

Healthy Families Arizona  
Annual Evaluation Report  
FY2011

July 2010 – June 2011



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## Executive Summary

Research results have produced sufficient evidence from rigorous randomized trials, demonstration projects, and community based evaluations that quality home visitation programs with regular visits can produce improvements in both child and family outcomes. There is also sufficient research that is broad and deep enough to point to key principles that are needed to achieve a high level of program effectiveness.

However, the circumstances families face in their day to day lives have changed dramatically. Families today face increased stress and most must contend with the real facts of a depressed economy. Families being served by home visitation programs are living in worse conditions. Research has established that increased poverty diminishes child development outcomes and impacts parenting.

Community agencies serving families are also struggling as they provide critical services to families experiencing more difficult circumstances than in the past. Agencies are likely to have fewer resources to help families manage their difficulties. This ongoing challenge raises the following question: with renewed interest and focus on home visitation as an effective strategy for delivering services, can programs maintain the outcomes that are expected from home visitation programs? If the program aims to successfully meet this challenge, it must continue to emphasize the critical elements that research has suggested are necessary for maintaining successful outcomes.

### **The Healthy Families Arizona Program**

Healthy Families Arizona was established in 1991 through the Arizona Department of Economic Security (DES) with 2 sites and increased to 58 sites serving over 150 communities around the state by 2006. In 2009, due to the economic downturn, DES budget reductions resulted in a decrease of the number of HFAz sites to 26. However, also in 2009, First Things First (FTF) released emergency dollars to agencies providing home visiting services consistent with the goals of FTF. Since 2009, these funds have enabled the state system of HFAz sites to build back up. In state fiscal year 2011, funding for the HFAz statewide system included just over \$6.5 million from DES and \$6 million from FTF, allowing for a total of 34 sites to provide the Healthy Families Arizona program. The DES funds originate from designated Lottery Funds, and the Federal Community-Based Child Abuse Prevention Grant.



An evaluation of Healthy Families Arizona has been conducted yearly since the program's inception. The scope of this evaluation report, differing from past years, includes both the DES-funded and the FTF-funded Healthy Families sites. For the 2011 state fiscal year, there are 10 programs and 34 sites (15 DES funded, 12 FTF funded, and 7 receiving funding from both).

Healthy Families Arizona received full accreditation in 2011. For Arizona's multi-site accreditation, DES serves as the central administration office for all HFaz programs. DES worked with FTF to coordinate and prepare the information for the accreditation process. DES and FTF have maintained the Interagency Service Agreement to ensure a collaborative relationship and to share the costs and resources for the administration of the HFaz program.

### Who Does Healthy Families Arizona Serve?

A total of 3,135 families were reached by Healthy Families programs between July 1, 2010 and June 30, 2011. However, the evaluation covers only families that are within the first 24 months after the birth of the baby (n=3,119). In addition, in order to have a meaningful evaluation of the program effects we include only the families where the most complete information on the effectiveness is available. This further restricts our dataset to include only those families where we have full data showing that they have received at least 4 home visits (n=2,721). The average length of time families remained in the program is just over ten months. About 75% of the engaged families entered the program after the birth of their child, with 25% entering during the prenatal phase.

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

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona state Rates - 2010
Teen Births (19 years or less)	22.6%	13.9%	10.8%*
Births to Single Parents	73.4%	70.8%	44.7%*
Less Than High School Education	47.6%	43.4%	23.9%**
Not Employed	80.2%	83.0%	50.3%***
No Health Insurance	7.3%	4.0%	3.7%*
Receives AHCCCS	84.4%	88.8%	53.3%*
Late or No Prenatal Care	25.0%	33.2%	18.1%*
Median Yearly Income	\$7,920	\$8,148	\$46,789 ***

Percent does not include "unknown."

\*Source: 2010 data from the Arizona Department of Health Services Vital Statistics records.

\*\*Source: 2009 data from the Arizona Department of Health Services Vital Statistics records.

\*\*\*U.S. Census Bureau, American Community Survey, 2010

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



Additionally, families reported the following risk factors at intake:

- Premature birth—11% of the infants who entered prenatally were born with less than 37 weeks gestation compared to 17% of infants who entered postnatally;
- Low Birth weight— 9% of the infants who entered prenatally had low birth weight (less than 5.5 pounds) whereas 14% of the infants who entered postnatally had low birth weight.

### **Outcomes for Families and Children Participating in Healthy Families**

The Healthy Families Parenting Inventory (HFPI) revealed statistically significant improvement on all subscales at the 6 month time point and on 8 of 9 subscales at the 12 month time point, suggesting that participation in the program reduced risk factors related to child abuse and neglect. Although the evaluation lacks a comparison group to study program effects, these findings (consistent over 3 years) continue to show that participants report improvements in healthy parenting behaviors.

#### ***Parents in Healthy Families report significant changes in:***

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

### **Child Health, Development, and Safety**

Timely immunizations remain an important component for positive child health and development outcomes. This year there was decrease in the number of infants reported as receiving immunizations. For example, there was a reported 74.4% immunization rate for the children of Healthy Families Arizona participants at 18 months. This is in comparison to a 76.3% immunization rate for children between the ages of 19 months and 35 months in the state of Arizona as a whole. Healthy Families Arizona also helps families adopt and maintain home safety practices. Results indicate that 99% of participants are using car seats, over 85% have poisons locked, and over 85% have working smoke alarms. This compares favorably with national trends among the general population (e.g., national estimates of 90% car seat usage and 75% “working” smoke detectors).



The program also screens for developmental delays at regular intervals and assures that children who need further services are referred appropriately.

### **Child Abuse and Neglect**

Records of child abuse and neglect incidents (substantiated) were examined for program participants who had received services for at least six months. The program performance goal is for 99.7% of families to have no substantiated reports to child protective services. This year the percent of families with no child abuse or neglect incidences was 99.9%, lower than the previous year of 97.4% and above the performance goal. A total of 38 HFAz families had a substantiated case of child abuse and/or neglect out of 1,874 families that had participated in HFAz for at least 6 months.

### **Mothers' Health, Education, and Employment**

In addition to the parenting outcomes noted earlier, the HFAz model also seeks to improve the health, education, and employment outcomes among mothers so that they are better equipped to meet their families' needs. Research shows that spacing births has positive health benefits for the mother. Results for HFAz show only 3.9% of mothers with a subsequent pregnancy waited over 24 months before they got pregnant with their next child, while more than 65% the mothers with subsequent pregnancies waited a year or less. This means that a small percentage of women are spacing their births in spite of the health benefits, and the program needs to put more emphasis in this area. The number of mothers enrolled in school has decreased slightly from last year, from 22.0% in state fiscal year 2010 to 17.7% in state fiscal year 2011 enrolled within 1 year of program participation. HFAz provides initial screening and referrals for substance abuse problems, and substance abuse continues to be a difficult problem for families. Approximately 52% of the participants (compared to 30% in the prior year) were screened as having potential substance abuse problems during the first 2 months of the program.





## Introduction

**~Letter from a Healthy Families parent~**

*"The pressure, responsibility, and loneliness grew every day, until I found myself at wits end. Crying and struggling with anger and self control. I knew this was very dangerous for my children and I love them too much to allow myself to hurt them, but I needed help. I kept trying to find help with my children, but everything was too expensive and I felt like no one cared. Then heaven sent my son home from Head Start with a flyer about Healthy Families. I called and shortly after, Maria (the Family Support specialist) became a part of our lives. She has been there to listen to all my worries, taught me to improve nutrition and parenting techniques to encourage development and motor skills in my baby. She has helped me with disciplining skills. Her encouragement has given me confidence in myself as a mother, and for that I truly thank her! Healthy Families is more than a wonderful program, it has been a life-line for me and my children. Without it, I really feel that I would not have been able to be the best mother I could be for my children."*

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

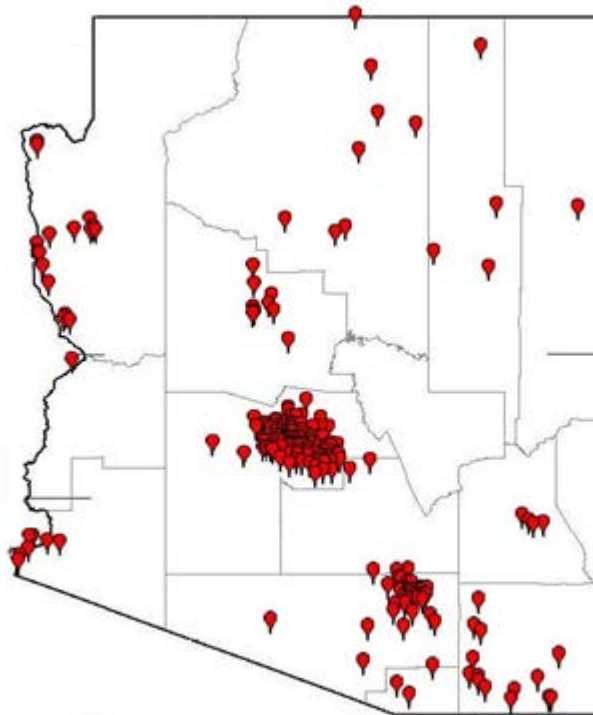
The Healthy Families program model is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Participating families receive home visits and referrals from trained staff. By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



## *Healthy Families Funding Sources Combine to Strengthen Statewide System*

Healthy Families Arizona was established in 1991 through the Arizona Department of Economic Security (DES) with 2 sites and increased to 58 sites serving over 150 communities around the state by 2006. In 2009, due to the economic downturn, DES budget reductions resulted in a decrease of the number of HFAz sites to 26. However, also in 2009, First Things First (FTF) released emergency dollars to agencies providing home visiting services consistent with the goals of FTF. Since 2009, these funds have enabled the state system of HFAz sites to build back up, enabling some sites to be increased in size and 8 additional sites in Maricopa County to be funded. In state fiscal year 2011, funding for the HFAz statewide system included just over \$6.5 million from DES and \$6 million from FTF. The DES funds originate from designated Lottery Funds, and the Federal Community-Based Child Abuse Prevention Grant.

The combined funding from DES and FTF has allowed for more comprehensive trainings, a statewide technical assistance program, and a complete evaluation of the full state-wide Healthy Families Arizona system. Healthy Families Arizona programs and sites provided services to families living in 10 counties and 227 zip code areas around Arizona.



The families funded through FTF are included in the annual report for the first time. For the 2011 state fiscal year, there are 10 programs and 34 sites (15 DES funded, 12 FTF funded, and 7 receiving funding from both). See Exhibit 1 for a list of currently funded sites.

**Exhibit 1. Healthy Families Arizona Program Sites as of June 2011**

<b>Maricopa County</b>	<b>Cochise/Santa Cruz County</b>
Central Phoenix	Douglas/Sierra Vista
Maryvale	Nogales
East Valley	<b>Graham County</b>
Sunnyslope	Safford
Mesa	<b>Mohave County</b>
West Phoenix	Kingman
Central Phoenix #1	Bullhead City
Central Phoenix #2	<b>Lake Havasu</b>
North Phoenix	<b>Coconino County</b>
Southeast/Northeast Maricopa	Page
Combination Phoenix	LaPlaza Vieja
South Phoenix	Kinlani
Southeast Maricopa #7	Flagstaff
Southeast Maricopa #8	<b>Yavapai County</b>
<b>Pima County</b>	Prescott
CODAC	<b>Navajo County</b>
La Frontera	Winslow
Pima #8	Tuba City
Pima #11	<b>Yuma</b>
Pima #27	Yuma #15
	Yuma #70

## *Current Issues in Home Visitation programs*

### **Maintaining Outcomes and Moving Forward**

Research results have produced sufficient evidence from rigorous randomized trials, demonstration projects, and community based evaluations that quality home visitation programs with regular visits can produce improvements in both child and family outcomes. There is also sufficient research that is broad and deep enough to point to key principles that are needed to achieve a high level of program effectiveness.



However, the circumstances families face in their day to day lives have changed dramatically. Families today face increased stress and most must contend with the real facts of a depressed economy. Families being served by home visitation programs are living in worse conditions. Research has established that increased poverty diminishes child development outcomes and impacts parenting.

Community agencies serving families are also struggling as they provide critical services to families experiencing more difficult circumstances than in the past. Agencies are likely to have fewer resources to help families manage their difficulties. This ongoing challenge raises the following question: with renewed interest and focus on home visitation as an effective strategy for delivering services, can programs maintain the outcomes that are expected from home visitation programs? If the program aims to successfully meet this challenge, it must continue to emphasize the critical elements that research has suggested are necessary for maintaining successful outcomes. The following sections discuss known factors that have led to the strongest outcomes in home visitation program results.

### *Regular and Frequent Visits*

It is well documented that regular and frequent visits to families are more likely to produce changes in parenting and family outcomes that result in developmental benefits for children than are programs that offer home visitation less frequently or for a shorter duration of time. As home visitors see families that are more stressed and economically depressed, additional attention should be directed toward keeping a frequent and intense schedule of home visits. Programs should put strong effort into creative and alternative methods of staying in touch with families, as well as using phone contacts and efforts to link families to center-based services.

### *Developing the Worker Alliance*

Perhaps nothing is better established in the literature than the importance of a solid worker-parent alliance in helping families. Home visitors can skillfully interact with families in a manner that cements a supportive relationship that moves parents toward parenting growth and change. Parenthood is difficult, and home visitors enter a family's life when adjustment and adaptation is critical – the birth of their baby. As home visitors establish empathy and a working relationship, they become a conduit to educational, emotional, and social supports. For example, the alliance may be the key feature that motivates a family to seek further assistance for depression or to seek concrete services such as obtaining food boxes.



Without a strong working alliance they cannot accomplish Healthy Families program goals. Ongoing efforts to assess this relationship and to discuss this aspect of program implementation in supervision are necessary. Some programs have even begun to systematically assess the worker alliance as a means of examining program implementation.

### *Pursuing Multiple Goals*

Reviews of research on home visitation have repeatedly found that a critical practice in home visitation is addressing multiple and broad goals rather than pursuing a more narrow goal. Home visitors can often get side tracked into a complete focus on the parent-child interactions and fail to address the larger social and economic barriers to healthy development. This goal represents a renewed challenge as home visitors have more difficulty finding resources to help families in a difficult economy. However, helping a family find affordable and *quality* child care might be instrumental in obtaining enhanced child development outcomes. Home visitation models recognize they are embedded in communities and that the effectiveness of home visitation depends in part on the capacity to bring additional needed services to families.

### *Developing and Training Qualified Staff*

Home visitation is a challenging job, and capable staff who are skilled at working with families are needed to create a program that achieves effective results. Home visitors, who are well trained, supported with good supervision and provided a work environment that reduces stress can most effectively work with families and promote successful outcomes. The Healthy Families program model will work best with staff that receive quality training and close supervision. This is particularly true since many of the home visitors have not previously worked in this capacity. Further, programs should be focused on providing continuous training on aspects of program implementation that are critical to program success. Over time programs often experience “program drift”. Trainings should be focused on the critical core features of home visitation to make the model successful.

### *Continuous Program Improvement and Evaluation*

Healthy Families Arizona programs must continue to examine their *local context* and consider ongoing data that can be helpful in refining *local* program implementation. Evaluation information such as quarterly cumulative performance reports can be carefully reviewed with an eye toward continuous program improvement.



Data should be examined to reveal ways to address critical elements and program characteristics that can impact families. While home visitation research in Arizona has taken some strong steps forward, there are many remaining steps needed to fully understand how to build evidence based program services. The Healthy Families Arizona program recently published the results of a rigorous research trial, and while many good outcomes from the program were established, there are also areas for program improvement and refinement (LeCroy & Krysik, 2011). The current federal Children’s Bureau study (LeCroy & Milligan Associates, 2011) continues to examine outcomes, and programs will want to dissect these results and consider program implications. Further, program staff who work directly with researchers can help ensure that the most important questions get answered from these studies.

*Putting knowledge to work in building home visitation services*

Home visitation has found renewed excitement and possibilities. It offers an unmatched strategy to deliver services that have the potential to impact a wide range of outcomes. Yet, it is not a panacea for all problems and it cannot solve many of the difficult problems low-income families face. Problems created by poverty, racism, and drug addiction are likely to need institutional solutions in addition to assistance with social programs. However, home visitation can be a valuable entry into assistance with social services. Even a few visits may assist families in the awareness that programs do exist to help them. For families that participate in long term home visitation programs like Healthy Families Arizona, there is strong potential to achieve modest impacts across a wide range of outcomes (LeCroy & Krysik, 2011). Therefore, the community success of the program is largely dependent on an understanding of modest results and an ongoing investment in experimentation with the program.



## In this Report

This 2011 program evaluation report for Healthy Families Arizona focuses on annual participant outcomes and program performance indicators, process and program implementation information, and evaluation information useful for program improvement for the time period July 1, 2010 - June 30, 2011. The process evaluation includes an update of statewide implementation issues, describes the characteristics of families participating in the program and provides narratives from families participating in the program. The outcome evaluation examines program outcomes and looks at the program's impact across a number of measures, with comparisons with previous years when appropriate and available. Detailed appendices provide specific site data on process and outcome variables. The description of evaluation methodology outlines the methods used for each part of the report.

As in recent years, since funding reductions required a redesign of the evaluation, this 2011 annual evaluation report has been designed to provide critical information and reporting of yearly data for basic accountability and credentialing and is limited to only those families within 24 months of the birth of the infant. Currently, the Healthy Families Arizona evaluation also includes the creation and distribution of quarterly cumulative performance reports for ongoing program monitoring. These reports are used during quality assurance and technical assistance site visits to review and assess progress on key program activities, including administration rates for developmental screenings and parenting skills inventories, attainment of immunization data, and substance abuse screening.

### *Evaluation Methodology*

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

The goal of the process component of the evaluation is to describe the participants involved in the Healthy Families Arizona program and document the services they receive. In the process evaluation, the program "inputs" such as numbers served, participant characteristics, and services received are described. In addition, narrative accounts of the experiences of participant families were gathered, and are shared throughout this report.



Also, information relative to Critical Elements and expected standards from Healthy Families America is provided as a benchmark for assessing some aspects of the implementation. The primary data for the process evaluation comes from the management information system developed to process data for Healthy Families Arizona. Sites are required to submit data that captures enrollment statistics, number of home visits, administration of assessment and outcome forms, descriptions of program participants, types of services provided, etc.

The overall aim for the outcome study is to examine program effects and outputs, at both the parent and child level on a number of different outcomes. The evaluation team has worked together with program staff to develop and select key program measures that are used to provide feedback and to measure the program's ability to achieve specific outcomes. The primary activities of the outcome evaluation are to: examine the extent to which the program is achieving its overarching goals, examine the program's effect on short term goals, and examine the extent to which participant characteristics, program characteristics, or community characteristics moderate the attainment of the program's outcomes. For most of the outcome measures, Healthy Families home visitors collect baseline (pretest) data and follow-up data at different time points of program participation: 6 months, 1 year, 18 months, and 24 months.

Evaluation funding in prior years allowed for the collection and analysis of follow-up data through 60 months, but this is no longer possible. Part of the outcome evaluation also includes examination of substantiated cases of child abuse and neglect obtained through the Department of Economic Security's CHILDS database.

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





## Program Updates

### *Healthy Families Arizona Celebrates 20<sup>th</sup> Anniversary*

2011 marked the 20<sup>th</sup> year of Healthy Families Arizona services. A celebration was held in April 2011 and was attended by over 200 home visitors, administrators, sponsors and special guests. Some highlights of the celebration included:

- The acknowledgement and remarks by the presenters;
- A poster/display session where each site described their Healthy Families Arizona journey;
- A time capsule where programs and sponsors placed items to remind the future Healthy Families Arizona program of our first 20 years and our current role; and
- Service awards to those who had served in the Healthy Families Arizona Program for 3, 5, 10, 15, and 20 years. The following have been with the program for the entire 20 year journey.
  - Barbara Wisler-Waldock
  - Kate Whitaker
  - LeCroy & Milligan Associates

### *Healthy Families Statewide Credential received*

Healthy Families Arizona programs worked diligently to prepare for re-accreditation during 2009 and 2010, and the statewide system was awarded a 5-year credential in March 2011. In order for Healthy Families Arizona programs to be accredited, both the state system and the individual programs within the system successfully met standards of best practice. The individual programs follow the best practice standards that operationalize the Healthy Families America 12 Critical Elements. These Critical Elements are broken into three major service activities: 1) initiation of services, 2) home visiting services, and 3) administration. There are 119 standards that indicate best practice based upon over 30 years of research. Arizona was the first state to achieve all sites passing their individual site visits demonstrating adherence to the standards without requiring additional evidence.

### *Quality Assurance and Training Support Stabilized*

Although the funding cuts in 2009 resulted in the temporary suspension of the HFAz Quality Assurance and Technical Assistance (QA/TA) Services, much progress has been made in re-establishing standard systems for quality assurance and technical assistance to program sites through the DES Central Administration Office.



An additional QA/TA specialist was hired in 2010, and site visits to each site are conducted once per year. Two members of the QA/TA team participate in the site visit to review the standards of best practice and provide technical assistance based on the sites' needs and issues. The quarterly cumulative performance reports are used at each visit and data systems have been developed to provide information around home visit rates.

### ***Collaboration between First Things First and Arizona Department of Health Services***

A vision for comprehensive home visitation in Arizona is emerging as DES, FTF, and DHS work together with their funding sources. With additional federal funding from the Affordable Care Act, additional funding came to DHS for expansion in home visitation with some going to Healthy Families Arizona. Common data requirements have been established between DES and FTF so that a uniform evaluation of the statewide system is in place. The intergovernmental agreement has been renewed between DES and FTF and they continue to meet quarterly to guide the program.

*"My Healthy Families Family Support Specialist helps support us to be better parents. I did not spend a lot of time with my older children when they were little. She encourages parents to value their children and to spend time with them. Now, I enjoy spending time with my children, I read with them, attend their field trips at school, volunteer at my sons Head Start program, go to the park with them and help them with their homework. I want my children to know I love them and appreciate them every day."*



## Healthy Families Arizona Participant Characteristics

During the current study year, July 2010 through June 2011, the total number of families served by Healthy Families Arizona programs was 3,135 including 1,615 through DES funding and 1,520 through FTF funding. The evaluation covers only families that are within the first 24 months after the birth of the baby (n=3,119). For the purposes of a meaningful evaluation of the program effects we include only the families where the most complete information on the effectiveness is available. This further restricts our dataset to include only those families where we have full data showing that they have received at least four home visits (n=2,721). The remaining 398 families all received a first home visit, but include families that closed prior to receiving four home visits (326 families), that went on outreach before receiving four home visits (12 families), and families that entered the program at the end of the year and may not have had the opportunity to receive four visits yet (60 families). Thus, the data for this report focuses on participants who were within the first 24 months after the birth of the infant and “actively engaged” (received four or more home visits) in the Healthy Families program regardless of when they entered the program.

About one quarter (25.2%) of the families enter the program in the prenatal period (prenatal participants) and about three quarters (74.8%) of the families enter the program after the birth of the child (postnatal participants). For the July 2010 to June 2011 evaluation cohort, there were 687 prenatal families and 2,034 postnatal families. Exhibit 2 presents the total numbers of prenatal and postnatal participants actively engaged from July 2010 to June 2011.

*“She (home visitor) encourages us, supports us, and motivates us. Not just me, but other people in my family. I want to be a good role model to my children. The home visitor encouraged me to set goals, and to reach our goals. I want to support and encourage my children to reach their goals.”*



**Exhibit 2. Participants Included in the Evaluation for State Fiscal Year 2011**

<i>County</i>	<i>Site</i>	<b>Prenatal</b>	<b>Postnatal</b>	<b>Total</b>
<i>Cochise</i>	Douglas/ Sierra Vista	14	55	69
<i>Coconino</i>	La Plaza Vieja	45	16	61
	Page	7	7	14
	Tuba City	19	37	56
	Flagstaff	10	6	16
	Kinlani	19	9	28
<i>Graham</i>	Safford	3	13	16
<i>Maricopa</i>	Central Phoenix	13	82	95
	Maryvale	18	74	92
	East Valley	25	68	93
	Sunnyslope	14	110	124
	Mesa	24	88	112
	West Phoenix	21	94	115
	Central Phoenix #1	20	56	76
	Central Phoenix #2	34	89	123
	North Phoenix	19	66	85
	Southeast/Northeast Maricopa	20	89	109
	Combination Phoenix	27	61	88
	South Phoenix	16	88	104
	Southeast Maricopa #7	22	71	93
Southeast Maricopa #8	24	78	102	
<i>Mohave</i>	Bullhead City	24	75	99
	Kingman	42	25	67
	Lake Havasu City	33	53	86
<i>Navajo</i>	Winslow	15	25	40
<i>Pima</i>	CODAC	20	74	94
	La Frontera	24	65	89
	Pima #8	21	53	74
	Pima #11	21	88	109
	Pima #27	18	55	73
<i>Santa Cruz</i>	Nogales	11	30	41
<i>Yavapai</i>	Prescott	6	111	117
<i>Yuma</i>	Yuma #15	24	71	95
	Yuma #70	6	41	47
<b>Total</b>		<b>687</b>	<b>2034</b>	<b>2721</b>



***Length of Time in Program and Reasons for Termination***

In state fiscal year 2011, a total of 938 families closed. The length of time in the program for closed families was slightly lower than for last year. For all families (N=938) who closed in state fiscal year 2011:

- The median number of days in the program was 257 days (as compared to 305 in 2010);
- The average length of time in the program was 317 days (as compared to 385 in 2010); and
- Just over thirty percent (30.8%) of families were in the program one year or longer (as compared to 40% in 2010).

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

**Exhibit 3. Most Frequent Reasons for Termination State Fiscal Year 2011**

<b>Reason</b>	<b>Prenatal</b>	<b>Postnatal</b>
Moved away	28.8%	27.0%
Did not respond to outreach efforts	16.5%	21.7%
Family refused further services	23.9%	18.8%
Refused worker change	7.4%	5.9%
Other	8.2%	7.0%
Self-sufficiency	4.5%	8.9%
Unable to contact	5.8%	5.7%
No longer has custody	4.9%*	5.0%

\* This is families that entered the program during the prenatal period, but lost custody after the birth of the infant.

Exhibit 4 presents selected risk factors for both prenatal and postnatal mothers at intake compared with state rates. As the data show, mothers participating in Healthy Families are at higher risk than the overall population in Arizona. HFAz mothers are teens in about 23% of all prenatal families and in nearly 14% of postnatal families, compared to 14% and 17% for prenatal and postnatal families in 2010. Single parents make up the vast majority of participants – over 71% of the mothers at intake. In state fiscal year 2010 the number of mothers with less than a high school education was approximately 60%, this year the number has dropped to about 45%. Over 80% of the mothers are unemployed and receive AHCCCS. With a median annual income of approximately \$8,000, it can be seen that many participants are living in poverty. In relation to the state rates, these data confirm that Healthy Families participants do represent an “at-risk” group of mothers.



The program has been successful in recruiting families with multiple risk factors associated with child abuse and neglect and poor child health and developmental outcomes.

**Exhibit 4. Selected Risk Factors for Mothers at Intake State Fiscal Year 2011**

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona state Rates 2010
Teen Births (19 years or less)	22.6%	13.9%	10.8%*
Births to Single Parents	73.4%	70.8%	44.7%*
Less Than High School Education	47.6%	43.4%	23.9%**
Not Employed	80.2%	83.0%	50.3%***
No Health Insurance	7.3%	4.0%	3.7%*
Receives AHCCCS	84.4%	88.8%	53.3%*
Late or No Prenatal Care	25.0%	33.2%	18.1%*
Median Yearly Income	\$7,920	\$8,148	\$46,789 ***

Percent does not include "unknown."

\*Source: 2010 data from the Arizona Department of Health Services Vital Statistics records.

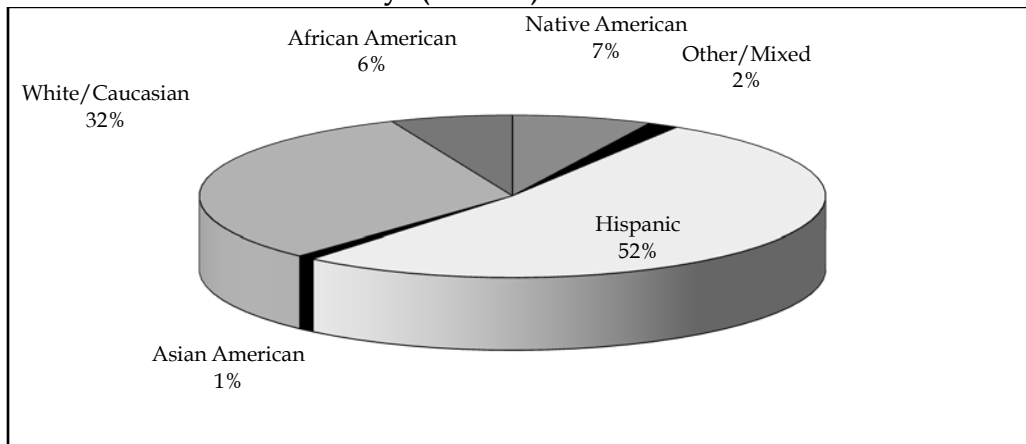
\*\*Source: 2009 data from the Arizona Department of Health Services Vital Statistics records.

\*\*\*U.S. Census Bureau, American Community Survey, 2010

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

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

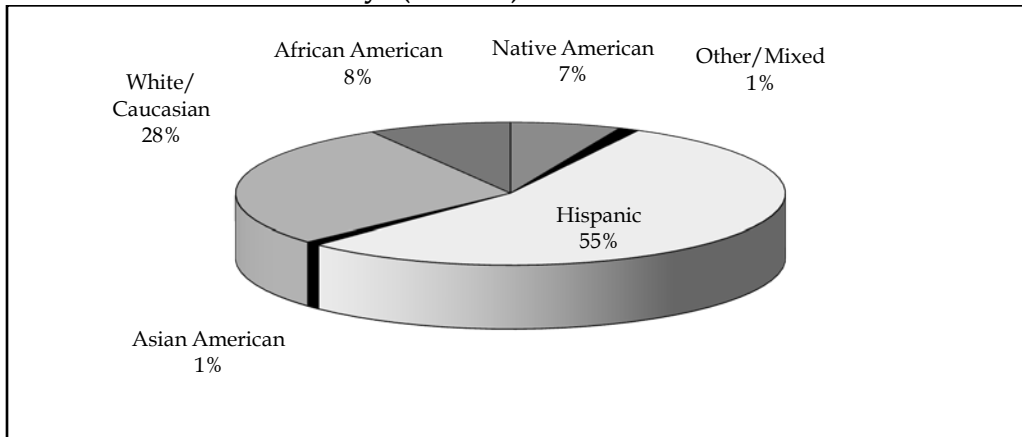
**Exhibit 5. Mother's Ethnicity\* (N=2664) State Fiscal Year 2011**



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



**Exhibit 6. Father's Ethnicity\* (N=2436) State Fiscal Year 2011**



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

***Assessment of Risk Factors***

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

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

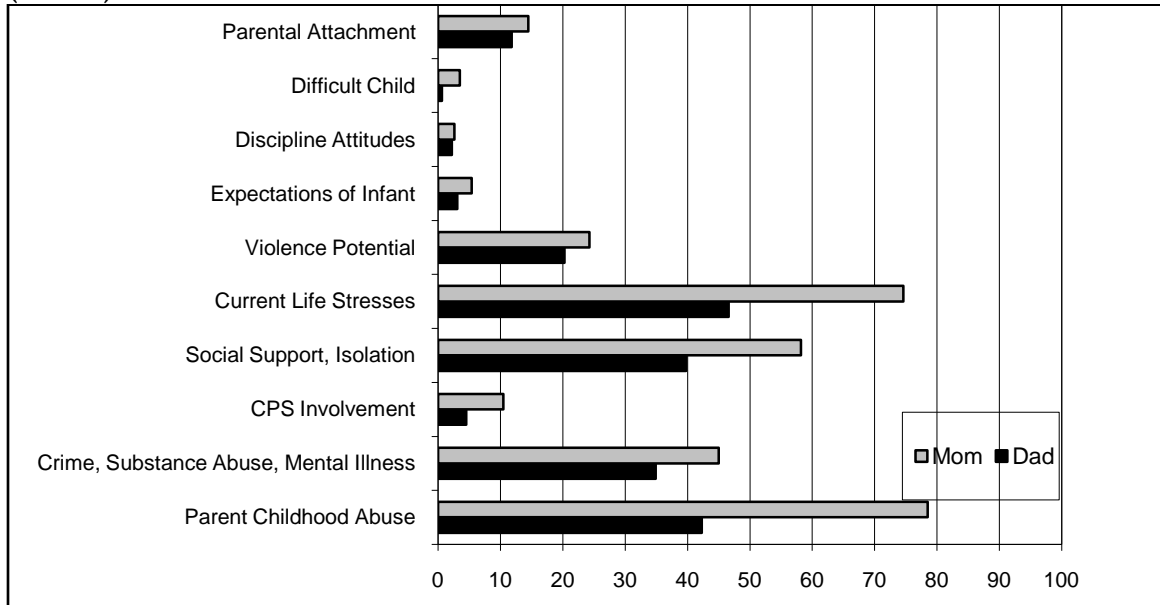
**Parental Risk Factors**

*"I grew up with physical discipline, that's how I was taught and what we were encouraged to use. I used physical discipline with my older children. I am not proud of it, but I have used phone cords as a form of discipline. That's what I knew. I know now that physical discipline is not the answer, it can traumatize children. I know it will interfere with the relationship between parents and their children-it could make my children afraid to come to us if they have something important to talk to us about, (I was afraid to go to my parents). I want my children to come to us when they are scared or worried, not be afraid of us, and how we will react. I want my children to trust us, and not hit. My Family Support Specialist encouraged me to use non-physical discipline, focusing on redirection, using a positive behavior chart, time outs." ~Healthy Families*

<sup>1</sup> The Family Stress Checklist was revised by the original developer and renamed the Parent Survey to impart a more strength based perspective; however, the rating scale remains unchanged. More information on this instrument is provided in Appendix B.

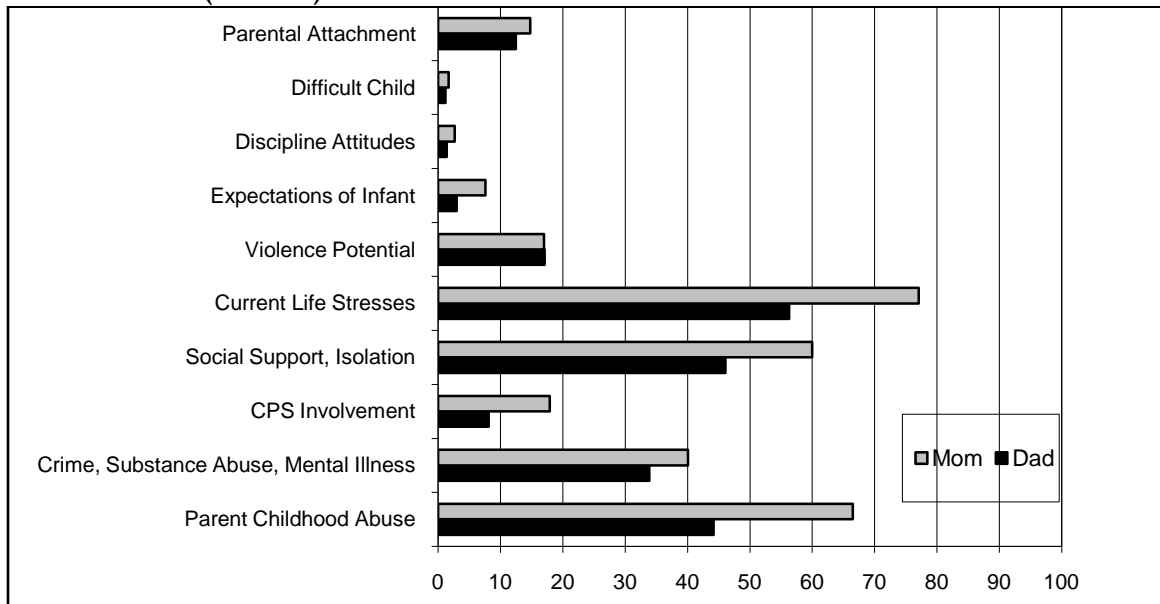


**Exhibit 7. Percentage of Parents Rated Severe on Parent Survey Items PRENATAL (N=684) \***



\* Does not include missing data

**Exhibit 8. Percentage of Parents Rated Severe on Parent Survey Items POSTNATAL (N=2028)\***



\* Does not include missing data





As in previous years, the four factors rated most severe by both mothers and fathers are: history of childhood abuse (for the parent); current life stressors; social support and isolation; and a history of crime, substance abuse, or mental illness. The prenatal mothers (78.5%) had a higher percentage of childhood abuse than the postnatal mothers (66.7%).

Overall, participants in the Healthy Families Arizona program are families that are impoverished, stressed, socially disadvantaged, and lacking in resources to manage the demands of parenting.

### *Infant Characteristics*

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

**Exhibit 9. Risk Factors for Infants - State Fiscal Year 2011**

<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>	10.9%	17.1%	10.0%***
<b>Birth Defects</b>	0.3 %	1.5%	0.6%***
<b>Low Birth Weight</b>	9.4%	13.9%	7.1%****
<b>Positive Alcohol/Drug Screen</b>	1.0%	8.7%	1.1%***

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

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

\*\*\*2009 data from the Arizona Department of Health Services Vital Statistics records.

\*\*\*\*2010 data from the Arizona Department of Health Services Vital Statistics records.

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



## *Summary*

The outcomes for fiscal year 2011 suggest that the Healthy Families Arizona program is effectively reaching parents and their babies who have greater risks of child maltreatment and other unhealthy outcomes. The home visitors in the Healthy Families Arizona program encourage parents that enroll prenatally to attend regular prenatal visits, adopt good nutrition habits, and avoid alcohol, drug, and tobacco use. These are known to help prevent pre-term or low birth weight babies. Both low birth weight children and children born at less than 37 weeks gestation are at more risk for child maltreatment and present special challenges for parents. The number of infants with these challenges among the families that enroll postnatally is greater than for families that enroll prenatally. This suggests that Healthy Families Arizona targets families that are at significant risk and can benefit from the early support that is offered in the home visitation program.



## Key Healthy Families Arizona Services

The overall goals of reducing child abuse and neglect are only attainable when families stay engaged in the program and receive the services and resources they need. An important aspect of the Healthy Families program model is linking families with needed community resources. Home visitors not only provide assistance and guidance in the home, they also connect families with education, employment, and training resources, counseling and support services, public assistance and health care services.

### **Home Visitors Support Families in Many Ways**

*"The Healthy Families home visitor has been a constant in the lives of this family. She first visited this mom before the baby was born and supported her when she learned that her baby would probably be born with some disabilities. She explored mom's feelings and fostered interaction between mother and baby. She focused on the developmental things that the baby could do and not what he couldn't do. She listened impartially and with empathy and offered unwavering support even when her own feelings were challenged. She arranged to keep the mom in the program and meet in a safe place when the ex-husband learned of the family's location and made threats to the mom. She kept in touch at all hours with the mom by phone when she had to take the baby to Phoenix and kept her home visits when the mom was in town. She supported the mom with her other two sons who had to be placed with other family members while their mom took care of the baby's needs."*

### ***Developmental Screens and Referrals for Children***

Developmental screens are regularly provided by home visitors and are used to measure a child's developmental progress and to identify potential developmental delays requiring specialist intervention. The home visitor administers the Ages and Stages Questionnaire (ASQ) for physical development and the ASQ-Social Emotional (SE) which focuses on social and emotional competence.

Starting in July 2010, the ASQ is given at 4, 6, 9, and 12 months in the first year of the infant's life and then every six months until the child exits the Healthy Families Arizona program. The statewide program performance goal is to screen at least 80% of the children in the program. As Exhibit 10 shows, the number of children receiving the ASQ at each interval is exceeding the program goal of 80% at four months and is approaching the program goal at all other time periods. Overall, the rates of screening for this year are approximately 5-10% higher than in the previous year.



**Exhibit 10. ASQ Screening State Fiscal Year 2011**

Interval ASQ Screening	Percent of children Screened with ASQ 2011	Percent screened as delayed 2011
4-month	83.1%	3.1%
6-month	78.8%	2.7%
9-month	78.8%	3.7%
12-month	78.7%	2.8%
18-month	74.1%	6.4%
24-month	72.3%	8.1%

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

Although 3-8% of children (depending on their age) are initially screened as delayed in their development, 4-7% of the children who initially screen as delayed on the ASQ in the early months of their life are determined to be “not delayed” upon further assessment (see Exhibit 11 below). For

**Developmental Screenings Lead to Resources for Children**

*“The family support specialist recognized her youngest daughter had speech delays and assisted the family to receive appropriate services, and locate resources in the community. She now receives social security benefits for this child. She stays involved in her children’s education, and seeks further assistance when they are in need. She has reported to her family support specialist the difference in her son’s vocabulary compared to the other children he is around, “He is able to talk more.” He is learning to write his name, identify colors, shapes, and recite his abc’s and the numbers 1-10, to prepare him for enrollment in kindergarten.”*

example, of the families at 4 months who screened as delayed on the ASQ and were referred for more assessment, 2 families showed no delay, 18 families were referred to the AzEIP, 5 families were referred to an early intervention program, 35 families received developmental intervention, 5 families were referred to specialized therapy, and 5 declined further referral. The ASQ screening provides a valuable service to families because it enables them to access appropriate services to meet their child’s particular needs. The following exhibit shows the outcome of these follow-up assessments that are completed with families at the different time intervals.



**Exhibit 11. ASQ Follow-up Services State Fiscal Year 2011**

	<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>4-month Screen</b>	4.3% (2)	39.1% (18)	4.3% (5)	76.1% (35)	10.9% (5)	10.9% (5)
<b>6-month Screen</b>	7.1% (3)	45.2% (19)	4.8% (2)	66.7% (28)	14.3% (6)	9.5% (4)
<b>9-month Screen</b>	4.0% (1)	20.0% (5)	4.0% (1)	44.0% (11)	16.0% (4)	0.0% (0)
<b>12-month Screen</b>	0.0% (0)	20.0% (6)	6.7% (2)	46.7% (14)	10.0% (3)	16.7% (5)
<b>18-month Screen</b>	0.0% (0)	46.9% (15)	6.3% (2)	53.1% (17)	6.3% (2)	12.5% (4)
<b>24-month Screen</b>	0.0% (0)	27.8% (5)	5.6% (1)	66.7% (12)	0.0% (0)	16.7% (3)

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

*"The family that comes to mind that has greatly benefited from the program is Eric, Nicole and Douglas. Nicole never wanted to be a mother. She states that she has never seen herself as the "Mother type." Eric knew that he wanted to be more of a father than he was in the past. When their son Douglas was born, Nicole didn't know what she was going to do. Nicole has stated that she didn't know how to raise a child, let alone interact with anyone who wasn't an adult. Through the program staff's with them, through the curriculum used, and through the support of the program, Nicole's attitude has changed and Eric feels more involved in Douglas's life. Now Nicole is starting to enjoy spending time with Douglas. Now Nicole gets excited about the accomplishments that Douglas has done in regards to his development. Now Nicole gets excited to learn about the next stages in Douglas's life. Now Nicole knows how to play with Douglas to help with his development. Even though parenting is a struggle for them still, the program has all the resources that they need so that parenting isn't just a job to do, but now they know how to make it more fun with Douglas."*



# Outcomes for Families

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

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

## *Parent outcomes*

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

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

### **Home Visitors Focus on Family Strengths**

*“I believe that things would have been much different for this family had they not had the support of Healthy Families and a particular home visitor who provided consistent, non-judgmental support. The strength-based relationship developed between this home visitor and this mom has made an immeasurable difference for this family.”*

## **Healthy Families Parenting Inventory Reveals Positive Parent Change**

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



The following section describes the results obtained for each subscale of the HFPI. The level of significance is reported along with the *effect size* which estimates the *magnitude* of the change. Effect sizes below 0.20 are considered small, while those between 0.20 and 0.50 are considered small to medium. These findings are based on data reported from the sites and represent participants who completed both instruments at the baseline and 6 month intervals (n=777) and participants who also had matched instruments at the 12 month interval (n=396).

### **Healthy Families Parent Inventory (HFPI) Subscales**

**Exhibit 12. Change in Subscales of the HFPI**

Sub- scale	Significant improvement from baseline to <u>6 months</u>	Significance	Effect size	Significant improvement from baseline to <u>12 months</u>	Significance	Effect size
Social support	✓	.000	(.11)	None	-	(.02)
Problem solving	✓	.000	(.19)	✓	.000	(.23)
Depression	✓	.001	(.12)	✓	.000	(.17)
Personal care	✓	.000	(.10)	✓	.000	(.16)
Mobilizing resources	✓	.000	(.16)	✓	.000	(.36)
Commitment To Parent Role	✓	.000	(.35)	✓	.000	(.21)
Parent/child Behavior	✓	.000	(.20)	✓	.016	(.12)
Home Environment	✓	.000	(.26)	✓	.000	(.34)
Parenting Efficacy	✓	.000	(.12)	✓	.002	(.15)

From baseline to 6 months, there were significant changes in all subscales. From baseline to 12 months, however, significant gains were lost in the area of social support. The largest changes at 6 and 12 months after entering the program are in the categories of home environment, commitment to parent role, problem solving and mobilizing resources scales. This indicates that the Healthy Families programs are effective at connecting parents to resources, improving the atmosphere of the home, improving parents' problem solving skills and parenting satisfaction.



## Total Change Score on the HFPI

In order to provide a more comprehensive understanding of changes in parenting observed during participation in the Healthy Families program, it is also useful to examine the total score on the Healthy Families Parenting Inventory and overall significance of change across all subscales. As the exhibit below shows, there were significant changes from baseline to 6 months and from baseline to 12 months on the HFPI. This finding supports the conclusion that program participants changed during the course of the program. Overall, the percent of individuals who showed positive change on the total score from baseline to 6 months was 64.1% and from baseline to 12 months was 62.9%.

**Exhibit 13. Overall Change in Healthy Families Parenting Inventory Outcomes**

Sub-scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Total Scale	✓	.000	(.26)	✓	.000	(.29)

## *Child Abuse and Neglect*

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

There are several reasons the use of child abuse data is believed to have limitations. First, child abuse is an event that occurs infrequently and, therefore, changes are difficult to detect with statistical methods. Second, using official incidents of child abuse and neglect does not necessarily reflect actual behavior – there are many variations in what constitutes abuse and neglect and using only reported and substantiated incidents of abuse only captures incidents that rise to that level of severity. Some incidents of child abuse or neglect are undetected or may not meet some definitional standard minimizing the accuracy of the count.





Third, using official data requires a process whereby cases are “matched” on available information such as mother’s name, social security number, and date of child’s birth. When any of this information is missing, the accuracy of the match decreases. Finally, because home visitors are trained in the warning signs of abuse and neglect and are required to report abuse or neglect when it is observed, there is a “surveillance” effect – what might have gone unreported had there been no home visitor shows up in the official data.

Only families that have been in the program for at least six months are analyzed to determine if they have a substantiated report of child abuse or neglect. This year, 99.98% of the Healthy Families eligible cases (38 out of 1,874) were without a substantiated report, as can be seen in Exhibit 14. This exceeds the program performance goal of 99.7%. A substantiated finding means that “Child Protective Services has concluded that the evidence supports that an incident of abuse or neglect occurred based upon a probable cause standard” (see DES substantiation guidelines for further detail).

**Exhibit 14. Percent of Families Showing no Child Abuse and Neglect Incidences - 2007, 2008, 2009, 2010, 2011**

Group	Percent Without Substantiated Report 2006-2007 (n = 3,301)	Percent Without Substantiated Report 2007-2008 (n = 3,885)	Percent Without Substantiated Report 2008-2009 (n = 4,247)	Percent Without Substantiated Report 2009-2010 (n = 878)	Percent Without Substantiated Report 2010-2011 (n = 1,874)
All Families	99.7%	98.9%	98.8%	97.4%	99.98%

### *Child Development and Wellness*

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



### **Families make Steady Progress with HFAz support**

*“Linda has been in the Healthy Families program for 18 months. She is a 25 year old single mother with a history of substance abuse and is a survivor of domestic violence and sexual abuse. The baby’s name is Alex, he is 18 months old. Linda has struggled most of her life with adverse living conditions exposing her to substance abuse, domestic violence and even sexual abuse at the age of 8 by her step-father. Linda was enrolled in a substance abuse treatment program while pregnant. The center staff recognized the need for Linda to learn how to parent and build a nurturing, secure relationship with her newborn child and she was referred to the HFAz program and has been an active participant building a strong relationship with her FSS. Linda graduated from the substance abuse treatment program 5 months ago and continues to see her FSS on a regular basis. She now has her own apartment and a steady job. Recently Linda resumed school and placed Alex in a quality child care facility.”*

### **Immunizations**

The Arizona Department of Health Services set a Healthy People 2010 goal to have at least 90% of all Arizona children immunized. As of 2010, the Arizona rate was 76.3%, and the U.S. rate was 75% ([www.cdc.gov](http://www.cdc.gov)). Healthy Families Arizona supports children obtaining all their necessary immunizations as a key step in preventing debilitating diseases. HFAz home visitors regularly check each family’s immunization booklet to assess completion of immunizations. Exhibit 15 presents the past four years of data on immunization rates for the 2, 4, 6, and 12 month immunization periods. For the 2011 study year, there was a significant drop in the number of children who were immunized at each time period. Healthy Families Arizona families also fell below both the state and national immunization rates for 2-year olds. This may be due to the economic factors where families do not have the resources to visit the doctor regularly. However, this finding suggests the program needs to increase efforts in promoting immunizations for the children served by Healthy Families Arizona.



**Exhibit 15. Immunization Rate of Healthy Families Arizona Children**

Immunization Period	Percent Immunized 2008	Percent Immunized 2009	Percent Immunized 2010	Percent Immunized 2011	Immunization Rate for 2-year-olds in Arizona (2010)*
2 month	91.3%	80.3%	92.9%	69.7%	
4 month	88.5%	78.0%	89.9%	70.2%	
6 month	75.9%	65.9%	74.0%	68.2%	
12 month	90.2%	88.6%	85.3%	62.7%	
Received all recommended immunization by 18 months of age	87.4%	85.0%	79.8%	74.4%	76.3%

\*Source: 2010 data from the CDC National Immunization Survey.

**Safety Practices in the Home**

Injury death rates in the United States have declined over the last 20 years, but unintentional injuries continue to be the leading cause of death for children ages 1 to 14. In addition, according to the CDC National Hospital Discharge Survey, there are 29 injury related hospitalizations and 1,110 injury related emergency room visits for every injury fatality. A recent report, *What works for children, 2008*, concluded that home visits can reduce the risk of accidental injuries in the home by approximately 26 percent.

**HFAz home visitors provide health education and advocacy for parents**

*“A prenatal family was having issues for 6 months in getting landlord to fix mold issues at house. The family was scared about how mold would affect their newborn baby. Children in the house were getting sick from the mold. Thus, the FSS brought lots of easy to read fliers in Spanish to highlight the effects of mold for everyone near it. The FSS also explained how mold would affect the health of the baby and the mother. The information was shared with the landlord as well as the fliers. Within a month, the landlord bought the material to fix the mold in the bathroom. The family has a house that is mold free and is grateful for the information which convinced the landlord to fix the mold.”*

Healthy Families Arizona assesses and promotes safe environments for children through education about safety practices and by monitoring safety in the home through the completion of the safety checklist. The following exhibits show results for families that had data in these areas. Exhibit 16 reports the use of four key safety practices across five time points for postnatal participants. As the data show, safety practices increase over time spent in the program and reach high rates. For example, at 18 months, 99.6% use car seats and 97.8% lock their poisons properly. Car seat use has been estimated to be 99% for infants up to 12 months (National Highway Traffic



Safety Administration, 2009) and the data reported for the Healthy Families program exceeds this percent. Furthermore, studies have found that smoke alarms are present in only 69% of homes with reported fires and one fifth of those alarms do not work properly (Ahrens, 2009). Similarly, one study in an inner city (Rowland, et al., 2002) reports that 54% of Americans have “working alarms” and this is much lower than the 90% working alarm finding reported by the Healthy Families program at 12 months.

**Exhibit 16. Percent of all Families Implementing Safety Practices**

	2-Month (n = 1618)	6-Month (n = 1425)	12-Month (n = 857)	18-Month (n = 447)	24-Month (n = 221)
<b>Outlets Covered</b>	43.4%	55.2%	68.9%	80.2%	80.0%
<b>Poisons Locked</b>	85.0%	90.9%	95.1%	97.8%	97.7%
<b>Smoke Alarms</b>	85.5%	89.6%	90.3%	91.9%	91.8%
<b>Car Seats</b>	99.4%	99.5%	99.4%	99.6%	99.1%

### *Mothers’ Health, Education, and Employment*

The Healthy Families Arizona program also attempts to influence maternal life course outcomes. The home visitors encourage families to seek new educational opportunities, complete their high school education, obtain greater economic self-sufficiency, and obtain better paying and better quality jobs. Information is also provided to mothers regarding the positive health impacts of delaying subsequent pregnancies to at least 24 months.

### Subsequent Pregnancies and Birth Spacing

Multiple births for some families can lead to increased stress and parenting difficulties, especially if the birth is unwanted or unplanned. The home visitors emphasize the benefits of delaying repeat pregnancies and promote longer birth spacing for the mothers in the program. The following exhibit shows that the percent of HFAz mothers who reported subsequent pregnancies has continued to decrease for the last several years.

**Exhibit 17. Percentage of Mothers who Reported Subsequent Pregnancies State Fiscal year 2011**

	2007	2008	2009	2010	2011
<b>Percent of mothers with subsequent pregnancies</b>	10.4%	11.5%	9.9%	7.1%	4.9%



Mothers with greater birth spacing have fewer pregnancy complications and are less likely to give birth to low birth weight or premature babies (Kallan, 1997). The health benefits of birth spacing are considerable and Healthy Families can support the new public campaign about birth spacing that says, “three to five years saves lives” by educating families about the benefits of longer time periods between births.

Although there are fewer mothers who have subsequent pregnancies while enrolled in the Healthy Families Arizona program, there is an unfortunate decrease in the percentage of women waiting at least two years before becoming pregnant again. Exhibit 18 below shows the length of time to subsequent pregnancy for those mothers who do have subsequent births. There has been a persistent upward trend in the number of women waiting less than 2 years between subsequent births, indicating that a smaller percentage of women are adhering to the “three to five years saves lives” philosophy.

**Exhibit 18. Length of Time to Subsequent Pregnancy for Those Families with Subsequent Births**

Length of Time to Subsequent Pregnancy	2007 Percent of Mothers	2008 Percent of Mothers	2009 Percent of Mothers	2010 Percent of Mothers	2011 Percent of Mothers
1 to 12 mos.	42.1%	40.2%	49.3%	54.1%	65.1%
13 to 24 mos.	39.3%	43.9%	46.8%	42.6%	31.0%
Over 24 mos.	18.6%	15.9%	4.0%	3.3%	3.9%

### **School, Educational Enrollment, and Employment**

Continued educational obtainment and increased employment are also important to consider when examining the program’s potential impact on maternal life course outcomes. Increased education is associated with better overall well-being and greater family stability. As the following exhibit shows, at each interval, 17-22% of the mothers are enrolled in school either full- or part-time. Fulltime school enrollment is lower than in 2010, but is still an increase over 2009. The extended weakened economy may be a relevant factor in the small number enrolled in the past few years. Parents may have additional challenges in accessing or affording childcare, affording school, or having the time available away from work (or seeking employment) to attend school.



### **Increasing family self-sufficiency**

*“The team worked with a family who lives on the Navajo reservation Dilkon, AZ, forty five miles from the city of Winslow. This mother has five children, four girls and one son the target child. She came into the program with no employment, and minimal income, from DES. The family had no vehicle to get to and from appointments in town. Family depended on others for transportation. Worker discussed needs of the family and referred to local agencies to assist mom with employment and education. She began studying to take her GED at the community college, and having food sales on the weekends. During tax season the worker provided referral and resources to the family for free tax preparation. This mother had never filed income tax before and was unaware of the benefits to her family. She received a tax return and was able to purchase a small vehicle, empowering this mother.”*

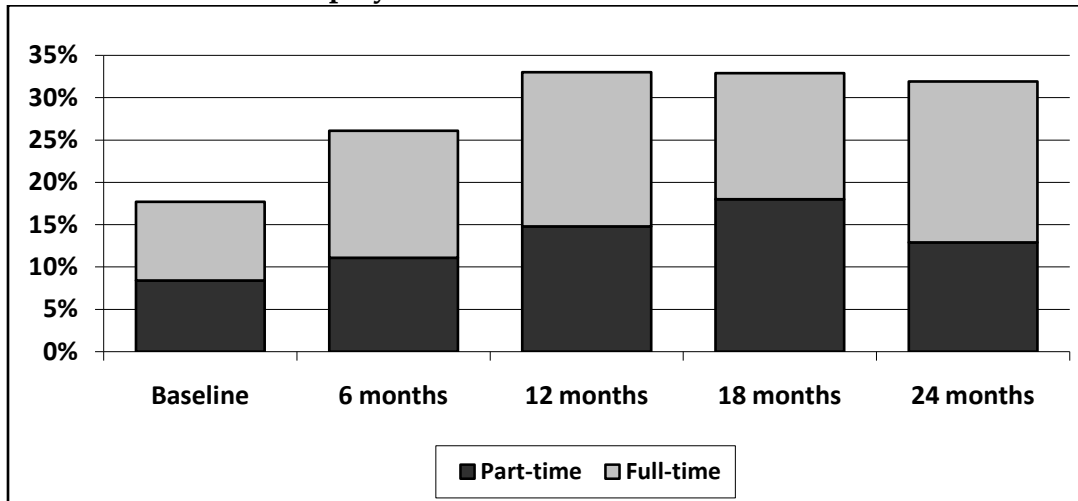
**Exhibit 19. Percent of Mothers Enrolled in School – State Fiscal Year 2010**

	Percent enrolled full-time (2009 prior report)	Percent enrolled part-time (2010 prior report)	Percent enrolled full-time (2010 prior report)	Percent enrolled part-time (2011)	Percent enrolled full-time (2011)
6 month	9.3%	6.2%	12.3%	6.1%	10.9%
12 month	10.4%	7.2%	14.8%	6.3%	11.4%
18 month	10.6%	6.2%	12.4%	9.3%	12.4%
24 month	7.3%	4.6%	10.0%	4.8%	12.7%

Mothers who are actively engaged in the program show an increasing rate of employment from initial assessment to 12 months of program participation. Approximately 32% of the mothers are employed at 24 months which is lower than national estimates of employment for mothers of young children at approximately 50%. While increasing employment and income is fundamental for family well-being there are complex realities facing families as they begin to increase their earnings. One concern is that as mothers increase their income, there is the potential for families to become ineligible for AHCCCS health insurance and also not be covered by employers. Furthermore, the importance of home visitors working with families in obtaining quality child care is critical given the limited child care options currently available for families with low incomes. The rate of employment for HFAZ mothers this year is similar to last year, but lower than in previous years when it was closer to 40%.



**Exhibit 20. Mother's Employment Status**



***Substance Abuse Screening***

There is a strong relationship between substance abuse and the potential for child maltreatment (Pan, et al., 1994; Windom, 1992; Wolfe, 1998). Children may not be adequately cared for or supervised when their caretaker suffers from substance abuse. The successful treatment of substance abuse often requires intensive treatment, but home visitors can play a critical role in screening for substance abuse, in educating families about the effects of substance abuse on their health and the health of their children, and in making referrals for treatment services. Exhibit 21 presents data on the percent of families screened with the CRAFFT substance abuse screening tool and the percent of those families who screened positive for drug use. The percent screened at the 2 month interval shows a marked decrease over previous years, but this was not originally required for FTF funded programs prior to July 1, 2010 so this is not a typical representation. On the other hand, the percentage of screens that were conducted at the 6 and 12 month time periods increase dramatically from 82% and 80% to 96% and 97% respectively. However, a 51.6% positive screen at 2 months is very high and suggests a large number of families are screened as positive and are potentially in need of substance abuse information or treatment.

**Exhibit 21. Percent Screened and Assessed Positive on the CRAFFT**

Time at assessment	Percent Screened	Percent Assessed Positive
2 months (lifetime)	63.7%	51.6%
6 months	95.5%	19.5%
12 months	96.8%	16.1%

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



## Participant Satisfaction

Data on participant satisfaction information provides valuable information for program staff and a time for reflection for participants. If participants are satisfied with the program and the work of the home visitor, they are more likely to benefit from the program. The following data summarizes the responses of participants who took the Healthy Families participant satisfaction survey during the spring of 2011 contract year. The survey is distributed to all current participants in the program and returned by mail. Data was received from all 10 programs for a total of 1,008 completed surveys. The ethnic breakdown of these participants was 51% Hispanic, 31% White, 7% American Indian, 5% African American, 5% Two or More Races, less than 1% Asian, less than 1% Hawaiian/Pacific Islander, and 1% Other. Exhibit 22 below shows key highlights from participant satisfaction survey responses. The exhibit presents the items which received the highest percent of strongly agree responses from participants and the items receiving the lowest percent of strongly agree. Clearly, participants feel they have good communication with their home visitors. Fewer participants agree strongly that finding services was easy. Overall, for the complete survey, most of the respondents endorsed the satisfaction items as strongly agree over 75% of the time.

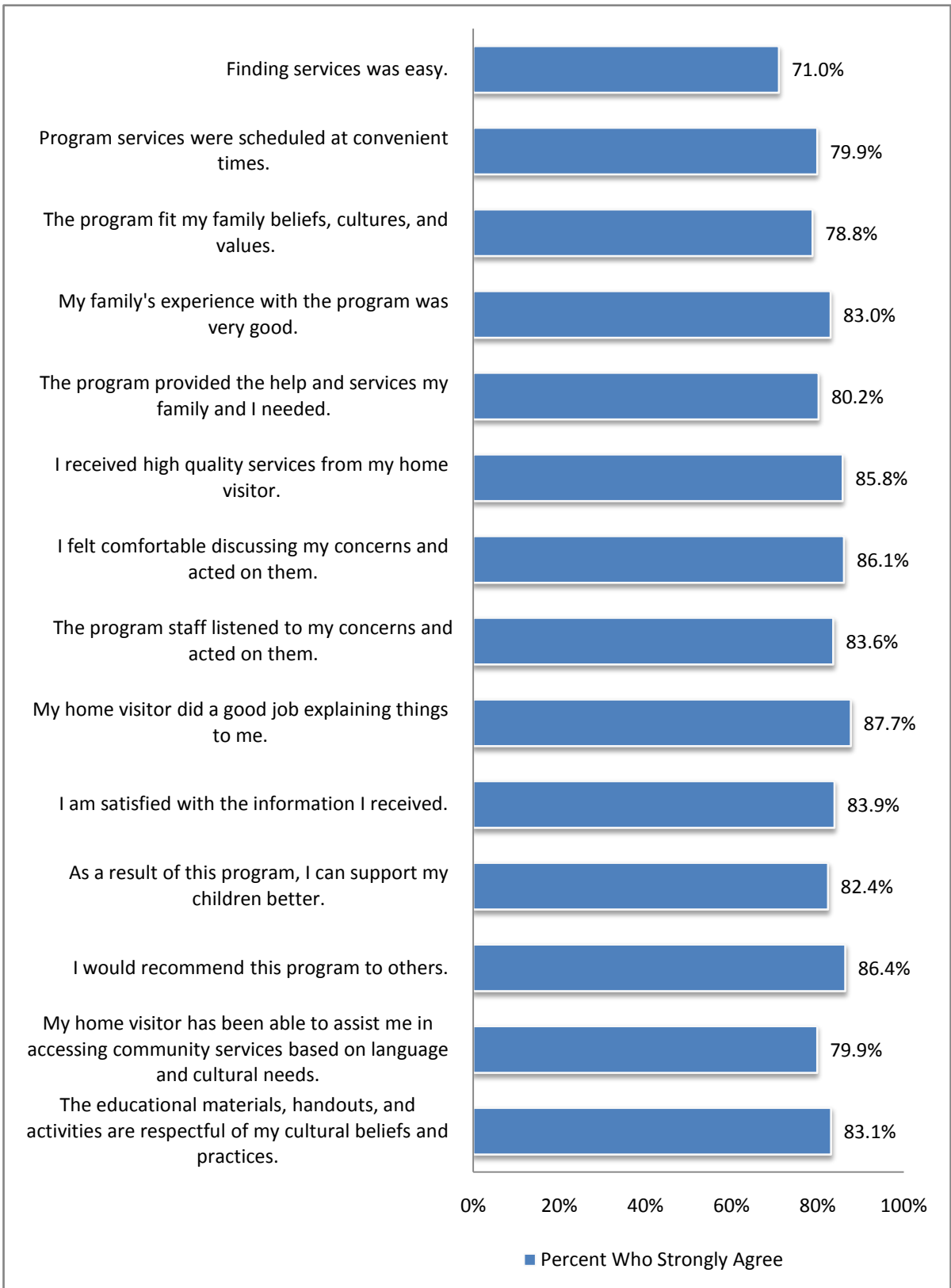
### **Healthy Families provides support for substance abuse prevention and treatment**

*“Mina and Zach have been in the Healthy Families program over the past four years. When we first met them, Mina was attending mandated counseling sessions with CPS; she had a long history of substance abuse, child neglect and had lost custody of her four older children to relatives. She had just given birth to Zach, Jr., was very depressed and had lost all confidence in herself. She wondered if she could stay clean and sober and keep her baby. Mike, her Healthy Families Family Support Specialist, spent many hours listening to Mina and worked steadily to give support to the family as they tried to start over. Mike continued to visit with the family even when the ability to stay clean and sober was in question. He spoke to Mina about her drug use and its affect on the baby. Mike continued to encourage sobriety for the children’s sake and together the family set sobriety as a goal. After several setbacks and struggles, Mina has remained clean and sober. Little Zach is healthy and happy and Mina has been reunited with two of her children and have regular visitation with the other two. The family welcomed Mike into their home and has rarely missed a visit in four years.”*





**Exhibit 22. Participant Satisfaction Survey 2011 – Selected Items**



## Conclusions and Recommendations

After the major changes that occurred to the Healthy Families Arizona program in the previous year due to reduced financial resources, the 2011 state fiscal year has been a productive year. The combined funding from DES and FTF has increased the number of families receiving services in more locations throughout the state. The accreditation process brought to light the continuing adherence to the Critical Elements of the Healthy Families program model, and this has no doubt contributed to the positive outcomes achieved with families. The Healthy Families Arizona evaluation report focuses on the following primary outcome indicators: parent outcomes, child health and wellness, and child abuse and neglect. The results from the Healthy Families Parenting Inventory, participant tracking data sheets, safety checklists, screening tools, child abuse and neglect rates, and immunization rates all suggest that Healthy Families Arizona continued to address and reach most of its goals.

The Healthy Families Arizona program uses evidence-based methods to guide the practice of home visitation. In order to continue to see successful outcomes and to improve other outcomes, the Healthy Families Arizona program needs to rigorously investigate the program at least annually and use evidence for program improvement.

Recommendations for this year are focused on ways the program can continue to emphasize quality programming, provide the most critical services to the highest risk families, and improve parent and child outcomes.

- **Continue to focus on serving families during the first year of the infant's life.** Since the highest occurrence of child abuse and neglect occurs among infants in their first year of life, it is important to remain focused on providing consistent service to families during this time. Due to the limited resources in the community due to the economic situation, the home visitors provide vital services that otherwise may not be available.
- **Direct additional efforts toward increasing the time between births.** While there has been a decrease in the number of repeat pregnancies during program enrollment, there has unfortunately continued to be an increase in the percentage of these pregnancies that are happening within 24 months of a prior birth. Additional training and creative strategies to educate parents on the benefits of delayed pregnancy should be undertaken.



- **Identify the families that are highest-risk early to ensure they receive the services they need.** A large number of families are struggling with substance abuse and other issues when they are enrolled into the program. Regular screening and supervision are absolutely vital at this time period in order to identify the families at greatest risk and provide them the referrals that they need to obtain help. Supervisors can help guide home visitors to focus on the most important needs and develop strong connections with community resources to help meet those needs.
- **Maintain attention to recruiting and serving families during the prenatal period.** The families that enroll during the prenatal period have better birth outcomes than those that have not received Healthy Families Arizona services prior to birth. The programs should consider setting concrete goals and action steps to systematically enroll families in the prenatal period. These strategies may need to be customized to the local community in order to most effectively reach families in the prenatal period.
- **Review and update the program logic models and provide training in the core elements of the program logic model to sharpen focus on key program objectives and activities.** Healthy Families Arizona developed comprehensive logic models for both the prenatal program and the postnatal program, to illustrate the key goals, objectives, activities, outputs, outcomes, and evaluation methods. Although many of the critical elements remain unchanged, it would be useful to re-examine if the models are depicting the program as currently implemented. These logic models can be distributed and used by all program staff to maintain focus on key aspects of the intervention model. Training for program staff can support the use of the logic model to maintain sharp focus on fidelity to the model.
- **Focus specific strategies on enhancing the “worker-parent alliance” to increase retention and positive outcomes of participant families.** Research has demonstrated that one common factor in predicting participant engagement and positive outcomes is the worker-parent alliance. Some programs are now using a measure of worker-parent alliance to monitor this critical factor. The program may want to explore the use of this tool to help home visitors understand the factors that contribute to achieving a strong alliance or connection with their families. Furthermore, the average length of stay in the program has decreased to less than a year. Each site should examine the reasons for termination from the program and then home visitors and their supervisors should develop creative retention strategies to retain families in the program.



- **Continued attention should be directed to submitting accurate and complete data to assure the program is documenting its outcomes and building a body of data for credentialing, program improvement, and research on home visitation effectiveness.** Missing data makes it difficult to evaluate the effectiveness of the program for a family, and it also may be an indication that the family is not receiving all the services they need. Both the quantity and quality of the paperwork required of program staff should be examined to determine the most useful and relevant data necessary for case management, quality assurance, compliance, and evaluation.
- **Supervisors should continue to place emphasis on evidence-based decision-making in the daily work of home visitation.** The home visitor trainings have focused this year on the usefulness of the HFPI for identifying areas of concern with families, selecting focused interventions and curriculum activities based on the scores of the HFPI, and identifying specific community resources to address concerns raised by the HFPI scores. In this way, the evaluation measure has increased clinical usefulness to the home visitors. Supervisors should provide clear directions on how to make use of the evidence-based protocols and instruments such as the HFPI through the development of practice protocols and approaches.
- **Continue to view and evaluate Healthy Families as part of a system of early childhood programs.** Research is increasingly suggesting the importance of a systems approach to improving early childhood outcomes, one that acknowledges the complexity of issues families are facing and the need for multiple partners in addressing them. The combined efforts of DES and FTF can help Arizona continue to be at the forefront of this.
- **Place increased focus on assuring timely immunizations and data submission.** There has been a decrease in the number of infants completing their immunizations at each time point. While some of this may be due to the current economic situation where families are unable to obtain immunizations easily due to clinic closures, lack of transportation, and other reasons, it is essential to the health of the infant that immunizations be completed. The home visitors may need to place more emphasis on the importance of immunizations and may need to make additional referrals to local immunization clinics. Sites should also pay particular attention to documenting immunizations in data collection forms.



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## Appendix A. Site Level Data

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**Age of Child at Entry by Site - 2011  
(Age in Days)**

Site	Mean (Age in Days)	Number	Standard Deviation
Central Phoenix	39.40	82	27.36
Maryvale	38.47	74	24.33
East Valley	42.49	68	25.53
Nogales	15.32	28	18.99
Page	11.14	7	54.21
Pima-Team 8	33.04	53	41.39
CODAC	35.84	74	26.50
La Frontera	30.34	65	33.45
Pima-Team 11	36.85	88	32.11
Douglas/ Sierra Vista	21.78	55	34.32
Tuba City	10.57	37	34.49
Yuma- DES	18.83	71	17.70
Lake Havasu	24.08	53	26.99
La Plaza Vieja-Flagstaff	30.81	16	50.60
Sunnyslope	45.92	110	28.21
Prescott	19.37	111	18.07
Mesa	43.74	88	31.06
Pima- Team 27	35.87	55	25.52
Safford	23.88	24	37.76
Winslow	2.08	25	40.84
Kingman	25.16	25	35.38
Bullhead City	29.85	75	32.61
West Phoenix	36.36	94	27.78
Kinlani-Flagstaff	33.44	9	26.25
Wellspring-Flagstaff	27.20	5	28.44
Central Phoenix #1	38.75	56	22.11
Central Phoenix #2	47.08	88	32.73
North Phoenix	55.38	66	66.48
SE/NE Maricopa	45.10	89	92.68
Combo Phoenix	37.77	60	24.03
South Phoenix	43.44	87	23.29
SE Maricopa #7	32.52	71	43.96
SE Maricopa #8	25.32	78	21.97
Yuma-FTF	23.46	41	22.36
<b>Total</b>	<b>34.24</b>	<b>2028</b>	<b>37.51</b>

Note: total does not include data for families that enrolled in the prenatal period including those that did not receive prenatal services.



**Days to Program Exit by Site - 2011  
(For families who left the program)**

Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Central Phoenix	177.00	274.60	232.71	5	214.50	293.19	231.05	36
Maryvale	471.00	556.13	312.41	8	355.00	427.72	277.46	32
East Valley	306.00	313.67	114.18	6	272.00	284.19	89.88	16
Nogales	169.00	370.67	447.03	3	318.00	419.00	275.88	9
Page	322.00	322.00	.	1	158.00	242.67	166.06	3
Pima-Team 8	179.00	278.57	319.44	7	230.00	288.15	138.37	13
CODAC	335.00	400.00	224.51	6	329.50	388.89	245.80	28
La Frontera	326.00	378.70	212.52	10	465.00	460.67	262.85	21
Pima- Team 11	329.00	380.60	279.63	5	235.50	277.29	160.56	28
Douglas/Sierra Vista	337.00	371.50	170.99	6	246.50	332.36	173.18	22
Tuba City	326.50	410.30	257.47	10	177.00	242.20	200.13	15
Yuma- DES	181.50	189.50	58.41	6	218.00	300.48	174.16	23
Lake Havasu	273.00	344.54	247.92	13	224.00	349.21	227.10	19
La Plaza Veija-Flagstaff	395.00	457.19	273.90	16	458.50	409.33	268.29	6
Sunnyslope	247.50	220.38	95.70	8	199.00	206.89	121.21	37
Prescott	560.00	560.00	.	1	279.00	333.54	198.87	39
Mesa	323.00	292.14	114.96	7	232.00	308.45	216.76	29
Pima-Team 27	634.00	561.00	333.02	5	297.50	353.86	246.72	14
Safford	239.00	286.80	183.67	5	295.00	430.00	313.99	7
Winslow	345.00	414.50	267.15	8	167.00	196.33	147.71	6
Kingman	182.00	283.65	270.94	17	450.50	459.90	338.13	10
Bullhead City	179.00	179.90	83.31	10	235.00	314.97	194.42	33
West Phoenix	290.50	298.25	164.97	4	311.00	308.96	133.25	27
Kinlani-Flagstaff	298.00	388.17	209.68	6	-	-	-	-
Wellsping-Flagstaff	358.50	478.00	298.01	8	557.00	524.33	273.91	6
Central Phoenix #1	378.00	378.00	180.26	5	224.50	259.45	128.95	20
Central Phoenix #2	179.00	290.27	261.53	11	295.50	335.18	196.30	28
North Phoenix	373.00	369.00	116.05	3	234.50	253.38	178.67	16
SE/NE Maricopa	144.00	137.00	50.28	5	298.00	295.16	159.50	32
Combo Phoenix	234.00	238.22	144.64	9	192.50	253.15	184.85	26
South Phoenix	280.00	315.43	128.89	7	201.00	246.44	176.21	39
SE Maricopa #7	244.00	228.11	77.15	9	248.50	255.17	155.63	24
SE Maricopa #8	269.00	331.00	169.78	11	266.50	269.87	141.32	30
Yuma-FTF	63.50	63.50	17.68	2	137.00	137.00	0	1
<b>Total</b>	<b>267.00</b>	<b>334.91</b>	<b>230.50</b>	<b>243</b>	<b>250.00</b>	<b>311.02</b>	<b>204.07</b>	<b>695</b>



**Top Four Reasons for Program Exit by Site - 2011**  
**Percent and number within site**

Site	Overall (Prenatal and Postnatal Combined)							
	#1 Moved Away		#2 Did Not Respond to Outreach Efforts		#3 Family Refused Further Services		#4 Self Sufficiency	
	%	n	%	n	%	n	%	n
Central Phoenix	24.1	10	17.1	7	12.2	5	19.5	8
Maryvale	15.0	6	17.5	7	10.0	4	12.5	5
East Valley	9.1	2	54.5	12	9.1	2	.0	0
Nogales	41.7	5	33.3	4	8.3	1	.0	0
Page	50.0	2	.0	0	25.0	1	.0	0
Pima-Team 8	25.0	5	30.0	6	5.0	1	10.0	2
CODAC	20.6	7	29.4	10	17.6	6	.0	0
La Frontera	29.0	9	19.4	6	3.2	1	19.4	6
Pima-Team 11	30.3	10	27.3	9	27.3	9	.0	0
Douglas/ Sierra Vista	28.6	8	25.0	7	7.1	2	17.9	5
Tuba City	24.0	6	24.0	6	44.0	11	.0	0
Yuma- DES	65.5	19	3.4	1	17.2	5	.0	0
Lake Havasu	46.9	15	6.3	2	12.5	4	3.1	1
La Plaza Vieja-Flagstaff	40.9	9	9.1	2	22.7	5	9.1	2
Sunnyslope	20.0	9	15.6	7	26.7	12	20.0	9
Prescott	32.5	13	40.0	16	10.0	4	2.5	1
Mesa	22.2	8	19.4	7	36.1	13	2.8	1
Pima- Team 27	15.8	3	26.3	5	21.1	4	15.8	3
Safford	41.7	5	16.7	2	8.3	1	8.3	1
Winslow	57.1	8	.0	0	7.1	1	14.3	2
Kingman	29.6	8	3.7	1	14.8	4	3.7	1
Bullhead City	44.4	20	13.3	6	8.9	4	.0	0
West Phoenix	29.0	9	38.7	12	9.7	3	6.5	2
Kinlani-Flagstaff	50.0	3	33.3	2	16.7	1	.0	0
Wellspring-Flagstaff	14.3	2	14.3	2	21.4	3	7.1	1
Central Phoenix #1	16.0	4	12.0	3	32.0	8	8.0	2
Central Phoenix #2	25.6	10	15.4	6	20.5	8	7.7	3
North Phoenix	15.8	3	10.5	2	52.6	10	.0	0
SE/NE Maricopa	18.9	7	21.6	8	29.7	11	10.8	4
Combo Phoenix	20.0	7	17.1	6	25.7	9	2.9	1
South Phoenix	19.6	9	28.3	13	26.1	12	.0	0
SE Maricopa #7	15.2	5	15.2	5	21.2	7	36.4	12
SE Maricopa #8	22.0	9	22.0	9	41.5	17	2.4	1
Yuma-FTF	100.0	3	.0	0	.0	0	.0	0
<b>Total</b>	<b>27.4</b>	<b>258</b>	<b>20.3</b>	<b>191</b>	<b>20.1</b>	<b>189</b>	<b>7.8</b>	<b>73</b>



**Health Insurance at Intake by Site - 2011**  
**Percent and number within Site\***

Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	.0	0	92.3	12	7.7	1	4.9	4	86.6	71	6.1	5
Maryvale	16.7	3	77.8	14	5.6	1	1.4	1	97.3	71	1.4	1
East Valley	20.0	5	68.0	17	8.0	2	6.0	4	86.6	58	7.5	5
Nogales	.0	0	100.0	10	.0	0	3.8	1	96.2	25	.0	0
Page	.0	0	85.7	6	14.3	1	.0	0	100.0	7	.0	0
Pima-Team 8	5.0	1	95.0	19	.0	0	3.8	2	84.6	44	11.5	6
CODAC	.0	0	83.3	15	11.1	2	2.7	2	93.2	68	4.1	3
La Frontera	8.7	2	87.0	20	4.3	1	4.7	3	90.6	58	3.1	2
Pima-Team 11	10.0	2	80.0	16	10.0	2	4.7	4	83.5	71	10.6	9
Douglas/ Sierra Vista	7.7	1	92.3	12	.0	0	1.8	1	83.6	46	12.7	7
Tuba City	11.8	2	82.4	14	5.9	1	.0	0	91.7	33	8.3	3
Yuma- DES	4.2	1	83.3	20	4.2	1	3.0	2	94.0	63	3.0	2
Lake Havasu	6.3	2	87.5	28	6.3	2	5.8	3	92.3	48	1.9	1
La Plaza Vieja-Flagstaff	7.1	3	88.1	37	4.8	2	.0	0	93.3	14	6.7	1
Sunnyslope	.0	1	100.0	13	.0	0	1.8	2	91.8	101	6.4	7
Prescott	20.0	1	80.0	4	.0	0	2.8	3	83.0	88	13.2	14
Mesa	12.5	3	83.3	20	4.2	1	5.7	5	81.8	72	12.5	11
Pima- Team 27	.0	0	83.3	15	16.7	3	3.6	2	81.8	45	9.1	5
Safford	.0	0	81.8	9	9.1	1	4.2	1	87.5	21	8.3	2
Winslow	.0	0	100.0	15	.0	0	4.0	1	92.0	23	.0	0
Kingman	7.5	3	72.5	29	20.0	8	4.0	1	92.0	23	4.0	1
Bullhead City	4.5	1	86.4	19	.0	0	4.1	3	87.8	65	6.8	5
West Phoenix	.0	0	85.7	18	4.8	1	5.3	5	90.4	85	4.3	4
Kinlani-Flagstaff	.0	0	100.0	18	.0	0	.0	0	100.0	8	.0	0
Wellspring-Flagstaff	.0	0	100.	7	.0	0	16.7	1	83.3	5	.0	0
Central Phoenix #1	15.8	3	84.2	16	.0	0	1.8	1	94.6	53	1.8	1
Central Phoenix #2	12.1	4	84.8	28	.0	0	4.7	4	89.5	77	3.5	3
North Phoenix	15.8	3	73.7	14	5.3	1	.0	0	93.9	62	6.1	4
SE/NE Maricopa	10.0	2	60.0	12	25.0	5	6.7	6	85.4	76	7.9	7
Combo Phoenix	3.8	1	88.5	23	3.8	1	5.0	3	85.0	51	8.3	5
South Phoenix	.0	0	100.0	16	.0	0	5.7	5	86.2	75	6.9	6
SE Maricopa #7	9.1	2	77.3	17	13.6	3	5.6	4	80.3	57	14.1	10
SE Maricopa #8	12.5	3	79.2	19	8.3	2	5.1	4	91.0	71	3.8	3
Yuma-FTF	.0	0	100.0	5	.0	0	5.3	2	94.7	36	.0	0
<b>Total</b>	<b>7.3</b>	<b>48</b>	<b>84.4</b>	<b>557</b>	<b>6.4</b>	<b>42</b>	<b>4.0</b>	<b>80</b>	<b>88.6</b>	<b>1771</b>	<b>6.7</b>	<b>133</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  
2011 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
Central Phoenix	38.5% (5)	53.8% (7)	7.7% (1)	35.4% (29)	63.4% (52)	1.2% (1)
Maryvale	22.2% (4)	77.8% (14)	.0% (0)	40.5% (30)	56.8% (42)	2.7% (2)
East Valley	24.0% (6)	76.0% (19)	.0% (0)	35.3% (24)	64.7% (44)	.0% (0)
Nogales	27.3% (3)	72.7% (8)	.0% (0)	28.6% (8)	64.3% (18)	7.1% (2)
Page	28.6% (2)	71.4% (5)	.0% (0)	57.1% (4)	42.9% (3)	.0% (0)
Pima-Team 8	20.0% (4)	80.0% (16)	.0% (0)	20.8% (11)	77.4% (41)	1.9% (1)
CODAC	15.0% (3)	85.0% (17)	.0% (0)	31.1% (23)	68.9% (51)	.0% (0)
La Frontera	20.8% (5)	70.8% (17)	8.3% (2)	27.7% (18)	70.8% (46)	1.5% (1)
Pima-Team 11	19.0% (4)	81.0% (17)	.0% (0)	18.2% (16)	81.8% (72)	.0% (0)
Douglas/ Sierra Vista	.0% (0)	100.0% (14)	.0% (0)	32.7% (18)	67.3% (37)	.0% (0)
Tuba City	52.6% (10)	47.4% (9)	.0% (0)	32.4% (12)	62.2% (23)	5.4% (2)
Yuma- DES	37.5% (9)	62.5% (15)	.0% (0)	38.0% (27)	62.0% (44)	.0% (0)
Lake Havasu	21.2% (7)	69.7% (23)	9.1% (3)	26.4% (14)	69.8% (37)	3.8% (2)
La Plaza Vieja-Flagstaff	13.6% (6)	86.4% (38)	.0% (0)	20.0% (3)	80.0% (12)	.0% (0)
Sunnyslope	23.1% (3)	76.9% (10)	.0% (0)	27.5% (30)	72.5% (79)	.0% (0)
Prescott	20.0% (1)	60.0% (3)	20.0% (1)	52.8% (57)	46.3% (50)	.9% (1)
Mesa	41.7% (10)	58.3% (14)	.0% (0)	35.2% (31)	64.8% (57)	.0% (0)
Pima- Team 27	16.7% (3)	83.3% (15)	.0% (0)	27.3% (15)	72.7% (7)	.0% (0)
Safford	18.2% (2)	72.7% (8)	9.1% (1)	12.5% (3)	66.7% (16)	20.8% (5)
Winslow	53.3% (8)	46.7% (7)	.0% (0)	20.0% (5)	80.0% (20)	.0% (0)
Kingman	24.4% (10)	68.3% (28)	7.3% (3)	24.0% (6)	72.0% (18)	4.0% (1)
Bullhead City	20.8% (5)	70.8% (17)	8.3% (2)	37.3% (28)	58.7% (44)	4.0% (3)
West Phoenix	19.0% (4)	81.0% (17)	.0% (0)	26.6% (25)	73.4% (69)	.0% (0)
Kinlani-Flagstaff	26.3% (5)	73.7% (14)	.0% (0)	33.3% (3)	55.6% (5)	11.1% (1)
Wellspring-Flagstaff	10.0% (1)	90.0% (9)	.0% (0)	.0% (0)	100.0% (6)	.0% (0)
Central Phoenix #1	21.1% (4)	73.7% (14)	5.3% (1)	42.9% (24)	57.1% (32)	.0% (0)
Central Phoenix #2	20.6% (7)	79.4% (27)	.0% (0)	34.9% (30)	61.6% (53)	3.5% (3)
North Phoenix	26.3% (5)	73.7% (14)	.0% (0)	35.4% (23)	63.1% (41)	1.5% (1)
SE/NE Maricopa	25.0% (5)	75.0% (15)	.0% (0)	36.0% (32)	62.9% (56)	1.1% (1)
Combo Phoenix	19.2% (5)	80.8% (21)	.0% (0)	36.7% (22)	63.3% (38)	.0% (0)
South Phoenix	31.3% (5)	68.8% (11)	.0% (0)	32.2% (28)	67.8% (59)	.0% (0)
SE Maricopa #7	31.6% (6)	68.4% (13)	.0% (0)	28.2% (20)	71.8% (51)	.0% (0)
SE Maricopa #8	39.1% (9)	60.9% (14)	.0% (0)	41.0% (32)	57.7% (45)	1.3% (1)
Yuma-FTF	50.0% (3)	50.0% (3)	.0% (0)	48.8% (20)	51.2% (21)	.0% (0)
<b>Total</b>	<b>25.0% (169)</b>	<b>72.9% (493)</b>	<b>2.1% (14)</b>	<b>33.2% (671)</b>	<b>65.4% (1322)</b>	<b>1.4% (28)</b>



**Ethnicity of Mother by Site PRENATAL - 2011**  
**Percent and number within Site**

Site	Caucasian/ White		Hispanic		African American		Asian American		Native American		Mixed/ Other	
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	15.4	2	69.2	9	7.7	1	.0	0	7.7	1	.0	0
Maryvale	52.9	9	29.4	5	5.9	1	.0	0	.0	0	11.8	2
East Valley	16.0	4	52.0	13	24.0	6	.0	0	4.0	1	4.0	1
Nogales	9.1	1	90.9	10	.0	0	.0	0	.0	0	.0	0
Page	.0	0	.0	0	.0	0	.0	0	100.0	7	.0	0
Pima-Team 8	10.5	2	68.4	13	10.5	2	5.3	1	5.3	1	.0	0
CODAC	25.0	5	55.0	11	.0	0	5.0	1	10.0	2	5.0	1
La Frontera	12.5	3	75.0	18	4.2	1	.0	0	4.2	1	4.2	1
Pima-Team 11	33.3	7	52.4	11	9.5	2	.0	0	4.8	1	.0	0
Douglas/ Sierra Vista	35.7	5	64.3	9	.0	0	.0	0	.0	0	.0	0
Tuba City	.0	0	.0	0	.0	0	.0	0	100.0	19	.0	0
Yuma- DES	8.3	2	79.2	19	8.3	2	.0	0	4.2	1	.0	0
Lake Havasu	75.8	25	24.2	8	.0	0	.0	0	.0	0	.0	0
La Plaza Vieja-Flagstaff	29.5	13	47.7	21	2.3	1	.0	0	18.2	8	2.3	1
Sunnyslope	46.2	6	23.1	3	23.1	3	.0	0	.0	0	7.7	1
Prescott	33.3	2	66.7	4	.0	0	.0	0	.0	0	.0	0
Mesa	20.8	5	66.7	16	4.2	1	.0	0	4.2	1	4.2	1
Pima- Team 27	50.0	9	38.9	7	.0	0	.0	0	11.1	2	.0	0
Safford	45.5	5	54.5	6	.0	0	.0	0	.0	0	.0	0
Winslow	21.4	3	42.9	6	.0	0	.0	0	35.7	5	.0	0
Kingman	84.2	32	2.6	1	.0	0	2.6	1	2.6	1	7.9	3
Bullhead City	62.5	15	20.8	5	8.3	2	.0	0	4.2	1	4.2	1
West Phoenix	14.3	3	61.9	13	19.0	4	.0	0	.0	0	4.8	0
Kinlani-Flagstaff	.0	0	52.6	10	.0	0	.0	0	47.4	9	.0	0
Wellspring-Flagstaff	30.0	3	30.0	3	.0	0	.0	0	40.0	4	.0	0
Central Phoenix #1	16.7	3	55.6	10	22.2	4	.0	0	.0	0	5.6	1
Central Phoenix #2	21.9	7	56.3	18	18.8	6	.0	0	.0	0	3.1	1
North Phoenix	50.0	8	37.5	6	12.5	2	.0	0	.0	0	.0	0
SE/NE Maricopa	52.6	10	42.1	8	5.3	1	.0	0	.0	0	.0	0
Combo Phoenix	15.4	4	57.7	15	11.5	3	.0	0	15.4	4	.0	0
South Phoenix	.0	0	75.0	12	25.0	4	.0	0	.0	0	.0	0
SE Maricopa #7	55.0	11	40.0	8	.0	0	.0	0	.0	0	5.0	1
SE Maricopa #8	37.5	9	58.3	14	.0	0	4.2	1	.0	0	.0	0
Yuma-FTF	.0	0	83.3	5	16.7	1	.0	0	.0	0	.0	0
<b>Total</b>	<b>32.0</b>	<b>213</b>	<b>47.6</b>	<b>317</b>	<b>7.1</b>	<b>47</b>	<b>0.6</b>	<b>4</b>	<b>10.4</b>	<b>69</b>	<b>2.4</b>	<b>16</b>



**Ethnicity of Mother by Site POSTNATAL - 2011**  
**Percent and number within Site**

Site	Caucasian/ White		Hispanic		African American		Asian American		Native American		Mixed/ Other	
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	34.1	28	43.9	36	13.4	11	1.2	1	7.3	6	.0	0
Maryvale	21.9	16	54.8	40	19.2	14	.0	0	2.7	2	1.4	1
East Valley	23.9	16	65.7	44	6.0	4	.0	0	1.5	1	3.0	2
Nogales	.0	0	100.0	28	.0	0	.0	0	.0	0	.0	0
Page	.0	0	14.3	1	.0	0	.0	0	85.7	6	.0	0
Pima-Team 8	18.9	10	79.2	42	1.9	1	.0	0	.0	0	.0	0
CODAC	31.1	23	60.8	45	2.7	2	1.4	1	1.4	1	2.7	2
La Frontera	9.2	6	78.5	51	3.1	2	3.1	2	4.6	3	1.5	1
Pima-Team 11	30.2	26	50.0	43	9.3	8	3.5	3	3.5	3	3.5	3
Douglas/ Sierra Vista	29.1	16	56.4	31	7.3	4	1.8	1	3.6	2	1.8	1
Tuba City	.0	0	.0	0	.0	0	.0	0	100.0	37	.0	0
Yuma- DES	7.0	5	91.5	65	1.4	1	.0	0	.0	0	.0	0
Lake Havasu	69.2	36	25.0	13	1.9	1	.0	0	3.8	2	.0	0
La Plaza Vieja-Flagstaff	28.6	4	64.3	9	.0	0	.0	0	7.1	1	.0	0
Sunnyslope	42.7	47	44.5	49	7.3	8	.0	0	2.7	3	2.7	3
Prescott	61.5	67	33.0	36	.0	0	.9	1	2.8	3	1.8	2
Mesa	26.4	23	57.5	50	5.7	5	2.3	2	6.9	6	1.1	1
Pima- Team 27	44.2	23	46.2	24	7.7	4	.0	0	1.9	1	.0	0
Safford	62.5	15	37.5	9	.0	0	.0	0	.0	0	.0	0
Winslow	16.0	4	12.0	3	4.0	1	.0	0	60.0	15	8.0	2
Kingman	68.0	17	24.0	6	4.0	1	.0	0	4.0	1	.0	0
Bullhead City	81.1	60	13.5	10	2.7	2	1.4	1	1.4	1	.0	0
West Phoenix	12.8	12	74.5	70	9.6	9	.0	0	1.1	1	2.1	2
Kinlani-Flagstaff	.0	0	66.7	6	.0	0	.0	0	33.3	3	.0	0
Wellspring-Flagstaff	33.3	2	33.3	2	.0	0	.0	0	33.3	2	.0	0
Central Phoenix #1	27.3	15	56.4	31	5.5	3	1.8	1	5.5	3	3.6	2
Central Phoenix #2	22.9	19	53.0	44	15.7	13	2.4	2	3.6	3	2.4	2
North Phoenix	39.1	25	42.2	27	7.8	5	4.7	3	6.3	4	.0	0
SE/NE Maricopa	43.0	37	46.5	40	2.3	2	2.3	2	4.7	4	1.2	1
Combo Phoenix	22.4	13	69.0	40	3.4	2	.0	0	5.2	3	.0	0
South Phoenix	10.3	9	74.7	65	11.5	10	1.1	1	1.1	1	1.1	1
SE Maricopa #7	49.3	34	39.1	27	8.7	6	.0	0	1.4	1	1.4	1
SE Maricopa #8	27.3	21	66.2	51	1.3	1	.0	0	5.2	4	.0	0
Yuma-FTF	15.0	6	82.5	33	2.5	1	.0	0	.0	0	.0	0
<b>Total</b>	<b>31.8</b>	<b>635</b>	<b>53.6</b>	<b>1071</b>	<b>6.1</b>	<b>121</b>	<b>1.1</b>	<b>21</b>	<b>6.2</b>	<b>123</b>	<b>1.4</b>	<b>27</b>



**Gestational Age by Site - 2011**  
**(Number and Percent within Site)**  
*Was the gestational age less than 37 weeks?*

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Central Phoenix	100.0	5	.0	0	77.9	60	22.1	17
Maryvale	91.7	11	8.3	1	68.5	50	31.5	23
East Valley	100.0	11	.0	0	86.6	58	13.4	9
Nogales	100.0	2	.0	0	100.0	26	.0	0
Page	100.0	7	.0	0	85.7	6	14.3	1
Pima-Team 8	62.5	5	37.5	3	92.5	49	7.5	4
CODAC	100.0	7	.0	0	86.4	57	13.6	9
La Frontera	85.7	12	14.3	2	84.7	50	15.3	9
Pima-Team 11	80.0	8	20.0	2	86.2	75	13.8	12
Douglas/ Sierra Vista	100.0	2	.0	0	72.5	29	27.5	11
Tuba City	90.0	9	10.0	1	95.5	21	4.5	1
Yuma- DES	87.5	7	12.5	1	91.0	61	9.0	1
Lake Havasu	80.0	12	20.0	3	91.8	45	8.2	4
La Plaza Vieja-Flagstaff	93.3	28	6.7	2	66.7	10	33.3	5
Sunnyslope	100.0	4	.0	0	68.2	73	31.8	34
Prescott	100.0	1	.0	0	92.6	100	7.4	8
Mesa	91.7	11	8.3	1	85.7	72	14.3	12
Pima- Team 27	100.0	4	.0	0	84.3	43	15.7	8
Safford	83.3	5	16.7	1	82.6	19	17.4	4
Winslow	100.0	9	.0	0	92.0	23	8.0	2
Kingman	94.4	17	5.6	1	95.5	21	4.5	1
Bullhead City	100.0	6	.0	0	89.7	52	10.3	6
West Phoenix	100.0	10	.0	0	84.9	79	15.1	14
Kinlani-Flagstaff	76.5	13	23.5	4	85.7	6	14.3	1
Wellspring-Flagstaff	100.0	7	.0	0	100.0	5	.0	0
Central Phoenix #1	100.0	1	.0	0	80.0	44	20.0	11
Central Phoenix #2	80.0	8	20.0	2	72.4	63	27.6	24
North Phoenix	100.0	5	.0	0	79.7	51	20.3	13
SE/NE Maricopa	50.0	1	50.0	1	70.8	63	29.2	26
Combo Phoenix	84.6	11	15.4	2	77.6	45	22.4	13
South Phoenix	50.0	4	50.0	4	86.0	74	14.0	12
SE Maricopa #7	88.9	8	11.1	1	82.6	57	17.4	12
SE Maricopa #8	100.0	8	.0	0	84.2	64	15.8	12
Yuma-FTF	100.0	2	.0	0	90.0	36	10.0	4
<b>Total</b>	<b>89.1</b>	<b>261</b>	<b>10.9</b>	<b>32</b>	<b>82.9</b>	<b>1587</b>	<b>17.1</b>	<b>328</b>





**Low Birth Weight by Site - 2011  
(Number and Percent within Site)**

*Did the child have low birth weight?  
(less than 2500 grams, 88 ounces, or 5.5 pounds)*

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Central Phoenix	87.5	7	12.5	1	79.3	65	20.7	17
Maryvale	83.3	10	16.7	2	78.9	56	21.1	15
East Valley	90.0	9	10.0	1	84.8	56	15.2	10
Nogales	100.0	2	.0	0	92.6	25	7.4	2
Page	100.0	7	.0	0	100.0	7	.0	0
Pima-Team 8	100.0	7	.0	0	91.8	45	8.2	4
CODAC	100.0	8	.0	0	89.0	65	11.0	8
La Frontera	86.7	13	13.3	2	85.7	54	14.3	9
Pima-Team 11	87.5	7	12.5	1	92.0	81	8.0	7
Douglas/ Sierra Vista	100.0	3	.0	0	78.2	43	21.8	12
Tuba City	100.0	12	.0	0	97.1	34	2.9	1
Yuma- DES	100.0	10	.0	0	95.7	66	4.3	3
Lake Havasu	73.3	11	26.7	4	92.3	48	7.7	4
La Plaza Vieja-Flagstaff	96.4	27	3.6	1	85.7	12	14.3	2
Sunnyslope	100.0	2	.0	0	73.6	81	26.4	29
Prescott	100.0	1	.0	0	93.6	103	6.4	7
Mesa	91.7	11	8.3	1	87.4	76	12.6	11
Pima- Team 27	100.0	4	.0	0	86.5	46	13.5	7
Safford	100.0	7	.0	0	87.0	20	13.0	3
Winslow	100.0	6	.0	0	96.0	24	4.0	1
Kingman	94.4	17	5.6	1	91.7	22	8.3	2
Bullhead City	60.0	3	40.0	2	90.5	67	9.5	7
West Phoenix	100.0	9	.0	0	87.2	82	12.8	12
Kinlani-Flagstaff	77.8	14	22.2	4	66.7	6	33.3	3
Wellspring-Flagstaff	83.3	5	16.7	1	100.0	6	.0	0
Central Phoenix #1	100.0	1	.0	0	79.6	43	20.4	11
Central Phoenix #2	80.0	8	20.0	2	72.3	60	27.7	23
North Phoenix	100.0	3	.0	0	81.5	53	18.5	12
SE/NE Maricopa	100.0	2	.0	0	76.4	68	23.6	21
Combo Phoenix	91.7	11	8.3	1	83.1	49	16.9	10
South Phoenix	85.7	6	14.3	1	92.9	78	7.1	6
SE Maricopa #7	88.9	8	11.1	1	88.6	62	11.4	8
SE Maricopa #8	85.7	6	14.3	1	90.8	69	9.2	7
Yuma-FTF	100.0	2	.0	0	97.4	38	2.6	1
<b>Total</b>	<b>90.6</b>	<b>259</b>	<b>9.4</b>	<b>27</b>	<b>86.1</b>	<b>1709</b>	<b>13.9</b>	<b>275</b>



### Yearly Income by Site - 2011

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Central Phoenix	\$4,404	13	\$9,300	82
Maryvale	\$10,200	18	\$2,244	74
East Valley	\$2,448	25	\$8,088	68
Nogales	\$13,000	11	\$9,200	28
Page	\$10,800	7	\$9,600	7
Pima-Team 8	\$3,600	20	\$0	53
CODAC	\$3,750	20	\$3,045	74
La Frontera	\$3,750	24	\$0	65
Pima-Team 11	\$0	21	\$0	88
Douglas/ Sierra Vista	\$1,800	14	\$12,000	55
Tuba City	\$2,976	19	\$6,000	37
Yuma- DES	\$9,120	24	\$9,600	71
Lake Havasu	\$14,400	33	\$12,132	53
La Plaza Vieja-Flagstaff	\$12,000	45	\$10,080	15
Sunnyslope	\$8,088	13	\$8,112	110
Prescott	\$5,000	6	\$0	111
Mesa	\$9,720	24	\$13,700	88
Pima- Team 27	\$9,048	18	\$2,400	55
Safford	\$7,200	11	\$11,000	24
Winslow	\$6,288	15	\$6,000	24
Kingman	\$12,000	41	\$9,600	25
Bullhead City	\$5,700	24	\$7,200	75
West Phoenix	\$8,220	21	\$9,428	94
Kinlani-Flagstaff	\$7,800	19	\$9,600	9
Wellspring-Flagstaff	\$4,800	10	\$6,480	6
Central Phoenix #1	\$1,680	19	\$8,712	56
Central Phoenix #2	\$ 5,700	34	\$9,600	87
North Phoenix	\$ 12,000	19	\$12,000	66
SE/NE Maricopa	\$ 9,250	20	\$10,440	89
Combo Phoenix	\$ 14,400	27	\$9,300	60
South Phoenix	\$ 10,044	16	\$12,000	87
SE Maricopa #7	\$ 10,794	22	\$9,600	71
SE Maricopa #8	\$ 618	24	\$11,850	78
Yuma-FTF	\$ 0	6	\$3,600	41
<b>Total</b>	<b>\$7,920</b>	<b>683</b>	<b>\$8,148</b>	<b>2026</b>



### Mother's Parent Survey Score by Site - 2011

Site	PRENATAL				POSTNATAL			
	0 - 20	25 - 40	45 - 65	70+	0 - 20	25 - 40	45 - 65	70+
Central Phoenix	.0%	46.2%	46.2%	7.7%	2.4%	25.6%	65.9%	6.1%
Maryvale	.0%	55.6%	38.9%	5.6%	.0%	28.4%	58.1%	13.5%
East Valley	.0%	32.0%	56.0%	12.0%	1.5%	38.2%	52.9%	7.4%
Nogales	.0%	45.5%	54.5%	.0%	3.6%	92.9%	3.6%	.0%
Page	.0%	28.6%	71.4%	.0%	.0%	42.9%	57.1%	.0%
Pima-Team 8	.0%	40.0%	50.0%	10.0%	5.7%	73.6%	18.9%	1.9%
CODAC	.0%	30.0%	70.0%	.0%	9.5%	33.8%	51.4%	5.4%
La Frontera	.0%	45.8%	50.0%	4.2%	12.3%	61.5%	24.6%	1.5%
Pima-Team 11	14.3%	28.6%	57.1%	.0%	4.5%	60.2%	30.7%	4.5%
Douglas/Sierra Vista	.0%	50.0%	42.9%	7.1%	14.5%	47.3%	36.4%	1.8%
Tuba City	15.8%	63.2%	21.1%	0.0%	13.5%	62.2%	24.3%	.0%
Yuma- DES	20.8%	54.2%	20.8%	4.2%	1.4%	76.1%	22.5%	.0%
Lake Havasu	9.1%	45.5%	39.4%	6.1%	11.3%	52.8%	35.8%	.0%
La Plaza Vieja-Flagstaff	.0%	64.4%	35.6%	.0%	.0%	62.5%	25.0%	12.5%
Sunnyslope	.0%	7.1%	71.4%	21.4%	1.8%	22.7%	50.0%	25.5%
Prescott	.0%	50.0%	16.7%	33.3%	1.8%	68.5%	27.9%	1.8%
Mesa	.0%	29.2%	70.8%	.0%	1.1%	25.0%	65.9%	8.0%
Pima- Team 27	.0%	47.1%	41.2%	11.8%	7.3%	41.8%	45.5%	5.5%
Safford	.0%	90.9%	9.1%	.0%	4.2%	66.7%	25.0%	4.2%
Winslow	6.7%	33.3%	40.0%	20.0%	8.0%	28.0%	56.0%	8.0%
Kingman	2.4%	22.0%	65.9%	9.8%	4.0%	32.0%	60.0%	4.0%
Bullhead City	.0%	16.7%	62.5%	20.8%	2.7%	44.0%	48.0%	5.3%
West Phoenix	.0%	42.9%	52.4%	4.8%	.0%	48.9%	45.7%	5.3%
Kinlani-Flagstaff	.0%	73.7%	26.3%	.0%	.0%	66.7%	22.2%	11.1%
Wellspring-Flagstaff	.0%	44.4%	55.6%	.0%	.0%	60.0%	40.0%	.0%
Central Phoenix #1	.0%	36.8%	63.2%	.0%	1.8%	17.9%	64.3%	16.1%
Central Phoenix #2	.0%	30.3%	60.6%	9.1%	.0%	27.3%	64.8%	8.0%
North Phoenix	.0%	21.1%	73.7%	5.3%	1.5%	40.9%	48.5%	9.1%
SE/NE Maricopa	5.0%	40.0%	55.0%	.0%	1.1%	30.3%	57.3%	11.2%
Combo Phoenix	3.7%	59.3%	37.0%	.0%	.0%	31.7%	65.0%	3.3%
South Phoenix	.0%	25.0%	68.8%	6.3%	.0%	39.1%	49.4%	11.5%
SE Maricopa #7	.0%	22.7%	68.2%	9.1%	1.4%	45.1%	45.1%	8.5%
SE Maricopa #8	.0%	41.7%	41.7%	16.7%	.0%	37.2%	57.7%	5.1%
Yuma-FTF	.0%	66.7%	33.3%	.0%	12.2%	61.0%	24.4%	2.4%
<b>Total</b>	<b>2.6%</b>	<b>41.1%</b>	<b>49.9%</b>	<b>6.3%</b>	<b>3.5%</b>	<b>45.8%</b>	<b>7.0%</b>	<b>100.0%</b>



**Trimester of Enrollment into Prenatal Program by Site - 2011**

Site	1 <sup>st</sup> Trimester		2 <sup>nd</sup> Trimester		3 <sup>rd</sup> Trimester		Other		Total
	#	%	#	%	#	%	#	%	#
Central Phoenix	1	7.7	4	30.8	7	53.8	1	7.7	13
Maryvale	2	11.1	8	44.4	7	38.9	1	5.6	18
East Valley	0	.0	9	36.0	15	60.0	1	4.0	25
Nogales	2	18.2	5	45.5	3	27.3	1	9.1	11
Page	1	14.3	3	42.9	3	42.9	0	.0	7
Pima-Team 8	2	9.5	3	14.3	12	57.1	4	19.0	21
CODAC	3	15.0	6	30.0	9	45.0	2	10.0	20
La Frontera	6	25.0	6	25.0	11	45.8	1	4.2	24
Pima-Team 11	2	9.5	5	23.8	7	33.3	7	33.3	21
Douglas/Sierra Vista	4	28.6	2	14.3	6	42.9	2	14.3	14
Tuba City	0	.0	8	42.1	9	47.4	2	10.5	19
Yuma- DES	0	.0	12	50.0	11	45.8	1	4.2	24
Lake Havasu	3	9.1	8	24.2	19	57.6	3	9.1	33
La Plaza Vieja-Flagstaff	7	15.6	13	28.9	24	53.3	1	2.2	45
Sunnyslope	0	.0	2	14.3	8	57.1	4	28.6	14
Prescott	0	.0	2	33.3	3	50.0	1	16.7	6
Mesa	1	4.2	11	45.8	10	41.7	2	8.3	24
Pima- Team 27	0	.0	6	33.3	11	61.1	1	5.6	18
Safford	3	27.3	3	27.3	5	45.5	0	.0	11
Winslow	3	20.0	4	26.7	8	53.3	0	.0	15
Kingman	10	23.8	8	19.0	8	19.0	16	38.1	42
Bullhead City	3	12.5	8	33.3	11	45.8	2	8.3	24
West Phoenix	1	4.8	7	33.3	10	47.6	3	14.3	21
Kinlani-Flagstaff	0	.0	10	52.6	9	47.4	0	.0	19
Wellspring-Flagstaff	2	20.0	2	20.0	5	50.0	1	10.0	10
Central Phoenix #1	0	.0	5	25.0	12	60.0	3	15.0	20
Central Phoenix #2	1	2.9	7	20.6	15	44.1	11	32.4	34
North Phoenix	0	.0	6	31.6	9	47.4	4	21.1	19
SE/NE Maricopa	0	.0	2	10.0	11	55.0	7	35.0	20
Combo Phoenix	3	11.1	6	22.2	13	48.1	5	18.5	27
South Phoenix	0	.0	6	37.5	9	56.3	1	6.3	16
SE Maricopa #7	1	4.5	3	13.6	15	68.2	3	13.6	22
SE Maricopa #8	1	4.2	4	16.7	16	66.7	3	12.5	24
Yuma-FTF	0	.0	0	.0	5	83.3	1	16.7	6
<b>Total</b>	<b>62</b>	<b>9.0</b>	<b>194</b>	<b>28.2</b>	<b>336</b>	<b>48.9</b>	<b>95</b>	<b>13.8</b>	<b>687</b>



**Engaged Prenatal Families that Exited Before Baby's Birth  
By Site - 2011**

<b>Site</b>	<b>Total Families</b>	<b># Closed before birth</b>	<b>% Closed before birth</b>
Central Phoenix	13	2	15.4
Maryvale	18	0	.0
East Valley	25	0	.0
Nogales	11	1	9.1
Page	7	0	.0
Pima-Team 8	21	0	.0
CODAC	20	0	.0
La Frontera	24	1	4.2
Pima-Team 11	21	1	4.8
Douglas/ Sierra Vista	14	0	.0
Tuba City	19	1	5.3
Yuma- DES	24	0	.0
Lake Havasu	33	2	6.1
La Plaza Vieja-Flagstaff	45	0	.0
Sunnyslope	14	1	7.1
Prescott	6	0	.0
Mesa	24	0	.0
Pima- Team 27	18	0	.0
Safford	11	1	9.1
Winslow	15	0	.0
Kingman	42	5	11.9
Bullhead City	24	0	.0
West Phoenix	21	1	4.8
Kinlani-Flagstaff	19	0	.0
Wellspring-Flagstaff	10	0	.0
Central Phoenix #1	20	0	.0
Central Phoenix #2	34	2	5.9
North Phoenix	19	0	.0
SE/NE Maricopa	20	2	10.0
Combo Phoenix	27	1	3.7
South Phoenix	16	0	.0
SE Maricopa #7	22	0	.0
SE Maricopa #8	24	1	4.2
Yuma-FTF	6	1	16.7
<b>Total</b>	<b>687</b>	<b>23</b>	<b>3.3</b>



## Appendix B. Healthy Families Arizona Steering Committee Members

**Karen Bulkeley**

**Jenna Shroyer**

**Esthela Navarro**

Department of Economic Security,  
Healthy Families Arizona Central  
Administration

**K Vilay**

**Wendy Sabatini**

First Things First

**Craig LeCroy**

**Kerry Milligan**

LeCroy & Milligan Associates

**Ginger Ward**

**Suzanne Schunk**

Southwest Human Development

**Eric Schindler**

Child and Family Resources

**Stacy Reinstein**

Department of Economic Security

**Becky Ruffner**

Prevent Child Abuse Arizona

**Beth Rosenberg**

Children's Action Alliance

**Anna Arnold**

Community Member

**Judy Krysik**

Arizona State University

**Mary Warren**

Never Shake a Baby

Prevent Child Abuse Arizona

**Marsha Porter**

Phoenix Crisis Nursery

**Joanne M. Karolzak**

Casa de los Ninos

**Kristine Reich**

Arizona State University



## Appendix C. Parent Survey

### Parent Survey\*

#### Problem Areas and Interpretation (Mother & Father)

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

\* Modified from the Family Stress Checklist



## Appendix D. Healthy Families Arizona Prenatal Logic Model

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

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

