## FIRST STEPS DATABASE

## SAFE BABIES-SAFE MOMS

Laurie Cawthon, M.D., M.P.H. and Karen Westra, Ph.D. Research and Data Analysis Department of Social and Health Services

January 2003 Fact Sheet Number 4.36d Olympia, Washington 98504-5204

SAFE BABIES-SAFE MOMS (formerly the Comprehensive Program Evaluation Project, or CPEP) seeks to improve the health and welfare of substance abusing mothers and their young children. The project attempts to improve long-term outcomes for these families and represents an investment in their future. The comprehensive services offered to substance abusing mothers who are pregnant and/or parenting children under age 3 include Targeted Intensive Case Management (TICM), Residential/Outpatient Chemical Dependency (CD) Treatment, Housing Support Services for Transitional Housing, Parenting Education, and Child Development Assessments and Referrals.

The project is a collaborative effort between the Department of Social and Health Services—Division of Alcohol and Substance Abuse, Medical Assistance Administration, Children's Administration, Research and Data Analysis—and the Department of Health. Three pilot sites—Benton-Franklin Counties, Snohomish County, and Whatcom County—served 417 substance abusing women and their children from January 2000 through November 2002.

This brief report describes three dimensions of client outcomes—low birth weight, parenting and use of family planning services—before and after enrollment in *SAFE BABIES-SAFE MOMS*. The number of women and children included in each analysis varies according to the time frame required for the three measures. The final evaluation report, due December 31, 2003, will include a description of client characteristics as well as more comprehensive outcomes for both women and children.

## Key Findings

- The low birth weight rate for infants born after program entry decreased by 61%, compared to those born before program entry. The low birth weight (LBW) rate for infants born after program entry (4.2%) was much lower than the 10.2% LBW rate for identified substance abusers who gave birth in 1999 and received prenatal treatment for chemical dependency, and lower than the 4.9% LBW rate for Medicaid women with no known substance abuse.
- Use of more effective family planning methods increased by 38% after program entry, with 81 clients (41%) using non-reversible or more effective methods in the year following program entry.
- Clients' self-reported levels of parenting stress decreased from an average score of 76 at intake, significantly higher than that of a national sample of parents (comparison group), to an average score of 71 at six months' follow-up. The six months' follow-up score was similar to that of the comparison group.

**CONCLUSION**: Children born to *SAFE BABIES-SAFE MOMS* clients are healthier, based on improved birth weight. Clients have demonstrated behavior change in their use of more effective family planning methods and reduced levels of parenting stress. These changes indicate that the program is achieving its goal—to improve the health and welfare of substance abusing mothers and their young children. The continuation of these comprehensive services is an investment in positive long-term outcomes.

USE OF FAMILY PLANNING SERVICES. Use of more effective family planning methods increased by 38% after entry into the *SAFE BABIES-SAFE MOMS* program, with 81 clients (41%) using non-reversible or more effective methods in the year following enrollment.

*SAFE BABIES-SAFE MOMS* seeks to reduce subsequent pregnancies for clients. The targeted intensive case management team offers family planning education and unintended pregnancy prevention services and referrals. Not enough time has elapsed since the inception of the program to adequately measure a reduction in the number of subsequent births. One available measure of program outcomes is the use of family planning methods.

Family planning methods used during the year prior to program enrollment were compared to the methods used during the year after enrollment. Medicaid expenditures were used to identify family planning methods. One hundred ninety-nine (N=199) women received Medicaid services during the period September 1997 through February 2002, and were enrolled in *SAFE BABIES-SAFE MOMS* prior to February 1, 2001. Because some family planning methods, such as condoms, may have been obtained without charges to Medicaid, these numbers likely underreport actual use of certain family planning methods. Claims data provide no indication of user effectiveness, which should improve after Safe Babies-Safe Moms. No information about the frequency of sexual abstinence was available.

Family planning expenditures were classified according to reversibility and effectiveness. Hysterectomies and tubal ligations were categorized as non-reversible; IUDs, implantable systems, hormonal and oral contraceptives were categorized as more effective (reversible) methods; diaphragms and condoms were categorized as less effective methods.

#### 80% 67.8% 70% Women Using Method (%) 58.8% 60% 50% 38.2% 40% 27.6% 30% 20% 10% 2.5% 3.0% 1.5% 0.5% 0% Non Reversible Methods More Effective Methods Less Effective Methods No Identifiable Method

## Family Planning Methods

Participation in SAFE BABIES-SAFE MOMS is associated with more effective family planning behaviors:

• At one year follow-up, 81 clients (41%) were using non-reversible or more effective methods.

■ Before Safe Babies-Safe Moms □ After Safe Babies-Safe Moms

• A small, but significant number of clients (5) had hysterectomies or tubal ligations following enrollment in the program.

The number of clients using more effective methods increased by 38%, from 55 in the year before enrollment to 76 in the year after enrollment.

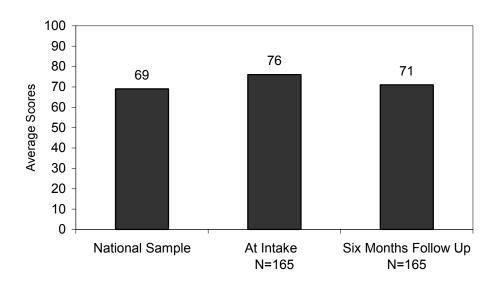
# PARENTING STRESS: After six months of participation in the SAFE BABIES-SAFE MOMS program, clients reported significantly lower levels of Parenting Stress.

Parenting education is a core service provided in the *SAFE BABIES-SAFE MOMS* program. Although active parenting may be the desired goal of many clients, the reality of such parenting can be very stressful, especially for women who are trying to establish a clean and sober lifestyle. Other researchers have reported that parenting skills training is the most frequently self-identified need of pregnant substance abusing women.

The level of parenting stress is based upon client responses recorded on the Parenting Stress Index (PSI) Short Form. The client completes the initial PSI at intake (or shortly after) if she has recent parenting experience, or after she has gained such experience if she does not. The client completes a second PSI six months after the first.

As of November 30, 2002, a total of 165 clients had completed both the initial and the six-month follow-up PSI. The results are displayed below:

### Parenting Stress Levels



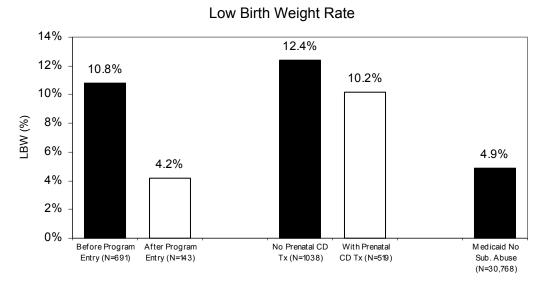
Based on these early results, participation in *SAFE BABIES-SAFE MOMS* is associated with a reduction in overall parenting stress:

- Clients' parenting stress levels at intake (average score = 76) were significantly higher than those of a national sample (average = 69).
- At six-months follow-up, clients' parenting stress levels (average score = 71) were significantly lower than at intake (average = 76).
- The improvement in the PSI scores at six months' follow-up was due to improved scores on two subscales: the average score for the Parental Distress Index decreased from 30 to 28 and the average score for Parent-Child Dysfunctional Interaction Index decreased from 21 to 19. The average Difficult Child score decreased slightly from 25 to 24.

LOW BIRTH WEIGHT: The low birthweight (LBW) rate for infants born after entry into the SAFE BABIES-SAFE MOMS program decreased by 61%, compared to those born before program entry.<sup>1</sup>

Birth weight is a primary indicator of the health of the newborn infant. Infants with birth weight of less than 2500 grams (5.5 pounds) are classified as low birth weight. Low birth weight is associated with increased risk of infant death and a wide range of disorders including neuro-developmental conditions, learning disorders, and respiratory tract infections.

The low birth weight rate was compared for infants born before program entry (N=691) and those born after program entry (N=143). For comparison, low birth weight was measured for children born in 1999 to identified substance abusers: those without prenatal treatment for chemical dependency (N=1038) were compared to those with prenatal chemical dependency (CD) treatment (N=519), compared to Medicaid women with no known substance abuse (N=30,768). Low birth weight was computed for singleton liveborn infants.



- The low birthweight rate decreased by 61%, from 10.8% to 4.2% when all infants born before their mothers entered the *SAFE BABIES-SAFE MOMS* program were compared to those born after program entry.
- The LBW rate before *SAFE BABIES-SAFE MOMS* (10.8%) is comparable to the 10.2% LBW rate for 519 identified substance abusers who gave birth in 1999 and received prenatal CD treatment.
- The LBW rate after enrollment in *SAFE BABIES-SAFE MOMS* (4.2%) is much lower than the 10.2% LBW rate for identified substance abusers who gave birth in 1999 and received prenatal CD treatment, and lower than the 4.9% LBW rate for Medicaid women with no known substance abuse.

These findings show that birth outcomes were better for infants born after their mothers enrolled in *SAFE BABIES-SAFE MOMS*. Improved birth weights suggest these infants will have lower risk of health problems associated with low birth weight and will incur lower medical care costs during infancy and early childhood.

<sup>&</sup>lt;sup>1</sup> Birth outcomes were analyzed for *SAFE BABIES-SAFE MOMS* clients using two methods: 1) Pooled Comparisons: low birthweight rates for births after program entry (N=143) were compared to all births to clients before program entry (N=691); and 2) Paired Comparisons: low birthweight rates were compared for infants whose mothers had (at least) one birth before program entry and one birth after (N=99). For paired comparisons, which included only infants whose mothers had (at least) one birth before program entry and one birth after, LBW decreased by 58.7%, from 12.1% before program entry to 5.0% after program entry.