Healthy Families Arizona
Annual Evaluation Report
FY2010

July 2009 – June 2010

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Executive Summary

There is broad recognition that there are many unmet needs among children and families in this country. Many of the most pervasive and intractable problems experienced by children can be found in homes with insufficient income, poor child care, poor parenting skills, and stressful conditions that interfere with effective child rearing and parenting. The long-term consequences of poor care take a toll on many of America's children, among these are: infant mortality, low birth weight, neuro-developmental impairments, child abuse and neglect, and accidental childhood injuries. The severity of the child abuse and neglect problem alone is evidence of the ongoing problems in many American homes. In 2008, there were nearly 2 million investigations or assessments (involving 3.7 million children) conducted by CPS regarding incidences of alleged maltreatment. Of these, approximately 24 percent found that at least one child was the victim of abuse or neglect (U.S. Department of Health and Human Services, 2010a).

While there are many potential methods for addressing some of these factors, increasingly the home visitation model has been selected as a way for communities and states to reach out to families. Home visitation programs share several common beliefs: the importance of children's early years, a focus on the pivotal role parents can play in shaping the healthy development of children's lives, and a perspective that service delivery works better when bringing services to families rather than expecting them to seek and find assistance in their communities. One study estimated that 400,000 to 500,000 families with young children now receive home visitation services each year (Gomby, 2005). This number is likely to increase as more federal dollars are now being put toward these programs.

As a national audience focuses increasing attention on home visitation, the issue of which programs to fund has been brought into question. For example, when President Obama announced his plan to spend up to 8 billion dollars over the next ten years on home visitation—he made it clear that evidence-based programs were a priority. The issue of which programs had enough "evidence," however, has been controversial. While some experts define "evidence-based practice" as hinged on positive outcomes from a randomized clinical trial, many understand evidence-based practice as a set of guidelines and practices that transcend that narrow definition.

An important element in the evidence-based program debate has been the evaluation of the home visitation programs. Although home visitation can be traced back to the 1800s, full understanding of its effectiveness remains somewhat elusive. It still unclear exactly which elements of home visitation programs are most likely to impact which outcomes, and some findings suggest all programs are not effective at impacting these outcomes. However, research suggests that home visitation programs help families with young children during a critical period, the first three years of a child's life, and suggests the effectiveness of early intervention services in areas such as avoiding child maltreatment, influencing a child's development, and building positive parent-child relationships (Daro, 2009).

The Healthy Families Arizona (HFAz) program is one model for home visitation, designed to impact these and other outcomes. Findings from the evaluation of this program, included in this report, continue to contribute to the research-base on the effectiveness of home visitation programs and document the impact this program has on families in Arizona.

The Healthy Families Arizona Program

Healthy Families Arizona (HFAz) serves families experiencing multiple stressors that can put their children at risk for child abuse and neglect. HFAz began in 1991 under the auspices of the Arizona Department of Economic Security (DES).

Like many states, budget decisions in Arizona over the last several years have reduced the health and human service system capacity. Over many years Arizona has developed an array of home visiting services which have been steadily reduced due to the current economic environment. The HFAz program was one of the programs dramatically impacted by the reduction. DES is hopeful that the funding level for the HFAz program is sustainable at its new reduced level. Funding to support the HFAz program from DES totaled over $6.0 million in state fiscal year 2010. First Things First (FTF) provided $6.3 million through their RFGA process. In spite of the financial shortfall, HFAz continues to be a visible and viable program across Arizona. There is a strong commitment to provide families with the necessary supports, education and information to promote the healthy development of their children.

HFAz is a national home visitation program model that requires their providers to be accredited. DES and FTF are working together on the reaccreditation of the HFAz program. In order to establish a Healthy Families Program, providers must complete an initial accreditation process with Healthy Families America. To maintain the accreditation, established Healthy Families programs are required to complete a reaccreditation process every four years. For Arizona's multi-site accreditation, DES serves as the central administration office for all HFAz programs. Arizona was due for reaccreditation through Healthy Families America in 2008, but was granted an extension due to the significant DES budget cuts. The reaccreditation process began in the summer of 2010 with the national site visit scheduled for Central Administration and 60% of the programs. DES worked with FTF to coordinate and prepare the information for the accreditation process. DES and FTF had established an Interagency Service Agreement to ensure a collaborative relationship and to share the costs and resources for the administration of the HFAz program.

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

Who Does Healthy Families Arizona Serve?

A total of 1,743 families were reached by DES funded Healthy Families programs between July 1, 2009 and June 30, 2010. However, the evaluation covers only families that are within the first 24 months after the birth of the baby (n=1,416). 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=901). The average length of time families remained in the program is just over one year. About 76% of the engaged families entered the program after the birth of their child, with 24% entering during the prenatal phase.

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

Risk Factors of Mothers	HFAz Prenatal Families	HFAz Postnatal Families	Arizona state Rates - 2009
Teen Births (19 years or less)	14%	17%	12%
Births to Single Parents	75%	72%	45%
Less Than High School Education	62%	58%	24%
Not Employed	80%	83%	NA*
No Health Insurance	6%	3%	3%
Receives AHCCCS	87%	90%	54%
Late or No Prenatal Care	27%	29%	20%
Median Yearly Income	$8,700	$12,000	$48,745

*Employment figures for Mothers are not available at the state level.

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 19% of infants who entered postnatally;
- Low Birth weight— 10% of the infants who entered prenatally had low birth weight (less than 5.5 pounds) whereas 15% of the infants who entered postnatally had low birth weight.

Outcomes for Families and Children Participating in Healthy Families

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

Parents in Healthy Families report significant changes in:

- Increased social support
- Increased problem solving
- Increased personal care
- Increased use of resources
- Improved home environment
- Increased parenting efficacy
- Decreased depression

The Healthy Families Parenting Inventory (HFPI) revealed statistically significant improvement on 7 of 9 subscales and on the total HFPI score at either the 6 or 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 2 years) continue to show that participants report improvements in healthy parenting behaviors.

Child Health, Development, and Safety

Timely immunizations remain an important component for positive child health and development outcomes. There continue to be positive results in this area among HFAz participants. For example, there was a reported 85% immunization rate for the children of Healthy Families Arizona participants at 18 months. This is in comparison to a 76.4% immunization rate for children between the ages of 19 months and 35 months in the state of Arizona as a whole. HFAz also helps families adopt and maintain home safety practices. Results show over 98% of participants are using car seats, 95% have poisons locked, and 90% have working smoke alarms. This compares favorably with national trends among the general population (e.g., national estimates of 90% car seat usage and 75% "working" smoke detectors). The program also screens for developmental delays at 6 month intervals and assures that children who need further services are referred appropriately.

Child Abuse and Neglect

Records of child abuse and neglect incidents (substantiated) were examined for program participants. The results showed that the percent of families with no child abuse or neglect incidences was 97.4%, slightly lower than the previous year, but still above the program performance goal of 95%. There were 23 HFAz families with a substantiated case of child abuse and neglect out of 878 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 3.3% of mothers with a subsequent pregnancy waited over 24 months before they got

pregnant with their next child, while more than half the mothers with subsequent pregnancies waited a year or less. This means that a smaller percentage of women are spacing their births in spite of the health benefits, and the program needs to put more emphasis in this area. The number of mothers enrolled in school has increased significantly in this reporting year, from 10% in 2008-2009 to 22% in 2009-2010 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. Just under 30% of the participants (compared to 34% in the prior year) were screened as having potential substance abuse problems during the first 2 months of the program.

Introduction

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

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

Initially, Healthy Families America drew largely from existing research, and knowledge and experiences gained through the Hawaii Healthy Start program to design the program. Healthy Families America is built on a set of 12 research-based critical elements that provide a benchmark used to measure quality. Healthy Families Arizona (HFAz) is now considered a nationally credentialed, community-based voluntary home visitation program designed to:

- Promote parent/child interaction
- Promote child health and development
- Prevent child abuse and neglect.

Current Issues in the Evaluation of Home Visitation programs

The growing demand for evidence-based home visitation is astonishing. A Google search on "evidence-based home visiting programs" provides over 500,000 entries. In addition, one study estimated that 400,000 to 500,000 families with young children now receive these home visitation services each year (Gomby, 2005). This number is likely to increase as more federal dollars are now being put toward these programs.

Although home visitation can be traced back to the 1800s, full understanding of its effectiveness remains elusive. Studies of home visitation to date have examined a range of outcomes with mixed evidence of program effects. Generalization of these studies is made more difficult given the variation in programming, the diversity of target populations and communities, and the fact that the studies examine different outcomes with different measures over different time periods. A sample of findings from some of these studies is included below. These studies are included to highlight the variation and complexity in the assessment of home visitation effectiveness, but should not be taken as a comprehensive literature review on the subject or to ascertain the effectiveness of any one model:

- A randomized study of *Hawaii's Healthy Start Program* (*HSP*), including six sites operated by three community-based agencies found more positive parenting attitudes and improved parent/child interactions at six and 12 months for program participants in contrast to the control group . There were, however, no differences found in children's cognitive development (McCurdy, 1996).
- Taylor & Beauchamp (1988) found a positive program impact of a home visitation program on attitudes toward discipline (Olds et al., 2002; 2004a; 2004b).
- Barth (1991) reported no advantages on self-report measures or reports of child abuse for families participating in the *Child Parent Enrichment Project*, compared to a randomized control group, although some indication of greater success with families with less serious problems was observed.
- Macdonald et al. (2007) assessed the effectiveness of five home-visiting programs directed at teenage mothers. All studies were randomized controlled trials with 1838 participants. Findings from this study suggest there is only limited evidence that home-visiting programs of the kind described in this review can impact positively on the quality of parenting of teenage mothers on child development. Authors assert that this does not amount to a conclusion that home-visiting programs are ineffective but rather indicate a need to think carefully about improvements in the conduct and reporting of outcome studies in this area.
- One study of a home visitation program utilizing nurses found these programs were able to reduce subsequent pregnancies, child abuse and neglect, welfare receipt, substance abuse, crime, and increasing labor force

participation (Olds et al., 1997). A replication of this study showed results that were less expansive, but nonetheless positive including reducing pregnancy-induced hypertension, subsequent pregnancies, and childhood injuries and hospitalizations (Kitzman et al., 1997).

- McDonald Culp et al. (2004) compared 156 Oklahoma mothers enrolled before 28 weeks of gestation through the infant's first birthday to 107 mothers not receiving the Healthy Families program. She found greater utilization of community resources, safer homes, more appropriate developmental expectations, better understanding of non-corporal punishment, and behaviors that were more respecting and accepting of their infants among mothers in the intervention group compared to the control group.
- Gessner (2008) in an evaluation of Healthy Families Alaska (HFAK) which included 325 families, found no overall program effect on maltreatment reports, and most measures on potential maltreatment. Home visited mothers reported using mild forms of physical discipline less often than control mothers. The groups were similar in their use of more severe forms of physical discipline. There was no program impact on parental risks.
- Other recent studies (such as Duggan et al., 2007) suggest that Healthy Families Alaska (HFAK) may have produced somewhat better results than those produced in the Hawaii Healthy Starts evaluation – at least with respect to children's development (Gomby 2007).

From these studies, it is apparent that the debate on the effectiveness of home visitation programs continues. The debate gathered strength when President Obama announced his plan to spend up to 8 billion dollars over the next ten years on home visitation—but only for programs that had the strongest evidence of effectiveness. The issue of which programs had enough "evidence" heated up and eventually the policy was reshaped to declare that the majority of funding would go to programs that had the most evidence and programs with modest evidence could get some, but less funding (See Haskins, Paxson, & Brooks-Gunn, 2009). Remaining in the legislation is the intent that all programs be subjected to continuous evaluation. For example a July 2010 announcement was made about the release of $88 million by U.S. Department of Health and Human Services to support evidence-based home visiting programs (U.S. Department of Health and Human Services, 2010).

The Healthy Families Arizona (HFAz) program is in the middle of the evidence-based revolution; the program model was on the forefront in 1993 when it was recognized as a "promising program," in part because of its strong evaluation component. Although a randomized trial had not been conducted at that time, the program was focused on continuous program improvement. While some experts define "evidence-based practice" as hinged on positive outcomes from a randomized clinical trial, many understand evidence-based practice as a set of guidelines and practices that transcend that narrow definition. Many experts claim evidence-based practice is best thought of as a *systematic* approach to improving the quality of services (Gray, 2001; Sackett et al., 2000). Thus, HFAz has taken into consideration the breadth of this definition since its inception, and has worked to establish itself as an evidence-based program. Over the years, the HFAz evaluation effort has conducted several special studies in order to improve the quality of services and program implementation, in addition to focusing on outcome findings. For example, the "problematic situations" study (LeCroy & Whitaker, 2005) sought to identify very specific problematic situations for home visitors. It was designed to shed additional understanding on what situations were difficult and provide a framework for improving supervision and training to respond to those difficult situations.

The overall evaluation model of the Healthy Families Arizona program focuses on quarterly and annual reports in order to meet legislative requirements, measure participant outcomes, describe evolving program components, and provide basic accountability. Furthermore, the ongoing evaluation seeks to provide information for strategic growth and planning by examining program theory and logic as it evolves and ask critical questions to inform progress and growth.

Some action steps in this process include:

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

All of this information also contributes to the evidence base for the Healthy Families program.

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

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

As the field continues to build on the home visitation programming and evidence-base in this country, increasingly program experts, researchers, and policymakers, are beginning to acknowledge that a systemic approach to understanding and improving outcomes for youth and families may be merited. In addition to home visitation programs, other important elements in this systemic approach might include: early access to basic health and reproductive care, a broad risk assessment, and linkages to childcare and early education programs (Daro, 2009). Continued evaluation of these home visitation programs, as well as the systems in which they operate, will help inform our understanding about the best ways to help children and families attain optimal outcomes.

Program Reductions in 2010

Healthy Families Arizona began in 1991 with 2 sites and increased to 58 sites serving over 150 communities around the state by 2006. Budget reductions at DES and at the program level in 2009 decreased the number of sites. Many sites have had to reduce the level of services they provide, and some communities will not be served by the

program due to limited capacity, resources, and funding. See Exhibit 1 for a list of currently funded sites.

Exhibit 1. Healthy Families Arizona DES Program Sites as of June 2010

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

DES provides just over $6 million annually to agencies around the state to deliver the HFAz program. These dollars come from designated Lottery Funds, and The Federal Community-Based Child Abuse Prevention Grant. This is a reduction from over $18 million in 2008. In April 2009, First Things First (FTF) responded to the state's urgent needs by releasing emergency dollars to agencies providing services consistent with the identified goals of FTF to promote early childhood health and development. In state fiscal year 2010 FTF provided $6.3 million to HFAz programs around the state, enabling some sites to be increased in size and 8 additional sites to be funded. The families funded through FTF are not included in this report, but an interagency agreement is in process to include FTF funded families in next year's report. For the 2010 state fiscal year, there are 11 programs and 40 sites (16 DES funded, 9 FTF funded, and 15 receiving funding from both).

In addition to the reduction in sites and numbers of families being served, funding cuts in early 2009 resulted in the temporary suspension of the HFAz Quality Assurance and Training Services, which was responsible for ongoing training, policy development, technical assistance, site visits, and credentialing preparation since 1991. Significant reductions in evaluation services for the state also took place in 2009 and required modifications to the evaluation design. The impact of the cuts includes: decreases in quality assurance site visits; fewer training workshops; fewer support materials being distributed; reduced evaluation data quality checks; a reduction in data collected, entered, and analyzed; and a re-focusing and reduction in the evaluation in order to ensure assessment of basic outcomes and credentialing data.

Credentialing Update

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

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

The individual programs follow the best practice standards that operationalize the Healthy Families America 12 Critical Elements. These Critical Elements are broken into three major service activities: 1) initiation of services, 2) home visiting services, and 3) administration. There are 119 standards that indicate best practice based upon over 30 years of research.

There are three major steps in the accreditation process. First, both the HFAz state system and the individual programs prepare a written self-study that enables HFAz

to take a critical look at the services offered and improve practice as needed. This written self-study is submitted to the Healthy Families America national office. The second step requires site visits by nationally trained peer reviewers. The HFAz state system receives a site visit first, followed by visits to individual program sites. The peer reviewers come to Arizona from other states and serve as outside, objective observers. Following the site visit, each program will receive an Accreditation Site Visit Report that will detail the strengths of the program as well as areas in which services can be improved. Finally, each program can demonstrate improvement in their practices and formally respond to the Healthy Families America Accreditation Panel, who will make the final decision to accredit. Peer review site visits were completed in July 2010 for the statewide system, and in August through October 2010 for the individual program sites. While the final results of accreditation have not yet been released the initial feedback on these documents was positive.

In this Report

This annual program evaluation report for Healthy Families Arizona focuses on annual participant outcomes, process information, and evaluation information useful for program improvement for the time period July 1, 2009 - June 30, 2010. The process evaluation describes the characteristics of families participating in the program. The outcome (or summative) evaluation examines program outcomes and looks at the program's impact across a number of measures. Detailed appendices provide specific site data on process and outcome variables. The description of evaluation methodology explains the methods used for each part of the report.

Due to reduced funding for the program evaluation, the 2010 Annual Report is limited to reporting of 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 reports for ongoing program monitoring, but detailed process and outcome studies are no longer included in these documents.

Evaluation Methodology

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

For the process evaluation, evaluation activities focus on obtaining and describing the program "inputs" such as numbers served, participant characteristics, and services received. The goal is to describe the participants involved in the Healthy Families Arizona program and document the services they receive. Also, 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 or outputs, at both the parent and child level on a number of different outcomes. The evaluation team has worked together with program staff to develop and select key program measures that are used to provide feedback and to measure the program's ability to achieve specific outcomes. The primary activities of the outcome evaluation are to: examine the extent to which the program is achieving its overarching goals, examine the program's effect on short term goals, and examine the extent to which participant characteristics, program characteristics, or community characteristics moderate the attainment of the program's outcomes. For most of the outcome measures, Healthy Families home visitors collect 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. 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.

Healthy Families Arizona Participant Characteristics

During the current study year, July 2009 through June 2010, the total number of families served by the DES-funded programs was 1,743. This is a 60% decrease from the number of families served last year prior to the full budget cuts. The evaluation covers only families that are within the first 24 months after the birth of the baby (n=1,416). For the purposed 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 4 home visits (n=901). The remaining 515 families all received a first home visit, but include both families that closed prior to receiving 4 home visits (81 families), that went on outreach before receiving 4 home visits (23 families), or for whom data had not yet been received so it was not possible to determine the number of home visits they have received (411 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 4 or

more home visits) in the Healthy Families program regardless of when they entered the program.

About one quarter (24%) of the families enter the program in the prenatal period (prenatal participants) and about three quarters (76%) of the families enter the program after the birth of the child (postnatal participants). For the July 2009 to June 2010 evaluation cohort, there were 212 prenatal families and 689 postnatal families. Exhibit 2 presents the total numbers of prenatal and postnatal participants actively engaged from July 2009 to June 2010.

Exhibit 2. Participants Included in the Evaluation for State Fiscal Year 2010

County	Site	Prenatal	Postnatal	Total
Cochise	Douglas/Bisbee	6	17	23
	Sierra Vista	2	20	22
Coconino	Flagstaff (La Plaza Vieja)	22	23	45
	Page	7	13	20
	Tuba City	10	12	22
	Wellspring	15	24	39
	Williams (Kinlani)	20	11	31
Graham	Safford	3	13	16
Maricopa	Central Phoenix	9	44	53
	Maryvale	9	44	53
	South Phoenix	2	47	49
	East Valley	13	42	55
	Sunnyslope	3	46	49
	Mesa	12	61	73
	West Phoenix	6	48	54
Mohave	Bullhead City	1	11	12
	Kingman	3	9	12
	Lake Havasu City	16	19	35
Navajo	Winslow	6	6	12
Pima	Child & Family Resources	5	15	20
	CODAC	5	34	39
	La Frontera	14	57	71
	Pascua Yaqui	15	9	24
Santa Cruz	Nogales	3	13	16
Yavapai	Prescott	2	34	36
Yuma	Yuma	3	17	20
Total		**212**	**689**	**901**

Length of Time in Program and Reasons for Termination

It is difficult to draw conclusions or make comparisons with last year regarding the length of time families stayed in the program due to the fact that the majority of terminations (55%) last year were caused by program closure. For all families (N=400) who closed:

- The median number of days in the program was 305 days;
- The average length of time in the program was 385 days; and

- Forty percent (40%) of families were in the program one year or longer.

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 2010

Reason	Prenatal	Postnatal
Moved away	33.7%	28.7%
Did not respond to outreach efforts	22.9%	21.5%
Family refused further services	8.4%	16.6%
Refused worker change	10.8%	8.1%
Other	10.8%	6.9%
Self-sufficiency	1.2%	8.5%
Unable to contact	6.0%	3.2%
No longer has custody	3.6%*	3.6%

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

Characteristics of the Target Population

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

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 14% of all prenatal families and in over 16% of postnatal families. Single parents make up the vast majority of participants—over 71% of the mothers at intake. Over 80% of the mothers are unemployed and receive AHCCCS. With a median annual income of $11,000-$14,000, it can be seen that many participants are living in poverty. In relation to the state rates, these data confirm that Healthy Families participants do represent an "at-risk" group of mothers. The program has

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

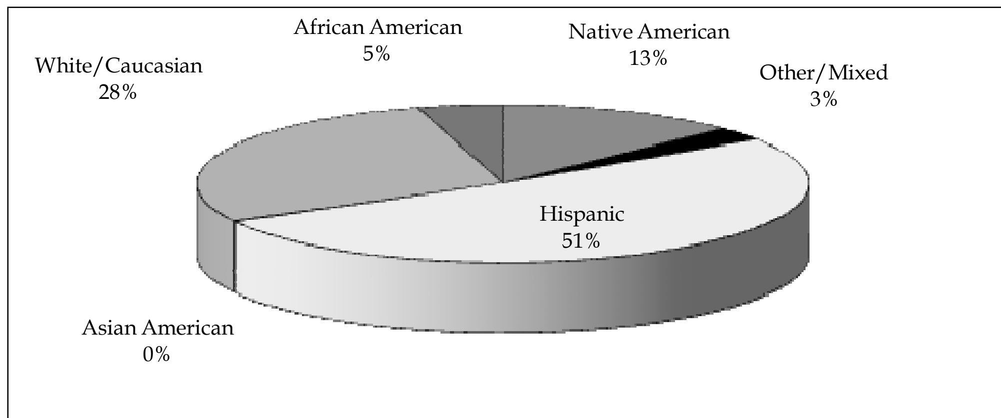
Exhibit 4. Selected Risk Factors for Mothers at Intake State Fiscal Year 2010

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona state Rates - 2009
Teen Births (19 years or less)	13.8%	16.5%	11.8%*
Births to Single Parents	74.9%	71.5%	45.2%*
Less Than High School Education	62.0%	57.6%	23.9%*
Not Employed	79.8%	83.4%	NA***
No Health Insurance	5.9%	3.1%	2.7%*
Receives AHCCCS	87.1%	90.4%	53.5%*
Late or No Prenatal Care	26.9%	29.3%	19.7%*
Median Yearly Income	$8,700	$12,000	$48,745 **

*Source: 2009 data from the Arizona Department of Health Services Vital Statistics records.
Percent does not include "unknown."
**U.S. Census Bureau, American Community Survey, 2009
*** Employment figures for Mothers are not available at the state level.
Note: Percentages for the combined total for prenatal and postnatal families can be found in Appendix A.

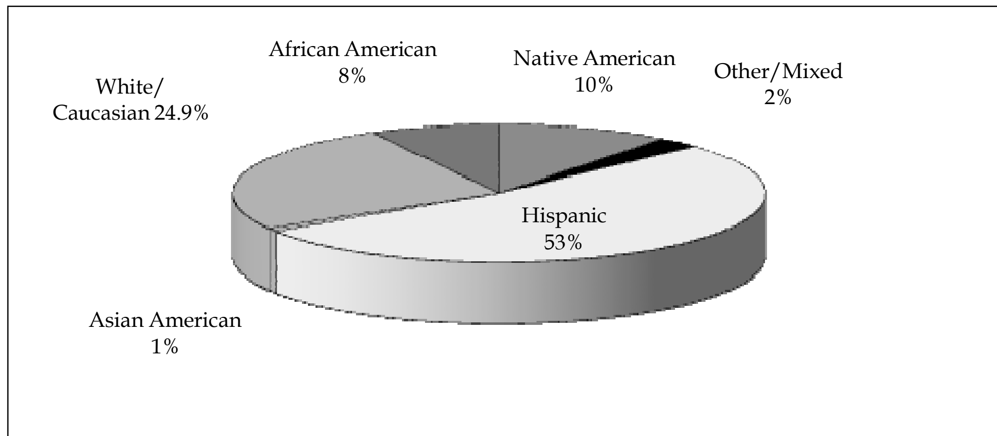
The Healthy Families Arizona program continues to serve a culturally diverse population. In the following two exhibits, ethnicity is examined from enrollment data for mothers and fathers, with prenatal and postnatal participants combined. Just over 50% of mothers and fathers enrolled in the program are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

Exhibit 5. Mother's Ethnicity* (N=892) State Fiscal Year 2010



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

Exhibit 6. Father's Ethnicity* (N=793) State Fiscal Year 2010



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

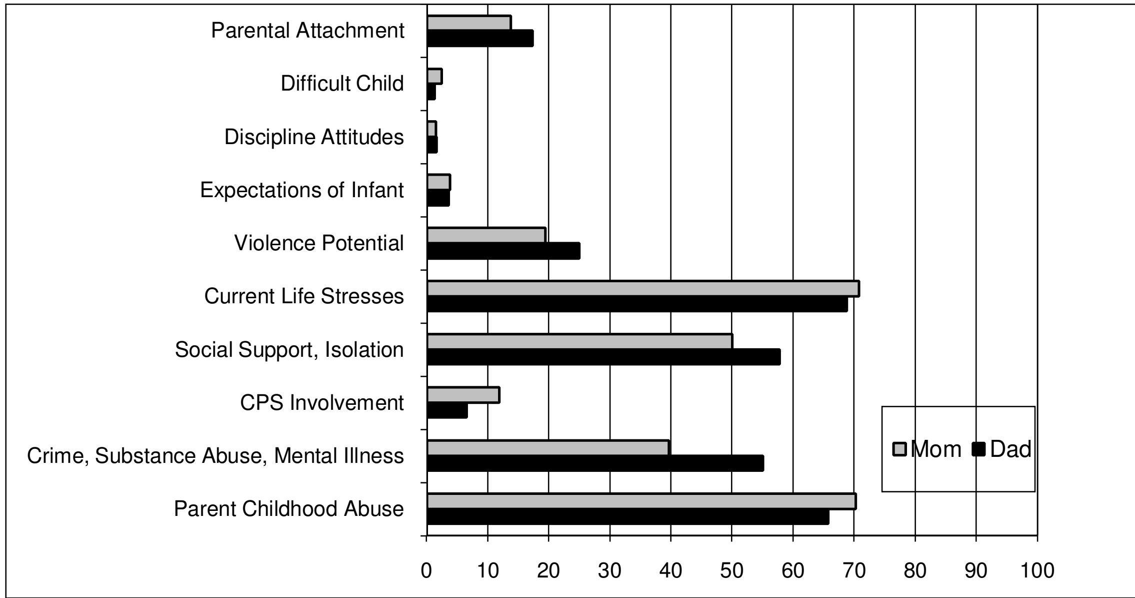
Assessment of Risk Factors

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

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.

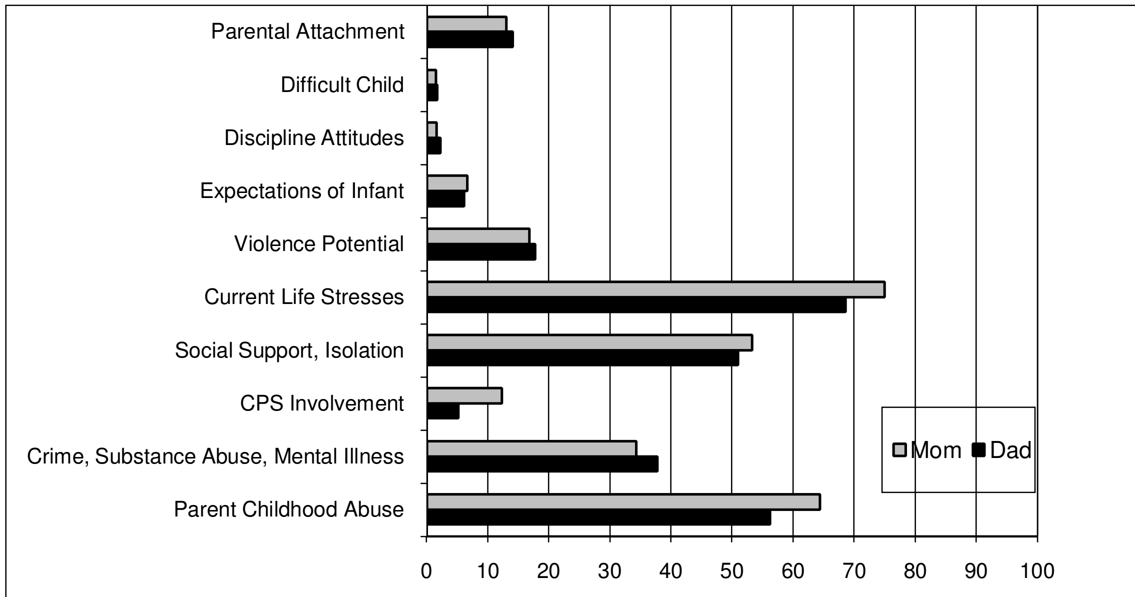
[1] The Family Stress Checklist was revised by the original developer and renamed the Parent Survey to impart a more strengths based perspective, however, the rating scale remains unchanged. More information on this instrument is provided in Appendix B.

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



*Note: The Ns ranged from 205 – 212 for mothers and from 64 – 150 for fathers depending on the item.

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



*Note: the Ns ranged from 668 – 685 for mothers and from 313 – 589 for fathers depending on the items

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. There are no major differences between prenatal participants and postnatal participants.

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

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 who entered prenatally and postnatally.

Exhibit 9. Risk Factors for Infants - State Fiscal Year 2010

Risk Factors for Infants	Prenatal Families*	Postnatal Families**	Arizona State percent***
Born < 37 weeks gestation	10.5%	19.2%	10.0%
Birth Defects	0.7 %	1.9%	0.6%
Low Birth Weight	9.8%	15.4%	7.1%
Positive Alcohol/Drug Screen	1.4%	6.8%	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.

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 9% 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

Data suggests the Healthy Families Arizona program is reaching parents and babies who have greater risks of child maltreatment and other unhealthy outcomes. Healthy Families Arizona home visitors have the opportunity to help mothers

prevent having pre-term or low birth weight babies by encouraging parents to attend regular prenatal visits; to adopt healthy behaviors such as good nutrition habits; and to stop alcohol, drug, and tobacco use. The recent Healthy Families New York randomized control study reported that in a control group, mothers were significantly more likely to deliver low birth weight babies than were the mothers engaged in the Healthy Families program (Mitchell-Herzfeld et al., 2005). 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. Taken together, this information suggests that the infants in the Healthy Families Arizona program are at significant risk and can benefit from early support that is offered by the Healthy Families program.

Key Healthy Families Arizona Services

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

Developmental Screens and Referrals for Children

Developmental screens are regularly provided by home visitors and are used to measure a child's developmental progress and 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 difficulties. The program goal is to screen 80% of the children in families served by the program. As Exhibit 10 shows, approximately two-thirds of children are receiving the ASQ at each interval. Rates of screening for this year are approximately 10% higher than the previous year and similar to rates from 2008. While the screening rate has increased back to the level prior to funding cuts, it is still below the program goal. It will be important to follow this trend in future years, as the program sites stabilize.

Exhibit 10. ASQ Screening State Fiscal Year 2010

Interval ASQ Screening	Percent of children Screened with ASQ 2010	Percent screened as delayed 2010
6-month	68.1%	2.6%
12-month	78.1%	8.2%
18-month	69.3%	19.1%
24-month	66.2%	26.0%

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 3-26% of children (depending on their age) are initially screened as delayed in their development, up to 43% of the children who initially screen as delayed on the ASQ are determined to be "not delayed" upon *further* assessment (see Exhibit 11 below). For example, of the families at 12 months who screened as delayed on the ASQ and were referred for more assessment, 6 families showed no delay, 3 families were referred to the AzEIP, 2 families were referred to an early intervention program, 9 families received developmental intervention, 1 family received specialized therapy, and 1 declined further referral. The ASQ screening provides a valuable service to families because it enables them to access appropriate services to meet their child's particular needs. The following exhibit shows the outcome of these follow-up assessments that are completed with families at the different time intervals.

Exhibit 11. ASQ Follow-up Services State Fiscal Year 2010

	Continued Assessment shows "no delay" % (n)	Referred to AzEIP % (n)	Referred to other Early Intervention % (n)	Provided Developmental Intervention % (n)	Referred to Therapy % (n)	Parent Declined Referral % (n)
6-month Screen	0% (0)	57.1% (3)	0% (0)	85.7% (6)	0% (0)	0% (0)
12-month Screen	42.9%(6)	21.4% (3)	14.3% (2)	64.3% (9)	7.1% (1)	7.1% (1)
18-month Screen	9.1%(2)	18.2% (4)	4.5% (1)	95.5% (21)	4.5% (1)	13.6% (3)
24-month Screen	16.0% (4)	64.0% (16)	4.0% (1)	72.0% (18)	12.0% (3)	12.0% (3)

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

Outcomes for Families

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

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

Parent outcomes

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

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

Healthy Families Parenting Inventory Reveals Positive Parent Change

In order to evaluate critical intermediate goals the evaluation team developed the Healthy Families Parenting Inventory (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. 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=459) and participants who also had matched instruments at the 12 month interval (n=230).

Healthy Families Parent Inventory (HFPI) Subscales

Exhibit 12. Change in Subscales of the HFPI

Sub- scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Social support	✓	.003	(.12)	None	-	(.02)
Problem solving	✓	.001	(.15)	✓	.017	(.15)
Depression	✓	.028	(-.12)	None	-	(-.10)
Personal care	✓	.002	(.13)	✓	.011	(.16)
Mobilizing resources	✓	.000	(.23)	✓	.000	(.23)
Commitment To Parent Role	None	-	-(.13)	None	-	(-.09)
Parent/child Behavior	None	-	(.01)	None	-	(-.05)
Home Environment	✓	.000	(.28)	✓	.000	(.45)
Parenting Efficacy	None	-	(.08)	✓	.037	(.14)

From baseline to 6 months, there were significant changes in social support, problem solving, depression, personal care, mobilizing resources, and the home environment. From baseline to 12 months, however, significant gains were lost in the areas of social support, and depression, while parenting efficacy did significantly improve. The largest changes occurred in the home environment and mobilizing resources scales indicating that the Healthy Families programs are effective at connecting parents to resources and improving the atmosphere of the home. Overall, the results from this year's study cohort are different than seen in the prior years, with more of the

subscales failing to show significant improvement from baseline to post-testing. This may be an artifact of the reduced number of families served this year compared to prior years or other changes in program or capacity with the reductions in funding. For example, some programs might have decided to focus their efforts on higher risk families. The continuing challenges presented by the slow economic recovery both statewide and nationally may also have played a role.

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 57.1% and from baseline to 12 months was 59.1%.

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**	**(.17)**	✓	**.000**	**(.27)**

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. Because of these issues, many programs are beginning to not only count on actual rates of child abuse and neglect as the standard, but instead rely on measures that document reducing risk factors and increasing protective factors—factors shown to predict child maltreatment (Howard and Brooks-Gunn, 2009). These factors were also evaluated for HFAz and findings are noted throughout this report.

This year, 97.4% of the Healthy Families matched cases were without a substantiated report, as can be seen in Exhibit 14. A substantiated finding means that "Child Protective Services has concluded that the evidence supports that an incident of abuse or neglect occurred based upon a probable cause standard" (see DES substantiation guidelines for further detail). Although 97.4% of the HFAz families that participate for at least six months have no substantiated reports, 23 families did have a substantiated report of abuse or neglect (2.6% of families), an increase over the previous years.

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

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)
All Families	99.7%	98.9%	98.8%	97.4%

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.

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 2009, the Arizona rate was 76.4%, and the U.S. rate was 78%. (www.AZDHS.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 2010 study year, nearly 80% of the children in the Healthy Families Arizona program, for whom we had data on immunizations, were reported to have received all 4 immunizations in the recommended series given by 18 months of age. This percentage exceeds the immunization rate for 2-year olds in Arizona and nationally. Overall, this finding suggests the program is successfully promoting immunizations for the children served by Healthy Families Arizona.

Exhibit 15. Immunization Rate of Healthy Families Arizona Children

Immunization Period	Percent Immunized 2007	Percent Immunized 2008	Percent Immunized 2009	Percent Immunized 2010	Immunization Rate for 2-year-olds in Arizona (2009)*
2 month	91.3%	91.3%	80.3%	92.9%	
4 month	88.4%	88.5%	78.0%	89.9%	
6 month	77.7%	75.9%	65.9%	74.0%	
12 month	87.4%	90.2%	88.6%	85.3%	
Received all 4 in the series by 18 months of age	87.5%	87.4%	85.0%	79.8%	76.4%

*Source: 2009 data from the Arizona Department of Health Services

Safety Practices in the Home

Unintentional injuries are the leading cause of death for children and adolescents ages 1 to 19. Each year over 13,000 children die from unintentional injuries. A recent report, *What works for children*, *2008,* concluded that home visits can reduce the risk of accidental injuries in the home by approximately 26 percent. Safety practices help prevent accidents and promote injury prevention—important steps toward promoting child health and wellness. Healthy Families Arizona assesses and promotes safe environments for children through education about safety practices and by monitoring safety in the home through the completion of the safety checklist. The following exhibits show results for families that had data in these areas. Exhibit 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 12 months, 98% use car seats and 95% lock their poisons properly. Car seat use has been estimated to be 90% for a similar age group not participating in the program (Glassbrenner & Ye, 2007) and the data reported for the Healthy Families program exceeds this percent. Furthermore, studies have found that smoke alarms are present in only 69% of homes with reported fires and one fifth of those alarms do not work properly (Ahrens, 2009). Similarly, one study in an inner city (Rowland, et al., 2002) reports that 54% of Americans have "working alarms" and this is much lower than the 90% working alarm finding reported by the Healthy Families program.

Exhibit 16. Percent of all Postnatal Families Implementing Safety Practices

	2-Month (n = 344)	6-Month (n = 497)	12-Month (n = 260)	18-Month (n = 214)	24-Month (n = 143)
Outlets Covered	45.1%	56.4%	77.5%	85.9%	82.4%
Poisons Locked	91.2%	92.9%	94.7%	96.8%	96.9%
Smoke Alarms	86.9%	89.7%	90.0%	94.1%	90.9%
Car Seats	100.0%	99.1%	98.7%	100.0%	97.7%

Mothers' Health, Education, and Employment

The Healthy Families' model extends beyond parenting outcomes and also attempts to influence maternal life course outcomes. The Healthy Families program has the opportunity to encourage families to seek new educational opportunities, complete

their high school education, obtain greater economic self-sufficiency, and obtain better paying and better quality jobs.

Subsequent Pregnancies and Birth Spacing

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

Exhibit 17. Percentage of Mothers who Reported Subsequent Pregnancies State Fiscal year 2009 –2010

	2006	2007	2008	2009	2010
Percent of mothers with subsequent pregnancies	11.8%	10.4%	11.5%	9.9%	7.1%

Mothers with greater birth spacing have fewer pregnancy complications and are less likely to give birth to low birth weight or premature babies (Kallan, 1997). The health benefits of birth spacing are considerable and Healthy Families can support the new public campaign about birth spacing that says, "three to five years saves lives" by educating families about the benefits of longer time periods between births. The following exhibit shows the length of time to subsequent pregnancy for those mothers who do have subsequent births. The most important data is the percent of mothers who waited over 24 months between births. There has been a persistent downward trend in the number of women waiting 2 years between subsequent births, which means 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	2006 Percent of Mother	2007 Percent of Mother	2008 Percent of Mother	2009 Percent of Mother	2010 Percent of Mother
1 to 12 mos.	37.7%	42.1%	40.2%	49.3%	54.1%
13 to 24 mos.	38.1%	39.3%	43.9%	46.8%	42.6%
Over 24 mos.	24.2%	18.6%	15.9%	4.0%	3.3%

School, Educational Enrollment, and Employment

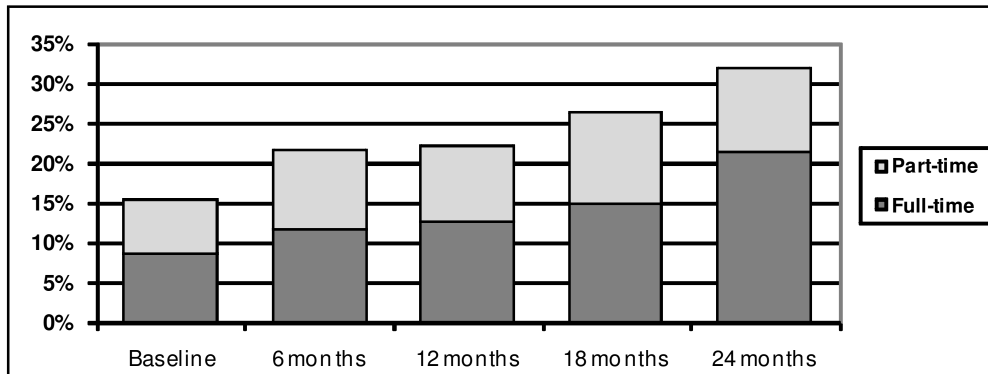
School and educational obtainment are also important to consider when examining the program's potential impact on maternal life course outcomes. Increased education is associated with better overall well-being and greater family stability. As the following exhibit shows, at each interval, 14-22% of the mothers are enrolled in school either full- or part-time. Fulltime school enrollment is much lower than in 2008, but has increased since 2009. While there has been a slight rebound, the continued economic issues could be a relevant factor. 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.

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

	Percent enrolled full-time **(2008 prior report)**	Percent enrolled part-time **(2009 prior report)**	Percent enrolled full-time **(2009 prior report)**	Percent enrolled part-time **(2010)**	Percent enrolled full-time **(2010)**
6 month	21.2%	5.8%	9.3%	6.2%	12.3%
12 month	24.9%	5.2%	10.4%	7.2%	14.8%
18 month	30.8%	6.1%	10.6%	6.2%	12.4%
24 month	31.7%	5.4%	7.3%	4.6%	10.0%

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

Exhibit 20. Mother's Employment Status



Substance Abuse Screening

Research finds a strong relationship between substance abuse and risk for child maltreatment (Pan, et al., 1994; Windom, 1992; Wolfe, 1998). When a family member suffers from substance abuse, it is not surprising to find that the individual is not able to adequately care for and supervise children. Successful treatment of substance abuse often requires intensive treatment, but home visitors can play a critical role in the initial screening, in educating families about substance abuse, 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 showed steady increases over the past several years, but decreased this year from nearly 95% last year to approximately 85% this year. The percentage of screens that were conducted at the 6 and 12 month time periods increase from 68% and 66% to 82% and 80% respectively. However, a 29.5% positive screen at 2 months is high and suggests a large number of families are screened as positive and are potentially in need of substance abuse information or treatment. The New York Healthy Families study, using the AUDIT for assessment, found 16% of the Healthy Families participants reported drug use.

Exhibit 21. Percent Screened and Assessed Positive on the CRAFFT

Time at assessment	Percent Screened	Percent Assessed Positive
2 months (lifetime)	84.8%	29.5%
6 months	82.1%	8.0%
12 months	80.4%	5.0%

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

Conclusions and Recommendations

During the 2009 – 2010 program year, the Healthy Families Arizona program has adjusted to major changes due to reduced financial resources, navigated combined funding sources from DES and FTF, and prepared for re-accreditation. This year's evaluation results highlight useful data for program accountability and help to maintain the focus of the program as it changes. While there are multiple outcomes that could be measured in home visitation programs, the Healthy Families Arizona program focuses the evaluation on the following primary outcome indicators: parent outcomes, child health and wellness, and child abuse and neglect. Results from such measures as the Healthy Families Parenting Inventory, participant tracking data, safety checklists, screening tools, child abuse and neglect rates, and participant satisfaction surveys, suggest Healthy Families Arizona continued to address and reach most of its goals.

Evidence-based methods are necessary to guide the practice of home visitation. In this time of limited resources, the Healthy Families Arizona program needs to maintain efforts to rigorously investigate the program and use evidence for program improvement. Recommendations for this year are focused on ways the program can continue to emphasize quality programming, make decisions based on evidence and data, and focus providing the most critical services to the highest risk families.

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

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

- **Direct additional efforts toward preventing repeat births and increasing the time between births.** Progress toward this health benchmark has not gone in the desired direction, and program staff might consider increasing their efforts to educate families on these topics. In addition, training efforts for home visitors could be re-examined.

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

- **Continued attention to data collection and data submission should be maintained to assure the program is meeting its goals and build a body of data for credentialing, program improvement, and to contribute to the research on home visitation effectiveness.** 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.

- **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. Arizona can continue to be at the forefront of this movement by maintaining this mentality and an understanding of other nationwide progress in this area.

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Appendix A: Site Level Data

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Age of Child at Entry by Site – 2010
(Age in Days)

Site	Mean (Age in Days)	Number	Standard Deviation
Douglas	15.75	16	9.70
Central Phoenix	33.87	46	21.86
Maryvale	36.56	45	21.87
South Phoenix	32.68	47	22.37
East Valley	38.77	44	23.44
Nogales	20.25	12	14.55
Page	26.67	12	22.59
CODAC	38.94	35	28.16
La Frontera	33.88	64	27.24
Child and Family Resources	48.38	16	35.95
Sierra Vista	22.55	20	21.72
Tuba City	20.89	9	21.07
Yuma	35.82	17	26.86
Pascua Yaqui	28.22	9	33.54
Lake Havasu City	22.16	19	22.69
Flagstaff	19.00	25	21.27
Sunnyslope	43.89	46	23.65
Prescott	13.56	34	10.57
Mesa	34.37	63	24.37
Safford	28.50	14	31.34
Winslow	20.25	4	7.37
Kingman	20.29	7	6.90
Bullhead City	26.60	10	20.25
West Phoenix	36.42	48	25.04
Williams (Kinlani)	17.21	14	24.79
Wellspring	22.56	27	28.09
Total	**31.43**	**703**	**24.95**

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 – 2010
(For families who left the program)

Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Douglas	579.00	649.67	192.01	3	267.00	284.80	116.04	5
Central Phoenix	561.00	505.67	331.13	6	285.50	443.06	325.02	16
Maryvale	774.00	611.67	307.52	3	253.00	330.46	239.07	13
South Phoenix	302.00	302.00	-	1	208.00	236.93	167.06	14
East Valley	358.00	392.29	256.23	7	450.50	477.94	243.06	16
Nogales	309.00	309.00	-	1	637.00	620.75	204.29	4
Page	349.00	351.25	146.65	4	486.50	437.83	250.40	6
CODAC	321.50	321.50	41.72	2	283.50	313.50	172.29	10
La Frontera	301.00	439.00	354.06	5	221.50	252.86	174.88	14
Child and Family Resources	605.00	605.00	101.82	2	584.00	511.43	293.58	7
Sierra Vista	0	0	0	0	354.00	421.18	268.41	11
Tuba City	243.00	309.67	210.09	3	386.00	473.00	318.53	5
Yuma	602.00	602.00	46.67	2	725.50	684.70	295.78	10
Pascua Yaqui	843.00	810.00	251.59	8	612.50	552.25	212.75	8
Lake Havasu City	215.50	203.00	116.87	4	202.00	210.40	112.79	5
Flagstaff	353.00	328.25	185.69	12	469.00	356.67	206.69	15
Sunnyslope	367.00	371.67	270.03	3	199.50	190.73	83.57	26
Prescott	402.00	402.00	223.45	2	427.00	434.80	166.41	15
Mesa	459.50	427.33	211.84	6	267.00	322.10	235.85	31
Safford	204.50	204.50	95.46	2	164.00	138.40	56.38	5
Winslow	209.00	207.67	128.01	3	241.00	247.00	98.14	3
Kingman	200.50	200.50	12.02	2	244.00	349.33	262.37	3
Bullhead City	229.00	229.00	-	1	137.00	194.10	133.58	10
West Phoenix	162.00	162.00	11.31	2	224.00	235.11	100.84	18
Williams (Kinlani)	567.00	577.00	232.09	9	657.00	578.33	268.67	9
Wellspring	344.00	465.89	276.27	9	501.00	530.89	254.28	19
Total	364.00	439.68	263.37	102	286.00	366.49	246.43	298

Top Four Reasons for Exit by Site – 2010
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 Refused Worker Change	
	%	n	%	n	%	n	%	n
Douglas	50.0	4	12.5	1	12.5	1	0	0
Central Phoenix	31.3	5	25.0	4	18.8	3	0	0
Maryvale	6.7	1	40.0	6	6.7	1	20.0	3
South Phoenix	64.3	9	7.1	1	0	0	7.1	1
East Valley	26.3	5	31.6	6	15.8	3	10.5	2
Nogales	0	0	50.0	1	0	0	0	0
Page	0	0	22.2	2	44.4	4	0	0
CODAC	10.0	1	40.0	4	20.0	2	10.0	1
La Frontera	44.4	8	16.7	3	22.2	4	0	0
Child and Family Resources	0	0	20.0	1	0	0	40.0	2
Sierra Vista	50.0	3	0	0	16.7	1	16.7	1
Tuba City	33.3	2	16.7	1	33.3	2	0	0
Yuma	50.0	3	33.3	2	16.7	1	0	0
Pascua Yaqui	20.0	3	60.0	9	13.3	2	0	0
Lake Havasu City	33.3	2	16.7	1	33.3	2	0	0
Flagstaff	26.9	7	19.2	5	15.4	4	34.6	9
Sunnyslope	10.7	3	10.7	3	21.4	6	0	0
Prescott	35.7	5	35.7	5	7.1	1	0	0
Mesa	53.3	16	16.7	5	3.3	1	3.3	1
Safford	83.3	5	16.7	1	0	0	0	0
Winslow	50.0	1	0	0	0	0	50.0	1
Kingman	20.0	1	0	0	20.0	1	0	0
Bullhead City	9.1	1	0	0	0	0	0	0
West Phoenix	50.0	8	0	0	18.8	3	0	0
Williams (Kinlani)	18.8	3	0	0	25.0	4	6.3	1
Wellspring	14.3	3	0	0	9.5	2	33.3	7
Total	30.0	99	.3	1	14.5	48	8.8	29

Health Insurance at Intake by Site – 2010
Percent and number within Site*

Site	PRENATAL						POSTNATAL					
	None		AHCCCS		Private		None		AHCCCS		Private	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	16.7	1	83.3	5	0	0	0	0	100.0	16	0	0
Central Phoenix	0	0	88.9	8	0	0	2.3	1	88.6	39	9.1	4
Maryvale	22.2	2	77.8	7	0	0	4.5	2	90.9	40	4.5	2
South Phoenix	.0	0	100.0	2	0	0	0	0	97.9	46	2.1	1
East Valley	15.4	2	84.6	11	0	0	4.8	2	71.4	30	23.8	10
Nogales	0	0	100.0	3	0	0	0	0	100.0	11	0	0
Page	0	0	85.7	6	14.3	1	0	0	100.0	13	0	0
CODAC	0	0	80.0	4	20.0	1	2.9	1	94.1	32	2.9	1
La Frontera	7.1	1	92.9	13	0	0	5.5	3	89.1	49	3.6	2
Child and Family Resources	0	0	100.0	5	0	0	0	0	100.0	15	0	0
Sierra Vista	0	0	50.0	1	50.0	1	5.0	1	85.0	17	5.0	1
Tuba City	22.2	2	77.8	7	0	0	0	0	91.7	11	8.3	1
Yuma	0	0	100.0	3	0	0	0	0	100.0	17	0	0
Pascua Yaqui	0	0	93.3	14	6.7	1	0	0	100.0	8	0	0
Lake Havasu City	6.7	1	80.0	12	13.3	2	5.3	1	78.9	15	15.8	3
Flagstaff	5.6	1	94.4	17	0	0	5.0	1	95.0	19	0	0
Sunnyslope	0	0	100.0	3	0	0	6.5	3	84.8	39	8.7	4
Prescott	0	0	100.0	2	0	0	0	0	93.9	31	6.1	2
Mesa	8.3	1	75.0	9	16.7	2	4.9	3	88.5	54	6.6	4
Safford	0	0	100.0	3	0	0	0	0	100.0	13	0	0
Winslow	0	0	100.0	6	0	0	0	0	100.0	6	0	0
Kingman	0	0	66.7	2	33.3	1	0	0	100.0	9	0	0
Bullhead City	0	0	100.0	1	0	0	0	0	90.0	9	10.0	1
West Phoenix	0	0	83.3	5	0	0	6.3	3	87.5	42	6.3	3
Williams (Kinlani)	5.6	1	94.4	17	0	0	0	0	88.9	8	11.1	1
Wellspring	0	0	76.9	10	23.1	3	0	0	91.7	22	8.3	2
Total	5.9	12	87.1	176	5.9	12	3.1	21	90.4	611	6.2	42

*"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
2010 by Site
Percent and number ( ) within Site

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

Site	PRENATAL			POSTNATAL		
	Yes	No	Unknown	Yes	No	Unknown
Douglas	33.3% (2)	66.7% (4)	.0% (0)	31.3% (5)	68.8% (11)	.0% (0)
Central Phoenix	44.4% (4)	55.6% (5)	.0% (0)	15.9% (7)	79.5% (35)	4.5% (2)
Maryvale	33.3% (3)	66.7% (6)	.0% (0)	31.8% (14)	65.9% (29)	2.3% (1)
South Phoenix	.0% (0)	100.0% (2)	.0% (0)	27.7% (13)	70.2% (33)	2.1% (1)
East Valley	53.8% (7)	46.2% (6)	.0% (0)	31.0% (13)	69.0% (29)	.0% (0)
Nogales	.0% (0)	100.0% (3)	.0% (0)	7.7% (1)	92.3% (12)	.0% (0)
Page	28.6% (2)	71.4% (5)	.0% (0)	46.2% (6)	53.8% (7)	.0% (0)
CODAC	40.0% (2)	60.0% (3)	.0% (0)	32.4% (11)	67.6% (23)	.0% (0)
La Frontera	14.3% (2)	78.6% (11)	7.1% (1)	33.9% (19)	64.3% (36)	1.8% (1)
Child and Family Resources	.0% (0)	100.0% (5)	.0% (0)	40.0% (6)	60.0% (9)	.0% (0)
Sierra Vista	50.0% (1)	50.0% (1)	.0% (0)	35.0% (7)	65.0% (13)	.0% (0)
Tuba City	30.0% (3)	70.0% (7)	.0% (0)	58.3% (7)	41.7% (5)	.0% (0)
Yuma	66.7% (2)	33.3% (1)	.0% (0)	17.6% (3)	82.4% (14)	.0% (0)
Pascua Yaqui	26.7% (4)	73.3% (11)	.0% (0)	11.1% (1)	88.9% (8)	.0% (0)
Lake Havasu City	25.0% (4)	68.8% (11)	6.3% (1)	21.1% (4)	78.9% (15)	.0% (0)
Flagstaff	9.1% (2)	90.9% (20)	.0% (0)	26.1% (6)	73.9% (17)	.0% (0)
Sunnyslope	.0% (0)	100.0% (3)	.0% (0)	26.1% (12)	73.9% (34)	.0% (0)
Prescott	.0% (0)	50.0% (1)	50.0% (1)	38.2% (13)	58.8% (20)	2.9% (1)
Mesa	41.7% (5)	58.3% (7)	.0% (0)	38.3% (23)	61.7% (37)	.0% (0)
Safford	33.3% (1)	66.7% (2)	.0% (0)	23.1% (3)	61.5% (8)	15.4% (2)
Winslow	33.3% (2)	66.7% (4)	.0% (0)	33.3% (2)	66.7% (4)	.0% (0)
Kingman	.0% (0)	100.0% (3)	.0% (0)	22.2% (2)	55.6% (5)	22.2% (2)
Bullhead City	.0% (0)	100.0% (1)	.0% (0)	50.0% (5)	50.0% (5)	.0% (0)
West Phoenix	.0% (0)	100.0% (6)	.0% (0)	22.9% (11)	77.1% (37)	.0% (0)
Williams (Kinlani)	30.0% (6)	70.0% (14)	.0% (0)	45.5% (5)	54.5% (6)	.0% (0)
Wellspring	33.3% (5)	66.7% (10)	.0% (0)	8.3% (2)	91.7% (22)	.0% (0)
Total	26.9% (57)	71.7% (152)	1.4% (3)	29.3% (201)	69.2% (474)	1.5% (10)

Ethnicity of Mother by Site PRENATAL – 2010
Percent and number ( ) within Site

Site	Mixed/ Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	16.7	1	16.7	1	66.7	4	0	0	0	0	0	0
Central Phoenix	0	0	33.3	3	66.7	6	0	0	0	0	0	0
Maryvale	11.1	1	33.3	3	55.6	5	0	0	0	0	0	0
South Phoenix	0	0	0	0	100.0	2	0	0	0	0	0	0
East Valley	7.7	1	30.8	4	38.5	5	23.1	3	0	0	0	0
Nogales	0	0	0	0	100.0	3	0	0	0	0	0	0
Page	0	0	0	0	0	0	0	0	0	0	100.0	7
CODAC	0	0	20.0	1	80.0	4	0	0	0	0	0	0
La Frontera	0	0	21.4	3	78.6	11	0	0	0	0	0	0
Child and Family Resources	0	0	80.0	4	20.0	1	0	0	0	0	0	0
Sierra Vista	50.0	1	0	0	0	0	0	0	0	0	50.0	1
Tuba City	0	0	0	0	0	0	0	0	0	0	100.0	10
Yuma	0	0	0	0	100.0	3	0	0	0	0	0	0
Pascua Yaqui	0	0	0	0	7.7	1	0	0	7.7	1	84.6	11
Lake Havasu City	0	0	75.0	12	25.0	4	0	0	0	0	0	0
Flagstaff	0	0	13.6	3	54.5	12	9.1	2	0	0	22.7	5
Sunnyslope	0	0	0	0	100.0	3	0	0	0	0	0	0
Prescott	0	0	50.0	1	50.0	1	0	0	0	0	0	0
Mesa	16.7	2	33.3	4	41.7	5	0	0	0	0	8.3	1
Safford	0	0	33.3	1	66.7	2	0	0	0	0	0	0
Winslow	0	0	40.0	2	40.0	2	0	0	0	0	20.0	1
Kingman	0	0	100.0	3	0	0	0	0	0	0	0	0
Bullhead City	0	0	100.0	1	0	0	0	0	0	0	0	0
West Phoenix	0	0	33.3	2	50.0	3	16.7	1	0	0	0	0
Williams (Kinlani)	0	0	5.0	1	55.0	11	0	0	0	0	40.0	8
Wellspring	6.7	1	20.0	3	33.3	5	0	0	0	0	40.0	6
Total	3.3	7	24.9	52	44.5	93	2.9	6	.5	1	23.9	50

Ethnicity of Mother by Site POSTNATAL – 2010
Percent and number ( ) within Site

Site	Mixed/ Other		Caucasian/ White		Hispanic		African American		Asian American		Native American	
	%	n	%	n	%	n	%	n	%	n	%	n
Douglas	0	0	25.0	4	75.0	12	0	0	0	0	0	0
Central Phoenix	4.5	2	52.3	23	29.5	13	4.5	2	0	0	9.1	4
Maryvale	4.5	2	29.5	13	40.9	18	25.0	11	0	0	0	0
South Phoenix	2.1	1	8.5	4	80.9	38	2.1	1	0	0	6.4	3
East Valley	4.8	2	40.5	17	52.4	22	2.4	1	0	0	0	0
Nogales	0	0	0	0	100.0	13	0	0	0	0	0	0
Page	0	0	0	0	0	0	0	0	0	0	100.0	13
CODAC	12.1	4	30.3	10	51.5	17	0	0	3.0	1	3.0	1
La Frontera	0	0	10.5	6	80.7	46	1.8	1	0	0	7.0	4
Child and Family Resources	0	0	28.6	4	57.1	8	7.1	1	0	0	7.1	1
Sierra Vista	0	0	60.0	12	20.0	4	20.0	4	0	0	0	0
Tuba City	0	0	0	0	0	0	0	0	0	0	100.0	12
Yuma	0	0	5.9	1	94.1	16	0	0	0	0	0	0
Pascua Yaqui	0	0	0	0	25.0	2	12.5	1	0	0	62.5	5
Lake Havasu City	5.3	1	68.4	13	26.3	5	0	0	0	0	0	0
Flagstaff	0	0	45.5	10	36.4	8	0	0	0	0	18.2	4
Sunnyslope	4.3	2	32.6	15	56.5	26	6.5	3	0	0	0	0
Prescott	2.9	1	73.5	25	23.5	8	0	0	0	0	0	0
Mesa	0	0	14.8	9	80.3	49	4.9	3	0	0	0	0
Safford	0	0	46.2	6	53.8	7	0	0	0	0	0	0
Winslow	0	0	33.3	2	50.0	3	0	0	0	0	16.7	1
Kingman	0	0	77.8	7	22.2	2	0	0	0	0	0	0
Bullhead City	0	0	50.0	5	50.0	5	0	0	0	0	0	0
West Phoenix	2.1	1	16.7	8	66.7	32	12.5	6	0	0	2.1	1
Williams (Kinlani)	0	0	9.1	1	9.1	1	0	0	0	0	81.8	9
Wellspring	8.3	2	25.0	6	41.7	10	0	0	0	0	25.0	6
Total	2.6	18	29.4	201	53.4	365	5.0	34	0.1	1	9.4	64

Gestational Age by Site – 2010
(Number and Percent within Site)
Was the gestational age less than 37 weeks?

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Douglas	0	0	0	0	100.0	2	0	0
Central Phoenix	100.0	5	0	0	67.4	29	32.6	14
Maryvale	88.9	8	11.1	1	61.0	25	39.0	16
South Phoenix	100.0	1	0	0	87.0	40	13.0	6
East Valley	100.0	9	0	0	70.0	28	30.0	12
Nogales	100.0	1	0	0	100.0	10	0	0
Page	100.0	7	0	0	83.3	10	16.7	2
CODAC	0	0	0	0	75.0	21	25.0	7
La Frontera	85.7	6	14.3	1	85.7	42	14.3	7
Child and Family Resources	66.7	2	33.3	1	84.6	11	15.4	2
Sierra Vista	100.0	2	0	0	72.7	8	27.3	3
Tuba City	75.0	3	25.0	1	80.0	4	20.0	1
Yuma	100.0	2	0	0	87.5	14	12.5	2
Pascua Yaqui	100.0	2	0	0	100.0	5	0	0
Lake Havasu City	75.0	9	25.0	3	94.4	17	5.6	1
Flagstaff	95.0	19	5.0	1	83.3	15	16.7	3
Sunnyslope	100.0	3	0	0	72.1	31	27.9	12
Prescott	100.0	2	0	0	97.0	32	3.0	1
Mesa	83.3	5	16.7	1	91.4	53	8.6	5
Safford	100.0	1	0	0	100.0	10	0	0
Winslow	100.0	3	0	0	60.0	3	40.0	2
Kingman	100.0	2	0	0	85.7	6	14.3	1
Bullhead City	0	0	0	0	100.0	1	0	0
West Phoenix	100.0	4	0	0	78.3	36	21.7	10
Williams (Kinlani)	72.2	13	27.8	5	100.0	4	0	0
Wellspring	100.0	10	0	0	71.4	10	28.6	4
Total	89.5	119	10.5	14	80.8	467	19.2	111

Low Birth Weight by Site – 2010
(Number and Percent within Site)
Did the child have low birth weight?
(less than 2500 grams, 88 ounces, or 5.5 pounds)

Site	PRENATAL				POSTNATAL			
	No		Yes		No		Yes	
	%	n	%	n	%	n	%	n
Douglas	0	0	.0	0	81.3	13	18.8	3
Central Phoenix	87.5	7	12.5	1	72.7	32	27.3	12
Maryvale	87.5	7	12.5	1	71.4	30	28.6	12
South Phoenix	100.0	1	0	0	89.4	42	10.6	5
East Valley	88.9	8	11.1	1	69.0	29	31.0	13
Nogales	100.0	1	0	0	84.6	11	15.4	2
Page	100.0	7	0	0	100.0	13	0	0
CODAC	0	0	0	0	79.4	27	20.6	7
La Frontera	88.9	8	11.1	1	92.9	52	7.1	4
Child and Family Resources	66.7	2	33.3	1	92.9	13	7.1	1
Sierra Vista	100.0	2	0	0	80.0	16	20.0	4
Tuba City	100.0	6	0	0	100.0	12	.0	0
Yuma	100.0	3	0	0	87.5	14	12.5	2
Pascua Yaqui	100.0	7	0	0	87.5	7	12.5	1
Lake Havasu City	72.7	8	27.3	3	89.5	17	10.5	2
Flagstaff	95.0	19	5.0	1	82.6	19	17.4	4
Sunnyslope	100.0	3	0	0	69.6	32	30.4	14
Prescott	100.0	2	0	0	97.1	33	2.9	1
Mesa	100.0	6	0	0	96.7	59	3.3	2
Safford	0	0	0	0	100.0	13	.0	0
Winslow	100.0	2	0	0	100.0	5	.0	0
Kingman	100.0	2	0	0	88.9	8	11.1	1
Bullhead City	0	0	0	0	80.0	8	20.0	2
West Phoenix	100.0	4	0	0	85.4	41	14.6	7
Williams (Kinlani)	78.9	15	21.1	4	81.8	9	18.2	2
Wellspring	90.0	9	10.0	1	83.3	20	16.7	4
Total	90.2	129	9.8	14	84.6	575	15.4	105

Yearly Income by Site – 2010

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Douglas	$2,160	5	$12,000	11
Central Phoenix	$1,260	8	$9,700	34
Maryvale	$14,400	8	$10,404	31
South Phoenix	$15,600	1	$13,100	38
East Valley	$768	10	$12,000	31
Nogales	$3,648	3	$6,000	11
Page	$12,000	6	$13,200	12
CODAC	$4,794	4	$6,000	29
La Frontera	$7,770	12	$10,300	40
Child and Family Resources	$8,400	5	$9,000	13
Sierra Vista	$6,732	2	$10,878	14
Tuba City	$5,520	8	$6,840	8
Yuma	$14,400	2	$10,400	13
Pascua Yaqui	$7,200	13	$8,592	6
Lake Havasu City	$14,400	15	$13,780	19
Flagstaff	$12,000	18	$12,000	21
Sunnyslope	$1,236	3	$12,162	40
Prescott	$27,000	1	$12,000	9
Mesa	$2,472	11	$15,600	52
Safford	$0*	3	$12,144	9
Winslow	$7,350	6	$12,000	5
Kingman	$61,000	1	$14,400	8
Bullhead City	$4,200	1	$9,600	9
West Phoenix	$7,320	4	$10,920	38
Kinlani-Flagstaff	$12,000	17	$12,000	9
Wellspring	$15,600	13	$9,600	24
Total	$8,700	180	$12,000	534

*3 families reported no income

Mother's Parent Survey Score by Site – 2010

Site	PRENATAL				POSTNATAL			
	0 – 20	25 – 40	45 – 65	70+	0 – 20	25 – 40	45 – 65	70+
Douglas	0.0%	66.7%	33.3%	0.0%	6.3%	68.8%	25.0%	0.0%
Central Phoenix	0.0%	33.3%	44.4%	22.2%	2.3%	27.3%	68.2%	2.3%
Maryvale	0.0%	44.4%	44.4%	11.1%	0.0%	38.6%	43.2%	18.2%
South Phoenix	0.0%	50.0%	50.0%	0.0%	0.0%	38.3%	59.6%	2.1%
East Valley	0.0%	30.8%	53.8%	15.4%	2.4%	45.2%	42.9%	9.5%
Nogales	0.0%	33.3%	66.7%	0.0%	7.7%	76.9%	15.4%	0.0%
Page	0.0%	28.6%	71.4%	0.0%	0.0%	53.8%	46.2%	0.0%
CODAC	0.0%	40.0%	60.0%	0.0%	8.8%	38.2%	44.1%	8.8%
La Frontera	7.1%	57.1%	35.7%	0.0%	12.3%	56.1%	28.1%	3.5%
Child and Family Resources	0.0%	20.0%	80.0%	0.0%	6.7%	33.3%	60.0%	0.0%
Sierra Vista	0.0%	0.0%	50.0%	50.0%	5.0%	45.0%	50.0%	0.0%
Tuba City	20.0%	60.0%	20.0%	0.0%	8.3%	58.3%	33.3%	0.0%
Yuma	33.3%	33.3%	33.3%	0.0%	5.9%	58.8%	29.4%	5.9%
Pascua Yaqui	6.7%	86.7%	6.7%	0.0%	22.2%	44.4%	33.3%	0.0%
Lake Havasu City	12.5%	12.5%	68.8%	6.3%	5.3%	73.7%	21.1%	0.0%
Flagstaff	0.0%	45.5%	54.5%	0.0%	0.0%	65.2%	34.8%	0.0%
Sunnyslope	0.0%	33.3%	66.7%	0.0%	0.0%	34.8%	50.0%	15.2%
Prescott	0.0%	100.0%	0.0%	0.0%	2.9%	67.6%	29.4%	0.0%
Mesa	0.0%	16.7%	83.3%	0.0%	1.6%	32.8%	60.7%	4.9%
Safford	0.0%	66.7%	33.3%	0.0%	7.7%	84.6%	7.7%	0.0%
Winslow	0.0%	66.7%	16.7%	16.7%	0.0%	60.0%	20.0%	20.0%
Kingman	33.3%	33.3%	33.3%	0.0%	0.0%	44.4%	44.4%	11.1%
Bullhead City	0.0%	0.0%	100.0%	0.0%	0.0%	50.0%	50.0%	0.0%
West Phoenix	0.0%	33.3%	66.7%	0.0%	0.0%	50.0%	45.8%	4.2%
Williams (Kinlani)	0.0%	75.0%	20.0%	5.0%	0.0%	54.5%	45.5%	0.0%
Wellspring	0.0%	53.3%	46.7%	0.0%	0.0%	58.3%	41.7%	0.0%
Total	3.8%	46.7%	45.3%	4.2%	3.5%	48.0%	43.6%	5.0%

Trimester of Enrollment into Prenatal Program by Site
July 2009 to June 2010

Site	1st Trimester		2nd Trimester		3rd Trimester		Other		Total
	#	%	#	%	#	%	#	%	#
Douglas	3	50.0	2	33.3	1	16.7	0	0	6
Central Phoenix	1	11.1	1	11.1	6	66.7	1	11.1	9
Maryvale	0	0	5	55.6	4	44.4	0	0	9
South Phoenix	0	0	0	0	2	100.0	0	0	2
East Valley	0	0	4	30.8	8	61.5	1	7.7	13
Nogales	0	0	1	33.3	2	66.7	0	.0	3
Page	1	14.3	4	57.1	2	28.6	0	.0	7
CODAC	0	.0	2	40.0	3	60.0	0	.0	5
La Frontera	5	35.7	1	7.1	7	50.0	1	7.1	14
Child and Family Resources	0	0	3	60.0	2	40.0	0	0	5
Sierra Vista	0	0	0	.0	2	100.0	0	0	2
Tuba City	0	0	5	50.5	5	50.0	0	0	10
Yuma	0	0	0	0	3	100.0	0	0	3
Pascua Yaqui	0	0	7	46.7	7	46.7	1	6.7	15
Lake Havasu City	0	0	7	43.8	7	43.8	2	12.5	16
Flagstaff	4	18.2	1	4.5	16	72.7	1	4.5	22
Sunnyslope	0	0	1	33.3	2	66.7	0	0	3
Prescott	0	0	0	.0	2	100.0	0	0	2
Mesa	3	25.0	1	8.3	6	50.0	2	16.7	12
Safford	0	0	2	66.7	1	33.3	0	0	3
Winslow	1	16.7	1	16.7	3	50.0	1	16.7	6
Kingman	1	33.3	1	33.3	1	33.3	0	0	3
Bullhead City	0	0	1	100.0	0	0	0	0	1
West Phoenix	0	0	2	33.3	4	66.7	0	0	6
Kinlani-Flagstaff	4	20.0	6	30.0	10	50.0	0	0	20
Wellspring	2	13.3	2	13.3	11	73.3	0	0	15
Total	25	11.8	60	28.3	117	55.2	10	4.7	212

Engaged Prenatal Families that Exited Before Baby's Birth
By Site – July 2009 through June 2010

Site	Total Families	# Closed before birth	% Closed before birth
Douglas	6	0	0
Central Phoenix	9	0	0
Maryvale	9	0	0
South Phoenix	2	0	0
East Valley	13	1	7.7
Nogales	3	0	0
Page	7	0	0
CODAC	5	0	0
La Frontera	14	0	0
Child and Family Resources	5	0	0
Sierra Vista	2	0	0
Tuba City	10	0	0
Yuma	3	0	0
Pascua Yaqui	15	0	0
Lake Havasu City	16	1	6.3
Flagstaff	22	1	4.5
Sunnyslope	3	0	0
Prescott	2	0	0
Mesa	12	0	0
Safford	3	0	0
Winslow	6	1	16.7
Kingman	3	0	0
Bullhead City	1	0	0
West Phoenix	6	0	0
Kinlani-Flagstaff	20	0	0
Wellspring	15	0	0
Total	212	4	1.9

Appendix B. 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	The *Parent Survey* comprises a 10-item rating scale. A score of 0 represents normal, 5 represents a mild degree of the problem and a 10 represents severe for both the Mother and Father Parent Survey Checklist items. The *Parent Survey* 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.
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	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.

* Modified from the Family Stress Checklist

Appendix C. Healthy Families Arizona Prenatal Logic Model

Long Term Outcomes	***Program Resources***
∈ *Reduced child abuse and neglect* ∉ *Increased child wellness and development* ∠ Strengthened family relations ∇ *Enhanced family unity* ® Reduced abuse of drugs and alcohol	Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., prenatal support & education programs, hospital programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services

Prenatal Program Objectives

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

Appendix D. Healthy Families Arizona Postnatal Logic Model

Long Term Outcomes	***Program Resources***
∈ *Reduced child abuse and neglect* ∉ *Increased child wellness and development* ∠ *Strengthened family relations* ∇ *Enhanced family unity* ® Reduced abuse of drugs and alcohol	Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., parenting support & education programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services

Postnatal Program Objectives

Increase the family's support network	**Improve mother's mental health**	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve family stability	Increase parental competence	Increase positive parent-child interaction	**Improve child health <u>and</u> Optimize child development**	Prevent child abuse and neglect

Program Activities and Strategies

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

Outcome Evaluation Measures

Healthy Families Parenting Inventory (HFPI); FSS-23	HFPI; FSS-23	HFPI; FSS-23; CRAFFT	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23; father involvement scale	HFPI; FSS-23; Safety checklist; ASQ	HFPI; FSS-23; FSS20