	69
	<i>Sierra Vista Blake</i>	15	31
Coconino	Flagstaff (La Plaza Vieja)	37	34
	Page	8	37
	Tuba City	18	42
	<i>Wellspring</i>	28	40
	Williams (Kinlani)	33	37
Gila	Globe/Miami	13	23
Graham	Safford	20	28
Maricopa	Central Phoenix	18	91
	Deer Valley	10	98
	East Mesa	29	82
	East Valley Phoenix	18	109
	El Mirage/Surprise	14	92
	Gilbert	36	95
	Glendale	10	102
	Kyrene	27	71
	Maryvale	17	88
	Mesa	22	114
	Metro Phoenix	8	69
	Northwest Phoenix	9	70
	<i>Peoria</i>	20	71
	Scottsdale	18	104
	South Mountain	23	124
	South Phoenix	15	99
	Southeast Phoenix	15	91
Southwest Phoenix	4	60	
Sunnyslope	23	75	
Tempe	12	48	
Tolleson/ Avondale	16	92	
West Phoenix	15	90	
Mohave	Bullhead City	15	47
	Kingman	19	53
	Lake Havasu City	35	83
Navajo	Winslow	11	28
Pima	Blake Foundation	24	108
	Casa de los Niños	34	100
	<i>Casa Family First</i>	13	32
	CODAC	23	94
	East/SE Tucson	25	62
	La Frontera	37	100
	Marana	15	83
	<i>Metro Tucson</i>	13	59
Pascua Yaqui	47	50	
Southwest Tucson	17	82	
Pinal	Apache Junction	31	75
	Gila River	13	8
	Coolidge	9	82
	Stanfield	11	11
Santa Cruz	Nogales	23	106
Yavapai	Prescott	24	122
	Verde Valley	73	51
Yuma	<i>Primero Los Niños</i>	6	49
	Yuma	9	67
TOTAL		1116	3910

\*Italicized names are new sites. In 2006-2007, there were 55 Healthy Families Arizona sites with Family Support Specialists (home visitors) and 3 sites with Family Assessment Workers for a total of 58 sites.



Families who participate in the Healthy Families Arizona program completed assessments for **risk factors** that have been associated with increased risk for child abuse and neglect, as well as poor child health and developmental outcomes (LeCroy & Milligan Associates, 2001). Exhibit 3 highlights the risk factor data for both the prenatal and postnatal 2007 program participants when they began the program and show comparison data for the general Arizona population.

**Exhibit 3. Selected Risk Factors for Mothers at Intake – 2007**

<b>Risk Factors of Mothers</b>	<b>Prenatal Families</b>	<b>Postnatal Families</b>	<b>Arizona state rates – 2006</b>
Teen Births (19 years or less)	32.1%	24.5%	12.6%*
Births to Single Parents	79.4%	77.0%	44.0%*
Less Than High School Education	68.2%	63.4%	29.1%*
Not Employed	81.3%	77.8%	NA
No Health Insurance	8.5%	2.8%	NA
Receives AHCCCS	83.8%	87.0%	52.0%*
Late or No Prenatal Care (or Poor Compliance)	33.2%	36.1%	23.5%*
Median Yearly Income	\$12,000	\$13,000	\$45,279**

\*Source: 2006 data from the Arizona Department of Health Services Vital Statistics records. Percent does not include “unknown.”

\*\*U.S. Census Bureau Population survey 2004-2005 median income.

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

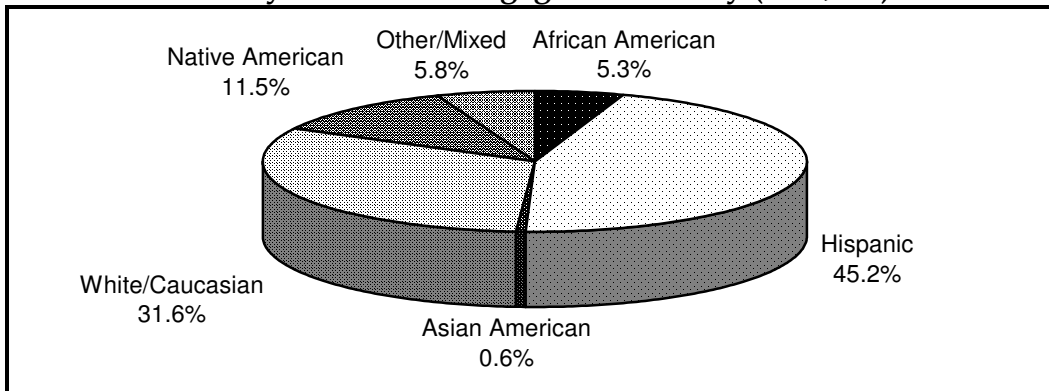
Based on these results, Healthy Families Arizona was successful in recruiting families with multiple risk factors as indicated by program and legislative goals. The prenatal services reached over 300 more families compared to last year. Both the prenatal and postnatal programs were successful in reaching single, teen mothers with less than a high school education. As in past years, Healthy Families Arizona participants consistently showed higher rates of these risk factors than the overall rates for Arizona families. Overall, data



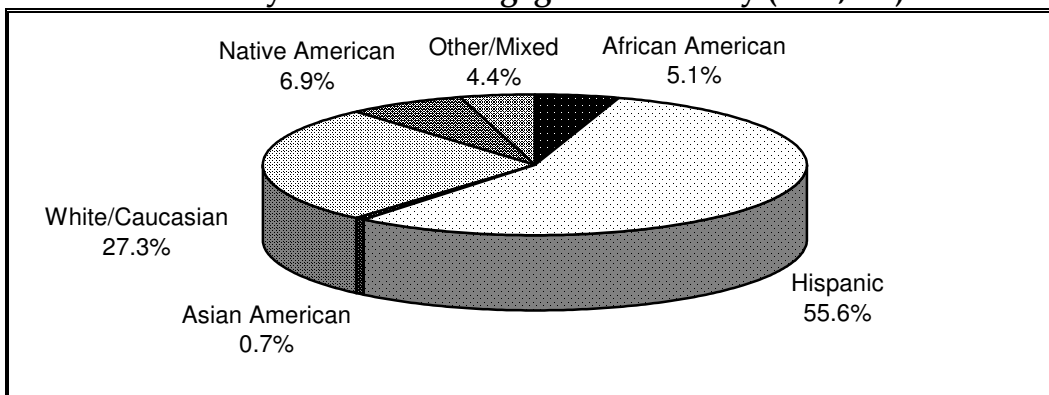
revealed that the prenatal mothers were slightly younger (average age 23 years) than the postnatal mothers (average age 25 years). In general, the characteristics of mothers served this year are quite similar to previous years. With median incomes around \$13,000 or less, it is clear that economic stress and poverty continue to pervade families' lives.

Healthy Families Arizona continues this year to serve a culturally diverse population. The ethnic background of the families who entered prenatally and postnatally in 2007 are shown below in Exhibits 4 and 5.

**Exhibit 4. Ethnicity of Mothers Engaged Prenatally (N=1,116)**



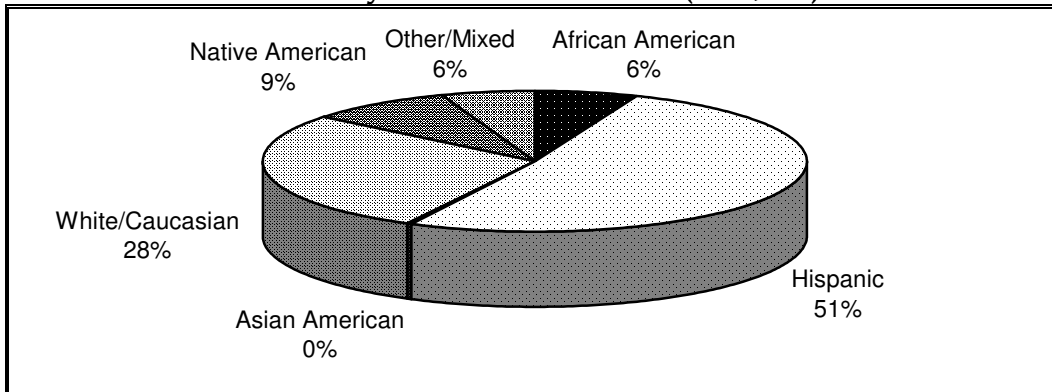
**Exhibit 5. Ethnicity of Mothers Engaged Postnatally (N=3,910)**



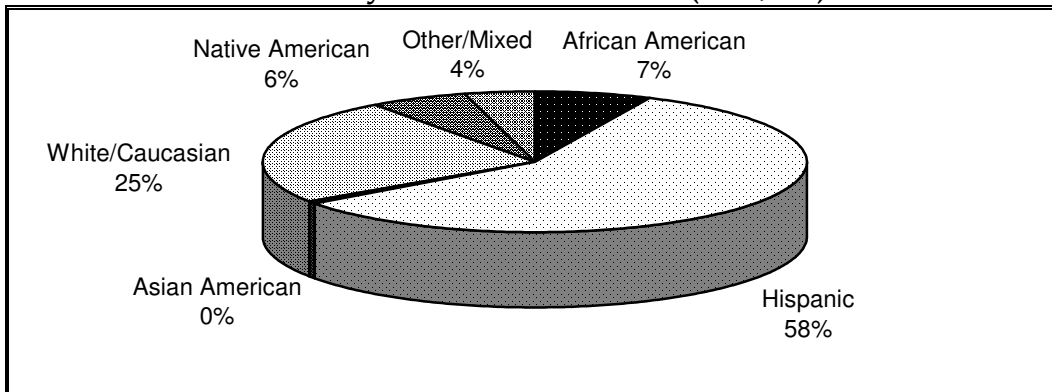
Healthy Families Arizona continued to encourage and support father involvement. During this year, ethnicity data was gathered on 1,116 prenatal fathers and 3,910 postnatal fathers. The ethnicity of fathers is displayed below.



**Exhibit 6. Father Ethnicity-- Prenatal Families (N=1,116)**



**Exhibit 7. Father Ethnicity-- Postnatal Families (N=3,910)**



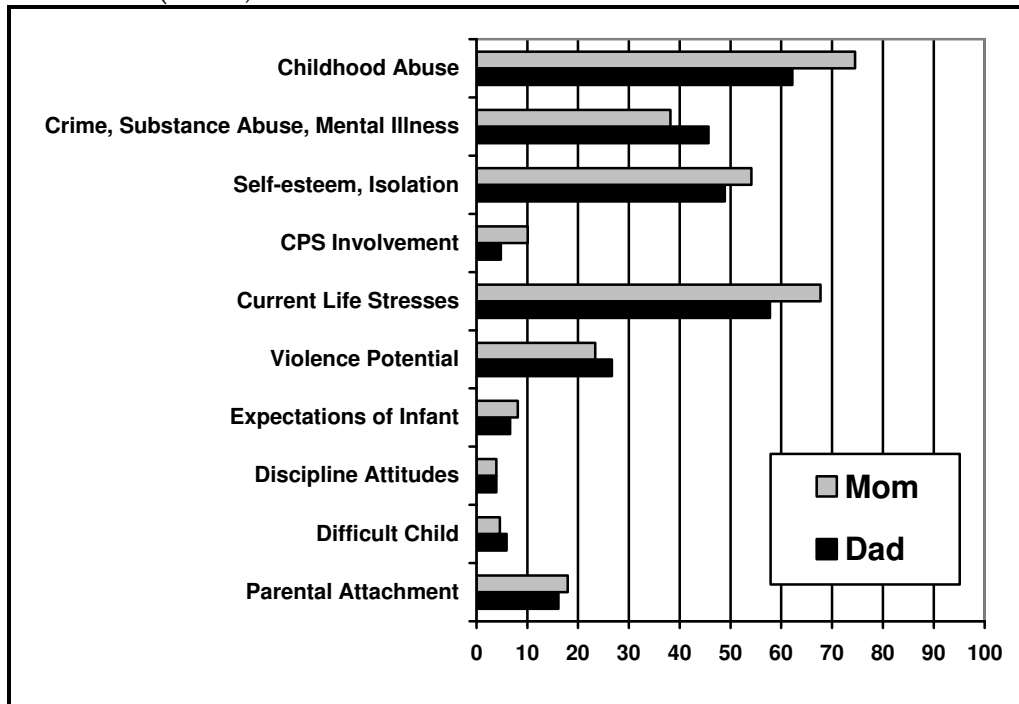
Mothers, and fathers when they are involved, are assessed during the screening process with the *Parent Survey*, a modified version of the Family Stress Checklist.<sup>3</sup> During the intake process, a Family Assessment Worker evaluates each parent's level of stress across 10 domains. The percentages of parents scoring severe on each of the scales are presented in Exhibits 8 and 9. A description of the scales is included in Appendix A.

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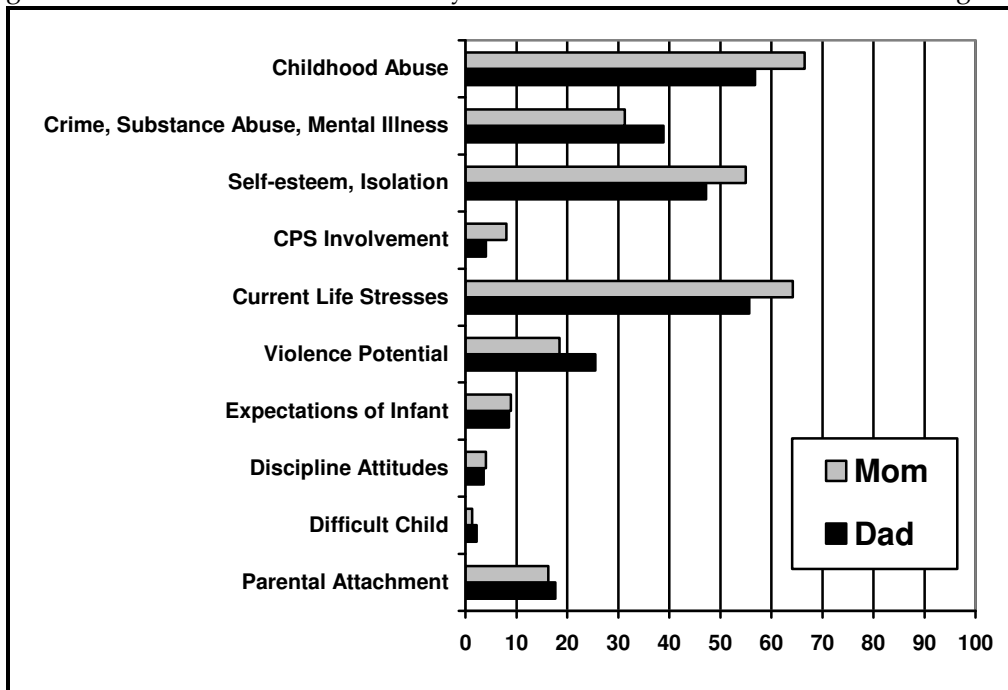
<sup>3</sup> During the 2005 program year, the Family Stress Checklist was revised by the original developer of the rating scale and renamed the Parent Survey to impart a more strengths-based perspective with staff and families; however the rating scale remains the same.



**Exhibit 8. Percentage of Parents Rated Severe on the Parent Survey Items  
PRENATAL (n~ 801)**



**Exhibit 9. Percentage of Parents Rated Severe on the Parent Survey Items  
POSTNATAL (n~ 2,674. Note: Approximately 500 moms and 400 dads were assessed using an older version of the Parent Survey. These families are not included in this figure.)**



The most significant stressors for families as they enter the Healthy Families Arizona program include the following: coping with a history of child abuse, having low self-esteem, feeling isolated, and dealing with current life stress, including low income, poor housing, and relationship difficulties. Additionally, many families enter the program with risks related to crime, substance abuse, and mental illness. Although the kinds of stressors affecting parents who enter prenatally are similar to those who enter the program after the birth of their babies, overall the percentage of severe stress scores is slightly higher for the prenatal families, indicating that the program is reaching the mothers who might most benefit from the earlier services by reducing stressors before the new baby arrives. These risk factors were similar to results from past years.

### **Infant Characteristics**

In addition to family risk factors, information about infant risk factors is also collected at intake for postnatal families or at birth for prenatal families. This information can be seen as indicators of the level of need of the families served by the program. These risks factors, such as premature birth, low birth weight and drug exposed newborns, can have long-term financial and emotional impacts on families and children. For example, children can be subject to greater risk for many problems including death within the first month of life, developmental disabilities and a myriad of health problems such as chronic lung disease, adult-onset diabetes, coronary heart disease, high blood pressure, intellectual, physical and sensory disabilities, and psychological and emotional distress. Exhibit 10 displays the high-risk characteristics of the newborns among families who entered prenatally and postnatally.



**Exhibit 10. Risk Factors for Infants -2007**

<b>Risk Factors for Infants</b>	<b>Prenatal Families*</b>	<b>Postnatal Families**</b>	<b>Arizona State percent***</b>
<b>Born &lt; 37 weeks gestation</b>	16.9% (Overall) 12.0% (1 <sup>st</sup> Trimester Enrollment) 18.0% (3 <sup>rd</sup> Trimester Enrollment)	19.7%	10.7%
<b>Birth Defects</b>	0.7%	1.4%	<1%
<b>Low Birth Weight</b>	12.1%	15.0%	7.1%
<b>Positive Alcohol/Drug Screen</b>	2.0%	3.5%	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.

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

The percentage of postnatal Healthy Families Arizona program infants born early (less than 37 weeks gestation) was slightly higher than in past years (e.g., the 2005 percentage was 16.6%) and it was nearly twice as high as the state rate. Some of the risk factors for those entering prenatally are slightly lower than those entering postnatally, and the percent of infants born early are slightly lower than last year’s percentages. It should be noted that results comparing those enrolling during the 1<sup>st</sup> trimester of pregnancy had slightly lower percentages of early births than those enrolling in the 3<sup>rd</sup> trimester. This suggests that the program may have some success in serving prenatal mothers when the staff have time to work with them. The percentage of low birth weight infants in the program remains high in comparison to the state rate. It is apparent that Healthy Families Arizona is reaching parents and babies who have greater risks leading to child abuse and neglect and other unhealthy outcomes. As the prenatal component of the program continues to grow, the Healthy Families Arizona home visitors have a great opportunity to help mothers prevent having pre-term or low birth weight babies by encouraging parents to attend regular prenatal visits and adopt healthy behaviors such as good nutrition habits and stopping alcohol, drug, and tobacco use.



## What Services Does Healthy Families Arizona Provide?

During the current study year the total number of families served by the program was 5,869. Not all families who enroll become actively engaged in the program. Successful program engagement is defined as those families who complete 4 home visits. A breakdown of the total families enrolled in Healthy Families Arizona reveals the following:

- 3,910 postnatal families became actively engaged
- 680 postnatal families left the program before 4 visits
- 1,116 prenatal families became actively engaged
- 163 prenatal families left the program prior to 4 home visits.

Overall the engagement rate among families who entered postnatally was 85.2% percent. For prenatal families, the 87.3% engagement rate is slightly higher than for the postnatal families.

The length of time families stayed in the program decreased again slightly this year. For all the families (both postnatal and prenatal) who closed (1,551), the median number of days in the program was 384 (just over 1 year). The most frequently given reasons for leaving the program include:

- 1) did not respond to outreach (37.0%)
- 2) moved away (18.3%)
- 3) family refused further services (14.3%)
- 4) completed program (6.2%)
- 5) unable to locate (6.0%)
- 6) reported self-sufficiency (5.1%)
- 7) refused worker change (3.3%)

A critical element of the national HFA model followed by Healthy Families Arizona called “outreach” occurs when families have not outright rejected services. The purpose of these efforts is to intensify the process for retaining parents and is typically used when a family appears to be disengaging (e.g., cancelled visits, etc.). In 2007, the evaluation team analyzed results to answer staff questions related to this outreach. These preliminary results are presented below.



*How many families were on outreach?* At the 6-month interval, approximately 756 families were reported to be on outreach. The length of time families were on outreach varied:

- 103 one month (23.3%)
- 103 two months (23.3%)
- 307 three months (44.0%)
- 66 greater than three months (9.4%)

*If families were on outreach, did they re-engage with the program?* Over 80% of these families (585) did *not* re-engage with the program (i.e., they “closed” and were no longer considered to be enrolled in the program).

*If a family was on outreach at the 6-month interval, did they close from the program on outreach?* Ninety-three percent (416) *did* close on outreach. As noted above, the number one reason for closure was lack of responsiveness to these outreach efforts.

The Healthy Families program model includes resource referral as an important link between families and needed community resources. Home visitors provide information on child development education, as well as modeling and coaching mothers in bonding with their child. However, equally important are the home visitor’s efforts to connect the family to other resources in the community. Just over half of the families for whom referral information was available received at least one referral in the past year (e.g., 869 of 1654 or 53% at 6-months; 675 of 1,308 or 52% at 12-months). For those families receiving referrals, Exhibit 11 below illustrates the numbers and types of referrals made by Family Support Specialists at the 6, 12, 18 and 24-month intervals. The percentage of families accessing the referred service is also included. Two-thirds to less than one-half of the referred families accessed the service. Possible reasons for these rates include lack of accessibility of services, availability of the services, and the time it can take to access a referral for services. Some Healthy Families Arizona sites exist in communities with adequate resources and others occur in communities where limited support resources are available for families. Some families did not access services because of a shortage of available services and were placed on “pending status” or wait lists. When interpreting the information provided below, it is important to note that a common concern among more rural sites is that there are not enough options for families who need help. Furthermore,



transportation can be a significant barrier as families travel to other communities to access resources.

**Exhibit 11. Types of Healthy Families Arizona referrals at six, twelve, eighteen and twenty-four months\***

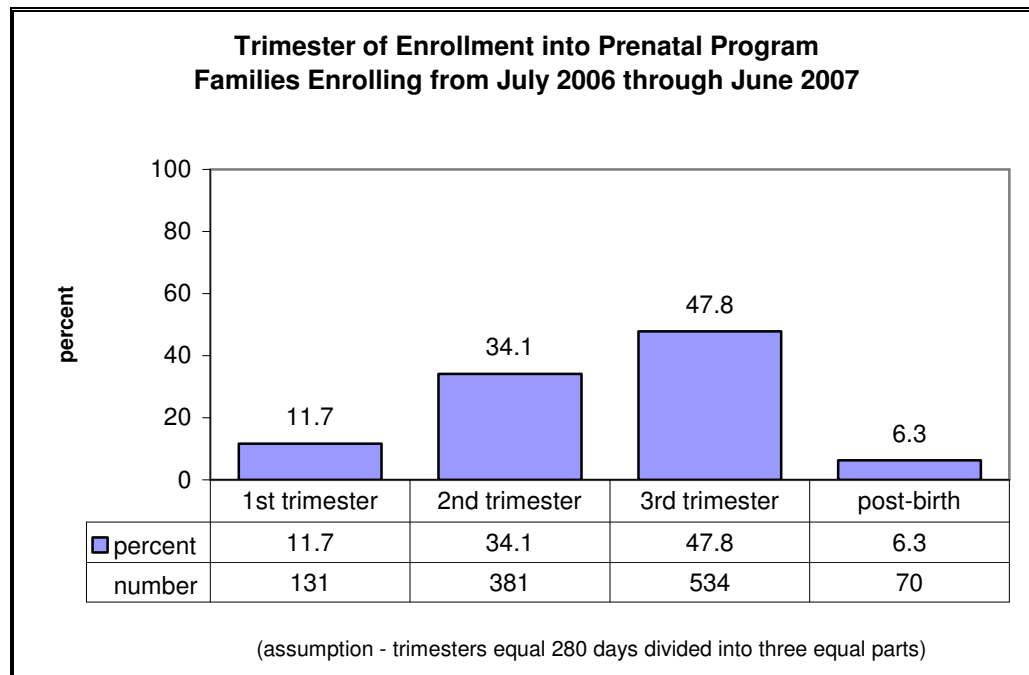
	Number of Families Who Received Referrals at <u>6-months</u> & Percent of Those Who Accessed the Referral (n=1,654)		Number of Families Who Received Referrals at <u>12-months</u> & Percent of Those Who Accessed Referral (n=1,308)		Number of Families Who Received Referrals at <u>18-months</u> & Percent of Those Who Accessed Referral (n=1,001)		Number of Families Who Received Referrals at <u>24-months</u> & Percent of Those Who Accessed the Referral (n=577)	
	Number Received	% Accessed	Number Received	% Accessed	Number Received	% Accessed	Number Received	% Accessed
<b>Health Care</b>	296	50.0%	244	61.1%	195	61.5%	113	55.8%
<b>Nutrition Services</b>	246	63.8%	175	65.3%	132	71.2%	84	54.8%
<b>Public Assistance</b>	290	52.4%	236	54.0%	162	59.9%	83	53.0%
<b>Family and Social Support</b>	318	40.6%	204	43.6%	169	47.9%	90	44.4%
<b>Employment, Training and Education</b>	249	43.0%	154	43.5%	117	48.7%	61	52.5%
<b>Counseling and Support Services</b>	237	40.1%	175	34.9%	121	33.1%	59	30.5%
<b>Child Development</b>	142	52.8%	127	59.8%	106	62.3%	88	55.7%
<b>Other</b>	288	51.7%	244	51.6%	200	54.5%	102	50.0%

\*The total number of referrals for each time period does not add up to the total number of families because some families may not have received any referrals or may have received multiple referrals.



Healthy Families Arizona added services for prenatal families in 2005. They continued this past year to try to reach mothers as early as possible. Exhibit 12 shows the trimester of enrollment for all families entering the program prenatally. Healthy Families Arizona staff continued to strive to reach families in the first trimester of pregnancy. The majority of the families do not enter until the third trimester, although more families in the 1<sup>st</sup> and 2<sup>nd</sup> trimester were reached this past year. This represents a continuing challenge for the program to reach more families even earlier. It also indicates a need to review definitions of prenatal enrollment (e.g., “prenatal” could be limited to those families who enroll prior to 24 weeks gestational age) to better target and track the effects of early involvement in HFAz visits.

**Exhibit 12. Trimester of Enrollment\***



\*Families who are referred to the program prior to birth of the baby are considered to be in this prenatal category. However, not all of the families enter and receive services early enough to have potentially improved birth outcomes. Also, some families were screened just prior to birth and final acceptance of enrollment did not occur until after the baby was born. Therefore, some (about 6%) of the “prenatal” families were considered for this analysis as enrolled post-birth.

As noted in past years, recruitment and retention strategies that seem to be effective, according to the staff interviewed, included (1) having the hospital social worker conduct initial screens for new participants and (2) having home



visitors with a strong ability to offer concrete types of assistance to meet the mother's immediate needs. Program staff can review these ideas and consider additional assessment of the effectiveness of them in reaching families as early as possible during prenatal development. Recruitment is challenging, but early enrollment is important for the program to have the best chance to positively influence birth outcomes and subsequent parenting and child development outcomes.

### **Child Development Screening**

One of the important services provided by Healthy Families Arizona is monitoring, screening, and assessment of child development. The program uses the Ages and Stages Questionnaire (ASQ) as a screening tool to assess for developmental delays. One of the main advantages of the tool is that it is considered very "parent friendly" and usable.

One of the primary goals set by Healthy Families Arizona sets is to administer the Ages and Stages questionnaire with 80% of the children in families served by the program. In 2006, just under 66% of all children were screened for developmental delays. This number increased in 2007 to between 71% and just over 80%, depending on the time interval. This represented an increase compared to previous years. It also is consistent and in some cases higher than the 75% average across Healthy Families sites nationally (Harding, et. al., 2007).

Based on file reviews during site visits, there continued to be some indication that the lower rates may be more of an issue of data collection than actual ASQ administration. However, a primary objective of the program is to administer the ASQ as a monitoring function so this is an area that deserves continued attention. The data show a similar pattern to the previous year in that the percentage of children screening as delayed increases with age. Furthermore, an estimate of the numbers of families on "outreach," and therefore perhaps not receiving ASQ administration, would account for a maximum of ten percent of the amount of children reported as having no ASQ scores. Therefore, there remained some room for improvement and ongoing commitment to the program goal of screening 80% of the children.



**Exhibit 13. ASQ Screening**

<b>Interval ASQ Administered</b>	<b>Percent of children screened with ASQ 2007</b>	<b>Percent screened as delayed 2007</b>
6-Month	71.0%	5.4%
12-Month	74.9%	9.0%
18-Month	73.3%	24.7%
24-Month	79.5%	20.2%
30-Month	76.7%	14.2%
36-Month	78.9%	19.6%
48-month	84.8%	19.1%

Program guidelines suggest that when an ASQ score falls into the “cutoff category” that indicates a potential delay, further assessment is required to determine whether the child needs additional intervention services. Continued assessment sometimes indicates no delay is in fact evident. Approximately one-fourth to one-fifth of the Healthy Families Arizona children who initially screen delayed with the ASQ are determined to be “not delayed” when referred for further assessment.

In other cases, assessment suggested additional intervention is needed, and appropriate referrals need to be made. The Family Support Specialist may also provide appropriate development interventions with the child and family. The table below describes the pattern of these services that are generally similar to previous years with referral to the Arizona Early Intervention Program (AzEIP) being the most common external resource used for children 18 months and older. Multiple intervention referrals occur and are often used. As in past years, when potential delays have been identified, the most common intervention choice continued to be developmental interventions offered by the Family Support Specialist at home with the parent and child (74% at 36 months and 71% at 48 months of the families received this type of service). This may reflect the program’s emphasis on providing appropriate support for parents and follow-up to discussions with the families about the results of the ASQ. It may also indicate an appropriate use of child



development curricula in the Healthy Families program model, as the home visitor becomes more familiar with the child and family over the course of service. Further exploration into this aspect of the program model needs to be conducted in order to illuminate exactly how these professional choices occur. Exhibit 14 illustrates the types of referrals and services received by families with children exhibiting delays.

**Exhibit 14. ASQ Referral Status – 2007 (All families)**

	<b>Continued assessment shows "no Delay" % (n)</b>	<b>Referred to AzEIP % (n)</b>	<b>Referred to other Early Intervention % (n)</b>	<b>Provided Developmental Intervention % (n)</b>	<b>Referred to Therapy % (n)</b>	<b>Parent Declined Referral % (n)</b>
<b>6-month Screen</b>	18% (8)	34% (17)	18% (9)	62% (31)	6% (3)	2% (1)
<b>12-month Screen</b>	29% (20)	25% (17)	18% (12)	63% (43)	6% (4)	6% (4)
<b>18-month Screen</b>	21% (31)	24% (36)	11% (17)	73% (110)	4% (6)	4% (6)
<b>24-month Screen</b>	20% (15)	29% (22)	26% (20)	72% (55)	1% (1)	5% (4)
<b>30-month Screen</b>	21% (6)	10% (3)	24% (7)	69% (20)	7% (2)	10% (3)
<b>36-month Screen</b>	4% (1)	11% (3)	15% (4)	74% (20)	11% (3)	11% (3)
<b>48-month Screen</b>	24% (4)	0% (0)	24% (4)	71% (12)	12% (2)	0% (0)

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



## ASQ-SE

In 2004 the Healthy Families Arizona program decided to add a social-emotional development screening tool to provide additional insight in child development of families served by the program. The *Ages and Stages Questionnaire-Social Emotional (ASQ-SE)* primarily assists parents and early intervention and early childhood personnel to identify “children with responses or patterns of responses that indicate possible future social or emotional difficulties” (Squires, Bricker and Twombly, 2002, p. 8). Similarly to the ASQ, the ASQ-SE serves as an aid to identify potential developmental delays and to help parents deepen their understanding of child development and their own child’s needs. Because the administrative timing for the ASQ-SE is not as narrow as with the ASQ (e.g., there is a six-month time frame for completion of the ASQ-SE), actual rates of administration are not included in this report. However, Exhibit 15 reports a summary of the ASQ-SE results (median and mean scores) obtained for postnatal families served by the program. For comparison, the cut-off scores (i.e., the score above which a recommendation for further assessment is made) are also listed.

**Exhibit 15. ASQ-SE (All families)**

<b>Interval ASQ-SE Administered (N)</b>	<b>Mean ASQ-SE Score</b>	<b>Median ASQ-SE Score</b>	<b>ASQ-SE Cutoff Score*</b>
6-Month (386)	14.92	10.00	45
12-Month (381)	16.34	15.00	48
18-Month (252)	22.06	15.00	55
24-Month (145)	25.52	20.00	50
30-Month (79)	28.61	20.00	57

\*Scores above the cutoff score indicate need for additional assessment.

Similar to the results from FY2006, these families report relatively low averages for their children. One possible explanation for this could be the nature of the Social-Emotional scale--- it may be more subject to a “social” bias than the ASQ because the “socially acceptable” response is more obvious than



with the items on the ASQ. Another possible explanation is that the families served by the program may not feel they have any concerns about the social and emotional aspects of their child's development.

### **Fatherhood/Male Involvement Data**

Healthy Families Arizona created a staff committee, called Men Involved in the Lives of their Children (MILC) in 2002 to identify strategies to increase father involvement. The committee has created training curricula and added resources related to male involvement to the web portal. The program evaluation added questions related to male involvement in January 2005. In 2007 the program renamed the effort: Men Are Nurturers (MAN) committee. The goal of the working group is to increase fatherhood involvement throughout the state's Healthy Families programming. Their strategies this past year have focused on increasing awareness, identification, and sharing of strategies for increasing father involvement and helping other staff improve the measurement and tracking of this involvement. The male involvement section of the FSS-20 form asked questions about the following categories: shared responsibility of the child through both basic care (feeding, bathing, etc.) and extended care (transportation, appointments, etc.), financial support, residence in the child's home, and male participation in HFAz activities. These questions are asked of male involvement of the father, partner, grandfather, and other male figures. There is also a 'none' option for every question, which indicates lack of male involvement. These questions are completed during the same times as the FSS-20 form (6 months, 12 months, 18 months, etc.).

From January 2006 to June 2007, 1,658 families at the 6-month interval were eligible to answer the male involvement questions. During this time, approximately 1,528 (92%) of the families had data recorded in this area. At the 12-month interval, 1,192 of 1,316 (91%) reported on male involvement. In general, just over half of the families reported some sort of male involvement. Of those families where information was available, fathers were the most frequently involved, followed by grandfathers, partners, and the other categories. The following table shows the percentage of male involvement across time.



**Exhibit 16. Male Involvement Across All Categories at 6 and 12 months\***

Male Figure	6 months	12 months
Father	56.0% (average n = 936)	55.0% (average n =728)
Grandfather	8.5% (average n = 141)	8.8% (average n = 116)
Partner	1.4% (average n = 23)	10.0% (average n = 36)

**Exhibit 17. Male Involvement at 6 and 12 Months**

	Number & Percent of Families Reporting Male Involvement at 6 Months Total # of Families Enrolled at 6 months=1,658					Number & Percent of Families Reporting Male Involvement at 12 Months Total Number of Families Enrolled at 12 Months=1,316				
	Father	Grand- father	Partner	Other	None	Father	Grand- father	Partner	Other	None
	Shares Child Care Responsibilities	963 58.1%	151 9.1%	27 1.6%	55 3.3%	332 20.0%	759 57.7%	127 9.7%	37 2.8%	36 2.7%
Helps with Basic Care	950 57.3%	128 7.7%	25 1.5%	53 3.2%	348 21.0%	726 55.2%	111 8.4%	39 3.0%	35 2.7%	265 20.1%
Helps with Extended Care	886 53.4%	117 7.1%	21 1.3%	41 2.5%	420 25.3%	693 52.7%	107 8.1%	33 2.5%	29 2.2%	310 23.6%
Provides Financial Support	988 59.6%	144 8.7%	22 1.3%	43 2.6%	313 18.9%	766 58.2%	104 7.9%	35 2.7%	24 1.8%	240 18.2%
Currently Resides in Same Home as Target Child	894 53.9%	165 10.0%	18 1.1%	79 4.8%	349 21.0%	698 53.0%	130 9.9%	37 2.8%	56 4.3%	256 19.5%
Participates in H.F. Activities	598 36.1%	28 1.7%	13 0.8%	15 0.9%	758 45.7%	483 36.7%	37 2.8%	22 1.7%	11 0.8%	551 41.9%

\*Numbers reflect how many families indicated whether a male figure was involved with each activity with the target child at each time interval. More than one male figure could have been chosen for each activity.



Across the categories, approximately 58% (963) of fathers were involved in the child's life, although a few more contribute by providing financial support. Grandfather involvement was the next most frequent category. Fathers were least frequently reported as being involved in Healthy Families Arizona activities (36%). There can be several reasons for this, including that many visits occur when fathers are working and not at home. The program staff have been interested in reaching out to fathers. Despite improvements in data collection, father involvement cannot be fully assessed using these limited measures. Nevertheless, the program staff intend to increase the involvement of fathers; therefore, the results can help shape the expectations around these intentions. For example, approximately two-thirds of the families in the program reported any involvement by a male figure. Of these, approximately half or less of the male figures are involved with the home visitation activities. Therefore, increased involvement could reasonably be expected for approximately a few hundred more families.

### **Participant Satisfaction**

Satisfaction with the program is an aspect of program implementation that may help families to stay involved in a program. Asking for feedback from families can also help them feel valued. Healthy Families Arizona program sites distribute a satisfaction survey to participants during a two-month time period each year. For this program year, 1332 surveys were returned from 54 sites. This is a large number of families, but may not be representative of every family served by the program. For example, this survey is not used as an exit survey for the program so families that have dropped out may not be included in the sample. Regardless, the results can provide important feedback for the program. A separate report was completed for sites that included a variety of satisfaction questions, and that analysis revealed high satisfaction in all areas of the program. For this report, only several critical areas are highlighted below.

For most of the categories, over 97% of the families agreed or strongly agreed with the statements. Fully 94% of the families agreed or strongly agreed with the statement "As a result of Healthy Families, I feel I am a better parent."



**Exhibit 18. Participant Satisfaction Survey Results (n=1259)**

<i>Sample Items from HFAZ Participant Satisfaction Surveys</i>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
I felt I received the help and services I wanted and needed.	0.7%	0.6%	1.0%	25.1%	72.5%
I felt the home visitor was respectful of my cultural beliefs and practices.	0.7%	0.1%	0.8%	16.7%	81.7%
My home visitor helped me to establish goals that I understand, that I am interested in pursuing, and that are important to me.	1.0%	0.0%	1.2%	21.8%	76.1%
I was satisfied with the information provided on child development and parenting.	0.7%	0.0%	0.6%	20.6%	78.0%
I felt I received high quality services in Healthy Families.	0.8%	0.2%	1.4%	21.7%	75.9%
As a result of Healthy Families, I feel I am a better parent.	0.7%	0.2%	5.3%	26.3%	67.4%

As in prior years, a large percentage of HFAz participants speak or use Spanish as their primary language. It is critical that home visitors speak the families' language and program materials are translated appropriately and in a culturally respectful manner. Participant responses regarding the relevance of program materials are shown below in Exhibit 19.



**Exhibit 19. Participants' Perception of Language Barriers**

	Yes	No
Do you speak another language other than English?	30.9%	69.1%
Were the program materials provided to you in a language that you read and understand?	98.3%	1.7%
Did your home visitor speak a language you understand?	98.2%	1.8%
Language the survey was completed in:	70%	30%
	English	Spanish

In summary, and consistent with prior years, participant satisfaction results suggested that the program is well received by the participants. This is particularly important for a voluntary program. Furthermore, program satisfaction is a first step in producing program outcomes.



## What Difference Does the Program Make with Families?

For FY2007, the following outcomes were examined:

- Parent outcomes, e.g., parental stress, (i.e., results of the Healthy Families Parenting Inventory)
- Child Abuse and Neglect
- Child and Maternal health outcomes
- Safety in the home environment.

The outcome indicators reported annually include program impact on child abuse and neglect, parental stress and competence, health risk behaviors, parental depression, parent-child bonding, safety practices, medical and social service use, employment, education attainment, and others. These outcomes are described in more detail in two logic models created in collaboration with program staff in 2005. The models (included in the Appendix) continued to provide guidance in thinking about the program, in organizing results and in identifying areas for development. In addition, the list of the measures used to determine whether the activities were carried out as planned (process measures), and whether program goals were met (outcome measures) is also included in Appendix C.

### Parent Outcomes

#### Healthy Families Parenting Inventory (HFPI)

Three years ago, the evaluation team and program staff created a new outcome instrument, the Healthy Families Parenting Inventory (HFPI). Various instruments have been used with other home visitation program evaluations that have been shown to be inadequate to capture the actual changes made by program participants. Many of these instruments were not designed as *outcome instruments*, but rather as measures of concepts, e.g., family stress. By focusing on outcomes (i.e., changes) and by designing an instrument specifically for the Healthy Families program, more relevant outcomes can be assessed to describe program effectiveness.



The HFPI includes 10 sub-scales that have been tested for reliability. The survey represents an inventory specific to Healthy Families that has shown its ability to capture change initiated by the program; furthermore, the inventory has good reliability data (See Appendix D for specific details on the more recent reliability estimates). Results from participant data on the HFPI revealed significant improvements from the two-month and six-month as well as two-month and twelve-month administration of the instrument. Exhibit 20 presents each subscale and the results of the statistical analysis of changes in parents from two months to six months and two to twelve months.

**Exhibit 20. Healthy Families Parenting Inventory**

Scale	Significant Improvement Baseline to 6 months	Significance* (Effect Size**)	Significant Improvement Baseline to 12 months	Significance* (Effect Size**)
Social Support		.105 (.05)	✓	.000* (.23)
Problem Solving	✓	.000* (.23)	✓	.000* (.34)
Depression	✓	.001* (.11)	✓	.000* (.32)
Personal Care	✓	.004* (.10)	✓	.000* (.24)
Mobilizing Resources	✓	.000* (.25)	✓	.000* (.48)
Commitment to Parent Role	✓	.004* (.10)	✓	.000* (.20)
Parent/Child Behavior	✓	.000* (.17)	✓	.038* (.11)
Home Environment	✓	.000* (.27)	✓	.000* (.28)
Parenting Competence	✓	.000* (.24)	✓	.000* (.35)
Parenting Efficacy	✓	.000* (.19)		.141 (.08)
Total Scale	✓	.000* (.27)	✓	.000* (.37)

\*Indicates a significant difference at the .05 level. Statistical significance indicates the results of the analysis could only be due to chance in 5 out of 100 cases.

\*\*Effect size was computed using Cohen's *d*. Effect size estimates the magnitude of the change.

As Exhibit 20 shows, nine of the ten scales, plus the overall scale, showed a statistically significant difference in the families between the two month



(baseline) and six month and between baseline and 12 month administration of the instrument. Families showed significant improvement on all but one of the scales; these results are indicators of improvements in healthy parenting. Overall, 68.5% of families showed positive change between baseline to twelve months. To further describe and estimate the amount of change shown by the families, a statistic called the “effect size” was calculated. Most social service programs produce effects that are considered “moderate” and these are roughly in the 0.1 to 0.2 range of effect size calculations (e.g., Gomby, 2005)<sup>4</sup>. The effect sizes in the HFPI results indicated modest effects and that the program’s influence increased over time (i.e., the effect sizes are higher for the 12-month administration of the HFPI). The largest effect size occurred with mobilizing resources (i.e., 0.48), a result that supports the value placed by the program on serving as support for families in connecting and using resources. Other moderate effects are seen in the parenting competence, problem solving, home environment, and depression scales. Smaller but consistent effects are reflected in improvements in social support, commitment to parent role and personal care.

An additional set of analyses<sup>5</sup> was used to examine factors that might predict the total score of the HFPI. Included in the analyses were mother’s age, ethnicity, marital status, history of childhood abuse, and number of children (i.e., first time mother or had at least one child). The results indicated that none of these characteristics predicted large differences on the HFPI. Ethnicity and number of children showed some small differences (e.g., Hispanic mothers and mothers with more than one child scored lower on the HFPI). These results should be reviewed with program staff to assess whether additional analyses about these groups of mothers might provide insight into their special needs. However, these results should also not be over interpreted,

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<sup>4</sup> More stringent interpretations of effect sizes consider 0.2 as “small” and 0.5 as “medium” effects. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: LEA

<sup>5</sup> A linear regression model was used to analyze a set of variables as they relate to an outcome (in this case, total HFPI score) of interest. The final model was significant and explained six percent of the relationship between the HFPI score and the included variables ( $R^2 = .058$ ,  $p < 0.001$ ). This analysis is preliminary and will be assessed for potential use in the future.



as they are preliminary in nature but can provide hints for potential extra attention from the home visitors to particular types of mothers.

### **Child Abuse and Neglect**

The following exhibit presents data for families who were active in Healthy Families during the period of July 1, 2006, to June 30, 2007, and who had been in the program at least six months. The percent of families having a substantiated incidence of child abuse or neglect since entering the program is compared with the previous years' rates.

For the total families served by Healthy Families Arizona in FY2007, 99.7% had no substantiated reports of child abuse or neglect. The comparison group, families who dropped out of the program before four home visits, showed a slightly higher (98.6%) rate. Healthy Families Arizona is required to report these statistics because the goal is included in the HFAz statute. However, several reasons exist for using caution in their interpretation. Child abuse and neglect rates may not be the best measures to describe short-term program impact because of the following: 1) The rates reflect low-occurring events where small changes may not be representative of long-term effects; 2) Incidents of child abuse and neglect often go unreported; 3) These rates involved a process that requires a "match" on available information on the families such as mother's name, social security number, and date of birth. When details for the match are missing or the legal name is not available, the accuracy of the match can decrease. A final explanation for finding lower numbers of substantiated reports in the short run is that the recording of "substantiated" is often delayed in the CPS system due to the time it takes to complete investigations and to go through appeals processes.



**Exhibit 21. Percent of families showing no child abuse and neglect incidences**

<b>Group</b>	<b>Percent without substantiated report 2004 (n=1,568)</b>	<b>Percent without substantiated report 2005 (n=1,814)</b>	<b>Percent without substantiated report 2006 (n=2,780)</b>	<b>Percent without substantiated report 2007 (n=3,301)</b>
<b>All Families</b>	98.4	98.2	99.2	99.7
<b>Comparison Group*</b>	98.6	97.3	99.1	98.6

\*Families who dropped out of the program before 4 home visits. In 2007, there were 827 families in the comparison group.

These data represent a one-year snapshot of information. Long-term patterns of substantiated reports may vary somewhat from what is reported here due to lag time in the final assignment of “substantiated” categories. This challenge to the interpretation of the child abuse and neglect results further supports the need for results from the longitudinal study that will provide more definite answers about ultimate outcomes as mentioned previously in this report.

**Child Development and Wellness**

Healthy Families Arizona maintains a process goal of completing administration of the Ages and Stages Questionnaire screening instrument with 80% of the children in families served by the program. The ranges of those results varied by time interval and most were within ten percentage points of the goal (e.g., 71%-84%). These results are significantly better than last year. For those children that were screened and had scores within the cutoff range, the majority received appropriate referrals and support. For more detailed information, refer to the service delivery section of this report.



## Safety Practices and Healthy Behaviors

Healthy Families Arizona assesses and promotes safe environments for children through education about important safety practices and monitoring the use of that information through completion of a safety checklist. These practices play an important role in accident and injury prevention in homes and cars. The home visitors successfully administered the safety checklist with more than 80% of the families in the program. The following exhibit reports the results in four critical areas of child safety. The results showed some increases from prior years.

**Exhibit 22. Percent of all families implementing safety practices**

	<b>2-Month (n=1,535)</b>	<b>6-Month (n=1,658)</b>	<b>12-Month (n=1,316)</b>	<b>18-Month (n=1,001)</b>	<b>24-Month (n=580)</b>
<b>Outlets Covered</b>	46.0%	59.9%	75.2%	82.2%	84.5%
<b>Poisons Locked</b>	84.2%	90.3%	94.5%	95.5%	95.2%
<b>Smoke Alarms</b>	84.4%	86.7%	89.3%	92.1%	90.9%
<b>Car seats</b>	99.5%	99.1%	98.7%	98.4%	98.4%

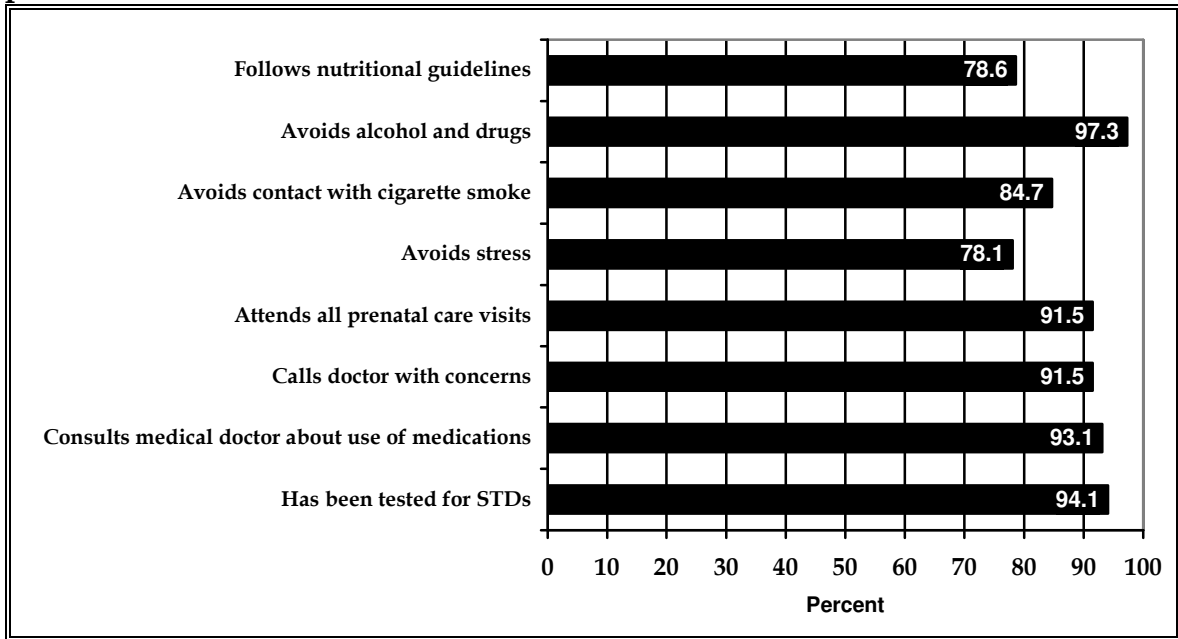
The program continues to excel in car safety seat use. For example, car seat use for a similar age group has been estimated to be 90% (Glassbrenner and Ye, 2007). As in past years, appropriate safety practices increased steadily as the child becomes more mobile at 12-24 months. Additional data showed that as the child ages, more attention to safety is shown, e.g., 99.2% of families ensure pool safety at the 24-month interval.

These results compare favorably with national estimates. A national study of households revealed that although 96% of households have a smoke alarm, when asked if they have a “working smoke alarm,” only three-fourths of U.S. households response in the affirmative (Ahrens, 2007). The Healthy Families safety checklist refers to working alarms. Therefore, the program results appear to be better than those of average homes in the U.S. with regard to use of car seats and smoke alarms.



In addition to household safety practices, a separate checklist related to healthy behaviors was administered to prenatal families. The following exhibit summarizes some of the key results of this assessment and shows fairly high, positive ratings.

**Exhibit 23. Percent of prenatal families implementing prenatal safety practices**



### Immunizations and Medical Homes

Promoting positive health behaviors encompass key objectives of Healthy Families Arizona. A common indicator for prevention programs is the **immunization rate for the children**. Exhibit 24 shows the rate for the infants of Healthy Families Arizona participants for 2007, 2006, and 2005. The results indicate even higher levels for children in the program than last year. Overall, Healthy Families Arizona families continue to have their children immunized at a rate greater than the Arizona percentages and are higher than estimates for children with the state insurance, Arizona Health Care Cost Containment System (AHCCCS). Nevertheless, Healthy Families Arizona supervisors and staff should continue to maintain high expectations and to encourage immunization completion and data submission.



**Exhibit 24. Immunization Rate of Healthy Families Arizona Children**

Immunization Period	Percent Immunized 2005	Percent Immunized 2006	Percent Immunized 2007	Immunization Rate for 2-year-olds in Arizona (2006)*	Immunization Rate for 2-year-olds on AHCCS in Arizona (2006)**
2 month	92.7%	86.4%	91.3%		
4 month	90.2%	83.9%	88.4%		
6 month	82.3%	69.5%	77.7%		
12 month	92.1%	87.4%	89.3%		
Received all 4 in the series by 18 months of age.	89.1%	83.5%	87.5%	79.0%	82.0%

\*Source: 2006 data from the Arizona Department of Health Services.

\*\*Source: 2007 report to Arizona Early Childhood Development and Health Board.

Another indicator for the goal of ensuring the families receive adequate medical care is the *percentage of children linked to a medical doctor*. The data revealed a substantial number of the children linked to a medical doctor. Furthermore, the levels were consistent with the 94% average noted across other Healthy Families programs (Harding et al., 2007). *Emergency room use* without a doctors referral was estimated at around 10%; approximately 90% of the families did not report emergency room visits without a doctor’s referral.

**Exhibit 25. Percentage of Children Linked to a Medical Doctor**

	6 months	12 months	18 months	24 months	AHCCCS Children 12-24 months
Percent of children with medical home 2006*	97.5%	97.1%	96.4%	97.8%	80.5%
Percent of children with medical home 2007**	96.0%	94.1%	92.4%	94.7%	NA

\*Postnatal only and \*\*Prenatal and postnatal.



## Mothers' Health, Education, and Employment

The following results report on the health and well-being of participating mothers in outcomes such as subsequent pregnancies, education, and employment.

During the study period, 10.4% of the mothers who entered postnatally reported *subsequent pregnancies*, compared to 15% in 2004 and 11.8% in 2006. Therefore the total rate of repeated pregnancies has decreased slightly. Of these, 28.6% were 19 years or younger. Exhibit 26 shows the length of time to subsequent pregnancy for active families during each year. In examining the past four years, the number of mothers having another child within 12 months of their child has again increased. The results should be reviewed with program staff and discussion about reasons and strategic planning around steps to affect this trend should be identified. Staff need to continue to place increased emphasis on the risks and challenges associated with closely spaced pregnancies and the benefits of increased spacing.

**Exhibit 26. Length Of Time To Subsequent Pregnancy for Those Families with Subsequent Births**

Length of Time to Subsequent Pregnancy	2004 Percent of mothers	2005 Percent of mothers	2006 Percent of mothers	2007 Percent of mothers
1 to 12 mos.	31.6 %	33.3%	37.7%	42.1%
13 to 24 mos.	42.3 %	42.3%	38.1%	39.3%
Over 24 mos.	26.1 %	24.4%	24.2%	18.6%

Home visitors can provide links and support mothers to finish GED programs, or enroll in vocational or college education programs for those interested in furthering their education. Exhibit 27 displays the percentage of mothers enrolled in school full or part-time at different intervals. The results are slightly lower than reported in the past year for fulltime enrollment and slightly higher for part-time enrollment in school.



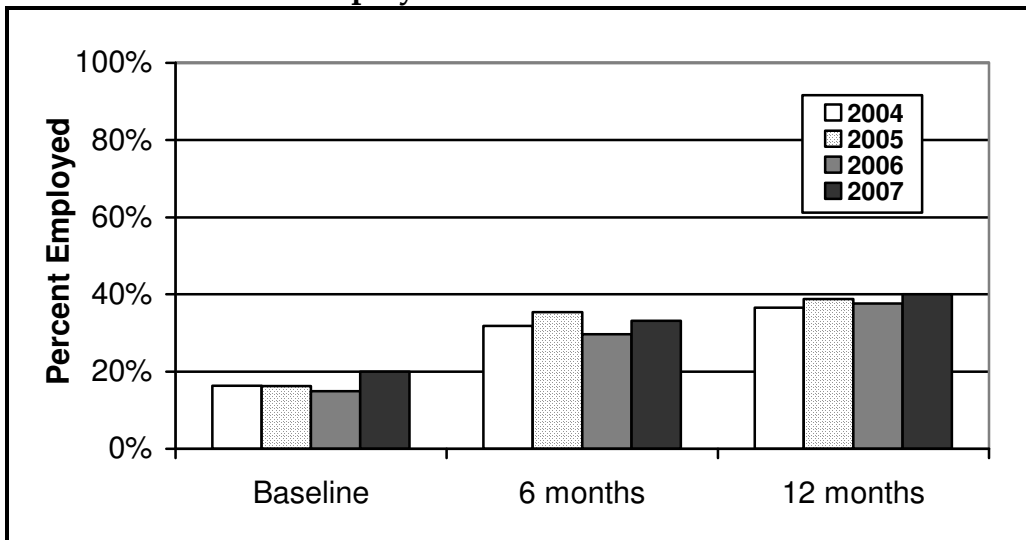
**Exhibit 27. Percent of all mothers enrolled in school**

	Percent enrolled part-time 2005	Percent enrolled part-time 2006	Percent enrolled part-time 2007	Percent enrolled fulltime 2005	Percent enrolled fulltime 2006	Percent enrolled fulltime 2007*
6 month	4.4%	3.3%	4.5%	9.4%	9.3%	8.9%
12 month	6.3%	4.8%	6.5%	12.9%	8.0%	9.8%
24month	5.0%	3.5%	4.2%	7.8%	8.8%	4.6%
36 month	6.3%	5.8%	5.8%	8.4%	2.9%	5.8%

\* For 2007, data was available for 1454 mothers at 6 months, 1131 at 12 months, 524 at 24 months and 173 at 36 months

Exhibit 28 shows the employment status of mothers actively engaged in the program at various points in the program as compared to 2004, 2005 and 2006. The results have been relatively stable over the past several years. They also showed a pattern of increased employment over time that indicated approximately 40% of the mothers in Healthy Families Arizona are working approximately 12 months after their baby was born. This may be a partial explanation for length of time in the program that is, on average, approximately 13 months. National estimates of employment rates of mothers with young children tend to be in the mid-fifty percent range. These results may also imply greater need for referral and support for helping mothers find quality child care.

**Exhibit 28. Mother's employment status**



## Substance Abuse Screening

One of the primary roles of the home visitor is the identification and assessment of the possible influence of alcohol or other drug abuse on the family. Alcohol and other substance abuse is a significant risk factor for child abuse and neglect. Home visitors provide education to the families about risky and healthy choices and can make referrals for support or treatment services if appropriate and available. Screening tools can help home visitors identify families most in need of such referrals.

The CRAFFT screening tool was chosen three years ago by program staff with expectations that it would effectively screen for substance abuse problems, and also promote communication between the home visitor and family member. However, its continued use for the Healthy Families program has been under review because alternative, brief, reliable, and valid measures about substance abuse are difficult to identify. The brief alcohol and drug-screening test is known by a mnemonic, CRAFFT, based on the first letter of keywords in the 6 easy-to-remember questions. The CRAFFT is a widely-used assessment instrument with acceptable reliability and validity; it was created for particular use with young adults and adolescents. Its series of questions should allow the home visitor and parent to have a conversation about substance use and abuse. Although a positive screen may not necessarily indicate a substance abuse problem or alcoholism, it could serve as a signal to Healthy Families staff about the need for further discussion or referral.

The data from the past year indicated that 67-99% of the families were screened using the CRAFFT, depending on the interval examined (6 months, 12 months, etc). *These rates showed a large increase from the 25-33% reported in 2005 and the 52-68% reported in 2006 year.* Furthermore, of those who received the screen, 430 (26%) were screened as positive for drug use at 2 months, but none received a positive screen at other intervals. In 2007, the program implemented newly designed specialty trainings in substance abuse for Family Support Specialists and this could have contributed to increased awareness and comfort in administering the CRAFFT or at least addressing substance abuse issues with families.



However, anecdotal feedback from staff have indicated continued dissatisfaction with the implementation of the CRAFFT and question the relevance for use with these families. Therefore, its use continues to be under review and a possible alternative measure may be suggested.



## Information for Program Learning

This section of the report focuses on special studies and ongoing evaluation support for program learning and decision making. First, a summary of programming and policy updates is provided, followed by a brief description of the past year's activities highlighting efforts to effectively communicate about the links between research and practice through the *Building Bridges* newsletter and evaluation presentations. Finally, information and results from the home visitor retention study is presented.

### Program and Policy Updates

Exhibit 29 depicts some of the key program and policy developments that have occurred in the past year.

#### Exhibit 29. Developments in the Healthy Families Arizona Program in 2006-2007

##### **The Healthy Families Arizona Web Portal Provides New Opportunities for Distance Learning to the Program Sites**

Healthy Families Arizona launched its Web Portal in June 2005. The Web Portal has been programmed to handle a number of administrative functions including new staff enrollment, registration for all required HFAz trainings, maintenance of on-line training logs, HFAz committee activities, and chat rooms. In 2007, HFAz developed two new orientation trainings specific to the roles of supervisors and family assessment worker staff. In the past, the on-line orientation training was focused primarily on the home visitors' role. Supervisor and family assessment orientation was only available through written training modules. These new on-line trainings were developed to ensure that newly hired supervisors and family assessment workers would have a high quality training regarding orientation to their role in the program including confidentiality, the strength-based philosophy, child abuse and neglect reporting and policy review. The format of all distance learning projects involves a "tell me, show me, let me try" approach so that staff feel successful and enthusiastic about their new job. The Web Portal has also served as a means for parents in HFA programs from other states to contact



HFAz central administration for potential transfers. The HFAz Web Portal can be accessed by going to <http://www.healthyfamiliesarizona.org>.

### **Revised Accreditation Standards Implementation**

In 2007, Prevent Child Abuse America revised the Healthy Families America Accreditation standards. The process for credentialing has been streamlined with a more process and outcome based approach to quality assurance. In addition, several standards were identified as being key to the safety of families and the quality of work. These “safety” and “sentinel” standards must be met in order to receive a credential. Safety standards include background checks and child abuse and neglect reporting processes. Sentinel standards include supervision, developmental screening, confidentiality practices and informed consent. Seasoned Program Specialist staff have participated in peer refresher training and are certified peers reviewers in the 2007 accreditation process. All site visits conducted this year utilized the new credentialing and quality assurance format to assist program sites in preparing for credentialing.

### **HFAz State System Analyses and Plans for Improvement**

In preparation for HFAz credentialing in 2009, the HFAz Credentialing Committee has developed a timeline and plan for implementation of the analyses required by accreditation. HFAz sites must measure, monitor, and analyze program acceptance, family retention, staff retention, cultural sensitivity, and progress towards accomplishment of program goals. These five analyses are required once every two years. Since family retention has been an improvement recommendation for the program for several years, the family retention analysis became the starting point for the credentialing process. Demographic, programmatic, social, and community factors are considered as part of the analysis. In partnership with the evaluation team, the Credentialing Committee has trained program supervisors and is in the process of reviewing each site’s family retention analysis and plan for improvement.



### **Prenatal Referral Collaboration with WIC**

Healthy Families Arizona staff continue to seek stronger partnerships for enrolling families earlier during the prenatal period. In order to have more positive birth outcomes, it is important to recruit families during the first trimester of pregnancy. In partnership with the Department of Economic Security, HFAz is in the process of working out a systematic referral system with WIC statewide that will allow for earlier access to pregnant woman and their families.

### **Father Involvement and Parent Leadership**

The HFAz Father Involvement Committee was revitalized in 2007 as a statewide committee. The Men Are Nurturers (MAN) Committee goals are to increase the number of fathers actively involved in the lives of their children, to provide additional training for staff on father involvement, and to develop materials designed to recruit fathers as leaders. This Committee moves its meetings throughout the state in an effort to recruit and increase each program's involvement in reaching out to fathers.

### **Expanded Specialty Training for Substance Abuse**

In 2006, the Training team initiated specialty training that supports staff in working more effectively with the ever-increasing needs of the families served by the program. Through the use of specialty training funds, most program sites have been able to contract with a clinical consultant who participates in monthly to bi-monthly team meetings and offers clinical support to staff working with families. With this type of clinical support, staff will be better able to address the multitude of challenges experienced by families participating in Healthy Families Arizona. The Program Specialist team developed a series of trainings that specifically address how to "facilitate change" through the use of motivational interviewing techniques that are integrated within the Healthy Families Arizona approach.



To maximize the use of these specialty training funds, and to ensure that new skills are used in interactions with families, the Program Specialist team has developed the first of three trainings that are based on the concepts of “facilitating change” in families that anchor experience and practice. A two-day Substance Abuse training was launched in 2007. In 2008, HFAz will launch domestic violence and mental health training.

The primary focus of the substance abuse training includes the following topics and is specifically designed for HFAz home visitors: The effects of the use of psycho-active substances on individual users and their families; the nature of the connection between substance abuse and the person who uses; the continuum of intervention resources available for those engaged in harmful substance abuse; how the home visitor fits into the continuum of intervention; risk factors, identification of the risks in the families served, how to talk with families about substance abuse, relapse factors, interventions when families are in denial, what to do when families won’t stop, and staying safe.

### **Building Bridges Newsletter**

In 2005, a newsletter was created to link practice and research on home visitation. The 2006-2007 issues of the newsletter, *Building Bridges*, were distributed to approximately 1000 people each quarter and were made available on the web. Topics included domestic violence, quality child care, working with teen mothers, and positive child development. The purpose of the newsletter fits well with recent research articles that point to the value of sharing explicit connections between research and practice (Galano, 2007).

### **Ongoing Evaluation Communications**

Evaluation team members regularly attend and participate in statewide committee meetings and bi-annual staff institute trainings. With the high number of program staff with relatively short tenure, there is a continual need to educate and update staff on evaluation methods and results. Ongoing efforts to share data, results, and lessons learned can help build capacity and motivation to engage in evaluation and provide opportunities for evaluation



staff to gather feedback and suggestions from Healthy Families stakeholders. Presentations at the institutes included results from the 2006 report as well as feedback on examples of “what works” for the sites to track and monitor administration dates of program forms (e.g., ASQ). In addition, a session on “Why evaluate?” using resources such as Healthy Families America® Site Development and Critical Elements documents was conducted to help all program staff discover and guide meaningful uses for evaluation data. For example, the following reasons to evaluate are noted by HFA:

- Provide direction for staff
- Identify training needs
- Improve programs
- Support annual and long-range planning
- Guide budgets and justify resource allocation
- Suggest target outcomes
- Recruit talented staff and volunteers
- Promote the program to potential participants and referral sources
- Identify partners for collaboration
- Enhance the program’s public image
- Support the program’s advocacy agenda and
- Retain and increase funding.

Furthermore, HFA notes, “It is critical that home visiting programs share their stories, their triumphs and shortfalls with their colleagues in this field. The only way we can learn and improve upon the work we do is to share...Evaluation data can lead to the creation of new policies, better programs and the allocation of new resources.”



## Home Visitor Retention

In April 2006, a workforce survey was administered to all Healthy Families Arizona staff attending the spring institute training in order to gather information relevant to staff retention. Home visitor retention is important for the following reasons:

1. *It influences participant retention.* Ninety-four families dropped out of Healthy Families Arizona during the three-year period from 2004 through 2006 due to “refusal of worker change.”
2. *It protects a substantial investment in training.* In the first year of employment, each Healthy Families Arizona home visitor receives between 140 and 180 hours of dedicated training, including orientation training, core training, and the biannual institute.
3. *It protects against a loss of productivity that occurs when experienced home visitors leave and new home visitors are interviewed, hired, trained, and garner the experience necessary to carry a full caseload.* In Healthy Families Arizona, new workers are typically assigned no more than two-to-three new families per week. Generally it takes two-to-three months following the completion of core training for new workers to build-up a full caseload. According to Michaud (2000), the Department of Labor estimates that it costs one-third of a new employee’s salary to replace a worker, and for a professional position the cost is estimated as high as 100%.

A total of 271 individuals completed the workforce survey in April 2006 (88% response rate). These staff responses represented the perspectives of family support specialists (home visitors), family assessment workers, supervisors, administrative support staff, program managers, and program specialists. The survey included questions relating to 13 domains, each identified in the literature as important to workforce satisfaction and retention. Exhibit 30 lists the 13 domains included in the workforce survey and a sample item from each domain. The full results of the workforce survey are reported in the 2006 Healthy Families Arizona Annual Report (LeCroy & Milligan Associates, 2006).



**Exhibit 30. 2006 Workforce survey domains and sample items**

<b>Domains</b>	<b>Example Statements</b>
1. Realistic expectations at entry	Those who interviewed me for this job gave me an accurate picture of the work.
2. Personal/professional fit	The work I am doing suits me.
3. Professional efficacy	I am generally effective in working with families.
4. Perception of workload	The size of my workload is too big.
5. Quality supervision	My supervisor provides the expert help I need to do my job.
6. Opportunity for meaningful input	I have the support to make work-related decisions when appropriate.
7. Leadership encouraged	My employing agency shares leadership roles with staff.
8. Location attachment	I consider the community where I live "home."
9. Perceived employing agency performance	I feel good about what my employing agency does for children and families.
10. Non-salary reward	My Healthy Families supervisor shows approval when I succeed.
11. Adequacy of salary	I am satisfied with the salary I receive from my employing agency.
12. Opportunity for advancement	This agency provides support for those working towards a degree or certificate.
13. Perceived community sanction	Other professionals respect Healthy Families staff.

Overall, the 177 home visitors responding to the workforce survey had a relatively short tenure with the program. Seventy-eight percent of the 177 home visitors had been employed with Healthy Families Arizona for only two years or less.



A majority (58%) of these home visitors indicated an ethnicity other than white. Maintaining a diverse workforce that reflects the population of families served by Healthy Families Arizona is considered important. The 2006 Annual Healthy Families Report identified that 69% of mothers engaging in the prenatal period, and 73% of mothers engaging in the postnatal period identified as other than white or Caucasian.

In terms of intent to remain employed with Healthy Families Arizona, 66% percent of the 177 home visitors surveyed reported that it was *unlikely* that they would make an effort to find a new job within the next six months, 73% reported that they were *not* actively seeking other employment, and 54% reported that they intended to work with Healthy Families Arizona as a long-term career. An analysis that examined factors related to home visitors' intentions to work with Healthy Families Arizona as a long-term career found three statistically significant predictors:

- 1- encouragement of leadership
- 2- location attachment, and
- 3- age.

The greater the home visitor's attachment to the local area, such as considering the community "home," having a spouse or immediate family members attached to the area, and not considering moving away, the more likely the individual was to indicate an intent to remain employed with Healthy Families Arizona. Greater perceived encouragement of leadership in the employing agency was also related to intent to remain employed with Healthy Families Arizona. And finally, age was also related to intent to remain with Healthy Families Arizona, with older home visitors more likely to report their intent to remain employed than younger home visitors. The following analysis examines factors related to the actual retention of home visitors in the one-year period following the administration of the workforce survey in April 2006.

During the 1-year period from April 2006 to April 2007, 35 of 177 Healthy Families Arizona home visitors terminated their employment (19.8%), and 142 (80.2%) were retained.



### **Characteristics Related to Home Visitor Retention and Attrition**

Exhibit 31 provides a comparison of the 142 home visitors who were retained during the study period and the 35 home visitors who ended their employment. As seen by the summary statistics presented in Exhibit 31, the home visitors who were retained by Healthy Families Arizona were slightly older than those who left, averaging 34 years of age for the former compared to an average of 32 years for the latter. Those who moved on tended to do so earlier in their careers. The average length of employment for those whose employment with HFAz ended was almost 2 years; however, some left as early as 72 days after initial hiring. Among the 35 home visitors who left their employment, 22.9% (8) did so within their first year of employment, and an additional 34% (12) discontinued their position between one and two-years of service. A total of 88.6% of the 35 home visitors leaving their employment during the study period had been employed in Healthy Families Arizona less than three years. There were no statistically significant differences in age, ethnicity, and education between those home visitors who were retained and those who discontinued. There were, however, statistically significant group differences in average length of employment, with those home visitors who were retained being employed longer on average than those who were not retained. Also, those who left were significantly more likely to indicate on the April 2006 workforce survey that they did not view Healthy Families Arizona as a long-term career, and that they were likely to seek alternative employment within the next six months.



**Exhibit 31. Comparison of home visitors retained and those who were not retained**

<b>Home Visitor Characteristics</b>	<b>Retained (n = 142)</b>	<b>Not Retained (n = 35)</b>
Average age	34 years	32 years
<b>Average length of employment as of termination or 04/30/07 *</b>	3 years, 82 days	1 year, 343 days
<b>Ethnicity</b>		
<i>White, not Hispanic (n = 74)</i>	41.6%	48.6%
<i>Hispanic (n = 66)</i>	38.0%	38.4%
<i>American Indian (n = 12)</i>	8.8%	--
<i>All other (n = 20)</i>	12.0%	11.6%
<b>Highest level of education</b>		
<i>High School (n = 23)</i>	10.6%	22.9%
<i>Some college (n = 21)</i>	14.2%	2.9%
<i>AA degree (n = 24)</i>	15.6%	5.7%
<i>BA/BS (n = 96)</i>	52.5%	62.9%
<i>MA/MS (n = 4)</i>	2.1%	2.9%
<i>BSW/MSW (n = 8)</i>	5.0%	2.9%
<b>Intent to make HF long-term career in April 2006**</b>		
<i>Yes</i>	70.4%	40.0%
<i>No, don't know</i>	29.6%	60.0%
<b>Unlikely to seek employment in next 6 months as of April 2006**</b>		
<i>Yes</i>	78.2%	48.6%
<i>No, don't know</i>	21.8%	51.4%

\*  $p. < .01$  - denotes a statistically significant difference between the groups of retained and terminated. \*\*  $p. < .001$ ,



### Predictors of Home Visitor Attrition

A multivariate logistic regression analysis<sup>6</sup> was performed to determine the best predictors of attrition among Healthy Families Arizona home visitors. The outcome of interest was whether or not the home visitor had ended employment with Healthy Families Arizona in the one-year period between the date the survey was administered in April 2006, and one full-year of follow-up on April 30, 2007. Logistic regression was conducted to determine which variables were statistically significant predictors of home visitor attrition. Regression results using a simultaneous entry method indicate that a model of five predictors was statistically reliable in distinguishing between those home visitors who terminate and those who are retained (See Exhibit 32). The best fitting regression model correctly classified 85% of the cases based on information from six statistically significant predictor variables: professional fit, professional efficacy, non-salary reward, workload, actively seeking alternative employment, and time employed. For additional details on the regression analysis see Appendix F.

**Exhibit 32. Factors from the Workforce Survey Predictive of Home Visitor Attrition**

Variables Entered into the Regression Equation	Statistically Significant Predictor of Attrition	
	x = no	✓ = yes
<i>Realistic expectations at entry</i>	x	
<i>Personal/professional fit</i>		✓
<i>Professional efficacy</i>		✓
<i>Perception of workload</i>		✓
<i>Quality supervision</i>	x	
<i>Opportunity for meaningful input</i>	x	
<i>Leadership encouraged</i>	x	
<i>Location attachment</i>	x	
<i>Perceived employing agency performance</i>	x	
<i>Non-salary reward</i>		✓
<i>Adequacy of salary</i>	x	

<sup>6</sup> Logistic regression analysis is a statistical procedure that determines whether a set of variables has a unique predictive relationship to an outcome of interest.



Variables Entered into the Regression Equation	Statistically Significant Predictor of Attrition
	x = no      ✓ = yes
<i>Opportunity for advancement</i>	x
<i>Perceived community sanction</i>	x
<b><i>Actively seeking alternative employment</i></b>	✓
<i>Education</i>	x
<b><i>Time employed</i></b>	✓

### **Professional/personal fit**

Three items are included in professional/personal fit. These include the following:

- There is a good match between the duties of this job and my skills.
- There is a good match between the duties of this job and my interests.
- The work I am doing suits me.

As expected, those home visitors who scored lower on professional/personal fit were more likely to terminate their employment with Healthy Families Arizona. The following quote by a home visitor illustrates the enthusiasm that is present when the professional/personal fit exists.

*This job is a perfect match for me. I feel like it was created just for me, a great fit! I love working for Healthy Families.*

### **Professional efficacy**

Six items are included in the professional efficacy subscale:

- I remain motivated to help families overcome obstacles.
- I rebound and persist after setbacks in order to accomplish work goals.
- I am generally effective in working with families.
- I am proud of my work.
- I am confident in my ability to perform this job.
- I feel a sense of personal accomplishment through my work.



Those who scored *higher* on professional efficacy were *more likely* to end their employment with Healthy Families Arizona. While this may seem counter intuitive, some of the narrative comments home visitors wrote on the workforce survey adds some insight on this phenomenon. It appears that home visitors with a strong sense of professional efficacy are driven to other employment because, in the absence of a masters degree, there are limited opportunities for advancement within some of the Healthy Families Arizona sites. Twelve home visitors wrote comments on the survey related to this concern. The following quote illustrates this point:

*I would like to become a supervisor, but I'm hesitant about obtaining my Master's due to having busy family life with young children. I believe experience should weigh higher than education in advancement.*

Some home visitors who have an associates or bachelors degree perceive that they face a ceiling in Healthy Families Arizona in terms of advancement and salary. Healthy Families Arizona is therefore considered a stepping-stone for employment outside of the program. This sentiment is reflected in the following verbatim comments from home visitors.

*HF is a beautiful program. I love the type of work I do but I do feel like I don't get paid enough for having a college education. This would be the only reason why I would seek new employment in the future.*

*More financial support for continuing graduate education would be very helpful! Also, I know we'll probably always be underpaid but it would be very nice not to have to have a second job just so I can afford to have the job I want (that would be this job).*

*This program was a perfect fit directly out of college because there was a lot of support and training. It was a good transition. I recommend it to new graduates. It would be nice if there were more funding for employees to get more college education.*



### **Non-salary reward**

Six items are included in the non-salary reward subscale. Non-salary reward includes a variety of aspects of the job that encourage feelings of belonging and value. Examples of statements included in the survey that fall into this category include the following:

- My supervisor cares about me as a person.
- My supervisor shows approval when I succeed.
- I am satisfied with the level of flexibility in my work schedule.
- There are clear job expectations for my work.
- Overall, I receive sufficient recognition for my work.
- I feel a sense of personal accomplishment through my work.

Home visitors who scored lower on non-salary reward, for instance, those who did not feel as much approval and recognition, were more likely to be lost to attrition. The following quotes from home visitors are reflective of the different types of non-salary rewards that are part of the program.

*I like the fact that we go to different conferences, the information is helpful. I wish there was more funding to support FSS to continue their education. I like the agency & I love to learn!*

*I've enjoyed working for HFAZ- I have a wonderful supervisor & great team. I'm content where I am and welcome all training & any continuing experience.*

*I absolutely love my employing agency & the administrators above me. I feel valued & trusted by my program manager.*

### **Perception of Workload**

Two items are considered for perception of workload. These include statements about the amount of end-of-month paperwork and documentation paperwork (e.g., home visit notes, etc.) being manageable.



Home visitors who disagreed with these two statements on workload were more likely to be lost to attrition. Fourteen home visitors wrote comments on the workforce survey pertaining to workload. All but two of the comments offered by home visitors in this area pertained to paperwork, rather than issues with caseload. The specific aspects of paperwork mentioned are home visitation notes, evaluation tools, and the family plan. It is important to note that the comments were written prior to implementation of the revised Healthy Families Parenting Inventory (HFPI).

*I'm not happy with salaries-I wish something could be done about it and also paperwork for FSS.*

*Smaller caseload would give more effective time with families.*

*Extensive amount of paperwork required, 24/7 responsibility and not enough time for personal welfare.*

*I love working with Healthy Families. I feel that it really helps the families that I work with. I strongly feel that there is way too much paperwork involved. The home visit note takes too long to effectively fill out. I feel that when I hit a burnout it's because of the paperwork.*

*HF is a great program. I don't think the pay is good considering I have a college degree. I don't think everything in the home visit notes is necessary.*

### **Time Employed and Intent to Terminate**

The *longer* the home visitor's employment in Healthy Families Arizona, the *less likely* the home visitor was lost to attrition. The item "I am actively seeking other employment" was the single, strongest predictor of actual attrition.



## **Limitations and Notes**

It is important to note when interpreting the data presented in this section of the report that the attrition of home visitors presumably includes both preventable as well as non-preventable turnover. In addition, some level of turnover is desirable; for instance, where there is a poorly performing home visitor, or a home visitor is promoted within the organization. There was no indicator in the data to distinguish between preventable and non-preventable forms of attrition. For instance, there was no way to identify those home visitors who retired, moved out of state, were fired, or left due to dependent care-taking responsibilities. Given that the age of the oldest worker who ended employment was 55 years of age, retirement is not likely to be an issue in home visitor attrition in this study. Promotion or change to another position within Healthy Families Arizona was captured in the data and therefore was not counted as attrition.

## **Conclusions and Findings on Staff Retention**

Stability in the home visitation workforce is critical to child abuse and neglect prevention in Arizona. Research has consistently shown that continuity in home visitor is important for participant retention, and participant retention is important for the achievement of desirable participant-related outcomes. Although home visitor experience and continuity are important, many home visitors have been on the job for a relatively short period of time. At the time of the workforce survey, 49.7% of home visitors had been employed less than one- year, 77.4% less than two-years, and 83.6% less than 3 years.

There is no one answer to address home visitor retention. Rather, the analysis of the workforce survey and retention study point to a combination of factors that could be addressed to improve retention.

1. Healthy Families Arizona, because of its clarity in purpose and expectations, quality training and supervision, is an excellent training ground for college and university graduates with a bachelors or associates degree. Due to the salary, however, some home visitors who want to remain employed with the organization perceive that they are required to either return to school for a masters-level education, or seek employment in another



agency where the same ceiling for advancement does not apply. This is a significant drain on experience and workers who have a strong sense of professional efficacy.

2. Paperwork is perceived as a workload detriment as opposed to something that is useful in regard to supervision and practice. The case plan and home visit notes, and some of the tools used in the evaluation are particularly perceived as problematic. There appears to be sufficient impetus to review the information being collected in order to reduce the paperwork burden, highlight the practice, policy, and evaluation relevance of what paperwork is necessary, and to maintain the focus of home visitation on the child and family.

3. Professional/personal fit is important to retention. Individuals seeking employment as home visitors with Healthy Families Arizona should have to answer “What is it that I really want to do.” Employing agencies should evaluate whether or not the answer includes working with families as well as working with babies and children. Experienced workers, videos, and other materials can be used to give prospective workers a true sense of the position. These types of materials could be developed out of current best practices among the sites.

4. Organizational factors that can positively influence retention and that are within the employing organization’s control include non-salary reward. The relationship with the supervisor is viewed as very important by the home visitor. Home visitors reportedly appreciate supervisors who are grounded in the practice of home visitation, and who they feel can help them succeed with families. Again, best practices in terms of non-salary reward could be surveyed among the sites and shared. If home visitor retention is to be positively impacted, agency administrators should ask whether or not the agency provides the necessary supports – supervisory, career ladder, workload support, and learning environment that will attract home visitors and keep them at the agency.



## Conclusions and Recommendations

A variety of key stakeholders with interest in Healthy Families Arizona necessitates multiple ways of communicating accountable results. Some of these stakeholders include the participating families, Healthy Families Arizona staff, Arizona Department of Economic Security staff, state legislators, Healthy Families America®, and other home visitation programs. This annual report describes results in the main program goal areas. Based on the results from such measures as the Healthy Families Parenting Inventory, participant satisfaction surveys, safety checklists and screening tools, Healthy Families Arizona continues to address and reach most of its goals, particularly in the areas of child and maternal healthy outcomes as well as child abuse and neglect rates.

To capitalize on the potential for learning from the extensive and ongoing data collection efforts, the evaluation should continuously seek to better understand the relationship between Healthy Families Arizona processes or activities and participant outcomes. The program theory (logic model) identifies the important concepts that facilitate change in the desired outcomes. For instance, increasing a parent's knowledge of child development should lead to more developmentally appropriate expectations of the child and improvements in parent child interaction. In the longer term, quality parent child interaction that is developmentally appropriate should produce children who are ready to learn in the longer term as they approach school age. It is important to examine the nature of relationships such as these, and to identify whether or not these relationships hold true for parents and children in general, and also for parents and children with diverse characteristics. By posing and answering questions related to the logic model, and to prior research findings on home visitation, the evaluation can help to inform practice.

In sum, the Healthy Families Arizona program reached even more families in FY2007 than in past years and increased its ability to reach families before the birth of their babies. The program continued to help parents make significant changes in their parenting outcomes and home safety. The annual evaluation activities will continue in the next year to provide information throughout the year to assist in program improvement and decision making.



The Healthy Families Arizona program showed increased service and improved outcomes in FY2007. Additional expansion in the previous year has brought on new sites with continued opportunities and challenges inherent in growth. The following table lists recommendations from the 2006 report that were suggested to help support program expansion and progress made during the 2007 program year.

**Exhibit 33. 2006 Recommendations and Key Results from 2007**

2006 Recommendations	Key Results from 2007
Attention to review of data collection training and follow-up support to improve data collection.	Sites, QA/TA staff, DES and the evaluation team redoubled efforts to ensure that data was gathered and submitted by the sites; additional processes for feedback and accountability were defined and implemented; results included an increase in the quantity and quality of data submitted.
Sub-studies that address “outreach” and ASQ and ASQ-SE administration	Discussions about key questions and data analysis occurred between the evaluation and QA/TA staff; results were included in the FY2007 report; continued questions about this topic will be addressed in 2007-2008.
Consider ways to involve more FSSs in leadership roles; discuss with sites strategies for describing or increasing promotion opportunities	A staff committee was formed to review evaluation plan; QA/TA encouraged sites to consider options to increase leadership roles; QA/TA staff conducted specific training and follow-up to increase knowledge about credentialing (e.g., standards and HF process); QA/TA team revised the annual staff satisfaction survey to include this topic.



Explore ways to measure parent-child interactions and review the best ways to record child development progress	Excellence Committee is in the process of identifying possible strategies to use on a small scale with a limited number of sites.
Program focus on dosage, engagement in program, frequency of visits, and retention in program for both families and workers.	More emphasis has been placed on the logic model during staff training and technical assistance; improved specialty training (to be rolled out over time) as noted in program update section of this report; staff note that some of the external influences over program goals are not able to be altered from within the program.

**2007 Recommendations**

Recommendations based on 2007 evaluation activities include the following:

- Further the development of Healthy Families Arizona as a “ learning organization” by scheduling regular communication updates with evaluation staff, QA/TA staff, program sites, DES staff, and others in areas such as development of evaluation plans, evaluation training, and data collection systems.
- Reconsider the format of evaluation report deliverables and identify alternative formats for timely feedback on issues important for program planning and decision making.
- Conduct a review of the clinical, administrative, and evaluation paperwork requirements as they pertain to FAW, FSS and Supervisor workloads to recommend ways to streamline the process. Incorporate into the process recommendations for alternative measures when appropriate.



- Use a collaborative approach to prioritize possible sub-studies that could include the following: clinical use of HFPI and ASQ-SE; staff operational definitions and use of “outreach”; child development outcomes that could reasonably and practically be assessed as part of an annual evaluation; and empirical outcomes predicted by the logic model, such as the relationship between quality parent/child interactions and readiness to learn.
- Continue support for QA/TA site visits and credentialing process by providing available data to address critical elements.
- Consider exploring site recommendations for best practices around non-salary rewards, supervisory strategies, career ladders, workload support, and learning environments that can attract and retain home visitors.
- Review the criteria and use of “outreach” when families remain in the program but are not receiving home visits. Explore the phases of re-engagement especially as it relates to “creative outreach” families.
- Strategize and implement program approaches to increase families’ understanding of the benefits of greater spacing between subsequent pregnancies.
- Discuss ways to increase the number and early enrollment of prenatal families. Review and set program standards around the categorization of “prenatal” enrollment (e.g., define prenatal to be enrollment prior to 24 weeks gestational age).
- Continue to review the use of the substance abuse screening tool and identify a short list of alternative measures. Decide whether to continue using the CRAFFT or a different screening tool.



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## Appendix A: 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. 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



## Appendix B: Site Level Data

- Age of Child at Entry.....66
- Days to Program Exit.....68
- Top Four Reasons for Exit.....70
- Health Insurance at Intake.....72
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- Engaged Prenatal Families that Exited before Baby's Birth .....90



## Age of Child at Entry by Site - 2007 (Age in days)

Site	Mean (Age in Days)	Number	Standard Deviation
Douglas	16.25	80	13.75
Central Phoenix	29.01	90	23.65
Maryvale	23.60	87	24.17
South Phoenix	28.69	97	23.74
East Valley	29.49	103	20.82
Nogales	15.83	101	19.08
Page	28.30	37	22.53
Casa de los Niños	31.98	97	24.63
CODAC	34.55	94	25.48
La Frontera	34.90	98	29.22
Sierra Vista	15.81	68	15.13
Tuba City	29.95	39	24.67
Verde Valley	17.37	51	22.44
Yuma	16.40	67	15.63
Pascua Yaqui	29.90	48	23.91
Lake Havasu City	25.38	81	18.86
Flagstaff	24.73	30	28.04
Sunnyslope	25.69	74	21.97
Prescott	31.09	121	26.23
Coolidge	20.73	80	28.37
Mesa	32.52	111	22.51
Southeast Phoenix	28.37	89	25.26
El Mirage	34.43	92	30.86
Blake Foundation	33.62	103	26.55
Marana	35.29	82	23.79
Safford	29.46	28	32.87
Stanfield	24.90	10	20.31
Apache Junction	26.92	75	21.43



Site	Mean (Age in Days)	Number	Standard Deviation
Gila River	35.00	7	13.33
Winslow	31.50	22	22.89
Kingman	30.84	50	24.96
Globe/Miami	32.40	20	28.86
Kyrene	30.04	71	19.71
Metro Phoenix	27.20	69	26.21
Tolleson	27.39	88	24.05
South Mountain	26.33	120	24.48
Glendale	26.78	101	21.37
Deer Valley	28.24	96	24.02
East/SE Tucson	34.95	60	23.86
SW Tucson	33.36	80	25.02
Bullhead City	24.80	45	22.78
Northwest Phoenix	24.77	69	24.65
Tempe	38.50	48	23.76
Gilbert	32.53	94	24.06
Scottsdale	29.82	100	23.44
West Phoenix	27.14	88	24.97
East Mesa	35.61	79	24.39
Kinlani-Flagstaff	18.97	37	26.74
Southwest Phoenix	21.56	59	21.79
Peoria	35.13	70	33.48
Metro Tucson	26.74	58	20.24
Casa Family First	30.45	31	19.78
Wellspring	16.82	38	24.36
Primeros Los Niños	14.46	46	13.72
Sierra Vista Blake	15.13	30	17.40
<b>Total</b>	27.89	3809	24.39

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



**Days to Program Exit by Site - 2007  
(For families who left the program)**

Sites	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Douglas	340.50	354.00	125.49	6	603.00	789.85	645.13	27
Central Phoenix	176.00	219.00	131.64	5	408.00	549.23	417.10	31
Maryvale	365.00	381.33	172.39	6	500.00	552.75	390.44	24
South Phoenix	475.00	483.60	199.69	5	354.00	420.41	261.56	41
East Valley	500.00	510.50	226.78	6	357.50	578.35	507.51	40
Nogales	273.00	260.20	73.09	5	1185.00	1111.52	723.15	25
Page	254.00	354.33	220.36	3	867.00	861.33	689.61	9
Casa de los Niños	184.00	219.00	93.76	9	392.00	596.46	535.69	39
CODAC	263.50	276.00	143.52	4	457.00	612.23	519.86	30
La Frontera	354.00	363.70	173.08	10	739.50	884.81	617.46	42
Sierra Vista	436.00	457.86	183.68	7	377.00	605.69	558.84	34
Tuba City	554.00	391.67	281.17	3	380.00	586.22	543.29	9
Verde Valley	441.00	422.10	171.09	31	563.00	746.86	580.09	21
Yuma	None				263.00	599.09	571.17	22
Pascua Yaqui	389.00	428.30	196.13	10	1780.00	1382.43	591.45	21
Lake Havasu City	377.00	430.50	293.15	12	819.50	871.23	579.61	30
Flagstaff	479.50	463.50	217.89	10	720.00	831.75	655.08	8
Sunnyslope	240.00	282.33	168.54	3	594.00	773.18	660.87	17
Prescott	535.00	526.55	145.90	11	764.00	912.70	596.00	43
Coolidge	441.00	453.33	200.78	3	362.00	564.58	490.95	26
Mesa	201.50	262.33	129.65	6	369.00	458.39	289.58	28
Southeast Phoenix	258.00	258.00	1.41	2	360.50	560.25	552.65	24
El Mirage/ Surprise	379.00	431.63	177.58	8	413.00	541.31	382.93	29
Blake Foundation	309.50	338.90	92.46	10	439.00	490.22	377.20	36
Marana	228.00	228.00	137.18	2	395.00	380.14	160.98	22
Safford	631.00	498.67	361.17	3	442.00	489.60	251.40	5
Stanfield	285.00	252.40	106.39	5	201.00	201.00	0	1
Apache Junction	221.00	315.80	208.29	10	249.00	250.55	158.09	22
Gila River	767.00	715.60	129.91	5	190.50	190.50	88.39	2



Sites	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Winslow	266.50	265.00	54.84	4	437.00	444.31	249.45	13
Kingman	123.00	187.00	151.50	3	310.00	344.57	192.97	23
Globe/Miami	484.00	411.75	165.29	4	564.00	560.73	273.73	11
Kyrene	366.00	414.13	201.38	8	384.00	510.88	384.14	25
Metro Phoenix	626.00	602.33	170.74	3	474.00	503.87	382.66	23
Tolleson/Avondale	376.00	410.75	169.71	8	476.00	523.26	425.75	34
South Mountain	488.00	470.67	239.18	9	307.00	420.65	331.80	51
Glendale	391.50	391.25	170.15	4	435.00	461.81	320.68	31
Deer Valley	643.50	611.50	213.42	4	444.00	485.10	313.67	31
East/SE Tucson	317.00	248.75	145.98	4	230.00	287.21	151.06	14
SW Tucson	207.00	302.71	227.49	7	526.00	531.61	359.06	23
Bullhead City	287.00	254.00	157.12	3	405.00	414.80	201.26	15
N.W. Phoenix	288.50	288.50	91.22	2	382.00	514.63	543.49	8
Tempe	268.00	239.00	74.84	3	231.00	379.57	381.66	7
Gilbert	311.00	335.38	181.39	8	336.00	380.39	295.06	44
Scottsdale	188.50	327.50	317.39	6	184.00	247.59	193.62	37
West Phoenix	338.00	405.71	233.18	7	243.00	357.77	239.70	31
East Mesa	493.00	479.25	99.46	8	395.00	384.40	164.18	21
Kinlani-Flagstaff	725.00	669.25	241.22	8	1338.00	1181.92	722.37	12
Southwest Phoenix	None				114.00	135.05	97.62	19
Peoria	500.00	46.71	164.93	7	395.00	532.79	528.99	19
Metro Tucson	239.50	239.50	106.77	2	239.50	501.58	517.44	12
Casa Family First	None				None			
Wellspring	878.00	878.00	181.02	2	491.00	592.88	531.47	8
Primero Los Niños	None				174.50	202.83	124.40	12
Sierra Vista Blake	217.00	217.00	0	1	129.00	120.33	28.02	3
<b>Total</b>	<b>358.00</b>	<b>399.80</b>	<b>206.98</b>	<b>315</b>	<b>393.00</b>	<b>561.97</b>	<b>491.94</b>	<b>1235</b>



**Top Four Reasons for Exit by Site - 2007**  
**Percent and number within Site**

Site	Overall (Prenatal and Postnatal Combined)							
	#1 Did Not Respond to Outreach Efforts		#2 Moved Away		#3 Family Refused Further Services		#4 Completed Program	
	%	n	%	n	%	n	%	n
Douglas	33.3%	11	21.2%	7	3.0%	1	12.1%	4
Central Phoenix	44.4%	16	8.3%	3	22.2%	8	0	0
Maryvale	30.0%	9	26.7%	8	13.3%	4	3.3%	1
South Phoenix	55.3%	26	17.0%	8	4.3%	2	0	0
East Valley	34.8%	16	21.7%	10	19.6%	9	2.2%	1
Nogales	40.0%	12	23.3%	7	0	0	26.7%	8
Page	41.7%	5	8.3%	1	16.7%	2	8.3%	1
Casa de los Niños	45.8%	22	12.5%	6	16.7%	8	10.4%	5
CODAC	32.4%	11	14.7%	5	5.9%	2	14.7%	5
La Frontera	17.3%	9	23.1%	12	1.9%	1	23.1%	12
Sierra Vista	29.3%	12	31.7%	13	7.3%	3	9.8%	4
Tuba City	45.5%	5	9.1%	1	18.2%	2	18.2%	2
Verde Valley	28.8%	15	28.8%	15	11.5%	6	5.8%	3
Yuma	13.6%	3	27.3%	6	13.6%	3	0	0
Pascua Yaqui	25.8%	8	19.4%	6	0	0	32.3%	10
Lake Havasu City	21.4%	9	21.4%	9	31.0%	13	11.9%	5
Flagstaff	22.2%	4	27.8%	5	16.7%	3	11.1%	2
Sunnyslope	30.0%	6	5.0%	1	30.0%	6	15.0%	3
Prescott	48.1%	26	18.5%	10	3.7%	2	16.7%	9
Coolidge	17.2%	5	10.3%	3	10.3%	3	6.9%	2
Mesa	37.1%	13	31.4%	11	11.4%	4	0	0
Southeast Phoenix	46.2%	12	15.4%	4	15.4%	4	7.7%	2
El Mirage	51.4%	19	16.2%	6	0	0	2.7%	1
Blake Foundation	26.1%	12	10.9%	5	19.6%	9	4.3%	2
Marana	25.0%	6	16.7%	4	16.7%	4	0	0
Safford	37.5%	3	0	0	37.5%	3	0	0
Stanfield (Pinal)	33.3%	2	50.0%	3	16.7%	1	0	0



Site	Overall (Prenatal and Postnatal Combined)							
	#1 Did Not Respond to Outreach Efforts		#2 Moved Away		#3 Family Refused Further Services		#4 Completed Program	
	%	n	%	n	%	n	%	n
Apache Junction	28.1%	9	28.1%	9	21.9%	7	0	0
Gila River	28.6%	2	0	0	42.9%	3	0	0
Winslow	52.9%	9	5.9%	1	23.5%	4	0	0
Kingman	42.3%	11	11.5%	3	19.2%	5	0	0
Globe/Miami	60.0%	9	33.3%	5	6.7%	1	0	0
Kyrene	37.5%	12	12.5%	4	28.1%	9	3.1%	1
Metro Phoenix	23.1%	6	11.5%	3	23.1%	6	0	0
Tolleson	37.5%	15	7.5%	3	10.0%	4	5.0%	2
South Mountain	57.6%	34	6.8%	4	13.6%	8	1.7%	1
Glendale	42.9%	15	20.0%	7	11.4%	4	2.9%	1
Deer Valley	41.2%	14	23.5%	8	14.7%	5	0	0
East/SE Tucson	22.2%	4	22.2%	4	22.2%	4	0	0
SW Tucson	26.7%	8	30.0%	9	10.0%	3	3.3%	1
Bullhead City	55.6%	10	33.3%	6	11.1%	2	0	0
Northwest Phoenix	30.0%	3	20.0%	2	20.0%	2	0	0
Tempe	33.3%	3	11.1%	1	22.2%	2	0	0
Gilbert	34.6%	18	7.7%	4	32.7%	17	0	0
Scottsdale	39.5%	17	14.0%	6	9.3%	4	0	0
West Phoenix	59.5%	22	13.5%	5	2.7%	1	0	0
East Mesa	62.1%	18	24.1%	7	10.3%	3	0	0
Kinlani-Flagstaff	5.0%	1	40.0%	8	10.0%	2	20.0%	4
Southwest Phoenix	10.5%	2	5.3%	1	84.2%	16	0	0
Peoria	73.1%	19	7.7%	2	3.8%	1	7.7%	2
Metro Tucson	35.7%	5	14.3%	2	7.1%	1	0	0
Casa Family First	NO DATA							
Wellspring	30.0%	3	0	0	30.0%	3	10.0%	1
Primero Los Niños	41.7%	5	50.0%	6	0	0	0	0
Sierra Vista Blake	0	0	75.0%	3	25.0%	1	0	0
<b>Total</b>	<b>37%</b>	<b>571</b>	<b>18.3%</b>	<b>282</b>	<b>14.3%</b>	<b>221</b>	<b>6.2%</b>	<b>95</b>



**Health Insurance by Site at Intake - 2007**  
**Percent and number within Site\***

Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	15.0%	3	80.0%	16	0	0	1.2%	1	96.3%	79	2.4%	2
Central Phoenix	5.6%	1	83.3%	15	11.1%	2	4.5%	4	86.4%	76	8%	7
Maryvale	6.7%	1	73.3%	11	13.3%	2	4.7%	4	88.4%	76	7%	6
South Phoenix	6.7%	1	86.7%	13	6.7%	1	3.1%	3	91.8%	90	5.1%	5
East Valley	11.8%	2	76.5%	13	5.9%	1	1.9%	2	86.9%	93	11.2%	12
Nogales	28.6%	6	66.7%	14	4.8%	1	5.0%	5	80.1%	91	4.0%	4
Page	12.5%	1	87.5%	7	0	0	0	0	100%	37	0	0
Casa de los Niños	3.0%	1	97.0%	32	0	0	2.0%	2	91.9%	91	3.0%	3
CODAC	4.8%	1	81.0%	17	9.5%	2	5.4%	5	87%	80	4.3%	4
La Frontera	2.9%	1	91.4%	32	2.9%	1	3%	3	91%	91	5%	5
Sierra Vista	0	0	85.7%	12	14.3%	2	3.6%	2	83.6%	46	7.3%	4
Tuba City	0	0	94.4%	17	0	0	4.8%	2	92.9%	39	0	0
Verde Valley	8.2%	6	79.5%	58	12.3%	9	2%	1	90%	45	8%	4
Yuma	12.5%	1	87.5%	7	0	0	3.1%	2	93.8%	61	3.1%	2
Pascua Yaqui	0	0	95.5%	42	0	0	0	0	95.9%	47	2%	1
Lake Havasu City	5.9%	2	76.5%	26	14.7%	5	2.4%	2	92.8%	77	4.8%	4
Flagstaff	11.1%	4	80.6%	29	2.8%	1	0	0	77.4%	24	22.6%	7
Sunnyslope	13.6%	3	86.4%	19	0	0	2.7%	2	83.8%	62	12.2%	9
Prescott	8.3%	2	83.3%	20	8.3%	2	0	0	88.5%	100	8%	9
Coolidge	12.5%	1	87.5%	7	0	0	1.2%	1	88.9%	72	9.9%	8
Mesa	9.5%	2	76.2%	16	9.5%	2	3.6%	4	85.7%	96	9.8%	11
Southeast Phoenix	14.3%	2	85.7%	12	0	0	4.4%	4	86.7%	78	8.9%	8
El Mirage	21.4%	3	78.6%	11	0	0	2.2%	2	72.8%	67	22.8%	21
Blake Foundation	8.7%	2	82.6%	19	8.7%	2	3.7%	4	88%	95	7.4%	8
Marana	0	0	80.0%	12	13.3%	2	0	0	89%	73	6.1%	5
Safford	0	0	87.5%	14	6.3%	1	0	0	92%	23	8%	2
Stanfield	10.0%	1	80.0%	8	10.0%	1	10%	1	90%	9	0	0
Apache Junction	9.7%	3	80.6%	25	9.7%	3	2.7%	2	78.7%	59	16.0%	12



Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Gila River	0	0	100%	13	0	0	0	0	100%	8	0	0
Winslow	0	0	100%	10	0	0	0	0	100%	28	0	0
Kingman	10.5%	2	84.2%	16	5.3%	1	1.9%	1	88.5%	46	9.6%	5
Globe/Miami	0	0	100%	13	0	0	0	0	86.4%	19	13.6%	3
Kyrene	11.1%	3	81.5%	22	7.4%	2	0	0	73.9%	51	24.6%	17
Metro Phoenix	25.0%	2	75.0%	6	0	0	4.4%	3	92.6%	63	2.9%	2
Tolleson	12.5%	2	81.3%	136	0	0	6.6%	6	80.2%	73	13.2%	12
South Mountain	9.1%	2	81.8%	18	9.1%	2	3.2%	4	87.1%	108	8.1%	10
Glendale	20.0%	2	70.0%	7	10.0%	1	1.0%	1	86.3%	88	10.8%	11
Deer Valley	20.0%	2	60.0%	6	20.0%	2	4.1%	4	83.7%	82	12.2%	12
East/SE Tucson	4.2%	1	87.5%	21	4.2%	1	1.6%	1	88.7%	55	8.1%	5
SW Tucson	11.8%	2	88.2%	15	0	0	6.1%	5	90.2%	74	3.7%	3
Bullhead City	0	0	93.3%	14	6.7%	1	6.5%	3	82.6%	38	10.9%	5
Northwest Phoenix	0	0	44.4%	4	55.6%	5	2.9%	2	85.7%	60	10.0%	7
Tempe	16.7%	2	83.3%	10	0	0	2.1%	1	89.4%	42	8.5%	4
Gilbert	0	0	97.0%	32	3.0%	1	1.1%	1	75.8%	72	20.0%	19
Scottsdale	0	0	83.3%	15	16.7%	3	1.0%	1	77.7%	80	21.4%	22
West Phoenix	6.7%	1	80.0%	12	13.3%	2	2.3%	2	88.6%	78	9.1%	8
East Mesa	7.4%	2	92.6%	25	0	0	1.2%	1	92.6%	75	4.9%	4
Kinlani-Flagstaff	6.5%	2	93.5%	29	0	0	0	0	80.6%	29	16.7%	6
Southwest Phoenix	0	0	100%	4	0	0	8.5%	5	84.7%	20	6.8%	4
Peoria	5.0%	1	90.0%	18	1.0%	5	0	0	81.7%	58	16.9%	12
Metro Tucson	0	0	100%	13	0	0	5.3%	3	86.0%	48	7.0%	4
Casa Family First	25.0%	3	58.3%	7	8.3%	1	0	0	90.6%	29	9.4%	3
Wellspring	34.6%	9	61.5%	16	3.8%	1	2.6%	1	94.7%	36	2.6%	1
Primero Los Niños	40.0%	2	60.0%	3	0	0	6.3%	3	93.8%	45	0	0
Sierra Vista Blake	9.1%	1	81.8%	9	9.1%	1	7.7%	2	80.8%	21	11.5%	3
<b>Total</b>	<b>8.5%</b>	<b>91</b>	<b>83.8%</b>	<b>895</b>	<b>6.1%</b>	<b>65</b>	<b>2.8%</b>	<b>108</b>	<b>87.0%</b>	<b>3334</b>	<b>9.0%</b>	<b>345</b>

**\*\*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  
2007 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	35.0% (7)	65.0% (13)	0	39.0% (32)	56.1% (46)	4.9% (4)
Central Phoenix	16.7% (3)	83.3% (15)	0	40.7% (37)	57.1% (52)	2.2% (2)
Maryvale	35.3% (6)	58.8% (10)	5.9% (1)	31.0% (27)	69.0% (60)	0
South Phoenix	26.7% (4)	60.0% (9)	13.3% (2)	40.4% (40)	56.6% (56)	3.0% (3)
East Valley	33.3% (6)	66.7% (12)	0	45.9% (50)	47.7% (52)	6.4% (7)
Nogales	36.4% (8)	59.1% (13)	4.5% (1)	51.9% (55)	43.4% (46)	4.7% (5)
Page	0	100% (8)	0	24.3% (9)	75.7% (28)	0
Casa de los Niños	30.3% (10)	69.7% (23)	0	31.0% (31)	67.0% (67)	2.0% (2)
CODAC	39.1% (9)	60.9% (14)	0	36.2% (34)	63.8% (60)	0
La Frontera	45.9% (17)	54.1% (20)	0	38.0% (38)	60.0% (60)	2.0% (2)
Sierra Vista	38.9% (7)	61.1% (11)	0	33.8% (23)	63.2% (43)	2.9% (2)
Tuba City	27.8% (5)	72.2% (13)	0	42.9% (18)	52.4% (22)	4.8% (2)
Verde Valley	13.7% (10)	83.6% (61)	2.7% (2)	36.7% (18)	63.3% (31)	0
Yuma	66.7% (6)	33.3% (3)	0	34.8% (23)	65.2% (43)	0
Pascua Yaqui	14.9% (7)	85.1% (40)	0	10.0% (5)	90.0% (4)	0
Lake Havasu City	22.9% (8)	74.3% (26)	2.9% (1)	34.1% (28)	57.3% (47)	8.5% (7)
Flagstaff	27.8% (10)	69.4% (25)	2.8% (1)	14.7% (5)	85.3% (29)	0
Sunnyslope	34.8% (8)	60.9% (14)	4.3% (1)	31.1% (23)	67.6% (50)	1.4% (1)
Prescott	50.0% (12)	45.8% (11)	4.2% (1)	50.4% (61)	47.1% (57)	2.5% (3)
Coolidge	33.3% (3)	66.7% (6)	0	51.2% (42)	48.8% (40)	0
Mesa	31.8% (7)	63.6% (14)	4.5% (1)	31.9% (36)	64.6% (73)	3.5% (4)
Southeast Phoenix	42.9% (6)	57.1% (8)	0	41.8% (38)	58.2% (53)	0
El Mirage	50.0% (7)	42.9% (6)	7.1% (1)	27.2% (25)	68.5% (63)	4.3% (4)
Blake Foundation	29.2% (7)	70.8% (17)	0	34.9% (37)	60.4% (64)	4.7% (5)
Marana	13.3% (2)	86.7% (13)	0	30.1% (25)	67.5% (56)	2.4% (2)
Safford	10.0% (2)	90.0% (18)	0	10.7% (3)	89.3% (5)	0
Stanfield	40.4% (4)	60.0% (6)	0	54.5% (6)	45.5% (5)	0



Site	PRENATAL			POSTNATAL		
	Yes	No	Unknown	Yes	No	Unknown
Apache Junction	38.7% (12)	58.1% (18)	3.2% (1)	48.0% (36)	50.7% (38)	1.3% (1)
Gila River	53.8% (7)	46.2% (6)	0	37.5% (3)	62.5% (5)	0
Winslow	45.5% (5)	54.5% (6)	0	42.9% (12)	57.1% (16)	0
Kingman	52.6% (10)	47.4% (9)	0	15.7% (8)	64.7% (33)	19.6% (10)
Globe/Miami	38.5% (5)	61.5% (8)	0	26.1% (6)	65.2% (15)	8.7% (2)
Kyrene	48.1% (13)	48.1% (13)	3.7% (1)	35.2% (25)	57.7% (41)	7.0% (5)
Metro Phoenix	25.0% (2)	62.5% (5)	12.5% (1)	33.3% (23)	63.8% (44)	2.9% (2)
Tolleson	40.0% (6)	60.0% (9)	0	39.1% (36)	56.5% (52)	4.3% (4)
South Mountain	52.2% (12)	43.5% (10)	4.3% (1)	37.9% (47)	62.1% (77)	0
Glendale	40.0% (4)	50.0% (5)	10.0% (1)	29.4% (30)	69.6% (71)	1.0% (1)
Deer Valley	30.0% (3)	60.0% (6)	10.0% (1)	27.8% (27)	68.0% (66)	4.1% (4)
East/SE Tucson	20.0% (5)	80.0% (20)	0	30.6% (19)	67.7% (42)	1.6% (1)
SW Tucson	52.9% (9)	47.1% (8)	0	39.0% (32)	61.0% (50)	0
Bullhead City	26.7% (4)	73.3% (11)	0	27.7% (13)	68.1% (32)	4.3% (2)
Northwest Phoenix	33.3% (3)	55.6% (5)	11.1% (1)	45.7% (32)	51.4% (36)	2.9% (2)
Tempe	41.7% (5)	58.3% (7)	0	35.4% (17)	58.3% (28)	6.3% (3)
Gilbert	33.3% (12)	63.9% (23)	2.8% (1)	33.7% (31)	62.0% (57)	4.3% (4)
Scottsdale	22.2% (4)	72.2% (13)	5.6% (1)	36.5% (38)	57.7% (60)	5.8% (6)
West Phoenix	33.3% (5)	60.0% (9)	6.7% (1)	32.2% (29)	65.6% (59)	2.2% (2)
East Mesa	51.7% (15)	44.8% (13)	3.4% (1)	50.0% (41)	41.5% (34)	8.5% (7)
Kinlani-Flagstaff	27.3% (9)	72.7% (24)	0	24.3% (9)	75.7% (28)	0
Southwest Phoenix	25.0% (1)	75.0% (3)	0	45.0% (27)	51.7% (31)	3.3% (2)
Peoria	45.0% (9)	55.0% (11)	0	27.1% (19)	70.0% (49)	2.9% (2)
Metro Tucson	23.1% (3)	76.9% (10)	0	27.1% (16)	72.9% (43)	0
Casa Family First	30.8% (4)	69.2% (9)	0	37.5% (12)	62.5% (20)	0
Wellspring	35.7% (10)	57.1% (16)	7.1% (2)	35.0% (14)	65.0% (26)	0
Primero Los Niños	66.7% (4)	33.3% (2)	0	43.8% (21)	56.3% (27)	0
Sierra Vista Blake	46.7% (7)	40.0% (6)	13.3% (2)	38.7% (12)	54.8% (17)	6.5% (2)
<b>Total</b>	<b>32.0% (245)</b>	<b>65.6% (502)</b>	<b>2.4% (18)</b>	<b>35.9% (1135)</b>	<b>60.86% (1924)</b>	<b>3.3% (104)</b>



**PRENATAL Ethnicity of Mother by Site - 2007**  
**Percent and number ( ) within Site**

Site	Mixed/Other		Caucasian/White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	5.0%	1	10.0%	2	80.0%	16	0	0	0	0	5.0%	1
Central Phoenix	5.6%	1	38.9%	7	44.4%	8	11.1%	2	0	0	0	0
Maryvale	5.9%	1	23.5%	4	70.6%	12	0	0	0	0	0	0
South Phoenix	6.7%	1	20.0%	3	46.7%	7	26.7%	4	0	0	0	0
East Valley	0	0	33.6%	6	50.0%	9	16.7%	3	0	0	0	0
Nogales	0	0	8.7%	2	82.6%	19	8.7%	2	0	0	0	0
Page	0	0	16.7%	1	0	0	0	0	0	0	83.5%	5
Casa de los Niños	8.8%	3	11.8%	4	70.6%	24	8.8%	3	0	0	0	0
CODAC	13.6%	3	18.2%	4	63.6%	14	4.5%	1	0	0	0	0
La Frontera	0	0	16.2%	6	70.3%	26	10.8%	4	0	0	2.7%	1
Sierra Vista	0	0	44.4%	8	44.4%	8	11.1%	2	0	0	0	0
Tuba City	5.6%	1	0	0	0	0	11.1%	2	0	0	83.3%	15
Verde Valley	2.7%	2	63.0%	46	31.5%	23	0	0	0	0	2.7%	2
Yuma	0	0	12.5%	1	75.0%	6	12.5%	1	0	0	0	0
Pascua Yaqui	13.3%	6	0	0	4.4%	2	0	0	2.2%	1	80.0%	36
Lake Havasu City	5.7%	2	71.4%	25	20.0%	7	0	0	0	0	2.9%	1
Flagstaff	2.7%	1	37.8%	14	27.0%	10	5.4%	2	0	0	27.0%	10
Sunnyslope	13.6%	3	31.8%	7	50.0%	11	4.5%	1	0	0	0	0
Prescott	4.2%	1	62.5%	15	33.3%	8	0	0	0	0	0	0
Coolidge	11.1%	1	22.2%	2	66.7%	6	0	0	0	0	0	0
Mesa	0	0	36.4%	8	59.1%	13	0	0	0	0	4.5%	1
Southeast Phoenix	13.3%	2	6.7%	1	53.8%	8	20.0%	3	0	0	6.7%	1
El Mirage	14.3%	2	7.1%	1	71.4%	10	7.1%	1	0	0	0	0
Blake Foundation	8.3%	2	4.2%	1	70.8%	17	8.3%	2	4.2%	1	4.2%	1
Marana	20.0%	3	33.3%	5	46.7%	7	0	0	0	0	0	0
Safford	5.0%	1	45.0%	9	45.0%	9	5.0%	1	0	0	0	0
Stanfield	9.1%	1	36.4%	4	18.2%	2	18.2%	2	0	0	18.2%	2
Apache Junction	3.2%	1	71.0%	22	19.4%	6	3.2%	1	3.2%	1	0	0
Gila River	0	0	0	0	0	0	0	0	0	0	100%	13
Winslow	18.2%	2	27.3%	3	36.4%	4	0	0	0	0	18.2%	2



Site	Mixed/Other		Caucasian/White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Kingman	5.3%	1	84.2%	16	5.3%	1	0	0	0	0	5.3%	1
Globe/Miami	0	0	33.3%	4	33.3%	4	0	0	0	0	33.3%	4
Kyrene	0	0	14.8%	4	63%	17	0	0	0	0	22.2%	6
Metro Phoenix	12.5%	1	25.0%	2	62.5%	5	0	0	0	0	0	0
Tolleson	0	0	6.3%	1	87.5%	14	0	0	0	0	6.3%	1
South Mountain	8.7%	2	8.7%	2	82.6%	19	0	0	0	0	0	0
Glendale	0	0	40.0%	4	20.0%	2	40.0%	4	0	0	0	0
Deer Valley	10.0%	1	40.0%	4	50.0%	5	0	0	0	0	0	0
East/SE Tucson	4.0%	1	36.0%	9	24.0%	6	20.0%	5	4.0%	1	12.0%	3
SW Tucson	5.9%	1	5.9%	2	88.2%	15	0	0	0	0	0	0
Bullhead City	7.1%	1	78.6%	11	7.1%	1	7.1%	1	0	0	0	0
Northwest Phoenix	33.3%	3	33.3%	3	22.2%	2	11.1%	1	0	0	0	0
Tempe	33.3%	4	33.3%	4	16.7%	2	16.7%	2	0	0	0	0
Gilbert	11.1%	4	63.9%	23	16.7%	6	2.8%	1	0	0	5.6%	2
Scottsdale	0	0	38.9%	7	33.3%	6	11.1%	2	5.6%	1	11.1%	2
West Phoenix	0	0	20.0%	3	73.3%	11	6.7%	1	0	0	0	0
East Mesa	3.4%	1	31.0%	9	65.5%	19	0	0	0	0	0	0
Kinlani-Flagstaff	0	0	21.2%	7	48.5%	16	0	0	0	0	30.3%	10
Southwest Phoenix	25.0%	1	0	0	75.0%	3	0	0	0	0	0	0
Peoria	5.0%	1	15.0%	3	60.0%	12	15.0%	3	5.0%	1	0	0
Metro Tucson	0	0	15.4%	2	84.6%	11	0	0	0	0	0	0
Casa Family First	0	0	25.0%	3	75.0%	9	0	0	0	0	0	0
Wellspring	3.6%	1	14.3%	4	53.6%	15	3.6%	1	0	0	25.0%	7
Primero Los Niños	0	0	16.7%	1	83.3%	5	0	0	0	0	0	0
Sierra Vista Blake	0	0	73.3%	11	13.3%	2	6.7%	1	6.7%	1	0	0
<b>Total</b>	<b>5.8%</b>	<b>64</b>	<b>31.6%</b>	<b>349</b>	<b>45.2%</b>	<b>500</b>	<b>5.3%</b>	<b>59</b>	<b>0.6%</b>	<b>7</b>	<b>11.5%</b>	<b>127</b>



**POSTNATAL Ethnicity of Mother by Site - 2007**  
**(Percent and number within Site)**

Site	Mixed/Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	1.2%	1	11.0%	9	85.4%	70	1.2%	1	1.2%	1	0	0
Central Phoenix	3.3%	3	15.4%	14	72.5%	66	5.5%	5	0	0	3.3%	3
Maryvale	0	0	13.6%	12	75.0%	66	6.8%	6	1.1%	1	3.4%	3
South Phoenix	7.1%	7	15.3%	15	66.3%	65	7.1%	7	0	0	4.1%	4
East Valley	0.9%	1	33.3%	36	53.7%	58	8.3%	9	0.9%	1	2.8%	3
Nogales	0	0	0.9%	1	98.1%	104	0	0	0	0	0.9%	1
Page	2.9%	1	2.9%	1	0	0	0	0	0	0	94.3%	33
Casa de los Niños	3.1%	3	18.6%	18	70.1%	68	4.1%	4	1.0%	1	3.1%	3
CODAC	6.4%	6	18.1%	17	71.3%	67	2.1%	2	0	0	2.1%	2
La Frontera	9.0%	9	16.0%	16	66.0%	66	6.0%	6	0	0	3.0%	3
Sierra Vista	7.2%	5	55.1%	38	33.3%	23	4.3%	3	0	0	0	0
Tuba City	2.4%	1	0	0	0	0	0	0	0	0	97.6%	41
Verde Valley	0	0	52.0%	26	40.0%	20	2.0%	1	0	0	6.0%	3
Yuma	1.9%	1	5.7%	3	86.8%	46	3.8%	2	1.9%	1	0	0
Pascua Yaqui	24.0%	12	2.0%	1	8.0%	4	2.0%	1	2.0%	1	62.0%	31
Lake Havasu City	6.0%	5	44.6%	37	43.4%	36	1.2%	1	0	0	4.8%	4
Flagstaff	6.1%	2	36.4%	12	30.3%	10	3.0%	1	0	0	24.2%	8
Sunnyslope	8.1%	6	32.4%	24	51.1%	40	4.1%	3	0	0	1.4%	1
Prescott	0.8%	1	43.0%	52	52.1%	63	0.8%	1	1.7%	2	1.7%	2
Coolidge	0	0	30.4%	24	57.0%	45	6.3%	5	0	0	6.3%	5
Mesa	5.3%	6	33.6%	38	55.8%	63	2.7%	3	0.9%	1	1.8%	2
Southeast Phoenix	1.1%	1	13.5%	12	73.0%	65	9.0%	8	1.1%	1	2.2%	2
El Mirage	11.0%	10	36.3%	33	42.9%	39	8.8%	8	1.1%	1	0	0
Blake Foundation	4.8%	5	23.8%	25	62.9%	66	6.7%	7	0	0	1.9%	2
Marana	8.4%	7	34.9%	29	49.4%	41	4.8%	4	1.2%	1	1.2%	1
Safford	0	0	73.1%	19	19.2%	5	7.7%	2	0	0	0	0
Stanfield	0	0	10.0%	1	50.0%	5	20.0%	2	0	0	20.0%	2
Apache Junction	1.4%	1	66.2%	47	26.8%	19	4.2%	3	0	0	1.4%	1
Gila River	0	0	0	0	0	0	0	0	0	0	100%	8
Winslow	7.1%	2	7.1%	2	17.9%	5	7.1%	2	0	0	60.7%	17



Site	Mixed/Other		Caucasian/White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Kingman	11.1%	5	75.6%	34	11.1%	5	0	0	2.2%	1	0	0
Globe/Miami	5.0%	1	55.0%	11	10.0%	2	0	0	0	0	30.0%	6
Kyrene	2.8%	2	21.1%	15	63.4%	45	4.2%	3	1.4%	1	7.0%	5
Metro Phoenix	4.3%	3	18.8%	13	62.3%	43	13.0%	9	0	0	1.4%	1
Tolleson	3.3%	3	13.0%	12	67.4%	62	7.6%	7	0	0	8.7%	8
South Mountain	2.4%	3	12.1%	15	79.0%	98	4.8%	6	0.8%	1	0.8%	1
Glendale	7.0%	7	29.0%	29	50.0%	50	11.0%	11	1.0%	1	2.0%	2
Deer Valley	6.2%	6	36.1%	35	48.5%	47	4.1%	4	1.0%	1	4.1%	4
East/SE Tucson	9.8%	6	41.0%	25	42.6%	26	6.6%	4	0	0	0	0
SW Tucson	2.5%	2	8.9%	7	84.8%	67	2.5%	2	0	0	1.3%	1
Bullhead City	2.2%	1	68.9%	31	24.4%	11	4.4%	2	0	0	0	0
Northwest Phoenix	2.9%	2	41.4%	29	44.3%	31	5.7%	4	0	0	5.7%	4
Tempe	8.5%	4	25.5%	12	51.1%	24	12.8%	6	0	0	2.1%	1
Gilbert	9.5%	9	53.7%	51	26.3%	25	3.2%	3	2.1%	2	5.3%	5
Scottsdale	5.8%	6	47.1%	49	34.6%	36	5.8%	6	1.0%	1	5.8%	6
West Phoenix	5.6%	5	10.1%	9	74.2%	66	9.0%	8	0	0	1.1%	1
East Mesa	0	0	20.7%	17	75.6%	62	1.2%	1	0	0	2.4%	2
Kinlani-Flagstaff	2.7%	1	18.9%	7	32.4%	12	2.7%	1	0	0	43.2%	16
Southwest Phoenix	1.7%	1	13.3%	8	71.7%	43	10.0%	6	0	0	3.3%	2
Peoria	4.3%	3	34.3%	24	50.0%	35	7.1%	5	0	0	4.3%	3
Metro Tucson	5.2%	3	25.9%	15	56.9%	33	8.6%	5	3.4%	2	0	0
Casa Family First	9.4%	3	12.5%	4	65.6%	21	6.3%	2	3.1%	1	3.1%	1
Wellspring	0	0	33.3%	13	41.0%	16	0	0	2.6%	1	23.1%	9
Primero Los Niños	0	0	0	0	97.2%	35	0	0	2.8%	1	0	0
Sierra Vista Blake	3.2%	1	54.8%	17	29.0%	9	12.9%	4	0	0	0	0
<b>Total</b>	<b>5.3%</b>	<b>203</b>	<b>27.3%</b>	<b>1044</b>	<b>55.6%</b>	<b>2129</b>	<b>5.1%</b>	<b>196</b>	<b>0.7%</b>	<b>25</b>	<b>6.9%</b>	<b>263</b>



**Gestational Age by Site - 2007**  
**(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	83.3%	25	16.7%	5
Central Phoenix	100%	6	0	0	77.0%	57	23.0%	17
Maryvale	60.0%	6	40.0%	4	72.7%	48	27.3%	18
South Phoenix	75.0%	3	25.0%	1	76.8%	63	23.2%	19
East Valley	100%	4	0	0	74.2%	66	25.8%	23
Nogales	100%	10	0	0	80.4%	45	19.6%	11
Page	100%	4	0	0	100%	35	0	0
Casa de los Niños	93.3%	14	6.7%	1	84.4%	65	15.6%	12
CODAC	83.3%	10	16.7%	2	87.0%	60	13.0%	9
La Frontera	95.0%	19	5.0%	1	82.8%	72	17.2%	15
Sierra Vista	80.0%	4	20.0%	1	90.6%	48	9.4%	5
Tuba City	90.9%	10	9.1%	1	82.9%	29	17.1%	6
Verde Valley	89.4%	42	10.6%	5	87.8%	43	12.2%	6
Yuma	66.7%	2	33.3%	1	95.8%	46	4.2%	2
Pascua Yaqui	80.0%	4	20.0%	1	91.4%	32	8.6%	3
Lake Havasu City	93.3%	14	6.7%	1	87.3%	69	12.7%	10
Flagstaff	88.2%	15	11.8%	2	59.1%	13	40.9%	9
Sunnyslope	50.0%	3	50.0%	3	67.7%	44	32.3%	21
Prescott	83.3%	15	16.7%	3	88.9%	96	11.1%	12
Coolidge	100%	3	0	0	86.4%	51	13.6%	8
Mesa	75.0%	9	25.0%	3	68.4%	65	31.6%	30
Southeast Phoenix	85.7%	6	14.3%	1	77.3%	58	22.7%	17
El Mirage	100%	4	0	0	79.7%	59	20.3%	15
Blake Foundation	86.7%	13	13.3%	2	83.5%	71	16.5%	14
Marana	83.3%	5	16.7%	1	74.6%	50	25.4%	17
Safford	85.7%	6	14.3%	1	100%	7	0	0
Stanfield	100%	6	0	0	80.0%	8	20.0%	2



Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Apache Junction	81.8%	9	18.2%	2	80.7%	46	19.3%	11
Gila River	88.9%	8	11.1%	1	100%	7	0	0
Winslow	100%	4	0	0	86.4%	19	13.6%	3
Kingman	100%	2	0	0	90.3%	28	9.7%	3
Globe/Miami	50.0%	2	50.0%	2	76.5%	13	23.5%	4
Kyrene	81.8%	9	18.2%	2	72.7%	40	27.3%	15
Metro Phoenix	100%	2	0	0	75.5%	40	24.5%	13
Tolleson	57.1%	4	42.9%	3	83.1%	59	16.9%	12
South Mountain	90.9%	10	9.1%	1	83.8%	88	16.2%	17
Glendale	60.0%	3	40.0%	2	74.3%	55	25.7%	19
Deer Valley	100%	3	0	0	78.6%	55	21.4%	15
East/SE Tucson	58.3%	7	41.7%	5	75.0%	30	25.0%	10
SW Tucson	60.0%	3	40.0%	2	90.1%	64	9.9%	7
Bullhead City	100%	1	0	0	84.6%	22	15.4%	4
Northwest Phoenix	40.0%	2	60.0%	3	69.5%	41	30.5%	18
Tempe	100%	2	0	0	81.0%	34	19.0%	8
Gilbert	74.1%	20	25.9%	7	65.8%	52	34.2%	27
Scottsdale	60.0%	3	40.0%	2	77.4%	65	22.6%	19
West Phoenix	91.7%	11	8.3%	1	75.0%	51	25.0%	17
East Mesa	78.6%	11	21.4%	3	66.2%	45	33.8%	23
Kinlani-Flagstaff	75.0%	12	25.0%	4	100%	24	0	0
Southwest Phoenix	50.0%	1	50.0%	1	84.3%	43	15.7%	8
Peoria	80.0%	4	20.0%	1	71.4%	45	28.6%	18
Metro Tucson	50.0%	3	50.0%	3	86.0%	43	14.0%	7
Casa Family First	100%	1	0	0	75.0%	21	25.0%	7
Wellspring	93.8%	15	6.3%	1	95.2%	20	4.8%	1
Primero Los Niños	100%	3	0	0	94.3%	33	5.7%	2
Sierra Vista Blake	100%	6	0	0	89.7%	26	10.3%	3
<b>Total</b>	<b>83.1%</b>	<b>399</b>	<b>16.9%</b>	<b>81</b>	<b>80.3%</b>	<b>2434</b>	<b>19.7%</b>	<b>597</b>



**Low Birth Weight by Site - 2007**  
**(Number and Percent within Site)**  
*Did the child have low birth weight?*  
**(less than 2500 grams, 88 ounces or 5.5 pounds)**

	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
<b>Douglas</b>	100%	2	0	0	90.0%	72	10.0%	8
<b>Central Phoenix</b>	100%	6	0	0	80.0%	72	20.0%	18
<b>Maryvale</b>	81.8%	9	18.2%	2	79.5%	70	20.5%	18
<b>South Phoenix</b>	80.0%	4	20.0%	1	77.6%	76	22.4%	22
<b>East Valley</b>	100%	3	0	0	81.9%	86	18.1%	19
<b>Nogales</b>	85.7%	12	14.3%	2	92.4%	97	7.6%	8
<b>Page</b>	60.0%	3	40.0%	2	94.6%	35	5.4%	2
<b>Casa de los Niños</b>	87.5%	14	12.5%	2	90.6%	87	9.4%	9
<b>CODAC</b>	87.5%	14	12.5%	2	91.1%	82	8.9%	8
<b>La Frontera</b>	95.5%	21	4.5%	1	85.9%	85	14.1%	14
<b>Sierra Vista</b>	92.9%	13	7.1%	1	88.4%	61	11.6%	8
<b>Tuba City</b>	80.0%	12	20.0%	3	90.2%	37	9.8%	4
<b>Verde Valley</b>	97.9%	46	2.1%	1	82.0%	41	18.0%	9
<b>Yuma</b>	100%	5	0	0	96.9%	63	3.1%	2
<b>Pascua Yaqui</b>	81.8%	9	18.2%	2	93.8%	45	6.3%	3
<b>Lake Havasu City</b>	95.8%	23	4.2%	1	91.6%	76	8.4%	7
<b>Flagstaff</b>	93.3%	14	6.7%	1	66.7%	22	33.3%	11
<b>Sunnyslope</b>	71.4%	5	28.6%	2	79.5%	58	20.5%	15
<b>Prescott</b>	81.0%	17	19.0%	4	88.5%	108	11.5%	14
<b>Coolidge</b>	100%	5	0	0	90.0%	72	10.0%	8
<b>Mesa</b>	75.0%	9	25.0%	3	80.5%	91	19.5%	22
<b>Southeast Phoenix</b>	100%	9	0	0	83.0%	73	17.0%	15
<b>El Mirage</b>	100%	8	0	0	86.8%	79	13.2%	12
<b>Blake Foundation</b>	87.5%	14	12.5%	2	85.6%	898	14.4%	15
<b>Marana</b>	57.1%	4	42.9%	3	89.0%	73	11.0%	9
<b>Safford</b>	75.0%	9	25.0%	3	82.1%	23	17.9%	5



	PRENATAL				POSTNATAL			
	No	Yes	No	Yes	No	Yes	No	Yes
<b>Stanfield</b>	100%	6	0	0	90.0%	9	10.0%	1
<b>Apache Junction</b>	100%	13	0	0	86.7%	65	13.3%	10
<b>Gila River</b>	90.9%	10	9.1%	1	100%	8	0	0
<b>Winslow</b>	100%	4	0	0	92.9%	26	7.1%	2
<b>Kingman</b>	100%	4	0	0	91.5%	43	8.5%	4
<b>Globe/Miami</b>	80.0%	4	20.0%	1	90.0%	18	10.0%	2
<b>Kyrene</b>	93.8%	15	6.3%	1	84.3%	59	15.7%	11
<b>Metro Phoenix</b>	100%	3	0	0	79.7%	55	20.3%	14
<b>Tolleson</b>	71.4%	5	28.6%	2	82.4%	75	17.6%	16
<b>South Mountain</b>	90.9%	10	9.1%	1	83.7%	103	16.3%	20
<b>Glendale</b>	60.0%	3	40.0%	2	82.0%	82	18.0%	18
<b>Deer Valley</b>	100%	3	0	0	81.4%	79	18.6%	18
<b>East/SE Tucson</b>	84.6%	11	15.4%	2	81.0%	47	19.0%	11
<b>SW Tucson</b>	80.0%	8	20.0%	2	88.9%	72	11.1%	9
<b>Bullhead City</b>	100%	6	0	0	84.2%	32	15.8%	6
<b>Northwest Phoenix</b>	80.0%	4	20.0%	1	75.7%	53	24.3%	17
<b>Tempe</b>	75.0%	3	25.0%	1	85.4%	41	14.6%	1
<b>Gilbert</b>	70.4%	19	29.6%	8	79.8%	75	20.2%	19
<b>Scottsdale</b>	77.8%	7	22.2%	2	82.4%	84	17.6%	18
<b>West Phoenix</b>	84.6%	11	15.4%	2	81.8%	72	18.2%	16
<b>East Mesa</b>	85.7%	12	14.3%	2	70.5%	55	29.5%	23
<b>Kinlani-Flagstaff</b>	100%	20	0	0	91.7%	33	8.3%	3
<b>Southwest Phoenix</b>	66.7%	2	33.3%	1	90.0%	54	10.0%	6
<b>Peoria</b>	100%	7	0	0	76.8%	53	23.2%	16
<b>Metro Tucson</b>	66.7%	4	33.3%	2	94.6%	53	5.4%	3
<b>Casa Family First</b>	100%	3	0	0	77.4%	24	22.6%	7
<b>Wellspring</b>	88.9%	16	11.1%	2	82.5%	33	17.5%	7
<b>Primero Los Niños</b>	100%	3	0	0	95.8%	46	4.2%	2
<b>Sierra Vista Blake</b>	100%	8	0	0	90.3%	28	9.7%	3
<b>Total</b>	87.9%	514	12.1%	71	85.0%	3250	15.0%	574



### Yearly Income by Site – 2007

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Douglas	\$3,600	17	\$8,220	73
Central Phoenix	\$9,288	11	\$12,000	62
Maryvale	\$16,040	12	\$13,782	48
South Phoenix	\$9,600	8	\$13,920	56
East Valley	\$14,400	13	\$14,400	63
Nogales	\$10,400	17	\$10,800	90
Page	\$4,320	7	\$10,800	33
Casa de los Niños	\$14,400	25	\$12,000	79
CODAC	\$5,892	15	\$12,000	80
La Frontera	\$12,760	32	\$10,068	83
Sierra Vista	\$7,044	15	\$5,070	58
Tuba City	\$12,000	9	\$9,300	21
Verde Valley	\$12,000	63	\$12,000	46
Yuma	\$5,200	6	\$8,400	53
Pascua Yaqui	\$8,400	36	\$6,870	48
Lake Havasu City	\$21,855	32	\$19,200	75
Flagstaff	\$12,000	35	\$16,200	32
Sunnyslope	\$10,000	16	\$14,400	49
Prescott	\$16,800	11	\$18,000	33
Coolidge	\$4,164	1	\$7,680	45
Mesa	\$20,800	16	\$12,600	70
Southeast Phoenix	\$15,270	10	\$11,592	55
El Mirage	\$20,400	4	\$18,000	60
Blake Foundation	\$13,200	19	\$13,100	84
Marana	\$19,200	11	\$14,400	60
Safford	\$12,600	14	\$11,400	24
Stanfield	\$16,800	5	\$6,600	6



Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Apache Junction	\$13,200	24	\$16,116	63
Gila River	\$13,200	7	\$3,240	3
Winslow	\$9,600	10	\$7,920	25
Kingman	\$16,800	7	\$14,400	27
Globe/Miami	\$10,800	9	\$6,700	12
Kyrene	\$19,200	17	\$16,800	41
Metro Phoenix	\$22,800	4	\$10,200	44
Tolleson	\$10,800	11	\$15,600	65
South Mountain	\$15,000	16	\$13,000	75
Glendale	\$7,800	5	\$15,600	65
Deer Valley	\$17,780	8	\$14,400	61
East/SE Tucson	\$14,300	50	\$18,576	48
SW Tucson	\$9,600	16	\$13,100	68
Bullhead City	\$12,000	7	\$12,000	25
Northwest Phoenix	\$18,720	3	\$15,600	41
Tempe	\$4,980	7	\$14,400	29
Gilbert	\$6,148	14	\$12,900	50
Scottsdale	\$15,000	10	\$15,300	44
West Phoenix	\$21,600	13	\$16,720	56
East Mesa	\$11,400	20	\$16,000	55
Kinlani-Flagstaff	\$9,000	29	\$14,400	34
Southwest Phoenix	\$5,082	4	\$14,400	38
Peoria	\$14,400	11	\$20,400	50
Metro Tucson	\$14,400	11	\$11,400	50
Casa Family First	\$14,850	10	\$13,200	21
Wellspring	\$12,000	23	\$8,400	35
Primero Los Niños	\$9,000	2	\$9,600	35
Sierra Vista Blake	\$5,748	12	\$11,000	27
<b>Total</b>	<b>\$12,000</b>	<b>789</b>	<b>\$13,000</b>	<b>2673</b>



### Parent Survey Score by Site - 2007

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	38.75	55.0%	11	37.38	43.9%	36
Central Phoenix	55.28	88.9%	16	43.85	70.3%	64
Maryvale	49.12	82.4%	14	43.92	59.1%	52
South Phoenix	57.00	86.7%	13	44.95	69.7%	69
East Valley	48.06	72.2%	13	41.70	61.5%	67
Nogales	36.96	30.4%	7	35.75	38.7%	41
Page	40.00	62.5%	5	31.08	18.9%	7
Casa de los Niños	41.62	55.9%	19	39.10	48.0%	48
CODAC	42.61	60.9%	14	39.95	62.8%	59
La Frontera	43.24	62.2%	23	40.00	53.0%	53
Sierra Vista	42.78	61.1%	11	38.31	44.9%	31
Tuba City	41.39	66.7%	12	30.36	33.3%	14
Verde Valley	38.49	46.6%	34	35.59	37.3%	19
Yuma	38.33	44.4%	4	32.69	25.4%	17
Pascua Yaqui	32.66	29.8%	14	33.10	28.0%	14
Lake Havasu City	49.57	71.4%	25	38.61	47.0%	39
Flagstaff	41.08	51.4%	19	39.41	52.9%	18
Sunnyslope	45.22	52.2%	12	41.67	60.0%	45
Prescott	45.42	70.8%	17	39.63	50.8%	62
Coolidge	39.44	44.4%	4	36.28	41.5%	34
Mesa	47.73	72.7%	16	42.63	57.9%	66
Southeast Phoenix	38.33	46.7%	7	43.13	59.3%	54
El Mirage	43.93	71.4%	10	39.35	54.3%	50
Blake Foundation	42.29	58.3%	14	40.42	48.1%	52
Marana	41.00	53.3%	8	37.47	48.2%	40
Safford	31.25	30.0%	6	20.89	14.3%	4
Stanfield	38.18	54.5%	6	34.55	18.2%	2
Apache Junction	50.16	80.6%	24	51.13	77.3%	58



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
Gila River	40.00	46.2%	6	32.50	25.0%	2
Winslow	34.55	45.5%	5	34.82	46.4%	13
Kingman	53.68	73.7%	14	42.55	60.4%	32
Globe/Miami	32.31	53.8%	7	31.43	39.1%	9
Kyrene	39.07	48.1%	13	40.77	59.2%	42
Metro Phoenix	41.25	62.5%	5	45.43	62.3%	43
Tolleson	39.06	50.0%	8	40.43	48.9%	45
South Mountain	38.91	56.5%	13	44.72	68.5%	85
Glendale	56.50	90.0%	9	43.33	59.8%	61
Deer Valley	44.00	70.0%	7	41.30	58.2%	57
East/SE Tucson	43.00	60.0%	15	43.55	58.1%	36
SW Tucson	36.18	47.1%	8	37.07	46.3%	38
Bullhead City	53.00	93.3%	14	42.55	48.9%	23
Northwest Phoenix	43.89	55.6%	5	46.93	68.6%	48
Tempe	54.58	83.3%	10	46.56	72.9%	35
Gilbert	56.11	88.9%	32	43.26	67.4%	64
Scottsdale	51.39	77.8%	14	47.55	75.0%	78
West Phoenix	44.67	60.0%	9	41.33	54.4%	49
East Mesa	49.66	75.9%	22	43.35	58.5%	48
Kinlani-Flagstaff	46.52	72.7%	24	39.86	51.4%	19
Southwest Phoenix	57.50	100%	4	49.33	83.3%	50
Peoria	41.25	50.0%	10	44.51	67.6%	48
Metro Tucson	41.54	53.8%	7	42.80	61.0%	36
Casa Family First	45.00	69.2%	9	37.81	46.9%	15
Wellspring	38.04	53.6%	15	42.38	57.5%	23
Primero Los Niños	41.67	50.0%	3	34.90	30.6%	15
Sierra Vista Blake	45.67	73.3%	11	35.65	41.9%	13
<b>Total</b>	<b>43.42</b>	<b>60.8%</b>	<b>678</b>	<b>40.84</b>	<b>54.8%</b>	<b>2142</b>



## Trimester of Enrollment into Prenatal Program July 2006 to June 2007

(includes all families, even those that did not engage)

Site	1 <sup>st</sup> Trimester		2 <sup>nd</sup> Trimester		3 <sup>rd</sup> Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
Douglas	5	25.0%	8	40.0%	7	35.0%	0	0	20
Central Phoenix	1	5.6%	5	27.8%	12	66.7%	0	0	18
Maryvale	1	5.9%	8	47.1%	8	47.1%	0	0	17
South Phoenix	1	6.7%	7	46.7%	6	40.0%	1	6.7%	15
East Valley	2	11.1%	8	44.4%	8	44.4%	0	0	18
Nogales	2	8.7%	7	30.4%	11	47.8%	3	13.0%	23
Page	2	25.0%	4	50.0%	2	25.0%	0	0	8
Casa de los Niños	5	14.7%	14	41.2%	13	38.2%	2	5.9%	34
CODAC	0	0	9	39.1%	13	56.5%	1	4.3%	23
La Frontera	0	0	14	37.8%	19	51.4%	4	10.8%	37
Sierra Vista	3	16.7%	7	38.9%	6	33.3%	2	11.1%	18
Tuba City	0	0	6	33.3%	12	66.7%	0	0	18
Verde Valley	6	8.2%	19	26.0%	46	63.0%	2	2.7%	73
Yuma	0	0	2	22.2%	6	66.7%	1	11.1%	9
Pascua Yaqui	9	19.1%	17	36.2%	21	44.7%	0	0	47
Lake Havasu City	10	28.6%	10	28.6%	15	42.9%	0	0	35
Flagstaff	5	13.5%	7	18.9%	25	67.6%	0	0	37
Sunnyslope	2	8.7%	7	30.4%	12	52.2%	2	8.7%	23
Prescott	3	12.5%	8	33.3%	13	54.2%	0	0	24
Coolidge	0	0	3	33.3%	6	66.7%	0	0	9
Mesa	2	9.1%	8	36.4%	12	54.5%	0	0	22
Southeast Phoenix	1	6.7%	7	46.7%	8	33.3%	2	13.3%	15
El Mirage	1	7.1%	6	42.9%	6	42.9%	1	7.1%	14
Blake Foundation	4	16.7%	5	20.8%	14	58.3%	1	4.2%	24
Marana	4	26.7%	7	46.7%	1	6.7%	3	20.0%	15
Safford	2	10.0%	3	15.0%	14	70.0%	1	5.0%	20
Stanfield	4	36.4%	4	36.4%	3	27.3%	0	0	11
Apache Junction	6	19.4%	13	41.9%	10	32.3%	2	6.5%	31
Gila River	2	15.4%	4	30.8%	5	38.5%	2	15.4%	13
Winslow	1	9.1%	4	36.4%	6	54.5%	0	0	11
Kingman	4	21.1%	7	36.8%	6	31.6%	2	10.5%	19



Site	1 <sup>st</sup> Trimester		2 <sup>nd</sup> Trimester		3 <sup>rd</sup> Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
<b>Globe/Miami</b>	0	0	7	53.8%	5	38.5%	1	7.7%	13
<b>Kyrene</b>	6	22.2%	5	18.5%	15	55.6%	1	3.7%	27
<b>Metro Phoenix</b>	1	12.5%	5	62.5%	2	25.0%	0	0	8
<b>Tolleson</b>	0	0	8	50.0%	6	37.5%	2	12.5%	16
<b>South Mountain</b>	2	8.7%	8	34.8%	10	43.5%	3	13.0%	23
<b>Glendale</b>	1	10.0%	2	20.0%	6	60.0%	1	10.0%	10
<b>Deer Valley</b>	0	0	2	20.0%	7	70.0%	1	10.0%	10
<b>East/SE Tucson</b>	2	8.0%	9	36.0%	12	48.0%	2	8.0%	25
<b>SW Tucson</b>	1	5.9%	9	52.9%	5	29.4%	2	11.8%	17
<b>Bullhead City</b>	2	13.3%	9	60.0%	2	13.3%	2	13.3%	15
<b>Northwest Phoenix</b>	1	11.1%	1	11.1%	7	77.8%	0	0	9
<b>Tempe</b>	0	0	5	41.7%	5	41.7%	2	16.7%	12
<b>Gilbert</b>	0	0	12	33.3%	50	55.6%	4	11.1%	36
<b>Scottsdale</b>	3	16.7%	4	22.2%	7	38.9%	4	22.2%	18
<b>West Phoenix</b>	1	6.7%	7	46.7%	7	46.7%	0	0	15
<b>East Mesa</b>	3	10.3%	14	48.3%	10	34.5%	2	6.9%	29
<b>Kinlani-Flagstaff</b>	5	15.2%	6	18.2%	20	60.6%	2	6.1%	33
<b>Southwest Phoenix</b>	0	0	3	75.0%	1	25.0%	0	0	4
<b>Peoria</b>	2	10.0%	6	30.0%	11	55.0%	1	5.0%	20
<b>Metro Tucson</b>	0	0	5	38.5%	6	46.2%	2	15.4%	13
<b>Casa Family First</b>	1	7.7%	7	53.8%	4	30.8%	1	7.7%	13
<b>Wellspring</b>	10	35.7%	5	17.9%	13	46.4%	0	0	28
<b>Primero Los Niños</b>	0	0	0	0	3	50.0%	3	50.0%	6
<b>Sierra Vista Blake</b>	2	13.3%	4	26.7%	7	46.7%	2	13.3%	15
<b>Total</b>	131	11.7%	381	34.1%	534	47.8%	70	6.3%	1113



**Engaged Prenatal Families that Exited before Baby's Birth  
By Site - July 2006 through June 2007**

<b>Site</b>	<b>Total Families</b>	<b># Closed before birth</b>	<b>% Closed before birth</b>
Douglas	20	0	0%
Central Phoenix	18	0	0%
Maryvale	17	0	0%
South Phoenix	15	0	0%
East Valley	18	0	0%
Nogales	23	0	0%
Page	8	0	0%
Casa de los Niños	34	1	3%
CODAC	23	0	0%
La Frontera	37	1	3%
Sierra Vista	18	0	0%
Tuba City	18	1	6%
Verde Valley	73	0	0%
Yuma	9	0	0%
Pascua Yaqui	47	0	0%
Lake Havasu City	35	2	6%
Flagstaff	37	0	0%
Sunnyslope	23	1	4%
Prescott	24	0	0%
Coolidge	9	0	0%
Mesa	22	0	0%
Southeast Phoenix	15	0	0%
El Mirage	14	0	0%
Blake Foundation	24	0	0%
Marana	15	0	0%
Safford	20	0	0%
Stanfield	11	1	9%
Apache Junction	31	1	3%
Gila River	13	0	0%
Winslow	11	0	0%
Kingman	19	1	5%



Site	Total Families	# Closed before birth	% Closed before birth
Globe/Miami	13	0	0%
Kyrene	27	0	0%
Metro Phoenix	8	0	0%
Tolleson	16	0	0%
South Mountain	23	0	0%
Glendale	10	0	0%
Deer Valley	10	0	0%
East/SE Tucson	25	1	4%
SW Tucson	17	0	0%
Bullhead City	15	1	7%
Northwest Phoenix	9	0	0%
Tempe	12	0	0%
Gilbert	36	0	0%
Scottsdale	18	0	0%
West Phoenix	15	0	0%
East Mesa	29	0	0%
Kinlani-Flagstaff	33	0	0%
Southwest Phoenix	4	0	0%
Peoria	20	0	0%
Metro Tucson	13	0	0%
Casa Family First	13	0	0%
Wellspring	28	0	0%
Primero Los Niños	6	0	0%
Sierra Vista Blake	15	0	0%
<b>Total</b>	<b>1116</b>	<b>11</b>	<b>1%</b>



## Appendix C. Program Objectives and Data Sources

Objective	Data Source
Increased Social Support Network	HFPI* Social Support Scale
Improved Mental Health	HFPI Depression Scale HFPI Personal Care Scale FSS-23** Services received
Increased Parents' Health Behaviors	FSS-23-Link to Medical Doctor Substance Abuse Screen (CRAFFT)
Increased Problem Solving Skills	HFPI Problem Solving Scale
Improved Family Stability	FSS-23 – Employment, Education HFPI Mobilizing Resources Scale
Increased Parental Competence	HFPI Parental Competence Scale HFPI Parenting Efficacy Scale
Increased Positive Parent/Child Interaction	HFPI Parent/Child Behavior Scale
Improved Child Health	FSS-23 --Immunizations Link to Medical Doctor Safety Checklist
Optimized Child Development	HFPI – Parent child Interaction ASQ Screening
Prevention of child abuse and neglect	CHILDS Registry Check Total HFPI score
Increase empathy for the unborn child (prenatal)	HFPI-prenatal
Increase father involvement	HFPI – Commitment to Parent Role Father Involvement levels
Increase safety in the home environment	HFPI – Home environment Safety Checklist
Increase the delivery of healthy babies, free from birth complications	FSS-20P; FSS-23
Improve nutrition	In development

\*Healthy Families Parenting Inventory

\*\*FSS-23 is a Healthy Families Arizona tool developed to collect process and outcome data every six months.



## Appendix D: Healthy Families Parenting Inventory

### Healthy Families Parenting Inventory Cronbach's Alpha Scores

<u>Subscale</u>	Alpha* 2month	Alpha* 6month	Alpha* 12month
Social support	r=.84	r=.86	r=.87
Problem solving	r=.79	r=.69	r=.85
Depression	r=.72	r=.73	r=.72
Personal care	r=.80	r=.83	r=.85
Mobilizing resources	r=.78	r=.82	r=.82
Accepting the parent role	r=.77	r=.79	r=.82
Parent Child behaviors	r=.79	r=.79	r=.82
Home environment	r=.79	r=.81	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 relate to each other.



## Appendix E: Selected Risk Factors at Intake All Families 2007

**Selected Risk Factors for Mothers at Intake\*--2007**

Risk Factors of Mothers	All Families (prenatal and postnatal combined)
Teen Births (19 years or less)	24.7%
Births to Single Parents	70.2%
Less Than High School Education	63.1%
Not Employed	80.0%
No Health Insurance	4.7%
Receives AHCCCS	85.1%
Late or No Prenatal Care	35.0%



## Appendix F. Regression Coefficients for Workforce Survey

	<b>B</b>	Wald	<i>df</i>	<i>p</i>	Odds Ratio
Professional/personal fit	-.621	8.786	1	.003	.537
Professional efficacy	.334	5.343	1	.021	1.397
Perceptions of workload	-.351	5.325	1	.021	.704
Non-salary reward	-.265	4.831	1	.028	.767
Time employed	-.001	8.652	1	.003	.9999
Actively seeking employment	.843	12.385	1	.000	2.323

This regression model was selected because it balanced maintaining the most cases in relation to missing data, and maximized the proportion of variance explained. This particular model explained 38% of the variance in attrition.



## Appendix G. Healthy Families Arizona Prenatal Logic Model

Long Term Outcomes					Program Resources			
① Reduced child abuse and neglect ② Increased child wellness and development ③ Strengthened family relations ④ Enhanced family unity ⑤ 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								
<p><b>Assess</b> family's support systems</p> <p><b>Model</b> relationship skills</p> <p><b>Foster connections</b> to positive support sources</p>	<p><b>Identify</b> signs and history of depression, abuse, mental illness, substance abuse</p> <p><b>Review</b> history of birthing</p> <p><b>Encourage</b> medical assessment, referral and treatment if needed</p> <p><b>Encourage</b> exercise, personal care, rest</p> <p><b>Educate</b> on post partum depression</p>	<p><b>Assess</b> personal risk behaviors</p> <p><b>Educate</b> on risk behaviors, lifestyle choices, community resources, affect of drugs, medicines on fetus</p> <p><b>Explore</b> domestic violence, form safety plan</p> <p><b>Encourage</b> help seeking and adoption of healthy behaviors</p>	<p><b>Identify</b> major life stressors</p> <p><b>Educate</b> on problem-solving, goal setting. Use IFSP to review progress</p> <p><b>Educate</b> on access to community resources, how to reach out</p> <p><b>Make referrals</b> as needed for anger and stress management</p> <p><b>Teach</b> stress reduction</p>	<p><b>Educate</b> and provide materials on nutrition during pregnancy, buying and choosing healthy foods, and requirements for healthy fetal development</p> <p><b>Provide referrals</b> to WIC, other resources</p> <p><b>Encourage</b> healthy celebrations</p>	<p><b>Explore and assess</b> issues around pregnancy, relationships, hopes, fears</p> <p><b>Discuss and educate</b> about changes in body, sexuality during pregnancy</p> <p><b>Share</b> developmental information about stages of development of fetus</p> <p><b>Encourage</b> pre-birth bonding and stimulation exercises (reading, touch, etc)</p>	<p><b>Explore</b> father's feelings, childhood experiences, expectations, hopes and fears about baby and goals for fatherhood</p> <p><b>Educate</b> about changes in intimacy, ways father can support mother</p> <p><b>Encourage</b> supportive relationships for father</p> <p><b>Educate</b> on father's legal rights and responsibilities</p>	<p><b>Assess, encourage and guide</b> family in making needed safety arrangements, e.g. crib safety, car seat, pets, SIDS, child care, feeding</p> <p><b>Educate</b> on baby temperaments, how to calm baby, Shaken Baby Syndrome, medical concerns</p> <p><b>Refer</b> to parenting workshops</p> <p><b>Explore</b> cultural beliefs about discipline</p>	<p><b>Connect</b> mother to prenatal care and encourage compliance with visits</p> <p><b>Encourage</b> STD testing</p> <p><b>Educate</b> on symptoms requiring medical attention</p> <p><b>Promote</b> breastfeeding and refer to resources</p>
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 H. Healthy Families Arizona Postnatal Logic Model

Long Term Outcomes					Program Resources			
① Reduced child abuse and neglect ② Increased child wellness and development ③ Strengthened family relations ④ Enhanced family unity ⑤ 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 <u>and</u> Optimize child development	Prevent child abuse and neglect
Program Activities and Strategies								
<b>Assess</b> family's support systems  <b>Model</b> relationship skills  <b>Foster connections</b> to positive support sources  <b>Educate</b> on communication skills	<b>Identify</b> signs and history of depression, abuse, mental illness, substance abuse  <b>Address</b> issues of grief and loss  <b>Encourage</b> medical assessment, referral and treatment if needed  <b>Encourage/coach</b> on exercise, personal care, rest  <b>Educate</b> on post-partum depression	<b>Assess</b> personal risk behaviors; <b>Educate</b> on dangers of specific risk behaviors  <b>Support</b> family in making lifestyle changes and adopting healthy behaviors  <b>Educate</b> on community resources  <b>Explore</b> domestic violence, create safety plan	<b>Identify</b> major life stressors  <b>Educate</b> on problem-solving, goal setting. Use IFSP to review progress  <b>Educate</b> on access to community resources, how to reach out  <b>Make referrals</b> as needed for anger and stress management  <b>Educate</b> about effect of stress on child	<b>Assess</b> basic living skills and needs; help family access housing, education, job, and budget management services.  <b>Coach</b> parent to set and evaluate goals; teach basic living skills  <b>Promote</b> use of community resources for self sufficiency  <b>Explore</b> family planning decisions	<b>Provide empathy</b> and support to parent in parenting role  <b>Teach</b> child development, early brain development, temperament  <b>Address</b> parental expectations of child  <b>Educate</b> about importance of routines and rules  <b>Refer</b> to parenting groups and classes	<b>Promote and teach</b> developmentally appropriate stimulation activities  <b>Educate</b> about rhythm and reciprocity, reading baby's cues  <b>Promote</b> reading, bonding during feeding  <b>Encourage</b> family activities, celebrations  <b>Coach</b> on father involvement	<b>Complete</b> developmental assessments and make referrals  <b>Address</b> medical screenings, support well child checks, immunizations, and good nutrition habits  <b>Promote</b> play, reading; provide links to early childhood programs  <b>Assess and Guide</b> family in making safety arrangements, e.g., home and car safety	<b>Assess</b> risk of child abuse and neglect  <b>Coach</b> and guide in choices for child care  <b>Educate</b> 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

