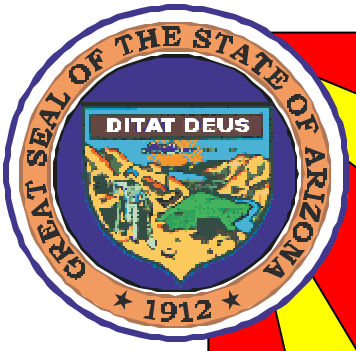


State of Arizona Office of the Auditor General

PERFORMANCE AUDIT

HEALTHY FAMILIES PROGRAM

Report to the Arizona Legislature
By Debra K. Davenport
Auditor General
February 2000
Report No. 00-1

The Auditor General is appointed by the Joint Legislative Audit Committee, a bipartisan committee composed of five senators and five representatives. His mission is to provide independent and impartial information and specific recommendations to improve the operations of state and local government entities. To this end, he provides financial audits and accounting services to the state and political subdivisions and performance audits of state agencies and the programs they administer.

The Joint Legislative Audit Committee

Representative Roberta L. Voss, Chairman
Senator Tom Smith, Vice-Chairman

Representative Robert Burns
Representative Ken Cheuvront
Representative Andy Nichols
Representative Barry Wong
Representative Jeff Groscost (ex-officio)

Senator Keith Bee
Senator Herb Guenther
Senator Darden Hamilton
Senator Pete Rios
Senator Brenda Burns (ex-officio)

Audit Staff

Carol Cullen—*Manager and Contact Person (602) 553-0333*
Laurie Cohen—Senior Evaluator
Mark McCain—Senior Evaluator

Copies of the Auditor General's reports are free.
You may request them by contacting us at:

Office of the Auditor General
2910 N. 44th Street, Suite 410
Phoenix, AZ 85018
(602) 553-0333

Additionally, many of our reports can be found in electronic format at:
www.auditorgen.state.az.us

DEBRA K. DAVENPORT, CPA
AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

February 7, 2000

Members of the Legislature

The Honorable Jane Dee Hull, Governor

Mr. John Clayton, Director
Department of Economic Security

Transmitted herewith is a report of the Auditor General, an evaluation of the Healthy Families Program. The evaluation was conducted pursuant to A.R.S. §41-1279.08.

The goals of the Healthy Families Program are the prevention of child abuse and neglect and the promotion of child development and wellness. To determine whether the program was effective in preventing child abuse, we compared rates of CPS reports received by Healthy Families participants to rates of a comparison group. Unlike our previous report, this study found no differences between the two groups. Both the Healthy Families participants and the comparison group members had substantiated reports of child abuse rates that were less than 2 percent. We did find that, after six months in the program, participants reported reduced stress in some areas including parental competence, attachment, and isolation.

Consistent with our previous report, the program was successful in enhancing children's health and improving their home environments. Specifically, Healthy Families participants showed positive outcomes in health-related measures, including immunization rates and assessments of children's physical and social development. In addition, home safety assessments showed that parents also took measures to ensure their children's safety in the home.

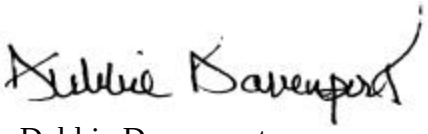
2910 NORTH 44th STREET • SUITE 410 • PHOENIX, ARIZONA 85018 • (602) 553-0333 • FAX (602) 553-0051

As outlined in its response, the agency agrees with all of the findings and recommendations.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on February 8, 2000.

Sincerely,



Debbie Davenport
Auditor General

Enclosure

SUMMARY

The Office of the Auditor General has completed an evaluation of the Healthy Families Program. The Office of the Auditor General is required pursuant to A.R.S. §41-1279.08 to evaluate the Healthy Families Program annually. This report contains information related to the program's effectiveness.

The Healthy Families Program has five goals: (1) reduce child abuse and neglect; (2) promote child wellness and proper development; (3) strengthen family relations; (4) promote family unity; and (5) reduce dependency on drugs and alcohol. Participation in the program is voluntary and may continue for up to five years. Currently, about 1,200 families participate in the program.

Two of the program's intents are to stop child abuse and neglect before it starts and to promote child development and wellness. This is done by coordinating with hospitals to screen all mothers giving birth in target geographic areas in an effort to identify families at risk for committing child abuse or neglect and having poor health outcomes. Based on a home-visitation model, family support specialists visit families regularly to provide support, education, and referral to needed resources. By intervening early, within the first three months of the child's life, the program aims to help families "get off to a good start" before bad patterns are established.

The Arizona Department of Economic Security (DES) administers the Healthy Families Program. Appropriations for fiscal years 1997-99 totaled $3 million per year. With additional funding from DES' Child Abuse Prevention Fund and federal grants, program funding was just over $4.1 million in fiscal year 1999.

To provide services, DES contracts with other organizations, which include medical centers, local departments of public health, and local social service agencies. DES currently has nine contracts with eight organizations to provide services at

20 sites in 10 counties. An additional contract was awarded to a data management firm for database management, evaluation, and quality assurance.

Program Effect on Child Abuse Rate Difficult to Determine but Parenting Stress is Reduced After Six Months in Program (See pages 11 through 17)

A critical measure of the program's impact on preventing child abuse is a comparison of the number of substantiated Child Protective Services (CPS) reports received by Healthy Families participants and a similar group of individuals who do not participate in the program. In the previous evaluation, Healthy Families participants had a significantly lower rate (3.3 percent) of substantiated CPS reports than the rate (8.5 percent) found for a comparison group. In contrast, this evaluation found that both groups had very low, almost negligible, rates (less than 2 percent) of substantiated CPS reports.

To rely on this measure as an indicator of effect on child abuse may be problematic, however. The low rates of substantiated abuse may have been influenced by several policy changes affecting Child Protective Services and Healthy Families. First, CPS has instituted a new appeals process through which individuals can challenge allegations of child abuse and neglect. Within this process, a higher level of evidence is now required to substantiate a child abuse case. The second policy change has been to institute the Family Builders Pilot Program in Maricopa and Pima Counties to provide services to families who received reports of low and potential risk of child abuse and neglect. Once a case is referred to Family Builders, the CPS case is closed and cannot be substantiated. The introduction of Family Builders reduces the pool of cases eligible for investigation and substantiation. Finally, recent legislation mandates that families who have had a substantiated CPS report not be offered Healthy Families services. Thus, families with a demonstrated propensity for abuse are no longer included among Healthy Families' participants. Because of these changes, in this year's evaluation, no definitive conclusions can be made about the program's effect on preventing child abuse.

Other indicators show that the program may have some impact on reducing child abuse risk. After six months in the program, Healthy Families participants reported reduced parenting stress, potentially lowering their level of child abuse risk. Alcohol and drug abuse, factors related to child abuse, were measured, but due to the assessment tool's limitations, evaluators were unable to draw conclusions about the program's impact on substance abuse.

Healthy Families Children Have Positive Health Outcomes and Improved Family Functioning Within the Parent-Child Relationship (See pages 19 through 26)

Healthy Families is successful in enhancing children's health and improving family functioning within the parent-child relationship. Healthy Families participants showed positive outcomes in health-related measures, including immunization rates and assessments of children's physical and social development. Immunization rates for Healthy Families participants were substantially higher than the immunization rates for children from community health centers. Almost all of the Healthy Families participants had a primary health care provider for their children. Assessments of home environment revealed improvements in parent-child relationships, including increases in measures of parental responsivity, involvement, and provision of appropriate play materials. Home safety assessments showed that parents also took measures to ensure their children's safety in the home. However, due to methodological problems with the instrument used to assess home environment, it is recommended that a new measure of family functioning be selected.

Statutory Evaluation Components (See pages 27 through 36)

This report also includes information on a number of factors that are required by the statute outlining the Healthy Families evaluation. These factors include information about participant demographics, program revenues and expenditures, enroll-

ment figures, and participants' self-reported reasons for exiting the program. In addition, the report includes information about program effects on employment and public assistance usage, including usage of Temporary Assistance for Needy Families (TANF) and Food Stamps.

The statute also requires information on any long-term savings associated with program services. Evaluators planned to include a cost-benefit analysis detailing short- and long-term savings/costs of the program. However, the analysis could not be completed because key measures, including child abuse rates, needed to calculate potential benefits/costs, could not be used.

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont'd)

TABLE OF CONTENTS (Concl'd)

Page

Tables

Figures

(This Page Intentionally Left Blank)

INTRODUCTION AND BACKGROUND

The Office of the Auditor General has completed an evaluation of the Healthy Families Program. The Office of the Auditor General is required to evaluate the Healthy Families program annually.[1] This report contains information related to the program's effectiveness.

Instances of Child Abuse and Neglect Continue to Rise

Over the past ten years, child abuse and neglect has been one of the country's most serious societal problems. According to the U.S. Department of Health and Human Services, nearly three million reports alleging child abuse or neglect were made in the United States in 1997. Nearly one million of these reports were substantiated.

During fiscal years 1997 and 1998, Arizona's Office of Child Protective Services investigated reports of over 38,000 abuse cases per year, or one for every 33 children in the State. This rate is up 34 percent from fiscal year 1996. Of the 1998 cases, approximately half were for neglect, one-quarter were for physical abuse, and the remainder were for sexual, emotional, and other types of abuse.

Healthy Families Offers a Prevention Approach for At-Risk Families

Healthy Families is a national program supported by Prevent Child Abuse America and is currently offered in 40 states and the District of Columbia.

---

[1] Provisions for the Healthy Families Evaluation are located in A.R.S. §41-1279.08.

The Healthy Families Program was developed with the goals of stopping abuse before it starts and promoting child development and wellness. Established by the State Legislature as a pilot program in 1994, Healthy Families—Arizona became permanent in 1998. The program attempts to identify families at risk for committing child abuse or neglect and having poor health outcomes. It provides them with support, education, and referral to needed resources. By intervening early, within the first three months of the child's life, the program aims to help families "get off to a good start" before bad patterns are established. Brain development research has shown that the brain's biology is profoundly affected by experiences within a child's first three years, and trauma during those early years can result in a range of psychological and developmental problems. Healthy Families aims to prevent this trauma through long-term support, education, and other types of services.

The program attempts to identify families deemed most at risk by coordinating with hospitals to screen all mothers giving birth within the program's geographic boundaries. Participating families go through two stages during the intake processs. The first stage is a screening to assess risk on the basis of such factors as inadequate income, unstable housing, lack of a high school diploma, inconsistent or late prenatal care, and being unmarried or separated.

The second stage is an assessment in which families are interviewed about factors such as family history, history of substance abuse or criminal activity, stress and self-esteem issues, expectations about infants' developmental milestones, and plans regarding discipline. Currently, about 1,200 families participate in the program. Participation in the program is voluntary and may continue for up to five years.

Preventative Services Are Delivered During Home Visitations

The Healthy Families program is based on a home visitation model in which family support specialists regularly visit families and fulfill a variety of support, education, and referral functions. These support specialists receive at least 30 hours of

training a year in such subjects as child development, cultural diversity, substance abuse, and identifying and reporting child abuse and neglect.[1] During home visits, family support specialists help families compose an individualized family support plan and encourage positive parent-child interaction to strengthen bonds and promote development. Family support specialists also use a variety of additional assessment tools to determine the services each family needs. They provide educational materials on developmental milestones, child health, safety, discipline, and nutrition as well as referrals to community resources. Each family support specialist is responsible for serving 12 to 21 families.[2] The frequency of visits varies according to families' progress in the program. Visits are more frequent at the beginning of families' involvement and become less frequent as they move through different levels of the program. Families receive weekly visits at level one, biweekly visits at level 2, monthly visits at level 3, and bimonthly visits at level 4.

Program Has Five Main Goals

A.R.S. §8-701 outlines five goals for the Healthy Families program. The goals and some methods the program uses to achieve them are listed below:

- **Goal 1: Reduce child abuse and neglect—**To reduce child abuse and neglect, family support specialists focus on enhancing the parent-child bond. They discuss issues of discipline, anger management, substance abuse, and domestic

---

1 New family support specialists have 42 days of initial training. Before interacting with clients, they must receive training in areas including identifying child abuse and neglect, infant growth and development, and family systems. They also receive on-the-job training that includes observing home visits conducted by experienced staff.

2 The program also includes two other types of staff positions: Program supervisors, who typically oversee a team of five full-time family support specialists; and family assessment workers, who are responsible for screening new mothers to determine their eligibility for the program and administer the HOME assessment tool for measuring the quality of the child's environment and interactions with family members.

violence. Family support specialists also periodically assess parent stress levels and safety issues to determine abuse and neglect potential. As appropriate, they may also refer families to counseling and treatment services.

- **Goal 2: Promote child wellness and proper development—**Family support specialists provide education on child health and nutrition and encourage families to have a primary care physician, get regular well-baby check-ups, and have their children immunized. They also conduct periodic developmental assessments and make referrals to early intervention services for children showing indications of a potential delay.

- **Goals 3 and 4: Strengthen family relations and promote family unity—**Healthy Families uses an approach that focuses services on the family and building on family strengths. Healthy Families staff indicate that they encourage fathers to participate in home visits and attend group activities. Family support specialists discuss relationship issues with participants and give referrals for counseling when appropriate. The overall quality of the child's home environment is also periodically assessed.

- **Goal 5: Reduce dependency on drugs and alcohol**—To address issues of substance abuse, Healthy Families began screening for substance abuse problems in July 1998. Family support specialists are required to administer an instrument used for identifying alcohol and drug abuse problems and to initiate discussions with clients about known or suspected substance abuse problems. When appropriate, family support specialists also provide referrals to treatment.

Recent Changes Affect Eligibility and Service Delivery

All individuals assessed as "at risk" are eligible to participate in the Healthy Families Program, with one key exception. Under A.R.S. §8-701(B)(1), passed during the 1998 legislative session, families with any current or prior substantiated reports to Child Protective Services (CPS) are ineligible for Healthy Families. To

comply, the program, starting in July 1998, has included a systematic CPS check for each family during the intake process.

Healthy Families participants are also required by statute to perform community service in exchange for program services. The program has established that families must complete 12 hours of community service per year of participation.

Within the last year, Healthy Families has also engaged in new efforts to improve service quality and consistency throughout the program. These efforts include:

- ✓ An enhanced training component consisting of more initial staff training and more required training topics.

- ✓ Participation in a national credentialing process. To demonstrate adherence to national standards, the program submitted information on training and technical assistance, policy, quality assurance, evaluation and administration to a national credentialing committee.[1] As part of this process, each program site also completed a self-assessment, documenting how it fulfilled program requirements, goals, and expectations. In addition, sites received formal visits from committee representatives and were evaluated on the quality of services provided. Credentialing determinations will occur in early to mid-2000.

Appropriations and Contracting

The Arizona Department of Economic Security (DES) administers the Healthy Families program. Appropriations for fiscal years 1997-99 totaled $3 million per year. The program also receives funding from DES' Child Abuse Prevention Fund, federal grants, contractor contributions, and private donations.

[1] The committee is a partnership between two organizations—Prevent Child Abuse America and the Council on Accreditation of Services for Families and Children, who determine the extent to which programs meet nationally accepted best practice standards.

The program is operated by contractors, including medical centers, local departments of public health, and local social service agencies. Overall, DES had nine contracts (with eight separate contractors) in fiscal year 1999. These contractors provided services at 20 sites in 10 counties (see Figure 1, page 7). An additional contract was awarded to a data management firm for database management, evaluation, quality assurance, and training.

Follow-up to Previous Evaluations

In a previous report issued in January 1998 (Report No. 98-1), the Office of the Auditor General noted two important concerns with the program:

1. Staff needed more awareness that the Program's goal is to prevent child abuse and neglect. Staff also needed to have better education and training in order to address these goals with the families they serve.

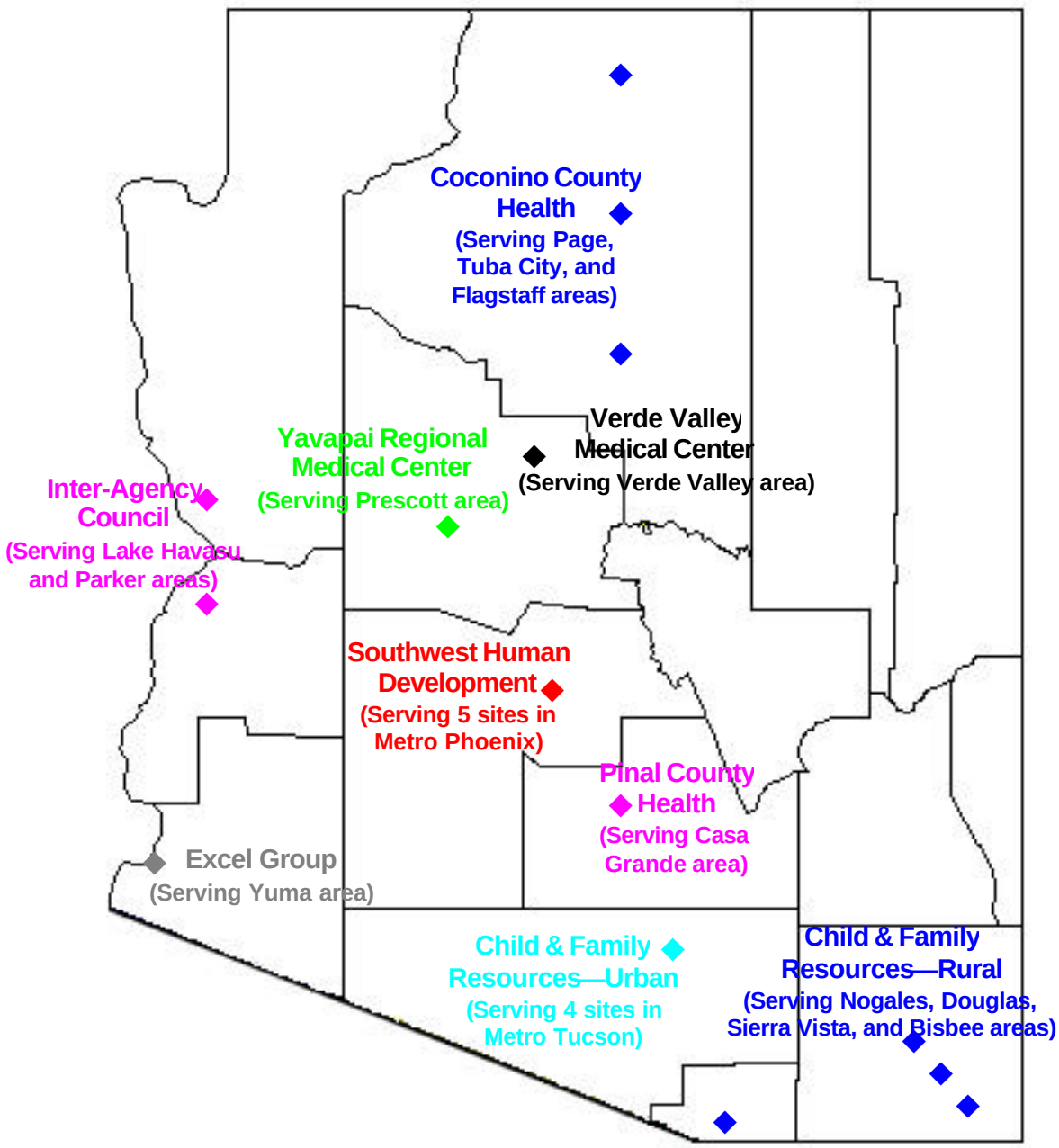
2. Staff needed to provide a higher intensity of services to families with a history of abuse and neglect.

Since the Office of the Auditor General's last report, interviews with staff, including program supervisors, family support specialists, and family assessment workers, indicate that staff members frequently emphasize their role in preventing child abuse and neglect. Some staff members indicated that preventing abuse and neglect is one of their most important functions. Workers also receive enhanced training on child abuse detection, reporting, and prevention, as well as child guidance and discipline. The increased emphasis on these issues shows that the program has implemented the Auditor General's recommendation for a stronger focus on abuse and neglect.

The second recommendation, for Healthy Families staff to provide a higher level of service to program participants with a history of abuse and neglect, is no longer relevant. As discussed previously, individuals with a past CPS history are now statutorily prevented from participating in the program.

Figure 1

Healthy Families Program
Contract Provider Locations[1]
Year Ended June 30, 1999



[1] Each site serves selected areas within a 40-mile radius of the contractor's office. These areas, identified by their zip codes, are chosen based on the number of live births per year, the number of CPS reports for children ages 0 to 5 years, and other factors including low income and under-utilization of health care services.

Source: DES Healthy Families contracts for the year ended June 30, 1999.

Scope and Methodology

A.R.S. §41-1279.08 mandates that the Office of the Auditor General evaluate the Healthy Families Program. A primary requirement of the evaluation is to assess the program's effectiveness in achieving its goals. Additional requirements include providing information about the level and scope of program services, program eligibility requirements, demographic characteristics of participants, long-term savings for providing early intervention services, and rates of enrollment and disenrollment.

During the evaluation, Auditor General staff visited 10 of the 20 sites for 1 to 2 days each. Site visits were conducted from February 1999 to June 1999. Each included:

- An interview with the program supervisor;
- A group interview with family support specialists and family assessment workers;
- Attending 1 to 3 home visits. During home visits, interviews were conducted with 17 program participants and structured observations were made in 19 visits; and
- Reviewing 10 to 15 files to check the accuracy of the Healthy Families database.

In addition, Auditor General staff attended the 4½ day initial staff training for both family assessment workers and family support specialists and the Healthy Families—Arizona training conference. Auditor General staff also monitored computer system and application controls and tested data for accuracy and completeness. These tests showed that the data was reliable, complete, entered properly, and managed appropriately.

Five assessment tools were used to collect information from all families participating in the Healthy Families program. A description of these assessment tools is included in Appendix A (see pages a-i through a-iii). The assessments include:

- The Parenting Stress Index (PSI) to measure parenting stress as an indicator of child abuse risk;

- The CAGE Substance Abuse Screening to identify families with substance abuse problems;

- The Ages & Stages Questionnaire (ASQ) to measure child development;

- The Home Observation for Measurement of the Environment **(**HOME**)** to measure improvements in family functioning within the parent-child relationship; and

- The Child Safety Checklist (CSC) to measure safety of the home environment.

In addition to the assessment tools, the following data was collected and analyzed:

- Number of substantiated and unsubstantiated Child Protective Services (CPS) reports on the Healthy Families participants and on a similar comparison group of families

- Immunization rates for children in the program and rates for children immunized through county health departments.

- Participation rates in two public assistance programs**:** Temporary Assistance to Needy Families (TANF) and food stamps. Rates are for Healthy Families participants and for a similar comparison group.

Data was collected on two comparison groups of families.

- The first group was comprised of 363 families who enrolled in Healthy Families but left the program before receiving at least four home visits from a family support specialist. These individuals met the same eligibility requirements as the participant group, but were not exposed to the program long enough to be considered officially "engaged" by the program. This group was similar to Healthy Families participants in factors such as income, ethnicity, proportion of first-time parents, and employment. However, the comparison group members were slightly younger (by one year) and more educated (by approximately one grade level) than

Healthy Families participants. This group served as a basis of comparison for Healthy Families' rate of CPS reports.

The second comparison group, comprised of 2,224 individuals, used to compare rates of public assistance usage, was selected from 1996-1998 birth records obtained from the Arizona Department of Health Services, Office of Vital Records. Criteria used for selection were similar to the initial screening criteria for entry into the Healthy Families program. These included marital status, lack of appropriate prenatal care, education, income, and others.

It is important to note that the comparison groups used in the current report differ from the comparison group used in the 1998 Healthy Families report. The 1998 comparison group was comprised of individuals who were eligible for Healthy Families, but not enrolled because the program was operating at full capacity. The current evaluation could not identify an existing comparison group similar to the one used in the 1998 evaluation. Therefore, comparison groups were constructed using available data.

Acknowledgements

The Auditor General and staff express appreciation to the Director of the Department of Economic Security; the Healthy Families Program Coordinator and Program Specialist; the Department of Health Services Office of Vital Records and Office of Epidemiology and Disease Control; the staff of DES' Division of Children, Youth, and Families; the staff of DES' Office of Evaluation/Division of Audit and Management Services; Healthy Families Data Management, Evaluation, and Quality Assurance staff; and Healthy Families supervisors; family support specialists; and family assessment workers for their cooperation and assistance during this evaluation.

FINDING I

PROGRAM EFFECT ON CHILD ABUSE RATE DIFFICULT TO DETERMINE BUT PARENTING STRESS IS REDUCED AFTER SIX MONTHS IN PROGRAM

Healthy Families participants and comparison group members both had very low rates of substantiated Child Protective Services (CPS) reports. However, this finding may reflect policy changes that have systematically reduced CPS' substantiation rates. Thus, no definitive conclusions can be made in this year's evaluation about the program's effect on preventing child abuse. After six months in the program, Healthy Families participants also have reduced parenting stress, potentially lowering their level of child abuse risk. Alcohol and drug abuse, factors related to child abuse, were measured. However, because of the assessment tool's limitations, evaluators were unable to draw conclusions about the program's impact on reducing substance abuse.

Background

To assess program effects on child abuse, the following measures were examined:

- **Child Protective Services (CPS) Reports—**CPS records for families who entered the program from July 1, 1997, to December 31, 1998, were reviewed to determine the proportion of Healthy Families participants and comparison group members who had substantiated and unsubstantiated child abuse reports. To ensure that the results reflected persons who had an adequate exposure to program services, evaluators limited their review to reports made six months or more after an individual had entered the program. Only Healthy Families participants in the program for at least six months were included in analyses.

To assess program effects on child abuse risk and substance abuse, evaluators used the following:

- **Scores on the Parenting Stress Index (PSI)—**The Parenting Stress Index was used as a measure of child abuse risk. Evaluators compared levels of various types of parenting stress after three weeks in the program to levels after six months in the program.

- **Scores on the "CAGE" Substance Abuse Screening Measure—**To identify families with substance abuse problems, the CAGE substance abuse screening measure was used. Evaluators examined the proportion of Healthy Families Participants identified by the CAGE as potential substance abusers. [1]

Both Healthy Families and Comparison Group Families Show Low Rates of Child Abuse

The review found very few families with substantiated child abuse reports. However, several policy changes between the previous and current evaluations may have substantially reduced the incidence of substantiated CPS reports. The frequency of substantiated CPS reports may now be too low to identify meaningful differences between participants and comparison group members in the incidence of these reports. For this reason, unsubstantiated report rates are included in this report as an additional indicator of potential abuse and neglect.

No difference between Healthy Families and comparison group in substantiated or unsubstantiated CPS reports—A very low rate of substantiated CPS reports was found for both Healthy Families participants and comparison group families. Less than

[1] The acronym "CAGE" stands for the first letter in each of four questions that are asked of respondents: (1) Have you ever felt the need to ***c***ut down on drinking/drug use? (2) Have you ever felt ***a***nnoyed by others' criticism of your drinking/drug use? (3) Have you ever felt ***g***uilty about your drinking/drug use? and (4) Have you ever had a drink/taken drugs first thing in the morning (***e***ye-opener)? Two or more "yes" responses is considered indicative of a substance abuse problem.

2 percent of each group had substantiated CPS reports and the rate for Healthy Families participants (1.6 percent) did not differ significantly from the comparison group rate (1.4 percent).[1] Rates of substantiated reports for both groups are substantially lower than rates found during the last Auditor General evaluation (January 1998)[2] of 3.3 percent for Healthy Families and 8.5 percent for comparison group families.

Analyses examining both substantiated and unsubstantiated reports showed a similar pattern of results with no statistically significant differences between Healthy Families participants (5.8 percent) and comparison group members (5.0 percent). In contrast, in the 1998 Healthy Families evaluation, it was reported that 5.7 percent of Healthy Families participants and 8.9 percent of comparison group families received either an unsubstantiated or substantiated report.

Recent policy changes may have an effect—The low rates of substantiated abuse may have been affected by several policy changes that have occurred in both Child Protective Services and Healthy Families:

- **Higher level of evidence needed to substantiate—**Effective January 1, 1998, CPS changed the process by which child abuse reports are substantiated. Currently, families accused of child abuse are now allowed to appeal the charge. With this process, outlined in A.R.S. §8-811, a higher level of evidence than was previously required must be obtained in order to substantiate a child abuse case. This change could result in a universally decreased level of substantiated child abuse cases.

- **Pool of abuse cases reduced—**Also on January 1, 1998, the Family Builders Pilot Program was established in Pima and Maricopa Counties to provide services to families who received lower-priority CPS reports. Once a family is referred to Family Builders, the CPS case is closed and thus

---

1 These rates include 704 Healthy Families participants and 363 comparison group families.

2 The January 1998 Auditor General Report included families enrolled in the program prior to December 31, 1996.

cannot be substantiated. The introduction of Family Builders also potentially reduces the pool of cases eligible for investigation and substantiation.

- **Families with abuse history excluded from program—** Legislation effective June 1, 1998, mandates that families who have had a substantiated CPS report NOT be offered Healthy Families services. Families already enrolled in the program must exit if they ever receive a substantiated CPS report. Thus, families with a demonstrated propensity for abuse are no longer included among Healthy Families participants.

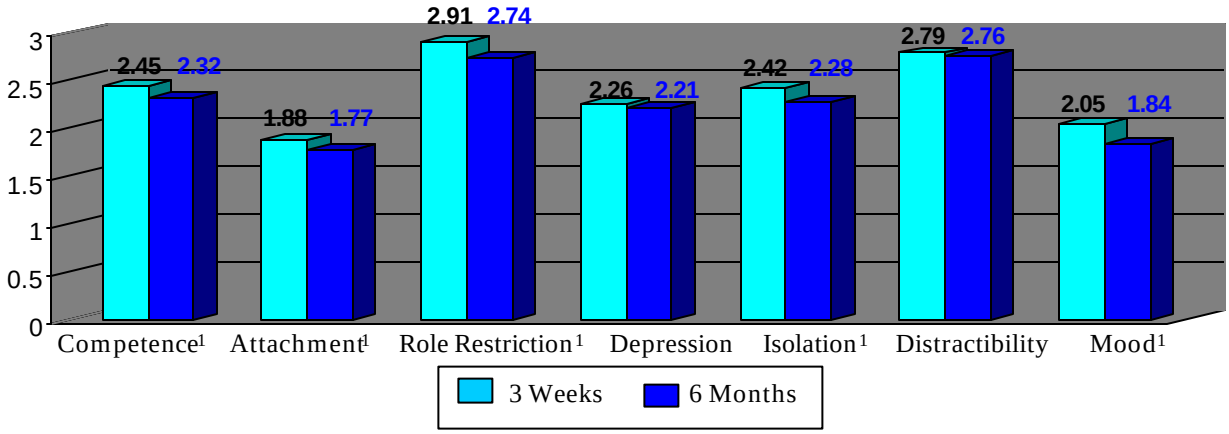
Lowered incidence of substantiated CPS reports may prevent measurement of group differences—Because of the policy changes above, it may be difficult to measure differences in group behavior solely based on the number of substantiated CPS reports. Because substantiated reports occur less frequently, there is a reduced likelihood that either program participants or comparison group members will receive a substantiated report, and a reduced likelihood that a difference in rates can be measured. Auditor General staff found that in the previous evaluation, the Healthy Families Program had an effect on preventing child abuse. Using substantiated report rates, the current data prevents evaluators from determining whether the program continues to show such an effect.

Healthy Families Parents Have Reduced Stress After Six Months of Participation

After six months in the program, Healthy Families participants show a statistically significant decrease in parenting stress on five out of seven types of stress included in the Parenting Stress Index (PSI). As shown in Figure 2 (see page 15), stress related to attachment, role restriction, competence, social isolation, and child mood was significantly lower than it was after only three

Figure 2

Healthy Families Program
Average Parenting Stress Scores
After 3 Weeks and 6 Months in the Program
July 1998 to June 1999



1 Indicates a statistically significant decrease in stress.

Source: Auditor General staff analysis of data provided by Healthy Families staff.

weeks in the program.[1] In addition, for all seven measures, the average score for Healthy Families participants was within the normal range as determined by scale developers. Past research has shown that high scores on parenting stress are related to the potential to abuse one's child. The significant reductions in parenting stress show that Healthy Families may be having a positive impact on parents' child abuse potential.

Healthy Families' Effect on Substance Abuse Cannot Be Determined

The program's impact on reducing participants' dependency on drugs and alcohol cannot be determined because no adequate

[1] Approximately 145 families had PSI scores at both 3 weeks and 6 months. Although the PSI is also given at 12 months, results are not reported for this time period, because there were no individuals who had scores at all three time periods.

measure of changes in substance abuse patterns is currently in place. Lacking a better available instrument that the program could easily implement, the CAGE was selected by the Office of the Auditor General in discussions with DES to identify individuals with drug and alcohol problems. The program began using the CAGE on July 1, 1998. However, experience to date has shown that the instrument, which was originally designed to determine whether an individual ever had a substance abuse problem, does not effectively track whether that problem has changed over time.

Results of the CAGE showed that 10 percent of Healthy Families participants enrolled for three weeks were identified as having had an alcohol abuse problem and 17 percent were identified as having had a drug abuse problem. However, current data does not allow evaluators to determine if the program had any effect on reducing alcohol and drug dependency.[1]

The CAGE is also limited in that it addresses the mother's substance abuse problems, but not the father's or other family members'. Because other family members' drug and alcohol usage might also affect the child's safety and well-being, substance abuse within the larger family structure is a topic that should also be measured.

[1] To examine changes in substance abuse patterns, additional questions are included in the instrument that ask families to indicate the date when they last experienced the problem. However, because only a few individuals provided such dates on more than one occasion, no conclusions could be drawn about whether substance abuse patterns changed over time.

Recommendations

1. To measure program effectiveness in reducing child abuse and neglect, other measures in addition to substantiated Child Protective Services reports may be required. Pending further study of CPS investigation and substantiation rates, DES, in conjunction with the Office of the Auditor General, should select additional methods for measuring child abuse and neglect.

2. DES should continue to monitor the parenting stress levels of families in the program, using the Parenting Stress Index.

3. DES should select an alternative instrument for measuring alcohol and drug abuse that is better able than the CAGE to track changes in behavior over time. Specifically, a measurement that can be given at various intervals to measure both past and current substance abuse problems of parents and other family members is needed. Information on what actions, if any, were taken to assist families with substance abuse problems (for example, referral to treatment, counseling, etc.), should also be included.

(This Page Intentionally Left Blank)

FINDING II HEALTHY FAMILIES CHILDREN HAVE POSITIVE HEALTH OUTCOMES AND IMPROVED FAMILY FUNCTIONING WITHIN THE PARENT-CHILD RELATIONSHIP

Healthy Families is successful in enhancing children's health and improving family functioning within the parent-child relationship. Healthy Families participants showed positive outcomes in health-related measures, including immunization rates and assessments of children's physical and social development. Assessments of home environment revealed improvements in parent-child relationships, including increases in measures of parental responsiveness, involvement, and provision of appropriate play materials. Home safety assessments showed that parents also took measures to ensure their children's safety in the home. However, improvements are needed in the ways that some aspects of the program are measured.

Background

Healthy Families is statutorily required to educate parents about the importance of preventative health care, encourage age-appropriate immunizations, and educate parents about developmental assessments for identifying special needs. To address these requirements, family support specialists provide a range of educational materials, help families set and achieve goals related to their children's well-being, and provide support, encouragement, and referral to community resources.

To assess the extent to which program goals continue to be realized, evaluators examined several types of information for Healthy Families participants, including the proportion of children with on-time immunizations and primary health care providers and measurements of physical and social development, home environment, and safety.

Healthy Families Participants Have Positive Health Outcomes Related to Immunizations, Primary Health Care Providers, and Physical and Social Development

In general, most Healthy Families participants had positive health-related outcomes. Consistent with the results of the 1998 Auditor General evaluation, families in the program had higher rates of "on-time" immunizations compared to local community health centers and nearly all program families had a primary health care provider for their children's medical needs. Finally, most children received a series of developmental assessments to determine whether they were developing properly. Results of those assessments showed that most children were developing normally.

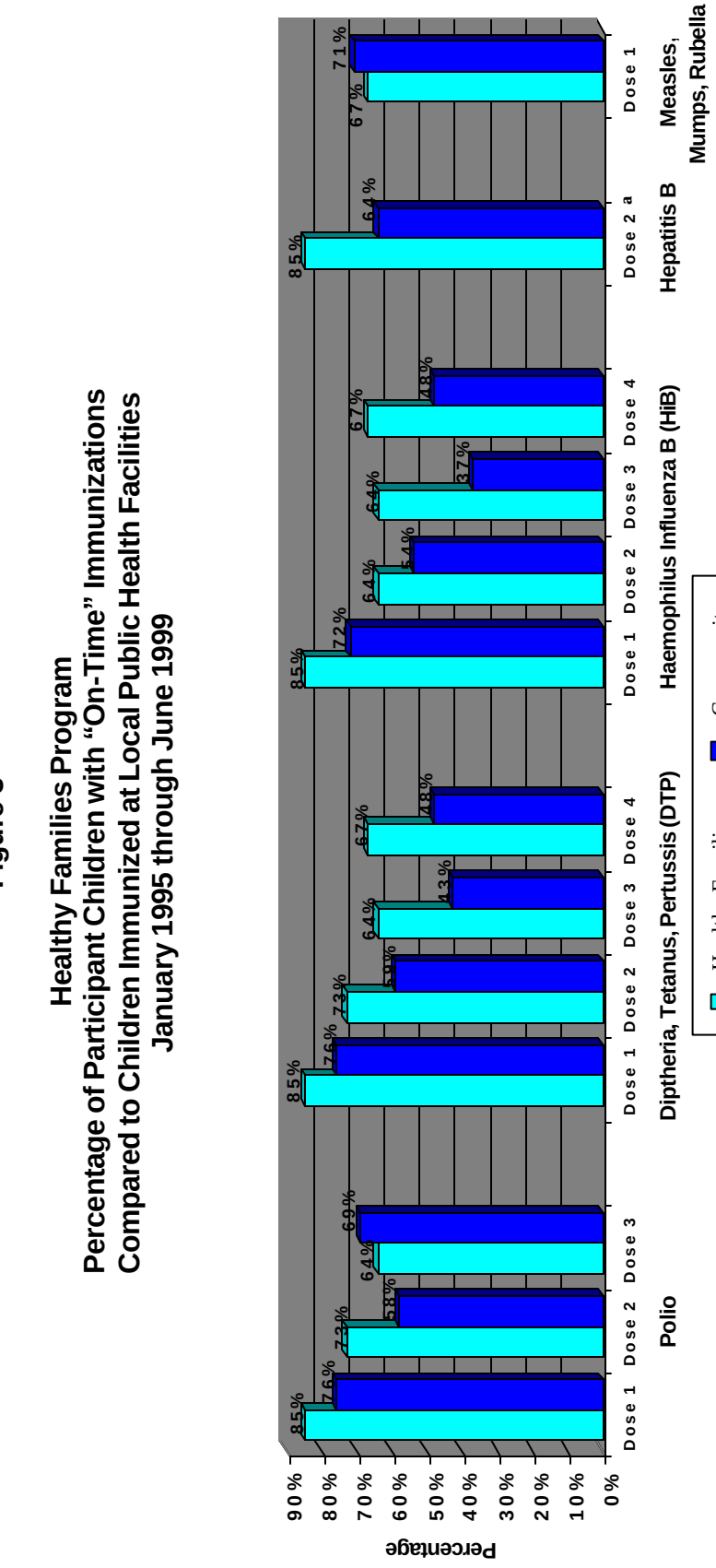
Healthy Families participants have high rates of "on-time " immunizations[1]—Compared to local community health centers, Healthy Families participants have substantially higher immunization rates for nearly all immunizations (see Figure 3, page 21). In fact, the only cases in which Healthy Families rates did not exceed community rates were those in which an earlier suggested "on-time" date was set by Healthy Families. Family support specialists are trained to discuss immunizations with families, inquire about whether children's immunizations are up-to-date, provide educational information about immunizations, and provide linkages to physicians.

Nearly all healthy families participants have a primary health care provider—After two months in the program, 97 percent of families had a primary health care provider (or "medical home") for their children. That rate was maintained after as

[1] Criteria for being considered "on-time" differed for the program and community health centers (as defined by the Department of Health Services) for four immunizations. Specifically, the third dosage of the polio vaccine is considered on time if received by 6 months of age for Healthy Families participants, but is considered on time by DHS if received by 18 months. In addition, three vaccines, including the fourth dosage of diptheria / tetanus / pertussis (DTP) and haemophilus influenza B (HiB) and the first dosage of mumps / measles / rubella (MMR) are considered on time by Healthy Families at 15 months and by DHS at 18 months.

Figure 3

Healthy Families Program
Percentage of Participant Children with "On-Time" Immunizations Compared to Children Immunized at Local Public Health Facilities
January 1995 through June 1999



[a] Rates are not reported for the first dosage of the Hepatitis B vaccine because it is typically given soon after the child's birth and thus prior to Program participation.

Source: Auditor General staff analysis of data provided by Healthy Families staff and information provided by Arizona Deparment of Health Services.

many as three years of program participation. Healthy Families staff emphasize that having a primary health care provider is critical in ensuring that children have proper preventative and routine care, and routinely provide linkages to physicians or health clinics. Such referrals were made for over one-third of the families in the program.

Healthy Families staff conduct developmental assessments and educate families about child development—A majority of children in Healthy Families received regular assessments of their physical and social development with the Ages & Stages Questionnaire (ASQ). During home visits, family support specialists frequently discuss child development information. Educating parents about when to expect certain developmental milestones serves a dual purpose of alerting parents to potential delays and reducing frustration associated with unrealistic expectations (for example, expecting a one-year-old child to be toilet-trained). In interviews with participants, families continue to report that information about child development is one of the most important and useful services they receive from the Healthy Families program.

Few Healthy Families children are developmentally delayed— Results of the ASQ also showed that most children in the program were developing within age-appropriate standards (see Table 1, page 23). When an ASQ score is below the minimum acceptable level, family support specialists are trained to explain the results to parents and request permission to contact the child's primary health care provider or the Arizona Early Intervention Program (AzEIP) to arrange for further assessment. However, because nearly all families in the program received a medical or social service referral (or initiated such a contact on their own), evaluators were unable to determine the extent to which families received services directly related to a developmental delay identified by the ASQ result.

Table 1

Healthy Families Program
Percentage of Children with Ages and Stages Questionnaire
Scores Indicating Normal Development
January 1995 to June 1999

	Age in Months at Evaluation						
Type of Development	**4**	**6**	**12**	**18**	**24**	**30**	**36**
Communication	98%	100%	98%	91%	90%	91%	93%
Gross motor skills	93	99	97	99	95	96	98
Fine motor skills	97	99	98	99	96	92	95
Problem solving	97	99	96	98	94	93	91
Personal and social development	97	99	97	100	93	96	95
Number of children[1]	1,511	1,492	937	591	398	270	182

[1] Includes participants enrolled since the program's inception in 1995. Each column includes all children within a given age group who were given developmental assessments.

Source: Auditor General staff analysis of data provided by Healthy Families staff.

Participants Show Enhanced Parent-Child Relationships and Ensure Child Safety in Their Homes, but Evaluation Approach Has Limitations

Healthy Families participants generally have stimulating and nurturing home environments and take steps to ensure that their homes are safe for their young children. On average, Healthy Families participants had an improved home environment after 18 months in the program. This improvement is indicative of increased functioning within the families of Healthy Families participants—typically families consisting of a single parent and one or more children. However, the ability to make definitive judgments about the program's effect in some areas is limited by reliability problems with the Home Observation for Measurement of the Environment (HOME) assessment tool. Assessments of child safety, done with another assessment tool, showed that families were also taking most of the required safety measures suggested by the program.

HOME evaluations indicate a positive environment that improves over time in some areas—Analyses of assessments conducted at 6 months and 18 months[1] shows that in the areas examined, Healthy Families participants had scores that exceeded national averages (see Table 2). In addition, the scores of Healthy Families participants improved significantly upon the second assessment. For example, a notable increase is seen in the "appropriate play materials" category—an area in which home visitors can exercise a great deal of influence. Most Healthy Families sites have a toy-lending library and family support specialists bring toys to home visits and provide information about toys that build various skills.

Table 2

Healthy Families Program
Average Score on HOME Assessment
for Families with 6-Month- and 18-Month-Old Children
January 1995 through June 1998

		Average Score			
		6 months		18 months	
Assessment Categories	Score Range	National	Healthy Families	National	Healthy Families
Responsivity	0 to 11	7.5	9.1	8.0	9.6 [a]
Appropriate play materials	0 to 9	5.0	6.3	6.4	7.6 [a]
Parent involvement	0 to 6	3.0	4.6	3.3	5.0 [a]
Acceptance	0 to 8	5.9	NA [b]	5.3	NA [b]
Organization	0 to 6	4.6	NA [b]	4.9	NA [b]
Variety in daily stimulation	0 to 5	2.3	NA [b]	3.0	NA [b]

[a] Indicates a statistically significant increase.

[b] Average score is not provided because scale is unreliable.

Source: Auditor General staff analysis of data provided by Healthy Families staff.

[1] Additional analyses examining approximately 150 families who remained in the program at 30 months showed that most maintained their 18-month scores.

Current evaluation approach has limitations—The remaining three areas assessed with the HOME, variety, acceptance, and organization, cannot be compared in the same manner. Statistical analyses showed that items within each area are not strongly related to each other and consequently do not measure the concepts they were intended to assess. Therefore, analyses were done examining results of individual items rather than scale totals.

Analyses of individual items show improvements with a few exceptions—Analyses of individual items that make up the assessment categories shown in Table 2 (see page 24) were also consistent with families providing positive home environments. For instance, significant increases from 6 months to 18 months were found on items dealing with reading and providing books for children, eating meals together, and taking children out to places such as the grocery store, among others. In addition, 3 percent or fewer of families were observed spanking or expressing overt annoyance with their children during visits by the assessment worker. However, two notable exceptions were found. The proportion who reported shouting at their children increased from 3 percent to 7 percent and the proportion who admitted to more than one instance of physical punishment in the past week increased from 7 percent to 20 percent (results of all items can be seen in Appendix B, pages a-v through a-vi).

Healthy Families participants keep their homes safe from potential hazards—Healthy Families participants take steps to ensure that their homes are safe for their young children. Families in the program typically maintain homes that meet Child Safety Checklist (CSC) requirements. On average, families have implemented 87 to 92 percent of the items on the checklist (see Appendix C, pages a-vii through a-viii, for list of checklist items). For instance, nearly all families indicated that they use a car seat for their children, make sure their children are never alone in the house or car, and keep dangerous objects such as scissors, matches, and plastic bags out of children's reach. A few measures that have lower initial compliance rates, such as keeping poisons and cleaners in a locked cabinet, using a heater guard, and covering electric outlets show significant improvement from 2 months to 6 months, indicating that program participation may result in home safety improvements.

Measures taken by Healthy Families staff to ensure child safety include discussing important safety issues, such as the dangers of shaking babies and bottle-feeding techniques that reduce choking risks. After the first administration of the CSC, family support specialists identify potential problem areas and discuss how improvements to home safety can be made.

Recommendations

1. DES should continue to require Healthy Families staff to encourage families to have their children immunized and to maintain a "medical home" for their children's health care needs.

2. DES should continue to use the Ages & Stages Questionnaire to screen for developmental delays. However, it should also devise a method to indicate what specific actions were taken for children identified as having a potential delay.

3. DES should continue to require the use of the Child Safety Checklist to assess the safety of participants' homes. Healthy Families staff should also continue to provide information to families about how to ensure the safety of their children.

4. DES should identify an instrument to replace the HOME. Because there are various statistical and methodological problems with the HOME, we recommend that DES, in conjunction with the Office of the Auditor General, find another measure of family functioning.

STATUTORY ANNUAL EVALUATION COMPONENTS

Pursuant to A.R.S. §41-1279.08, the Office of the Auditor General is required to include the following information in the annual program evaluation.

C.1. Information on the number and characteristics of the program participants.

Since 1994, when Healthy Families was first established, 3,869 families have participated in the program. Approximately 32 percent have been from Maricopa County, 22 percent from Pima County, 14 percent from Cochise County, 9 percent from Coconino County, 8 percent from Yavapai County, 8 percent from Santa Cruz County, 4 percent from Yuma County, 3 percent from La Paz and Mohave Counties, and 1 percent from Pinal County.

Age, marital status, and ethnicity

The median age of mothers enrolled in the program is 21 and the median age of fathers is 24. Teenagers (age 12-19) accounted for 36 percent of all mothers in Healthy Families and 18 percent of fathers. Most participants were unmarried or separated (81 percent). Upon program entry, approximately one-third lived with their parents, one-quarter lived either alone or with a non-relative (e.g., friend, acquaintance), and the remaining participants lived with a husband (18 percent), partner (12 percent), or other relative (12 percent). Healthy Families participants are from a variety of ethnic groups. Of mothers who have participated in the program, 50 percent were Hispanic, 29 percent were Caucasian, 10 percent were Native American, 7 percent were African-American, and 5 percent were from other ethnic groups. Ethnicities of fathers were in roughly the same ratio as those of mothers.

Education, employment, income, and public assistance usage

Sixty percent of mothers and nearly 70 percent of fathers indicated that they had a high school degree or GED. Sixty-eight percent of fathers were employed compared to only 14 percent of mothers. A majority of participants had family incomes that were below the poverty line. The median annual family income was $8,400. Sixty-four percent of families earned $10,000 or less; 20 percent earned between $10,001 and $15,000; 9 percent earned from $15,001-$20,000; and only 8 percent earned more than $20,000. At program entry, most families indicated that they were using at least one form of public assistance: 80 percent were using the Women, Infant, and Children Program (WIC), 81 percent were enrolled in the Arizona Health Care Cost Containment System, 38 percent reported using food stamps, and 27 percent reported being enrolled in Aid to Families with Dependent Children (AFDC), or Temporary Assistance to Needy Families (TANF).

Child & family characteristics

Of all children participating in the program, 89 percent were born with a normal health status. Eight percent required intensive care and 4 percent required intermediate care. The program has served 3,626 families with single births and 243 with multiple births with virtually equivalent numbers of girls and boys. For approximately half of the families, the infant designated as the "target" child was the family's first child. For 23 percent, it was their second child; for 20 percent the third or fourth child, and for 6 percent, the fifth child or more.

Risk of child abuse and neglect

A family's degree of risk for committing child abuse or neglect is assessed using the Family Stress Checklist, an interview-based assessment tool. Mothers are asked a series of questions on ten topics, including family history, stressors, expectations of the child, beliefs about discipline, substance abuse, criminal history, and mental health history. Based on this information, family assessment workers then indicate the severity of risk for each category. Of mothers enrolled, 55 percent were assessed at low or moderate risk with the remaining 45

percent at high risk. Common risk factors for mothers included family history (history of childhood abuse), environmental stressors (low income, unstable housing, relationship problems), and low self-esteem.

C.2. Information on contractors and program service providers.

Figure 1 (page 7) in the Introduction and Background provides information on the contractors and program service providers.

C.3. Information on program revenues and expenditures.

Table 3 (page 30) provides information on program revenues and expenditures.

C.4. Information on the number and characteristics of enrollment and disenrollment and information from participants on the reasons for each.

As of June 30, 1999, there were 1,189 families being served by the program. Since the program was established in 1994, 3,869 families have been enrolled. Of families continuing to receive services as of June 30, 1999, the median length of time in the program was 358 days, or approximately one year. However, for families who have exited the program, the median number of days was 189, or slightly over 6 months.

By far, the most common reasons given for leaving the program were either that the family moved (28 percent) or that the worker was unable to contact the family (33 percent). In approximately 13 percent of cases, families refused further services. Other reasons for disenrollment were: the family indicated they were self-sufficient and not in need of further services (9 percent), and the families refused a change in family support specialists (4 percent).

Table 3

Healthy Families Program
Schedule of Funding Sources by Contractor and Average State Contribution per Family [1]
Year Ended June 30, 1999
(Unaudited)

	State Contribution [2]	Contractor Contributions		Federal Grant [4]
		Cash	In-Kind [3]	
Contractor:				
Southwest Human Development	$ 988,173		$227,254	$131,175
Child and Family Resources—				
Pima County	866,864	$ 86,390	86,761	
Cochise and Santa Cruz County	636,800	54,466	48,712	
Evaluation, Quality Assurance, and Training Statewide	348,508		8,250	
Coconino County Department of Public Health	334,258		61,080	
Lake Havasu Social Services Interagency Council	218,806	29,008		
Yavapai Regional Medical Center	202,008	38,554	43,196	
Pinal County Department of Public Health	190,936		25,933	
Yuma County EXCEL Group	90,438	151,312		
Verde Valley Medical Center	86,341	1,002	61,288	
Total funding sources	$3,963,132	$360,732	$562,474	$131,175
Average state contribution per family [5]	$ 1,783			

[1] A schedule of funding sources is presented rather than a schedule of expenditures because contractors do not report expenditures consistently. For example, not all contractors reported in-kind expenditures. However, based on the information reported by the contractors to the Department of Economic Security, funding sources appear to approximate program expenditures.

[2] Includes approximately $555,400 from the Child Abuse Prevention Fund and approximately $463,000 from the Community Based Family Resource and Support federal grant that the Department of Economic Security distributed to contractors. Monies distributed to the contractors are not separately identified by funding source (i.e., state appropriation, Child Abuse Prevention Fund, or federal grant).

[3] Amount is estimated value of noncash resources, such as office space, personnel, etc. contributed by the contractors. The estimates were provided by the contractors during the contract awarding process but are not the actual in-kind contributions because contractors do not consistently track the actual amounts.

[4] Consists of monies from the Safe and Stable Families Act grant awarded to Southwest Human Development for child abuse prevention and family support services.

[5] Calculation based on the total number of families served (1,963) during the fiscal year, including families who have disenrolled. Calculation excludes the Community Based Family Resource and Support federal grant received by the Department of Economic Security and distributed to the contractors.

Source: Auditor General staff analysis of financial information provided by the Department of Economic Security.

C.5. Information on the average cost for each participant in the program.

Table 3 (page 30), provides information on the average cost for each program participant.

C.6. Information concerning the progress of program participants in achieving goals and objectives.

See Finding I (pages 11 through 17) for information on the progress of program participants in reducing rates of child abuse and neglect, reducing rates of substance abuse, and in lowering stress associated with parenting.

See Finding II (pages 19 through 26) for information on the progress of program participants in improving children's health, home environment, and general well-being. Finding II includes information about immunization rates, developmental screening, child safety, and the quality of the home environment.

See Section D (pages 33 through 36) for information on participants' progress in increasing self-sufficiency and reducing dependence on social welfare programs.

C.7. Information on any long-term savings associated with program services.

For the current evaluation, evaluators planned to include a cost-benefit analysis detailing short and long-term savings associated with program services. However, the analysis could not be completed because several of the key measures needed to calculate potential savings could not be used. For instance, evaluators planned to estimate savings associated with reduction in child abuse rates, examining such factors as costs of CPS investigations, foster care placements, and in-home services. However, as discussed in Finding I (see pages 11 through 17), evaluators are not in a position to estimate program effects on child abuse using rates of substantiated CPS reports and thus estimate any program savings or costs associated with these rates. Because of the inability to include these measures, it is not possible at this time to provide a cost-benefit analysis that is complete and conclusive.

C.8. Recommendations regarding program administration.

1. To measure program effectiveness in reducing child abuse and neglect, other measures in addition to substantiated Child Protective Services reports may be required. Pending further study of CPS investigation and substantiation rates, DES, in conjunction with the Office of the Auditor General, should select additional methods for measuring child abuse and neglect.

2. DES should continue to monitor the parenting stress levels of families in the program, using the Parenting Stress Index.

3. DES should select an alternative instrument for measuring alcohol and drug abuse that is better able than the CAGE to track changes in behavior over time. Specifically, a measurement that can be given at various intervals to measure both past and current substance abuse problems of parents and other family members is needed. Information on what actions, if any, were taken to assist families with substance abuse problems (for example, referral to treatment, counseling, etc.), should also be included.

4. DES should continue to require Healthy Families staff to encourage families to have their children immunized and to maintain a "medical home" for their children's health care needs.

5. DES should continue to use the Ages & Stages Questionnaire to screen for developmental delays. However, it should also devise a method to indicate what specific actions were taken for children identified as having a potential delay.

6. DES should continue to require the use of the Child Safety Checklist to assess the safety of participants' homes. Healthy Families staff should also continue to provide information to families about how to ensure the safety of their children.

7. DES should identify an instrument to replace the HOME. Because there are various statistical and methodological problems with the HOME, we recommend that DES, in conjunction with the Office of the Auditor General, find another measure of family functioning.

C.9. Recommendations regarding informational materials distributed through the program.

For previous evaluations of the Healthy Families program, the Office of the Auditor General reviewed informational materials distributed through the program and found them to adequately address program needs.

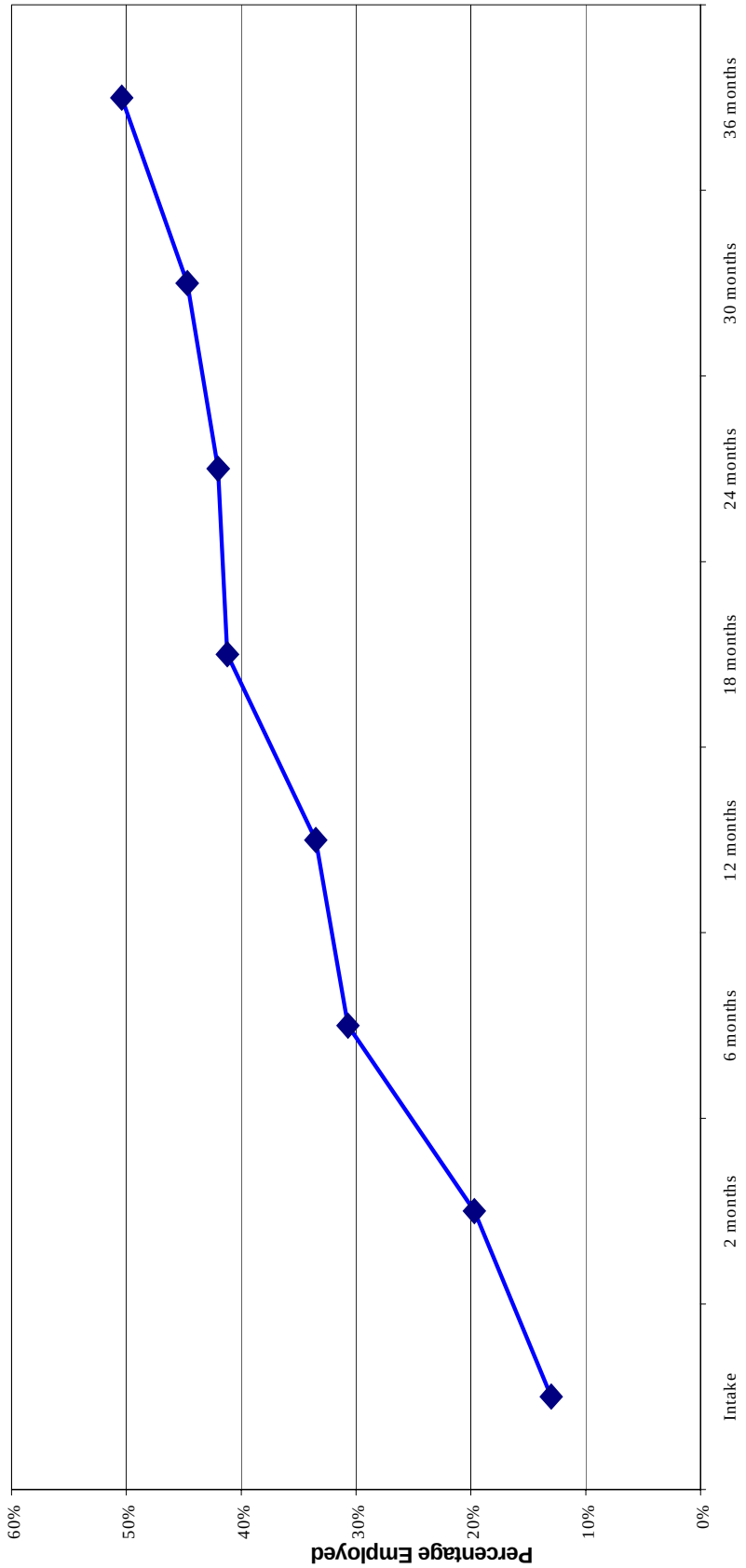
D. Effect of the program on encouraging parental responsibility in employment, self-sufficiency, and child safety. Document the income level and family size of those receiving program services.

- **Self-sufficiency**—See sections below on Employment, Temporary Assistance to Needy Families, and food stamps for information about the program's effects on self-sufficiency.

- **Employment rates—**As seen in Figure 4 (page 34), employment rates for mothers in the Healthy Families Program increased steadily over time while the mothers were in the program. Evaluators also found that mothers who received referrals to job services within their first six months of participation were significantly more likely than mothers who did not receive referrals to be employed at six months, showing that the program may be having a positive effect on employment rates for mothers. Employment rates for fathers generally remained steady at a rate of approximately 68 percent to 85 percent but were not affected by worker referrals in the same way that rates were for mothers.

Figure 4

Healthy Families Program
Employment Rates of Mothers in Program
January 1, 1995 through June 30, 1999



Source: Auditor General staff analysis of data provided by Healthy Families staff.

- **Temporary Assistance to Needy Families (TANF)—**Approximately 28 percent of Healthy Families participants who enrolled during June 1996 through June 1998 used TANF within one year of their child's birth. In contrast, 21 percent of the comparison group used TANF during the same time period. Although Healthy Families participants were more likely than comparison group members to use TANF, they were not more likely to *start* using TANF after entering the program.[1] Between 6 and 8 percent of Healthy Families participants and comparison group members who had not previously used TANF[2] started using it after their child's birth. Healthy Families' higher level of usage can be explained by the fact that Healthy Families participants were more likely than comparison group members to be using TANF in the 12-month period *before* their child was born (and thus prior to their enrollment into Healthy Families). In addition, on average, Healthy Families participants used TANF for a slightly longer time period than the comparison group. In the 12-month period after their child's birth, Healthy Families participants used TANF for an average of 5.3 months and comparison group members used it for an average of 4.5 months, a statistically significant difference. Overall, these results show that although Healthy Families participants had higher rates of TANF usage than the comparison group, these rates are most likely not attributable to program participation.

- **Food stamps—**Participants' patterns of food stamp usage were similar to those for TANF. Healthy Families participants were more likely than comparison group members to use food stamps during the first year after their child's birth. Approximately 37 per-

---

1 For comparison group members, evaluators examined whether families started receiving public assistance for the first time after their children's birth.

2 Previous usage was examined within the one-year period before the child's birth.

cent of Healthy Families participants and approximately 28 percent of comparison group members had at least some usage of food stamps before their child's first birthday. Healthy Families participants were also more likely than the comparison group to use food stamps prior to the birth of their child. Thirty-three percent of Healthy Families participants and 28 percent of comparison group families used food stamps before their child's birth. However, as with TANF, Healthy Families participants were not more likely than the comparison group to *start* using food stamps after enrolling in the program. In addition, Healthy Families participants also used food stamps for a slightly longer time period than the comparison group (5.3 months for Healthy Families and 4.8 months for the comparison group). Overall, as with TANF, Healthy Families' higher rates of usage are not likely a direct result of program participation.

- **Child safety—**See Finding II (pages 19 through 26) for information on child safety, including results of the Child Safety Checklist assessment.

- **Income level and family size of those receiving program services—**See C.1 (pages 27 through 29) of this section for information on income levels and family size of those receiving program services.

APPENDICES

(This Page Intentionally Left Blank)

Appendix A
Assessment Tools

Ages and Stages Questionnaire (ASQ)

The ASQ is a developmental screening tool that is completed by the parent and is used to assess whether children are developing normally, both physically and socially. The questionnaire addresses five areas of child development: (1) Communication, (2) Gross Motor Skills, (3) Fine Motor Skills, (4) Problem-Solving, and (5) Personal-Social Skills. For each area, parents are asked to respond to six questions about whether their children are engaging in behavior appropriate for their age. The ASQ is administered at the following ages: 4, 6, 12, 18, 24, 30, 36, and 48 months.

Reference: Bricker, Diane, Jane Squires, Linda Mounts, La-Wanda Potter, Bob Nickel, & Jane Farrell. *The Ages and Stages Questionnaire: A Parent-Completed, Child-Monitoring System.* Paul H. Brookes Publishing Co. Baltimore, MD. 1995.

The CAGE Questionnaire—Substance Abuse Screening

The CAGE Questionnaire was designed to identify potential alcohol-abuse problems. It was also modified to include the abuse of drugs other than alcohol. The acronym "CAGE" stands for the first letter in each of four questions that are asked of respondents: (1) Have you ever felt the need to ***c***ut down on drinking/drug use? (2) Have you ever felt ***a***nnoyed by others' criticism of your drinking/drug use? (3) Have you ever felt ***g***uilty about your drinking/drug use? and (4) Have you ever had a drink/taken drugs first thing in the morning (***e***ye-opener)? Two or more "yes" responses are considered indicative of a substance abuse problem. The CAGE is administered after 3 weeks, 6 months, and 12 months of program participation.

Reference: Mayfield, D., G. McCleod, and P. Hall. The CAGE questionnaire: validation of a new alcoholism screening questionnaire. *American Journal of Psychiatry*, 131, 1121-1123. 1974.

Appendix A (Cont'd)

The Child Safety Checklist (CSC)

The Child Safety Checklist is an instrument that assesses whether various safety measures in the home have been implemented (see Appendix C, pages a-vii through a-viii for a list of items). The CSC is administered by family support specialists who ask parents whether or not each safety measure on the checklist has been taken (for example, "do you use a car seat for your baby?"). There are two versions of the child safety checklist. The first is administered when the child is 2, 6, 12, 18, 24, and 30 months of age. The second contains questions designed for families with older children and is administered at the following ages: 36, 42, 48, 54, and 60 months.

Home Observation for Measurement of the Environment (HOME*)*

The HOME is an observation and interview instrument that measures the quality of stimulation, support, and structure available to children in their homes. The version used for Healthy Families was designed for families with children from 0 to 3 years of age and has six subscales measuring the following six aspects of home environment: (1) emotional and verbal *responsivity* of the parent, (2) *acceptance* of the child's behavior, (3) *organization* of the physical and temporal environment, (4) provision of appropriate *play materials,* (5) parent involvement with the child, and (6) opportunities for *variety* in daily stimulation.

The HOME is completed by Healthy Families family assessment workers. Prior to July 1998, the HOME was completed when the child was 6 months old and then subsequently every 12 months (at 18, 30, 42, and 54 months). Beginning on July 1998, the HOME was completed at 4 months, 12 months, and 24 months.

Reference: Caldwell, Bettye, and Robert Bradley. *Professional Manual: Home Observation for Measurement of the Environment.* Little Rock, AR. 1984.

Appendix A (Concl'd)

Parenting Stress Index (PSI)

The PSI is an instrument designed to identify stressful situations that could potentially put parents at risk for "dysfunctional parental behavior," including abuse. It includes several subscales that measure stress related to child characteristics and parent functioning. For the evaluation, seven subscales were used. These included two that focused on child characteristics (child's mood and distractibility/hyperactivity) and five that focused on adult characteristics (depression, attachment, restriction of role, sense of competence, and social isolation). The PSI is administered after 3 weeks, 6 months, and then 12 months of program participation.

Reference: Abidin, Richard R. *Parenting Stress Index Professional Manual*, Third Edition. Psychological Assessment Resources, Inc. Odessa, FL. 1995.

(This Page Intentionally Left Blank)

Appendix B

Healthy Families Program
Scores on Items Measuring Quality of Home Environment
January 1995 through June 1998

Categories	6 months	18 months
Responsivity		
Speech is distinct, clear, audible	98	98
Voice conveys positive feelings	97	98
Parent converses freely	93	97 [a]
Parent responds positively to visitor's praise of child	90	90
Parent initiates interchanges with visitor	89	94 [a]
Responds to child's vocalizations	84	87
Vocalizes to child at least once	83	92 [a]
Caresses or kisses child at least once	82	77
Permits child to engage in "messy play"	80	93 [a]
Praises child at least twice	70	69
Tells child name of object or person	45	67 [a]
Learning materials: Child has…		
Stroller or walker, kiddy car, scooter, or tricycle	91	87
Simple hand-eye coordination toys	88	96 [a]
Cuddly or role-playing toys	87	93 [a]
Learning facilitators (mobile, playpen)	76	83 [a]
Muscle activity toys or equipment	73	88 [a]
Push or pull toy	34	87 [a]
Parent provides toys during visit	69	69
Toys for literature and music	57	82 [a]
Complex hand-eye coordination toys	52	76 [a]
Involvement		
Parent keeps child in visual range; looks at often	97	95
Talks to child while doing household work	89	90
Consciously encourages developmental advance	76	87 [a]
Invests maturing toys with value	68	77 [a]
Structures child's play periods	65	67
Provides toys that challenge child to develop new skills	64	80 [a]

[a] Indicates a statistically significant increase from 6 months to 18 months.

[b] Indicates a statistically significant decrease from 6 months to 18 months.

(Continued)

Note: Analysis of 400 participants with scores at 6 months and 18 months.

Appendix B (Concl'd)

Healthy Families Program
Scores on Items Measuring Quality of Home Environment
January 1995 through June 1998

Categories	6 months	18 months
Variety		
Family visits relatives at least once a month	88	91
Father provides some care daily	60	63
Child eats at least one meal with mother and father	59	76 [a]
Child has at least three books of his / her own	44	73 [a]
Parent reads to child at least 3 times per week	42	61 [a]
Acceptance		
Parent does not spank child during visit	98	97
Parent does not shout at child	97	93 [b]
Does not express overt annoyance with child	97	99
Parent does not scold or criticize child during visits	96	95
No more than 1 time physical punishment in past wk	93	80 [b]
Does not interfere with / restrict kid 3 times during visit	90	96 [a]
Family has a pet	41	46 [a]
At least 10 books are present and visible	29	32
Organization		
Taken regularly to doctor's office / clinic	94	95
Grocery store at least once a week	88	93 [a]
Child care provided by one of three regulars	86	85
Gets out of house at least 4 times per week	85	91 [a]
Play environment is safe	87	89
Has special place for toys	80	88 [a]

[a] Indicates a statistically significant increase from 6 months to 18 months.

[b] Indicates a statistically significant decrease.

Note: Analysis of 400 participants with scores at 6 months and 18 months

Source: Auditor General staff analysis of data provided by Healthy Families staff.

Appendix C

Healthy Families Program
Child Safety Checklist Items

Checklist for families with children ages 2 months to 30 months

1. Do you use a car seat for your baby?
2. Do you have your electrical outlets covered?
3. Do you have gates in front of the stairs?
4. Do you have a floor furnace or heater guard?
5. Do you keep the handles of pots on the stove turned in toward the stove?
6. Do you have poisons and cleaning supplies in a locked cabinet?
7. Do you keep small things baby could swallow out of reach?
8. Do you check your baby's toys for breaks, chips, and dirt?
9. Do you keep plastic bags and balloons away from baby?
10. Do you keep baby's crib mattress covered with something other than a plastic bag?
11. Do you have plants & breakable objects out of baby's reach?
12. Do you make sure your baby is never alone in the house?
13. Do you make sure your baby is never alone in the car?
14. Do you keep the toilet lid down?
15. Do you empty mop buckets and other containers of water immediately when you finish using them?
16. Do you make sure your baby is never alone in the bathtub?
17. Do you keep lighters, matches, & cigarettes out of baby's reach?
18. Do you keep dogs, cats, & other animals away from baby?
19. Do you keep scissors, knives, & other sharp objects out of baby's reach?
20. Do you use a safety strap when baby is in a stroller or shopping cart?
21. Do you keep window shades and curtains/cords out of baby's reach?
22. Have you turned the water heater down to less than 120 degrees?
23. Do you have a working smoke alarm?

Checklist for families with children ages 36 months to 60 months

1. Emergency medical service/poison control number stickers on all phones
2. Syrup of ipecac with an unexpired date is on hand?
3. Medicines, vitamins, soaps, shampoos, mouthwashes, cosmetics, aftershave, perfumes, and razors are stored out of the child's reach?
4. Cleaners, drain openers, and other household chemicals are stored in a locked cabinet?
5. The home has a properly installed, functioning smoke detector?
6. All unused electrical outlets equipped with safety plugs?
7. Electrical cords are in good condition and used appropriately?

(Continued)

Appendix C (Concl'd)

Healthy Families Program
Child Safety Checklist Items (Concl'd)

Checklist for families with children ages 36 months to 60 months (concl'd)

8. Heaters, fans, irons, curling irons, or other electrical devices are safe and out of child's reach?
9. Deflated balloons are disposed of, plastic bags are kept out of the child's reach?
10. Lighters, matches, and dirty ash trays are kept out of the child's reach?
11. Firearms and ammunition are stored separately and locked?
12. Poisonous plants in the home or yard have been identified and child understands not to touch?
13. The pool isolation fence is in good condition, gates are securely locked, toys not left in pool. Child is supervised while in pool area.
14. Pesticides, fertilizers, paints, hand tools, and power tools stored outside the child's reach.
15. Knives and sharp objects are kept out of child's reach even while in use.
16. Alcoholic beverages are out of the reach of children?
17. Food is refrigerated properly.
18. Children are supervised while in the tub.
19. Children are supervised while playing outside.
20. Spills, broken glass, etc. are cleaned up immediately.
21. Child is supervised while eating to prevent choking.
22. Screens are present on open windows.

Source: Healthy Families staff provided copies of instrument.

AGENCY RESPONSE

(This Page Intentionally Left Blank)

Jane Dee Hull
Governor

ARIZONA DEPARTMENT OF ECONOMIC SECURITY
1717 W. Jefferson, P.O. Box 6123, Phoenix, AZ 85005

John L. Clayton
Director

Ms. Debbie Davenport, CPA
Office of the Auditor General
2910 North 44th Street, Suite 410
Phoenix, Arizona 85005

Dear Ms. Davenport:

The Department wishes to thank the Office of the Auditor General for the opportunity to respond to the recently completed audit of the Healthy Families Arizona Program.

I am pleased your findings indicate that the program benefits the families we serve. You found the program effect on the rate of child abuse difficult to determine this year, most likely due to policy changes beyond the control of the program. Your previous report dated January 1, 1998 and reports from our independent evaluator showed there was evidence of the program's effect on reducing child abuse and neglect. In addition, you found parenting stress is reduced after six months in the program. Further, you found children in the Healthy Families Arizona program have positive health outcomes and improved family functioning within the parent-child relationship.

You recommended the Department select different assessment tools to replace the current instruments, and to provide additional information about child abuse and neglect. The Department welcomes the opportunity to work with you in making these changes. In fact, the Healthy Families Arizona Evaluation Committee has been meeting for the past six months with a goal to streamline the evaluation and identify more appropriate assessment tools. The Department and the Evaluation Committee look forward to our continued work with you in this endeavor.

We agree with both findings contained in the report. The recommendations pertaining to each finding will be implemented as discussed in our accompanying response.

Finally, please accept our appreciation for the time and effort invested in this important evaluation. We wish to specifically recognize Laurie Cohen for her hard work during the evaluation process.

Sincerely,

John L. Clayton

Enclosure

DEPARTMENT OF ECONOMIC SECURITY
RESPONSE TO THE
HEALTHY FAMILIES ARIZONA PROGRAM EVALUATION

FINDING I: Program Effect on Child Abuse Rate Difficult to Determine but Parenting Stress is Reduced after Six Months in Program

The Department is disappointed the program effect on child abuse rates was difficult to determine, most likely due to policy changes beyond the control of the program, but is pleased program participants had a very low rate of substantiated Child Protective Services reports. Prior to the policy changes, the previous Auditor General's report dated January 1, 1998 showed there was a significant difference between the program group and the comparison group with the program group having a statistically significant lower rate of child abuse and neglect (3.3 percent vs. 8.5 percent). Further, our independent evaluator for this program has consistently found a significant difference between the program group and comparison group with the program group having a statistically significant lower rate of child abuse and neglect.

The Department agrees parenting stress is reduced after six months in the program. Healthy Families Arizona program participants show a statistically significant decrease in parenting stress on five out of seven types of stress included in the Parenting Stress Index. We believe the significant reductions in parenting stress show Healthy Families is having a positive impact on parents' child abuse potential.

The finding of the Auditor General which states DES, in conjunction with the Office of the Auditor General, should select additional methods for measuring child abuse and neglect is agreed to and the audit recommendation will be implemented.

The finding of the Auditor General which states DES should continue to monitor the parenting stress levels of families in the program, using the Parenting Stress Index, is agreed to and the audit recommendation will be implemented.

The finding which states the Department should select an alternative instrument for measuring alcohol and drug abuse is agreed to and the audit recommendation will be implemented.

The Healthy Families Evaluation Committee is currently searching for a better substance abuse assessment tool which will track changes and behavior over time.

DEPARTMENT OF ECONOMIC SECURITY
RESPONSE TO THE
HEALTHY FAMILIES ARIZONA PROGRAM EVALUATION

FINDING II: Healthy Families Children Have Positive Health Outcomes and Improved Family Functioning Within the Parent-Child Relationship.

The Department agrees the Healthy Families Arizona program participants showed positive outcomes in health-related measures, including immunization rates and assessments of children's physical and social development. Further, we agree assessments of home environment revealed improvements in parent-child relationships, including increases in measures of parental responsiveness, involvement, and provision of appropriate play materials. Finally, we are in agreement that home safety assessments showed parents took measures to ensure their children's safety in the home.

The finding of the Auditor General which states DES should continue to require Healthy Families staff to encourage families to have their children immunized and to maintain a "medical home" for their children's health care needs is agreed to and the audit recommendation will be implemented.

The finding of the Auditor General which states DES should continue to use the Ages and Stages Questionnaire to screen for developmental delays and further to devise a method to indicate what specific actions were taken for children identified as having a potential delay is agreed to and the audit recommendation will be implemented. In July 1998, Healthy Families Arizona program staff developed a method to document what specific actions were taken when delays were found. Program staff will continue to fine tune this system to ensure any children found with delays will be referred to appropriate services.

The finding of the Auditor General which states DES should continue to require the use of the Child Safety Checklist to assess the safety of participants' homes and for program staff to continue to provide information to families about how to ensure the safety of their children is agreed to and the audit recommendation will be implemented.

The finding of the Auditor General which states DES, in conjunction with the Office of the Auditor, should identify an instrument to replace the HOME is agreed to and the audit recommendation will be implemented. The Healthy Families Evaluation Committee is currently searching for an assessment tool which would better measure the home environment.

Under Finding II, the report states there are significant increases in providing positive home environments from 6 months to 18 months except in the areas of shouting and spanking. The report stated the proportion who reported shouting at their children and who admitted to more than one instance of physical punishment in the past week increased in both instances.

These increases in discipline may be related to developmental changes in the child. Most parents in the United States do not make serious attempts to discipline or socialize infants who are less than one year old (Mercer, 1998, p. 372). However, this changes as the child becomes a toddler. Toddler's naive egocentrism and physical exuberance frequently bring them into conflict with a parent, sibling, and peers (Wenar, 1982). This is often referred to by child developmentalists as negativism where children express their autonomy.

Mercer, J. (1998). *Infant Development*. Pacific Grove, CA: Brooks/Cole Publishing.

Neman, P.R., & Newman, B.M. (1997). *Childhood and adolescence.* Pacific Grove, CA: Brooks/Cole Publishing.

Schuster, C.S., & Ashburn, S.S. (1992). *The Process of human development: A holistic life-span approach.* Philadelphia: J.B. Lippincott.

Wenar, C. (1982). On negativism. *Human Development,* 25, 1-23.

Other Performance Audit Reports Issued Within the Last 12 Months

99-4	Adult Probation
99-5	Department of Gaming
99-6	Department of Health Services—Emergency Medical Services
99-7	Arizona Drug and Gang Policy Council
99-8	Department of Water Resources
99-9	Department of Health Services—Arizona State Hospital
99-10	Residential Utility Consumer Office / Residential Utility Consumer Board
99-11	Department of Economic Security—Child Support Enforcement
99-12	Department of Health Services—Division of Behavioral Health Services
99-13	Board of Psychologist Examiners
99-14	Arizona Council for the Hearing Impaired
99-15	Arizona Board of Dental Examiners
99-16	Department of Building and Fire Safety
99-17	Department of Health Services' Tobacco Education and Prevention Program
99-18	Department of Health Services—Bureau of Epidemiology and Disease Control Services
99-19	Department of Health Services—Sunset Factors
99-20	Arizona State Board of Accountancy
99-21	Department of Environmental Quality—Aquifer Protection Permit Program, Water Quality Assurance Revolving Fund Program, and Underground Storage Tank Program
99-22	Arizona Department of Transportation A+B Bidding

Future Performance Audit Reports

Department of Health Services—Behavioral Health Services Coordination

Arizona's Family Literacy Program

Family Builders Pilot Program