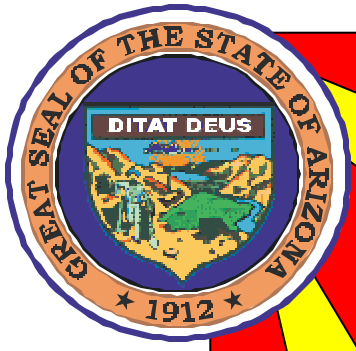

State of Arizona Office of the Auditor General

PERFORMANCE AUDIT

HEALTHY FAMILIES PROGRAM

Report to the Arizona Legislature
By Debra K. Davenport
Auditor General

February 2001
Report No. 01-02

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

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DEBRA K. DAVENPORT, CPA
AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

February 15, 2001

Members of the Arizona 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. This evaluation was conducted pursuant to A.R.S. §41-1279.08. I am also transmitting with this report a copy of the Report Highlights for this evaluation to provide a quick summary for your convenience.

As outlined in its response, the Department 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 16, 2001.

Sincerely,

Debbie Davenport
Auditor General

Enclosure

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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 Arizona Revised Statutes (A.R.S.) §41-1279.08 to evaluate the Healthy Families Program annually. This report contains information related to program procedures and effectiveness.

Healthy Families—Arizona is a child abuse prevention and child wellness and development program administered by the Department of Economic Security (DES). 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.

The program coordinates with hospitals to identify mothers giving birth in specific geographic areas whose family characteristics may place them at risk for committing child abuse or neglect, and/or whose babies may face increased health risk. Healthy Families provides services through various contractors, which include medical centers, local health departments, and social service agencies. These contractors provide services at 23 sites in 10 counties.

The program is based on a home-visitation model. Home visitors regularly visit families to offer support, educational materials, and referrals to needed resources. Home visitors also help families develop family support plans and encourage positive parent-child interaction to strengthen bonds and promote development. Participation in the program is voluntary and may continue for up to five years. In fiscal year 2000, 1,254 families were enrolled in the program.

Healthy Families Participant Child Abuse Rates Do Not Differ Significantly from the Comparison Group (See pages 13 through 19)

For the second year in a row, comparison of child abuse rates for Healthy Families participants and a comparison group of families who left the program shows that abuse rates were not significantly different. Specifically, 1.7 percent of participant families received a substantiated report of abuse and 1.8 percent of families who left the program before receiving four home visits received a substantiated report. These rates are comparable to the rates reported in the previous Office of the Auditor General evaluation of the program (see Report No. 00-1), in which 1.6 percent of participants and 1.4 percent of the comparison group received substantiated reports of abuse.

While one possible explanation for these findings might be that the program does not have a significant effect on child abuse, other explanations may also account for the similarity in outcomes between the two groups. First, it is possible that the effects of the program on preventing child abuse cannot be adequately measured by the current evaluation design because of changes in DES procedures for substantiating child abuse reports. In particular, the occurrence of substantiated abuse reports has decreased since the implementation of an appeals process. Second, preliminary analysis of when abuse occurs for both program participants and the comparison group suggests that abuse is likely to occur a year or more after enrollment, and in most cases, after the family has left the program. Thus, participants may not be enrolled in the program at the time when the risk of child abuse increases.

Healthy Families Program Provides Health Referrals, Encourages On-Time Immunizations, and Promotes Safety (See pages 21 through 26)

The Healthy Families Program has been successful in providing health referrals, encouraging parents to get their children immunized, and in promoting home safety. On average, the majority

of children in the program are fully immunized and most children have a primary health care provider. Additionally, Healthy Families staff regularly conduct assessments of the physical and social development of children enrolled in the program. Parents improved their compliance with home safety measures such as covering electrical outlets and keeping poisons and choking hazards out of reach.

Parenting Stress Measure Shows Improved Family Relations (See pages 27 through 29)

Healthy Families parents showed significant decreases in indicators of parental stress after one year in the program, suggesting that program services may improve parent-child relations. In addition, parents with higher stress levels related to areas such as social isolation and depression also received referrals to mental health services at a higher rate than parents with lower stress. To assist families in improving parent-child interaction, home visitors regularly provide emotional support and information to help parents understand their child's behavior.

Other Pertinent Information (See pages 31 through 34)

The previous report issued by the Office of the Auditor General (see Report No. 00-1) offered several recommendations to improve the measurement of the program's effect on family functioning and reduction of substance abuse. The previous evaluation also recommends tracking referrals for children with developmental delays. To address these recommendations, the program discontinued using the Home Observation for Measurement of the Environment (HOME) questionnaire and will instead use the Parenting Stress Index (PSI) to measure the program's effect on family relations. The program also replaced the CAGE substance abuse screen with a new questionnaire that can measure the program's effect on reducing drug / alcohol dependency over time. Finally, the program added questions to its family update form, which will enable staff to track whether children with developmental delays are offered the appropriate referrals.

Statutory Annual Evaluation Components (See pages 35 through 44)

This report also contains information that addresses various components of the Healthy Families evaluation statute. These components include information regarding participant demographics such as mother's age, marital status, income, ethnicity, and household size. Other areas covered in the statutory components section contain information about enrollment and disenrollment and employment.

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INTRODUCTION AND BACKGROUND

The Office of the Auditor General has completed an evaluation of the Healthy Families Program. According to Arizona Revised Statutes (A.R.S.) §41-1279.08, the Office of the Auditor General is required to evaluate the Healthy Families Program annually. This report contains information regarding the program's procedures and outcomes.

Healthy Families Offers a Preventative Approach to the Problem of Child Abuse

Healthy Families is a child abuse prevention and child wellness and development program.

Healthy Families—Arizona is a child abuse prevention and child wellness and development program administered by the Department of Economic Security (DES). Preventing child abuse is a serious concern in Arizona, as in other states. During fiscal year 1999, Arizona's Department of Economic Security, Division of Child Protective Services received 32,631 reports of maltreatment toward children. Twenty-five percent of these reports were subsequently substantiated.[1]

The State Legislature established Healthy Families—Arizona as a pilot program in 1994, and gave it permanent program status in 1998. Healthy Families attempts to identify families at risk for committing child abuse or neglect and that may have poor health outcomes. The program provides participants with support, education about child development and referrals for nutrition, medical care, counseling, and education and employment programs. Arizona's program is part of a national initiative promoted by Prevent Child Abuse America. It is currently offered in 39 states, the District of Columbia, and Canada and serves over 400 communities. Program enrollment and participation are

[1] Department of Economic Security. *Child Welfare Reporting Requirements: Annual Report for the Period of July 1, 1998 through June 30, 1999.* Substantiated reports are those reports DES determines met the standard of probable cause to conclude that abuse occurred. Note: Of the total reports for fiscal year 1999, 153 fell within the jurisdiction of military or tribal governments.

voluntary. However, nationally, 90 percent of families offered Healthy Families services enroll in the program.

The program provides services through home visitation.

The Healthy Families Program is based on home visitation. Home visitors regularly visit families to offer support, educational materials, and referrals to various medical, mental health, and social services. (For information regarding home visitor training see the Training, Quality Assurance, and Credentialing section on page 5.) During the home visit, home visitors help families develop family support plans in which parents identify goals for themselves and their children and encourage positive parent-child interaction to strengthen bonds and promote development. Home visitors also determine which services a family might need, and provide educational material on child health, developmental milestones, safety, discipline, and nutrition. In addition to home visits, the program holds parent and play group meetings to provide participants with the opportunity to meet other families in their community. Families may participate in the program for five years.

Program Stresses Early Screening and Intervention

Participants are enrolled within the first three months after their child is born.

Healthy Families establishes its family visitation within the first three months after a child is born. By doing so, the program attempts to help families establish positive parent-child relationships and positive child development outcomes early on. To identify families most at risk, Healthy Families coordinates with hospitals to screen mothers giving birth within the program's service area (see Figure 1, footnote 1, page 8). To be eligible for program enrollment, participants cannot have any substantiated reports of child abuse on file with Child Protective Services (CPS) and must reside in a Healthy Families service area. The intake process is completed in two stages. Specifically,

- The first stage includes a screening in which parents are identified as possibly at risk for child abuse based on a combination of factors such as inadequate income, unstable housing, lack of a high school diploma, inconsistent or late prenatal care, and being unmarried or separated. The screening process is usually completed while the mother is still in the hospital. The program refers to those screenings that identify at-

risk parents as positive screens. During fiscal year 2000, Healthy Families screened 17,005 families. Of this total, 49 percent (8,382) screened positive.

- During the second stage, parents who receive a positive screen are contacted by a Healthy Families worker about completing an assessment. If the parent consents to completing the assessment, he or she is interviewed about topics including family history, history of substance abuse or criminal activity, stress, self-esteem issues, expectations for the child, and plans regarding discipline. If the parent receives a positive assessment, indicating a potential risk for committing child abuse, he or she is invited to enroll in the program pending a CPS check. Assessments are completed a few days after the screening process either in the hospital, in the parent's home, or over the telephone.

  Families who received a positive screen and were not offered the assessment include those who were ineligible for the program because they have a substantiated abuse report on file with CPS, could not be reached, or lived in an area in which the Healthy Families Program was full. During fiscal year 2000, of those families contacted and offered the assessment, 1,069 completed the assessment and 533 refused the assessment. Nine-hundred thirty-one families assessed positive for child abuse risk and 854 of these families enrolled in the program.

Once enrolled in the program, Healthy Families participants are 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.

Home visitors at each site are responsible for serving 12 to 25 families. The frequency of home visits varies according to the family's level of participation. Visits are more frequent at the beginning of the family's participation and less frequent as the family becomes more self-sufficient. Increased self-sufficiency is determined by a variety of factors such as a stable home environment, ability to access resources independently, and utilization of support networks.

Program Goals

Five program goals are outlined in A.R.S. §8-701. Healthy Families goals and the procedures used by the program to address these goals are listed below:

- **Goal 1: Reduce child abuse and neglect**—To reduce child abuse and neglect, home visitors assist families with enhancing parent-child interaction, attachment, and bonding. They provide information about child safety, discipline, and methods for anger management, and assess parent stress levels and home safety. As appropriate, home visitors may provide referrals for counseling and treatment services to address substance abuse and domestic violence.

- **Goal 2: Promote child wellness and proper development**—Home visitors provide information on child health and nutrition and encourage families to have a primary care physician, to receive well-baby check-ups, and to have their children immunized. They also conduct periodic developmental assessments and provide referrals to medical providers and the Arizona Early Intervention Program (AzEIP) for children with potential delays.

- **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. They encourage positive parent-child interaction and discuss family relationship issues with participants. When appropriate, they refer participants to counselors to discuss family relationship issues. Although most primary caregivers who enroll in the program are mothers, the program encourages fathers and other family members to participate in home visits and group activities.

- **Goal 5: Reduce dependency on drugs and alcohol**—To address issues of substance abuse, Healthy Families began administering a substance abuse assessment instrument in July 1998. When alcohol or drug abuse problems are identified, home visitors are trained to discuss the issue with the participant and/or provide a referral for treatment.

Training, Quality Assurance, and Credentialing

Home visitors are trained home visiting specialists. They must have at least a high school diploma to be employed by the program, but many also have college degrees. Home visitors receive a minimum of 30 hours of training a year in subjects such as child development, substance abuse, and identifying and reporting child abuse and neglect. New home visitors are required to complete four and one-half days of initial training. New staff also complete self-guided training modules under the supervision of site managers. Initial training includes methods for identifying child abuse and neglect, infant growth and development, and methods for interacting with families and encouraging positive parent-child interaction. Finally, new staff must also complete on-the-job training in which they observe home visits conducted by more experienced staff.

To help ensure that Healthy Families' sites are in compliance with program policies and procedures, DES contracts with an evaluation firm to provide quality assurance and database management. Specifically, quality assurance coordinators from this firm visit each site at least twice a year to review participant files for accuracy. This firm also collects and maintains all program data from each Healthy Families site and is responsible for testing this data to ensure that it is reliable and accurate.

Healthy Families—Arizona was first in the nation to receive a statewide credential.

In April 2000, Healthy Families—Arizona became the first program in the nation to receive a statewide credential from Prevent Child Abuse America and the Council on Accreditation. During the credentialing process, the program had to demonstrate adherence to national standards by submitting information on training, technical assistance, policies, quality assurance, evaluation, and administration. Each site completed a self-assessment of its performance according to 12 critical elements and 138 standards of best practice. Seven sites received formal visits from national credentialing committee representatives. During the site visits, committee representatives evaluated the quality of service provided by each site.

The credential attests that Healthy Families—Arizona meets nationally established research-based standards for quality ser-

vice delivery, and best practice standards for management and administration.

Contractors and Appropriations

Healthy Families provides services through local contractors.

Healthy Families provides services through various contractors, which include medical centers, local health departments, and social service agencies. In fiscal year 2000, DES had 11 contracts with 10 separate contractors. These contractors provide services at 23 sites in 10 counties (see Figure 1, page 8). For fiscal year 2000, two new sites were added in Maricopa County. In addition, the Pascua Yaqui Tribe site offered services in previous years through a federal grant but was awarded program funding for the first time this year. 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. Additionally, Healthy Families contracts with an evaluation firm for database management, evaluation, quality assurance, and training.

For fiscal year 2000, program funding for Healthy Families totaled about $5.6 million, $4 million of which was from the State's General Fund appropriation. In fiscal years 1997, 1998, and 1999 the General Fund appropriation totaled about $3 million for each fiscal year. Other funding sources for the program include DES' Child Abuse Prevention Fund, federal grants, contractor contributions, and private donations (see Table 1, page 7).

Scope and Methodology

A.R.S. §41-1279.08 mandates that the Office of the Auditor General evaluate the Healthy Families Program. The statute specifies that the evaluation will include an assessment of the program's effectiveness in achieving its goals. According to the statute, additional evaluation requirements include providing information about the level and scope of program services, enrollment eligibility, participant demographic characteristics, long-term

Table 1

Healthy Families Program
Schedule of Distributions by Funding Source and Contractor, and
Average State Contribution per Family [1]
Year Ended June 30, 2000
(Unaudited)

	Funding Source				
Contractor:	**State General Fund**	**Child Abuse Prevention Fund**	**Tobacco Taxes [2]**	**Federal Grants [3]**	**Total**
Southwest Human Development	$1,098,787	$179,892	$132,580	$195,837	$1,607,096
Child and Family Resources:					
Urban	769,980	106,530	213,923		1,090,433
Rural	539,699	184,819	183,569		908,087
Coconino County Department of Public Health	296,761	33,506	31,586	1,325	363,178
Yavapai Regional Medical Center	215,587	22,773	25,534		263,894
Pinal County Department of Public Health	171,605	45,512	24,735		241,852
Lake Havasu Social Services Interagency Council	190,772	20,470	20,470		231,712
Yuma County EXCEL Group	108,903	40,743	20,008		169,654
Verde Valley Medical Center	88,875	30,415	16,590		135,880
Pascua Yaqui Tribe	8,254	38,730		27,792	74,776
Parents Anonymous of Arizona (Tuba City)	32,940	20,790	10,530		64,260
LeCroy & Milligan (provides evaluation, quality assurance, and training statewide)	445,043		36,832		481,875
Total monies distributed	$3,967,206	$ 724,180	$ 716,357	$224,954	$5,632,697
Average state contribution per family [4]	$ 3,164	$ 577	$ 571		$ 4,312

[1] Department-distributed monies to contractor, rather than contractor expenditures, are presented. Contractors do not report expenditures in a timely manner and funding sources appear to be approximate expenditures of Department-distributed monies. In addition, the schedule excludes the required contractor matches of at least 10 percent, because contractors do not report the value of their noncash resources, such as office space and personnel, on a consistent basis.

[2] The program received monies from the Parent's Commission on Drug Education and Prevention beginning in January 2000. The Commission's funding comes from tobacco taxes; therefore, this schedule presents the source of funding as tobacco taxes.

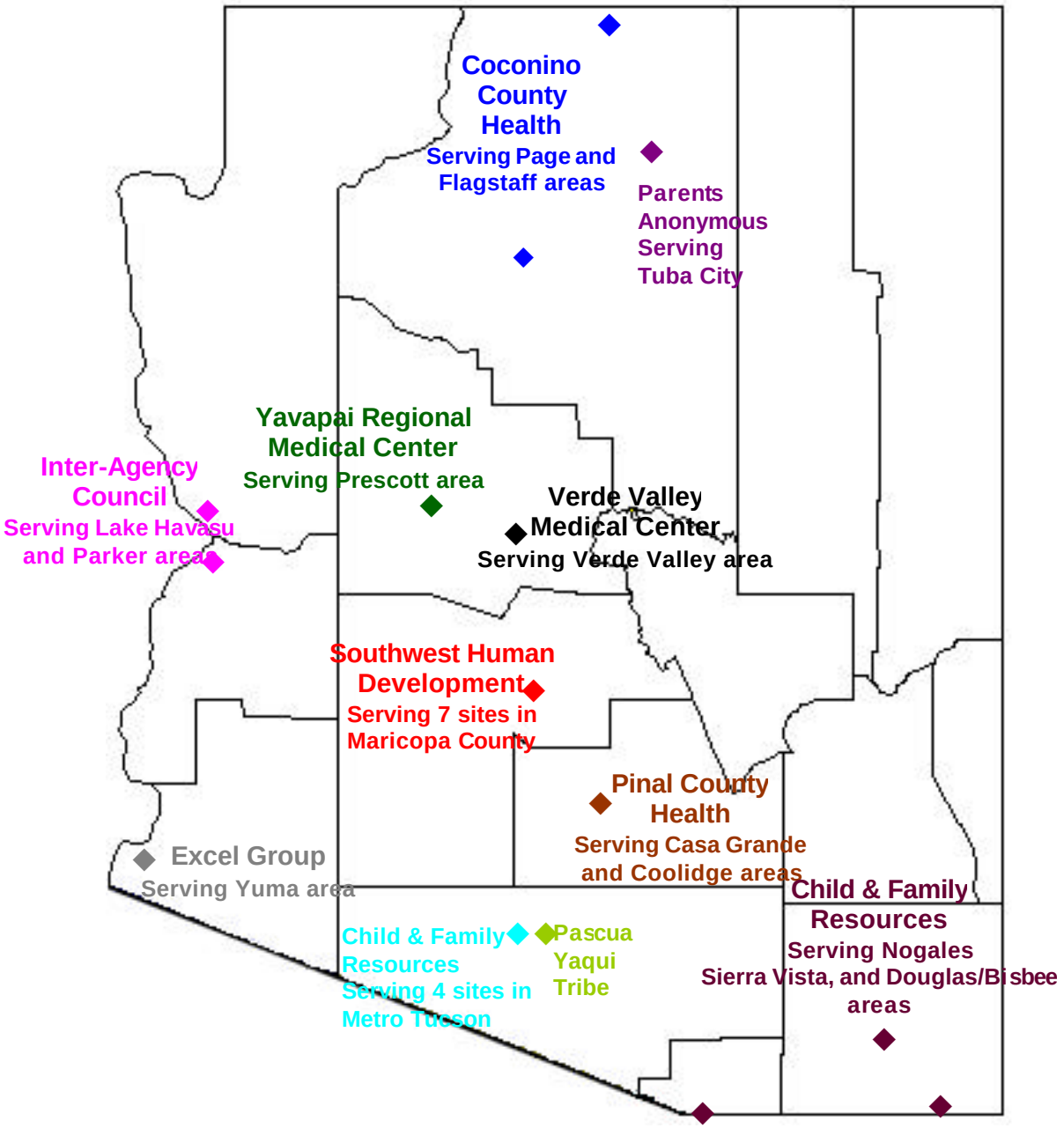
[3] Consists of approximately $164,400 and $60,600 received from the Community Based Family Resource and Support and the Safe and Stable Families Act federal grants, respectively.

[4] Calculation based on the total number of families served (1,254) during the fiscal year, including families who have disenrolled. Calculation excludes the federal grants and contractor contributions to arrive at the State's contribution per family.

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

Figure 1

Healthy Families Program
Contract Provider Locations[1]
Year Ended June 30, 2000



[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: Auditor General staff analysis of Department of Economic Security Healthy Families contracts for the year ended June 30, 2000.

savings associated with the program and rates of enrollment and disenrollment.

During this annual evaluation, Auditor General staff visited 11 of 23 sites. Site visits included:

- An interview with site manager(s);
- A group interview with home visitors and assessment workers;
- Accompanying home visitors on 1 to 2 home visits. During home visits, evaluators interviewed 13 program participants and conducted 13 structured observations of the visit; and
- Reviews of 110 participant files to check the accuracy of Healthy Families databases. Specifically, information obtained from the file reviews was compared to information in the program's database. This comparison showed that data was reliable.

Evaluators also analyzed data from the following assessment tools:

- The Parenting Stress Index, which provides a measure of parental stress;
- The Child Safety Checklist, which measures the safety of the home environment;
- The Ages and Stages Questionnaire, which assesses children for potential developmental delays.

A description of the assessment tools is included in the Appendix (see pages a-i through a-ii).

In addition to the assessment tools, evaluators collected and analyzed:

- Approximately 83,000 records of substantiated and unsubstantiated CPS reports to determine the number of reports received by program participants and members of the comparison group;

- Immunization rates of children in the program;

- Healthy Families participant usage of two types of public assistance: Temporary Assistance for Needy Families (TANF) and food stamps.

In conducting the analyses of child abuse rates, evaluators compared substantiated and unsubstantiated report rates for Healthy Families participants with those of a comparison group. Healthy Families participants included in the analysis of abuse rates are those participants who enrolled in the program from July 1, 1997 to November 30, 1999, received at least four home visits, and participated in the program for at least six months. The comparison group comprised individuals who enrolled in Healthy Families between July 1, 1997 and November 30, 1999, but left the program before receiving four home visits. Evaluators also analyzed CPS data to determine how many participants and comparison group members were referred to Family Builders, which is a program that provides services to families who have been reported to CPS for low and potential risk of child abuse.

The evaluation includes findings and recommendations in the following areas:

- Child abuse rates for Healthy Families participants and the comparison group are not significantly different;

- The Healthy Families program succeeds in providing health referrals, encouraging on-time immunizations, and promoting safety.

- Parenting stress measure shows improved family relations.

In addition to these finding areas, the evaluation also contains an Other Pertinent Information section (see pages 31 through 34), regarding the implementation of new methods for measuring program outcomes. These changes address recommendations made in the last Auditor General Report (Report No. 00-1).

Acknowledgements

The Auditor General and staff express appreciation to the Director of the Department of Economic Security and DES staff in the Division of Children, Youth, and Families and the Office of Evaluation; the Manager of the Office of Prevention and Family Support, Healthy Families Statewide Coordinator, and Program Specialist; Healthy Families Data Management, Evaluation and Quality Assurance staff; Healthy Families supervisors, home visitors, and family assessment workers; and the Department of Health Services' Bureau of Epidemiology and Disease Control for their cooperation and assistance during this evaluation.

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FINDING I HEALTHY FAMILIES PARTICIPANT CHILD ABUSE RATES DO NOT DIFFER SIGNIFICANTLY FROM THE COMPARISON GROUP

For the second year in a row, comparison of child abuse rates for Healthy Families participants and families who left the program show that abuse rates were not significantly different. While one possible explanation of these findings might be that the program does not have a significant effect on child abuse, other explanations may also account for the similarity in outcomes between the two groups.

Child Abuse Rates for Healthy Families Participants and Comparison Group Similar

Child abuse rates for families who participated in the Healthy Families Program did not differ significantly from child abuse rates for a comparison group of families who left the program after only a short time. Additionally, substantiated reports for many participants and control group members occurred a year or more after program enrollment. Finally, abuse rates found in this report are consistent with rates found in the Auditor General's last evaluation (see Report No. 00-1).

Evaluation compared Healthy Families participants with others who left the program—To assess the program's effect on child abuse, evaluators reviewed CPS records in the Children's Information Library Data Source (CHILDS).[1],[2] The analysis included

[1] The data system contains abuse report information such as the alleged abuser, report date, reporting source, and investigation findings.

[2] Auditor General staff also reviewed the CHILDS system's intake, investigation, and security procedures to determine whether adequate controls for ensuring the reliability and accuracy of data were in place. Staff concluded that such controls were in place.

all substantiated and unsubstantiated CPS reports made at least six months after intake in Healthy Families for participants and comparison group members. This time period was selected to allow participants to have sufficient program exposure before assessing whether the program had an impact. For instance, for families with intake dates of July 1, 1997, evaluators examined reports made on or after January 1, 1998. Evaluators also examined the proportion of participants and comparison group members who received referrals to Family Builders during the same period.

The Healthy Families participant group comprised families who received at least four home visits and participated in the program for at least six months; members of the comparison group left the program before receiving four home visits. The analysis included 1,139 program participants and 512 families in the comparison group.

Participant abuse rates do not differ from comparison group.

No significant difference between Healthy Families and comparison group—The analysis revealed that Healthy Families participants and comparison group members had similar rates of CPS reports. For substantiated reports—those in which DES concluded that abuse occurred—the percentage of families who had a report on file was 1.7 for program participants, and 1.8 percent for the comparison group. The slight difference between the two is not statistically significant. For unsubstantiated reports, program participants had a slightly higher rate (6.1 percent versus 5.5 percent for the comparison group), but again the difference was not statistically significant.

As a further point of comparison, evaluators also analyzed the percentage of program participants and comparison group members who were referred to Family Builders. Family Builders is a program that provides services to families who have been reported to CPS for low and potential abuse risk. Once referred to Family Builders, the report is closed and CPS does not conduct an investigation of the case.[1] Results show that 1.8 percent of program participants and 2.7 percent of the comparison group

[1] To be eligible for Family Builders, the family cannot have an existing open file with CPS. Additionally, the case cannot involve allegations of sexual abuse, or current injuries, or involve a child who is currently in out-of-home placement or a ward of the State.

were referred to Family Builders. However, this difference is also not statistically significant. Results are summarized in Table 2.

Table 2

Healthy Families Program
Percentage of Participants and Comparison Group Members with Substantiated and Unsubstantiated Reports of Abuse and Referrals to Family Builders
Reports Received Between January 1, 1998 and May 31, 2000

Outcome Measure	Program Participants	Comparison Group
Substantiated reports of abuse [1]	1.7%	1.8%
Unsubstantiated reports of abuse [1]	6.1	5.5
Referred to Family Builders [1]	1.8	2.7

[1] Differences are not statistically significant.

Source: Auditor General staff analysis of data provided by Child Protective Services and the Healthy Families Program.

Many reports received one year after intake—The majority of program participants and comparison group families with substantiated reports of abuse received these reports at least one year after their initial intake into the Healthy Families Program. Over half the reports were received two years after intake.[1] Moreover, the results of this analysis also show that 79 percent of Healthy Families participants who have a substantiated report in the CHILDS database received the report after they left the program.

Comparison with prior Auditor General reports—The rates found in this report are consistent with those found in the Auditor General's last evaluation (see Report No. 00-1). However, an Auditor General evaluation issued in January 1998 found higher

[1] For this analysis, evaluators included all substantiated reports that occurred at any point after intake—that is, they did not limit the analysis to reports that occurred after six months of exposure to the program.

abuse rates (see Report No. 98-1). Specifically, 3.3 percent of program participants and 8.5 percent of comparison group members received substantiated reports of abuse (see Table 3). These findings show a decrease in rates over the last two years.

Table 3

Healthy Families Program
Percentage of Participants and Comparison Group Members with Substantiated Abuse Reports
Office of the Auditor General Evaluations

Issue Date	Healthy Families Participants	Comparison Group
January 1998 [a]	3.3%	8.5%
February 2000 [b]	1.6	1.4
February 2001 [b]	1.7	1.8

[a] Difference between Healthy Families participants and comparison group statistically significant at the .001 level. That is, the probability that the difference in rates occurred by chance is less than 1 in 1,000.

[b] Difference between Healthy Families participants and comparison group not statistically significant.

Source: Auditor General staff analysis of data provided by Child Protective Services and the Healthy Families Program.

Possible Explanations of Results

There are several possible explanations for evaluation results.

There are several possible explanations for the evaluation results. First, it is possible that the effects of the program on preventing child abuse cannot be adequately measured by the current evaluation design because of various factors associated with changes in abuse reporting requirements. Second, it is possible the program's impact is lessened because most program services occur before the time period when the risk of child abuse increases. Third, the program may not have an effect on preventing child abuse.

Explanation 1: Program reduces child abuse risk but various factors might have affected the results—Compared to the 1998 evaluation, Healthy Families participants and comparison group members were found to have lower rates of abuse in

the current and last evaluations. The reduction in abuse rates for both groups may reflect changes in CPS child abuse substantiation standards, changes in the construction of the comparison group, and changes in program enrollment that occurred after the 1998 evaluation. These changes may have affected the evaluation design, limiting the ability of evaluators to assess the program's impact on child abuse. Specifically,

- **Overall there is a lower occurrence of substantiated abuse, due in part to the appeals process**—Effective January 1, 1998, DES changed its procedures for substantiating reports of abuse and neglect. Under A.R.S. §8-811, the Department created the Protective Service Review Team (PSRT). The PSRT reviews reports of abuse and / or neglect to determine if report allegations should be substantiated in the Department's Central Registry.[1] Since the implementation of the PSRT, substantiation rates have decreased. According to a DES report, 25 percent of CPS cases were substantiated in fiscal year 1999, the first full fiscal year with the appeals process in place.[2] In comparison, 45 percent of cases were substantiated in fiscal year 1997, the last fiscal year without the appeals process.

- **Comparison group different**—The current comparison group comprised families who left the program before receiving four home visits. This comparison group differs from the group used in the 1998 evaluation, which was constructed using individuals eligible for Healthy Families but who could not enroll because the program was full. Although current comparison group families did not receive four home visits, many received one to three visits. During these initial visits, Healthy Families staff explain the program's mandatory CPS reporting policy and provide information about child safety (for example, the importance of never shaking a baby, or leaving a baby unattended). Within

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1 PSRT reviews do not include those cases in which criminal or civil charges have been filed against the alleged abuser.

2 Department of Economic Security. *Child Welfare Reporting Requirement: Annual Reports for the Period July 1, 1996 through June 30, 1997, and the Period of July 1, 1998 through June 30, 1999.*

the first three visits these families can also receive various referrals for family assistance.

In addition, in the current analysis, there are some small but statistically significant differences between participants and the comparison group. Participants are slightly older, less likely to be single, and less likely to be employed. Participant scores on the Family Stress Checklist Risk Assessment are also higher by an average of one point. No significant differences were found when comparing annual household income, education level, or ethnicity.

- **Families with abuse history excluded from the program**—Effective June 1, 1998, the Healthy Families statute (A.R.S. §8-701) was changed, prohibiting the enrollment of families with prior substantiated CPS abuse reports. Families who received a substantiated report, but were already enrolled in the program, were also required to exit.[1] Thus, families with a demonstrated propensity for abuse are no longer enrolled in the program.

Explanation 2: Program impact on abuse may be affected by timing and length of participation—Evaluators' preliminary analysis of report dates for substantiated abuse reveals that the majority of program participants and comparison group members who receive reports do so one year or more after the family's initial exposure to the program. In most cases, the abuse reports for program participants also occurred after the family left the program as a majority of families participate for 12 or fewer months. Therefore, it is possible that the risk of child abuse may increase as the child gets older, but that participants have already left the program before this increase occurs.

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[1] Comparison of initial assessment scores for parents who entered the program before June 1, 1998, with scores of those parents who entered after June 1, 1998, suggest current enrollees are less at-risk. Specifically, Family Stress Checklist (FSC) scores are lower for participants who entered the program after the enrollment criteria changed. The average FSC score is 38.6 for pre-June 1, 1998, enrollees and 36.4 for post-June 1, 1998, enrollees. This difference is significant at the .001 level. Scores of 25 or higher indicate a potential risk to commit abuse.

Explanation 3: Groups do not differ because program might not reduce child abuse risk—Because last year's and this year's evaluations show no difference in program participant and comparison group abuse rates, it could be concluded that the program does not reduce child abuse risk. However, before making this determination, evaluators would prefer to address the other possible explanations. This would involve constructing additional comparison groups of "at-risk" families who have not received any child abuse prevention services. Additionally, because abuse often occurs a year or more after program enrollment, other measures of the program's long-term effect will have to be developed. However, establishing new comparison groups and developing additional long-term measures would require extensive efforts and the results of the further analyses would likely not be available for several years.

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FINDING II

HEALTHY FAMILIES PROGRAM PROVIDES HEALTH REFERRALS, ENCOURAGES ON-TIME IMMUNIZATIONS, AND PROMOTES SAFETY

Although the Healthy Families Program's long-term effect on preventing child abuse cannot be clearly determined, it has been successful in providing health referrals, encouraging on-time immunizations, and promoting safety. More specifically, on average, the majority of children in the program are fully immunized and most children have a primary health care provider. Additionally, most children receive regular developmental assessments. Parents also improved their compliance with home safety measures over time.

Background

According to program goals defined in the Healthy Families statute (A.R.S. §8-701), the program is required to provide parents with information about child development and preventative health care. Program goals also include reducing participant substance abuse. To determine if the program is achieving these goals, evaluators examined several health, safety, and development measures. The measurement tools used to collect this information are described in the Appendix (see pages a-i through a-ii).

Although program goals include reducing participant substance abuse, evaluators reported in the February 2000 evaluation (see Auditor General Report No. 00-1) that the program's impact on reducing participants' dependency on drugs and alcohol could not be determined. Specifically, evaluators reported in the

February 2000 evaluation that the CAGE[1] substance abuse screen used by the program was not an adequate measure for assessing change in drug and alcohol usage and recommended replacing this instrument. To address this recommendation, the Healthy Families Program began using a new substance abuse questionnaire in July 2000 (see Other Pertinent Information, pages 31 through 34). However, data from the questionnaire will not be available for analysis until the 2001 evaluation.

Participants Receive Developmental Screenings, Referrals, and On-Time Immunizations

Evaluators found that consistent with the January 1998 and February 2000 evaluations, the majority of children in the Healthy Families Program received age-appropriate immunizations and developmental screenings. Most participants also had a primary health care provider. Results of the developmental assessments show that most children in the program are developing normally. However, for those children identified as potentially having delays, the program provides referrals to appropriate services and recently began tracking those referrals in its new family update form (see Other Pertinent Information on page 31).

Healthy Families monitors immunization rates and promotes preventative medical care—Eighty-five percent of two-to-three-month-old children enrolled in the program are fully immunized. At four months of age, 73 percent of children in the program are fully immunized; at 6 months of age, 66 percent are fully immunized; and at 1 year to 15 months of age, 73 percent are fully immunized. Generally, these rates are higher than estimated vaccination rates for children served by local public health clinics in the same areas as program sites. Additionally, these

[1] The acronym "CAGE" is derived from the first letter in each of four questions that are asked of the respondent: (1) Have you every 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? (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.

rates are comparable to statewide rates for Arizona reported by the Centers for Disease Control and Prevention.

In addition to encouraging parents to ensure that their children are fully immunized, the program also emphasizes the importance of preventative and routine medical care. At 2 months in the program, 97 percent of children had a medical primary care provider; and at 6 and 12 months, 98 percent of children had a medical provider.

To promote positive health outcomes, home visitors ask about immunization schedules for the children they serve, provide educational information about immunizations, and refer families to health / immunization clinics. In addition, program staff emphasize the importance of routine and preventative medical care and encourage participants to use referrals to obtain a primary care provider.

Program conducts developmental assessments of participants' children.

Healthy Families program conducts developmental assessments—Home visitors use the Ages and Stages Questionnaire (ASQ) to conduct regular assessments of the physical and social development of children enrolled in the program. The ASQ is administered at the following ages: 4, 6, 12, 18, 24, 30, 36, and 48 months. In addition to conducting these assessments, home visitors provide families with information about the developmental stages to alert parents to signs of potential delays and reduce fears associated with unrealistic expectations. Program participants cited developmental assessments as important for identifying milestones, early detection of potential delays, and reducing confusion about their child's development.

Results of the ASQ reveal that most children in the program are developing at levels that are appropriate for their age (see Table 4, page 24). The ASQ assesses five developmental areas—communication, gross motor skill, fine motor skill, problem solving, and personal social development. If a child receives a score below the minimum level for normal development, home visitors are trained to explain the result to the parent and provide referrals to a primary health care provider, or the Arizona Early Intervention Program (AzEIP), to arrange for further assessment.

However, as with the previous Auditor General report (see Report No. 00-1), evaluators were unable to directly link develop-

mental screenings with referrals to AzEIP or a health care provider. The program has revised its family update form. The update form now contains questions which enable the program to document if children with developmental delays are offered the appropriate referrals. This change is discussed in the Other Pertinent Information section of this report (see pages 31 through 34).

Table 4

Healthy Families Program
Ages and Stages Questionnaire
Percentage of Children Developing at Age-Appropriate Levels
January 1994 to May 2000

Type of Development	Age in Months							
	4	**6**	**12**	**18**	**24**	**30**	**36**	**48**
Communication	98.4%	99.8%	98.6%	89.8%	89.4%	91.8%	92.4%	96.7%
Gross motor skills	91.7	98.5	97.5	99.2	95.6	95.9	98.2	98.9
Fine motor skills	96.5	99.0	98.8	98.9	96.0	91.2	95.5	98.9
Problem solving	96.7	99.1	96.0	98.6	93.8	93.9	89.2	81.9
Personal/Social	96.5	98.6	97.0	99.9	93.3	94.7	94.6	100.0
Number of children[1]	1,884	1,849	1,183	741	499	342	224	94

[1] The number of children varies by scale; the number reported is the largest number assessed for that age group.

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

Participants Show Significant Improvements in Home Safety

The safety of program participants' homes improves over the course of their enrollment in the program. Healthy Families staff administer the Child Safety Checklist (CSC) to identify potential safety hazards and also discuss with parents ways to improve home safety. On average, program participants improved their home safety after one year by taking steps to comply with items on the CSC.

Participants improve home safety.

Healthy Families participants maintain homes that meet child safety requirements—Evaluators analyzed results from the CSC at 2, 6, and 12 months and found that home safety improves after a year of enrollment. On average, the percentage of child safety measures implemented improves from 87 percent to 94 percent between 2 to 12 months (see Table 5). Analyses of individual items on the checklist show significant improvement in key safety measures such as covering outlets and keeping poisons and small items that are potential choking hazards out of reach (see Appendix, page a-ii, for a description of the checklist). Nearly all of the program participants indicated initial (2 months) and subsequent (6 and 12 months) compliance with other important safety measures such as using car seats, making sure their child is never alone in the house or car, and keeping dangerous objects such as scissors and matches out of their child's reach.

Table 5

Healthy Families Program
Percentage of Safety Measures Implemented
by Age of Child
July 1998 to May 2000

Age of Child	Percentage Implemented [1]
2 months	87%
6 months	91
12 months	94

[1] Increases in percentages of safety measures implemented are all statistically significant at the .001 level. That is, the probability that the average gain in compliance occurred by chance is less than 1 in 1,000.

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

Recommendations

1. To ensure compliance with its statutorily defined goal to reduce substance abuse, the Healthy Families Program should continue to implement the new questionnaire for assessing participant substance abuse problems and method for tracking substance abuse referrals.

2. To ensure that families with children who receive scores in the delayed range on the ASQ receive appropriate referrals, the Healthy Families Program should continue to implement new measures for tracking these referrals.

FINDING III PARENTING STRESS MEASURE SHOWS IMPROVED FAMILY RELATIONS

Parents have reduced stress after 12 months in the program.

Results from the Parenting Stress Index show that parental stress decreases after 12 months of participation. Evaluators also found that parents with higher scores on the restricted role, isolation, and depression subscales were more likely to receive referrals to mental health services compared with those whose scores indicated lower risk. To assist families in improving parent-child interaction, home visitors provide emotional support and information to help parents understand their child's behavior.

Background

To address recommendations in the last Auditor General evaluation, the Healthy Families program discontinued using the Home Observation for Measurement of Environment (HOME) to assess family functioning (see "Other Pertinent Information," pages 31 through 34). In place of the HOME, the program is using the Parenting Stress Index (PSI) to measure family relations. The PSI is first administered to program participants after 3 weeks of enrollment and then again at 6 and 12 months. Currently, there is no comparison group for this measure.

Participants' Stress Reduced After 12 Months

Although scores for most Healthy Families participants are within normal ranges, after 12 months in the program participants show statistically significant decreases in parental stress on 6 of the PSI's subscales. As shown in Table 6, stress related to attachment, role restriction, competence, social isolation, depression, and mood is lower at 12 months than it is at 3 weeks.

Table 6

Healthy Families Program
Average Parenting Stress Scores
After 3 Weeks and 12 Months in the Program
July 1998 to May 2000

Scale[1]	Normal Stress Range	Participant Scores	
		3 Weeks	12 Months
Competence[2]	23-34	31.9	29.9
Attachment[2]	10-15	13.1	12.0
Role Restriction[2]	14-23	20.0	18.5
Depression [2]	16-24	20.2	19.1
Isolation [2]	10-16	14.1	13.2
Distractibility [3]	20-28	25.3	25.0
Mood [2]	7-11	10.9	9.4

[1] Higher numbers indicate higher stress levels. See Other Pertinent Information (pages 31 through 34) for detailed information on these scales.

[2] Differences from 3 weeks to 12 months are statistically significant at the .05 level or better. That is, the chance that the average reduction in parenting stress occurred by chance is less than 5 in 100. Evaluators also analyzed participant PSI scores at 6 months. For the competence, role restriction, and mood subscales evaluators found significant differences between scores at 3 weeks and 6 months. Scores for the depression and attachment subscales at 6 months were significantly different from scores at 12 months.

[3] Differences not statistically significant.

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

Research has shown that high scores on parenting stress are related to the potential to abuse one's child. Conversely, low to normal scores are related to positive parent-child relationships. Thus, reductions in parental stress suggest that program services may improve family relations.

Parents With Higher Stress More Likely to Receive Mental Health Referrals

Additionally, participants who scored in the higher risk ranges for depression, isolation, and role restriction were more likely than families scoring at lower risk levels to receive referrals for mental health services. This shows that the PSI may also be a useful tool for identifying families who need additional services.

Home Visitors Provide Information on Parent-Child Bonding

To assist families with parent-child interaction, home visitors provide emotional support and information to help parents understand their child's behavior. Information provided can include methods for alleviating stress, activities to improve parent-child interaction and bonding, and referrals to counseling services to assist with family relationship problems.

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OTHER PERTINENT INFORMATION

The previous report issued by the Office of the Auditor General (see Report No. 00-1) offered several recommendations to improve the measurement of the Healthy Families Program's effect on family functioning and reduction of substance abuse. It is necessary for the program to continue collecting data on the program's effect on family relations and reducing dependency on drugs and alcohol because these are defined in statute (A.R.S. §8-701) as two of the program's five goals. The previous evaluation report also recommends tracking referrals for children with developmental delays. To address these recommendations, the program has implemented several changes.

Healthy Families stopped using the HOME—During last year's evaluation, evaluators were not able to make definitive conclusions about the program's impact on family functioning because the analysis was limited by reliability problems with the Home Observation for Measurement of the Environment (HOME) assessment tool. Specifically, statistical analyses of variety, acceptance, and organization—three of six areas assessed by the HOME—revealed that questions within each area were not strongly related to each other. This suggests that some items on the HOME do not measure the concepts they were intended to assess.

Program stopped using the HOME assessment.

Following the Auditor General's recommendation, the program stopped using the HOME. However, because improving family relations and family unity are defined in statute as program goals, it is necessary for the program to collect information related to these goals. Therefore, in place of the HOME, the program will use the Parenting Stress Index (PSI) to assess the program's impact on family relations. Past research has shown that low scores on the PSI are related to positive parent-child relationships. In particular, the PSI, designed to measure "stressful parent-child systems," can identify areas in which improvements are needed in parent-child relations. Below are descriptions of what high shores on each subscale indicate, according to

Richard Abidin, PSI's creator[1]. The first five scales measuring competence, isolation, attachment, restricted role, and depression focus on parent characteristics. The last two scales, measure child distractibility and child mood, focus on child characteristics.

- **Competence:** High scores on the competence scale can be the result of the lack of child development knowledge, limited child management skills, or a feeling that parenting is less reinforcing than expected. High scores may also be related to "lack of acceptance and criticism from the child's other parent."

- **Isolation:** Parents who score high on the social isolation scale tend to be "isolated from their peers, relatives, and other emotional support systems." Additionally, "in many instances, their relationships with their spouses are distant and lacking in support for their efforts as parents."

- **Attachment:** High scores on attachment may indicate that parents do not feel closeness with their child or feel unable to understand the child's feelings and needs.

- **Restricted Role:** High scores indicate that the parent sees the child as restricting their freedom and may feel controlled by their child's demands or needs. As a result, resentment and anger may build toward one's child and / or spouse.

- **Depression:** High scores on the depression scale can be indicative of clinical depression. Depressed parents may lack the energy needed to fulfill parental responsibilities.

- **Child Distractibility:** High scores on this subscale indicate that either the child has Attention Deficit Disorder with hyperactivity or that the child is normal, but that the parent lacks the energy to keep up with the child.

- **Child Mood:** High scores on child mood are associated with children who are unhappy and depressed. When scores are extremely high, there may be impairment in parental at-

[1] Richard R. Abidin. *Parenting Stress Index: Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc., 1995.

tachment or parents may be absent or unavailable due to drug abuse or alcoholism.

Healthy Families replaced the CAGE—Evaluators noted in the previous report that, lacking a better instrument, Healthy Families has used the CAGE substance abuse screening measure since July 1, 1998. However, the CAGE, which contains questions for identifying individuals with an alcohol and / or drug abuse problem, does not allow the program to track whether a participant's problem with substance abuse changes over time. To address the Auditor General recommendation to replace the CAGE, the program began using a new questionnaire on July 1, 2000. The new questionnaire measures the program's effect on reducing dependency on alcohol and drugs over time. In addition, the program has also added questions to its family update form, which will enable staff to track referrals for substance abuse treatment.

Program replaced substance abuse questionnaire.

The new substance abuse assessment was adapted from the Health Screening Survey (Fleming and Barry, 1991) and includes items that measure current substance usage. For instance, participants are asked to indicate, over the past three months, the number of days per week they drank alcohol, and the number of drinks they typically have had during a single occasion. Unlike the CAGE, which only captures lifetime usage, the new assessment allows evaluators to assess changes in drinking patterns over time.

The program will track referrals for children with delays—The previous Auditor General report noted that when children receive scores in the delayed range on the Ages and Stages Questionnaire (ASQ) home visitors are trained to provide a referral to a medical provider or the Arizona Early Intervention Program (AzEIP). However, because most families in the program receive medical or social services, evaluators were unable to determine the extent to which families receive services directly related to a developmental delay identified by the ASQ. To address the previous report recommendation that the program track referrals for children identified as having a potential developmental delay, Healthy Families has revised its family update form. The form now contains questions, which supplement the ASQ,

Program will track referrals for children with developmental delays.

and will be used to track whether children with developmental delays are offered appropriate referrals. The new form was implemented on July 1, 2000, and data from this measurement will be analyzed in the next evaluation.

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 program participants.

- **Number of Participants—**Since 1994, 4,421 families have participated in Healthy Families. Of these, 3,267 met program criteria for being officially engaged in the program. That is, they received at least four home visits from a home visitor. The remaining 1,154 received three or fewer home visits and were included as a comparison group when examining child abuse rates.

- **Mother's Age, Marital Status, Income, Ethnicity, Education, Employment Status, and Risk Score—** Information about the age, marital status, income, ethnicity, employment status, and educational status of participants is shown in Table 7 (see page 36). Because in nearly all cases, the child's mother is the primary program participant, information is provided for mothers only and is presented separately for participant families and for comparison group families. Statistical analyses showed that these two groups were similar in most areas, with a few exceptions. Comparison group members were more likely than participants to be single and employed. On average, participants were also slightly older (average age of 22.9) than the comparison group (average age of 22.3). In addition, scores on the Family Stress Checklist risk assessment tool were slightly higher for participant families (average score of 38) than for comparison group families (average score of 37), and the difference was statistically significant. No significant differences were found when comparing annual household income, education level, or ethnicity.

Table 7

Healthy Families Program
Participant and Comparison Group Member Profile
January 1994 through May 2000

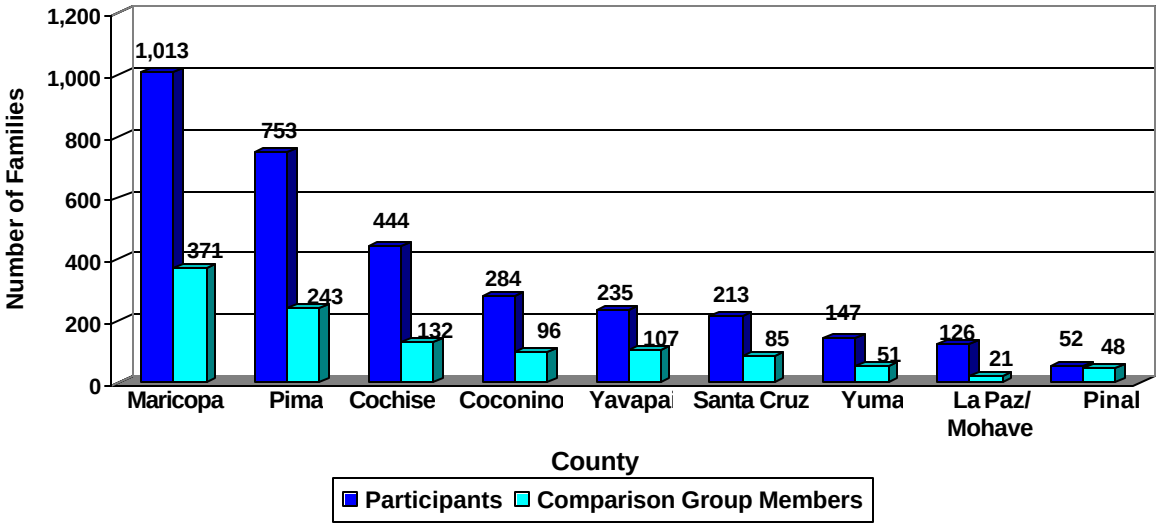
	Program Participants N (total number of participants) =3,267	Comparison Group N (total number of comparison group members)=1,154
Mother's age		
11-15	6.0%	5.7%
16-19	34.6	37.8
20-25	34.2	36.1
26-30	13.1	11.4
31 and older	12.1	9.1
Marital status		
Single	68.2	76.7
Married	20.3	13.4
Divorced	3.1	3.3
Separated	3.5	3.6
Widowed	.2	.3
Other/Unknown	4.6	2.8
Annual income		
$10,000 and under	61.9	62.5
$10,001-$15,000	20.4	19.2
$15,001-$20,000	9.0	8.7
$20,001-$30,000	5.8	7.9
$30,001 and higher	2.9	1.7
Mother's ethnicity		
Hispanic	54.3	54.8
Caucasian	23.8	24.0
African-American	7.9	8.7
Native American	10.0	8.4
Asian-American	.5	.2
Other	3.5	4.0
Percentage employed at intake	13.2	18.8
Full-time	62.9	69.1
Part-time	37.1	30.9
Average years of education	10.3	10.4
Average risk score on Family Stress Checklist (Range 5 to 85)	37.9	37.0

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

- **Regions Served—**The Healthy Families Program serves families in 10 of Arizona's 15 counties. The number of participants served from each county is shown in Figure 2 (see page 37).

Figure 2

Healthy Families Program
Number of Participants and Comparison Group Members by County
January 1994 through May 2000



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

- **Number of Children, Household Size, Sex of Child, Health Insurance, and Public Assistance Usage—**Table 8 (see page 38) presents information on program participants' number of children, household size, and the proportion of female and male children served by the program. It also provides information on participants' self-reported health insurance status and use of public assistance. Statistical analyses revealed that, on average, comparison group members had a slightly larger household size (average of 4.89) than participants (average of 4.65). No significant differences were found for the number of children in participant versus comparison group families or for the proportion of male versus female children served in each group. In addition, no group differences were found for health insurance status or for the proportion

Table 8

Healthy Families Program
Participants and Comparison Group Members
Profile of Family Characteristics
January 1994 through May 2000

	Program Participants N (total number of participants) = 3,267	Comparison Group N (total number of comparison group members) = 1,154
Number of children		
1	54.0%	55.2%
2-3	34.3	35.6
4-5	9.5	7.3
6 or more	2.1	1.8
Household size		
2-3	33.0	30.6
4-5	39.2	37.4
6-7	19.4	21.1
8-9	6.5	7.2
10 or more	1.8	3.6
Sex of child		
Female	49.6	50.2
Male	50.4	49.8
Health insurance		
AHCCCS[1]	80.3	80.1
Private	9.3	9.1
Other	3.3	2.9
None	6.1	6.1
Unknown	1.0	1.2
Public assistance services used as reported at intake		
TANF[2]	24.7	23.3
Food Stamps	35.6	35.4
WIC[3]	80.1	78.9

[1] Arizona Health Care Cost Containment System.

[2] Temporary Assistance for Needy Families.

[3] Women, Infants and Children Nutrition Program.

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

of program participants using Temporary Assistance for Needy Families (TANF), food stamps, or Women, Infants and Children (WIC).

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

See Introduction and Background (page 6) for information on contractors and program service providers.

C.3. Information on program revenues and expenditures.

See Table 1 (page 7) for information on program revenues and expenditures.

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

As of May 31, 2000, there were 1,178 families enrolled in Healthy Families. Since 1994, 4,421 families have enrolled. Table 9 (see page 40) provides information about the length of participation for families who have exited the program. These families participated for a median of 195 days (or 6 and a-half months). Among families who were active participants as of May 31, 2000, the median duration of participation was slightly more than 1 year (379 days).

In addition, the January 1998 Healthy Families evaluation reported an attrition rate of 45 percent for fiscal year 1997. An attrition rate for a given fiscal year is computed by dividing the number of families who exited the program during that year by the number who participated in the program at any point during the year. The corresponding attrition rates for fiscal years 1998, 1999, and 2000 were 42 percent, 40 percent, and 35 percent, showing a gradual improvement in retention. [1]

Figure 3 (see page 40) shows the most common reasons participants exit the program. More than half terminate because they have moved or because the program could not contact the family after several attempts. Other reasons for termination include participants' refusal of fur-

[1] Thirty-five percent attrition rate for 2000 includes 11 months of data from fiscal year 2000 (July 1, 1999 through May 31, 2000).

ther services, refusal of a change in home visitor, and achievement of self-sufficiency.

Table 9

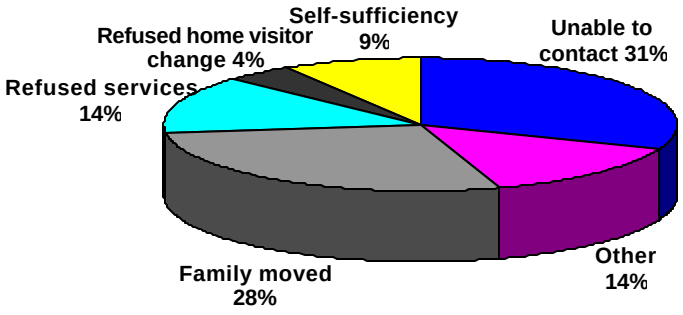
Healthy Families Program
Months of Participation for Families at Exit
January 1994 through May 2000

	Number	Percentage
1-6 months	1,520	46.9%
7-12 months	773	23.9
13-18 months	382	11.8
19-24 months	197	6.1
25-30 months	128	3.9
31-36 months	90	2.8
37-48 months	97	3.0
49-60 months	53	1.6
Total	3,240	

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

Figure 3

Healthy Families Program
Reasons for Exit
January 1994 through May 2000



n (total number of families who left the program) = 3,212

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

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

See Table 1 (page 7) for 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 13 through 19) for information on the program's progress in reducing rates of child abuse and neglect.

See Finding II (pages 21 through 26) for information regarding the program's progress in improving children's health and participants' home environment. Finding II includes information about immunization rates, developmental screenings, child safety, and parent-child interaction.

See Section D (pages 42 through 43) for information on participants' progress in increasing self-sufficiency through employment, and reducing their dependence on public assistance.

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

As discussed in Finding I (see pages 13 through 19), evaluators did not find statistically significant differences in the rates of substantiated child abuse reports for Healthy Families participants and the comparison group. Thus, evaluators cannot estimate potential savings associated with reduction in child abuse rates, examining such factors as costs of CPS investigations, foster care placements, and in-home services.

C.8. Recommendations regarding program administration.

1. To ensure compliance with its statutorily defined goal to reduce substance abuse, the Healthy Families Program should continue to implement new measures

for assessing participant substance abuse problems and tracking substance abuse referrals.

2. To ensure that families with children who receive scores in the delayed range on the ASQ receive appropriate referrals, the Healthy Families Program should continue to implement new measures for tracking these referrals.

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

Current and past evaluations of Healthy Families informational materials show that materials distributed by the program are adequate to address program needs. Specifically, Healthy Families provides program participants with information regarding medical care, mental health, employment, and education. Additionally, the program provides information to promote parent-child interaction and to assist parents with understanding their child's development.

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.

- **Employment rates**—As seen in Figure 4 (see page 44), employment rates for both mothers and fathers enrolled in Healthy Families generally increased over time. Healthy Families can influence these rates by providing referrals to job services. According to program data, 6.3 percent of mothers and 10.5 percent of fathers received a referral to job services within two months of enrollment, 10.2 percent of mothers and 12.8 percent of fathers received such a referral at 6 months, and 12.2 percent of mothers and 12.7 percent of fathers received a job-related referral at 12 months. Although employment rates show an increase, it is important to note that due to attrition, at each time period, there are fewer participants represented. Therefore, it is difficult to determine the extent to

which increases in employment rates are due to program participation or due to differences among people who remain in the program compared to those who drop out.

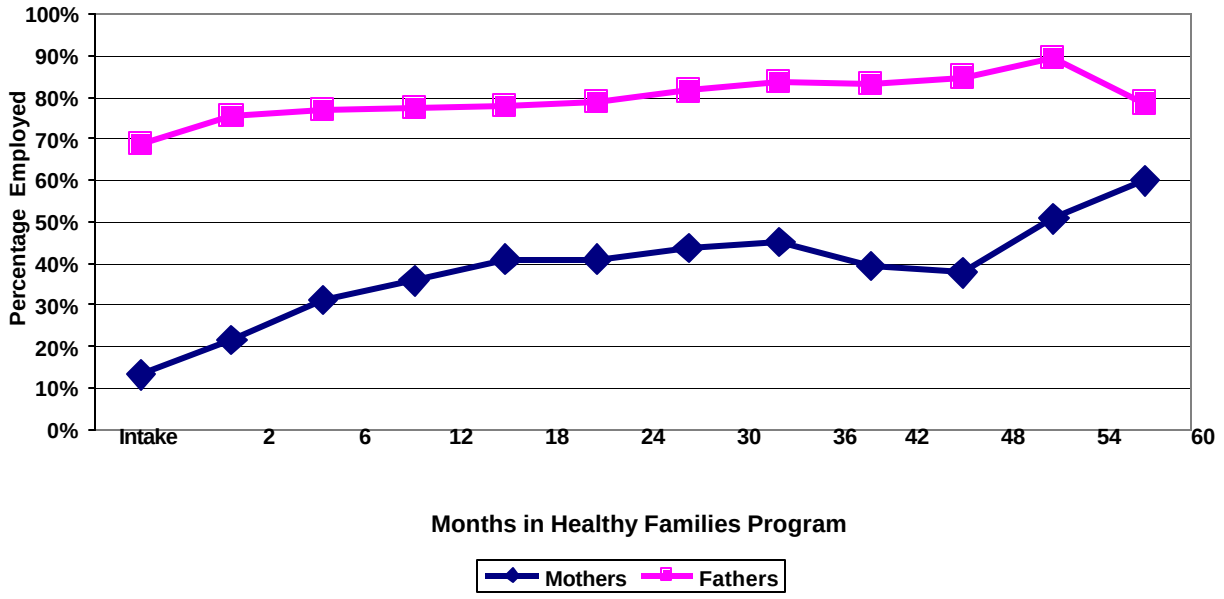
- **Public assistance**—In order to conduct an analysis of public assistance usage, evaluators requested, data from DES,containing all records of Temporary Assistance to Needy Families (TANF) and food stamps received by Healthy Families participants and comparison group members. However, after receiving the data, evaluators learned that information about several of the participants was missing. Therefore, it was determined that any analysis of public assistance usage would provide inaccurate results. In addition, it was not possible to make additional data requests due to the substantial amount of time it would have taken to make the request, receive the data, test it for reliability, and analyze the results.

- **Child safety**—See Finding II (pages 21 through 26) for information on child safety, including the results of the Child Safety Checklist assessment.

- **Income level and family size of those receiving program services**—See C.1. (pages 35 through 38) of this section for income levels and family size of those receiving program services.

Figure 4

Healthy Families Program
Employment Rates of Mothers and Fathers in Program
January 1994 through May 2000



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

Appendix

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Appendix

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, LaWanda Potter, Bob Nickel, and Jane Farrell. *The Ages and Stages Questionnaire: A Parent-Completed, Child-Monitoring System.* Baltimore: Paul H. Brookes Publishing Co., 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 cut down on drinking / drug use? (2) Have you ever felt annoyed by others' criticism of your drinking / drug use? (3) Have you ever felt guilty about your drinking / drug use? and (4) Have you ever had a drink / taken drugs first thing in the morning (eye-opener)? Two or more "yes" responses are considered indicative of a substance abuse problem. The CAGE is administered after 6 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*, 1974, 131, 1121-1123.

- **The Child Safety Checklist (CSC)**—The Child Safety Checklist is an instrument that assesses whether various safety measures in the home have been implemented. The CSC is administered by home visitors 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.

- **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, than at 6 and 12 months of program participation.

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

Agency Response

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

Jane Dee Hull
Governor

John L. Clayton
Director

Ms. Debbie Davenport, CPA
Auditor General
2910 North 44th Street, Suite 410
Phoenix, AZ 85018

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.

Report findings II and III indicate that the program benefits the families we serve. Finding I is inconclusive and is based on an indicator (child abuse report rates) that is a relatively low occurring event in the participant families, the comparison group, and in the general population.

It is important that we keep in mind that the reason the program exists and the reason we focus resources on prevention is to help ensure that no child is maltreated and that all children have the chance to be nurtured and comforted during their growing years into adulthood. Because of the years of positive evaluation outcomes, we believe the Healthy Families Arizona Program is an effective prevention program.

The Department welcomes the opportunity to work with you in helping to find other methods of determining the impact of the program's positive outcomes on the prevention of child abuse and neglect.

The Department will continue to utilize the new forms listed in the two recommendations under Finding II.

Finally, please accept our appreciation for the time and effort invested in this important evaluation. We wish to specifically recognize Laurie Cohen and JoAnne Dukeshire for their dedication during the evaluation process.

Sincerely,

John L. Clayton

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

FINDING I: Healthy Families Participant Child Abuse Rates Do Not Differ Significantly from the Comparison Group

This report has found no significant difference between Healthy Families participants and the comparison group on the rates of substantiated CPS reports. The report states that there are three possible explanations for these results. The true reason may never be known as, but we do realize that using substantiated child abuse and neglect reports as a measure for program success is fraught with difficulties.

State child abuse data often are considered to be the primary indicator of successful prevention efforts. However, if one wishes to obtain an accurate appraisal of family functioning, using CPS data may not be adequate. For example, a national study found that one third of child maltreatment incidents go unreported (Sedlak & Broadhurst, 1996), so reliance on this data will produce an incomplete picture.

Observations of interactions between a parent and child, maternal warmth, sensitivity, and nurturing are better indicators of parent-child relationships than maltreatment reports. Healthy Families Arizona independent evaluations have time and again over the years showed excellent outcomes in these meaningful areas.

The Department will cooperate in any way possible in helping to find or develop a better method of determining the impact of the program's positive outcomes on the prevention of child abuse and neglect.

There are no recommendations under this finding.

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

FINDING II: Healthy Families Program Provides Health Referrals, Encourages On-Time Immunizations and Promotes Safety

The Department agrees the Healthy Families Arizona Program provides health referrals, encourages on-time immunizations and promotes safety in the program's participant families. The Department is proud of the many successes in these areas.

An example of one success is how the direct involvement of a Healthy Families home visitor saved the life of a family of nine. An early morning fire swept through the two-bedroom apartment of a participant family. The mother was alerted in time because the Healthy Families home visitor had recently completed the Child Safety Checklist with the family and had helped them purchase and install smoke detectors in the apartment.

The finding of the Auditor General is agreed to and the audit recommendation will be implemented which states that to ensure compliance with its statutorily defined goal to reduce substance abuse, the Healthy Families Program should continue to implement the new questionnaire for assessing participant substance abuse problems and method for tracking substance abuse referrals.

The Healthy Families Program started using the new substance abuse assessment questionnaire on July 1, 2000 to measure the effect of the program on reducing dependency on alcohol and drugs over time. Questions have been added to the family update form to enable staff to track referrals for substance abuse treatment.

The finding of the Auditor General is agreed to and the audit recommendation will be implemented which states that to ensure families with children who receive scores in the delayed range on the Ages & Stages Questionnaire (ASQ) receive appropriate referrals, the Healthy Families Program should continue to implement new measures for tracking these referrals.

As this report states, the Healthy Families Program already revised the family update form, which was implemented on July 1, 2000. The form includes tracking reporting information on referrals for children identified as having a potential developmental delay. This new form contains questions which supplement the ASQ, and is being used to track whether children with developmental delays are offered appropriate referrals.

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

FINDING III: Parenting Stress Measure Shows Improved Family Relations

The Department agrees the Healthy Families Program has improved family relations in participant families. The outcomes from the Parenting Stress Index show that parental stress decreases after 12 months of participation in the program. As pointed out in this report, research shows that high scores on parenting stress are related to the potential to abuse one's child, and, conversely, low to normal scores are related to positive parent-child relationships. The program also assists participants with higher stress scores to seek mental health services, thus providing help to parents so that they have a better opportunity to become nurturing parents to their children.

The Department fully intends to continue independent evaluation of the Healthy Families Arizona Program and to maintain national accreditation to ensure continued excellence in program delivery and administration.

There are no recommendations under this finding.

Other Performance Audit Reports Issued Within the Last 12 Months

00-4	Family Builders Pilot Program
00-5	Arizona Department of Agriculture—Licensing Functions
00-6	Board of Medical Student Loans
00-7	Department of Public Safety—Aviation Section
00-8	Arizona Department of Agriculture—Animal Disease, Ownership and Welfare Protection Program
00-9	Arizona Naturopathic Physicians Board of Medical Examiners
00-10	Arizona Department of Agriculture—Food Safety and Quality Assurance Program and Non-Food Product Quality Assurance Program
00-11	Arizona Office of Tourism
00-12	Department of Public Safety—Scientific Analysis Bureau
00-13	Arizona Department of Agriculture Pest Exclusion and Management Program
00-14	Arizona Department of Agriculture State Agricultural Laboratory
00-15	Arizona Department of Agriculture—Commodity Development Program
00-16	Arizona Department of Agriculture—Pesticide Compliance and Worker Safety Program
00-17	Arizona Department of Agriculture—Sunset Factors
00-18	Arizona State Boxing Commission
00-19	Department of Economic Security—Division of Developmental Disabilities
00-20	Department of Corrections—Security Operations
00-21	Universities—Funding Study
00-22	Annual Evaluation—Arizona's Family Literacy Program
01-01	Department of Economic Security—Child Support Enforcement

Future Performance Audit Reports

Department of Public Safety—Telecommunications

Department of Public Safety—Drug Abuse Resistance Education (D.A.R.E.) Program

Board of Osteopathic Examiners in Medicine and Surgery