



**Nurse-Family
Partnership**

Helping First-Time Parents Succeed

**Pregnancy Health and
Outcomes Report**
Sample NFP
Data through 12/31/2007

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The data in this report are based only on those clients who remain in the program through the specified time point. These clients may have a lower risk level than those who left the program and are not included in this report. Additionally, there is no control group with which to compare the clients for whom data are available. It is important to keep these issues in mind in interpreting these data. Where possible, NFP Objectives and national data are provided for comparison purposes.

SAMPLE

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Pregnancy Health and Outcomes Report

Sample NFP

Data through 12/31/2007

Pregnancy Health

An important part of the Nurse-Family Partnership program is improving the health and wellbeing of the clients and children enrolled in the program and monitoring any changes that occur. Various outcomes and risk factors are noted in the tables below.

Table 1: Client's Health during Pregnancy

	Local NFP	National NFP
Percent with first prenatal visit in		
First Trimester	79%	
Second Trimester	21%	
Third Trimester	0%	
^a Percent underweight before pregnancy	12%	
^b Percent with adequate weight gain	80%	
Urinary Tract Infection		
Percent with one or more	24%	
Sexually Transmitted Infection		
Percent with one or more	3%	
Antibiotic Use		
Percent using one or more times	23%	

^a Underweight before pregnancy is defined as BMI less than or equal to 18.5.

^b Adequate weight gain during pregnancy is defined as greater than or equal to 25 lbs.

Change in Maternal Health Behaviors

Prenatal use of tobacco, alcohol, and other drugs has been associated with various adverse birth outcomes such as low birth weight, preterm delivery, and spontaneous abortion. Assessments of personal health habits, including smoking and the use of alcohol, are conducted periodically: shortly after enrollment, at 36 weeks of pregnancy, and at 12 months of infancy. Because health habits are measured at different time periods, it is possible to consider changes in these behaviors as intervening outcomes.

Table 2 provides information about the maternal health habits of the local NFP clients between intake and 36 weeks of pregnancy with information being compared for those with data at *both* time points. As is common for programs addressing substance use during pregnancy, a client may return to previous substance use or other detrimental health habits after the birth of her baby. It is not feasible to examine change in behavior over time if that behavior is reported infrequently at intake. Please note that the relative percent change cannot be calculated when no participants reported a certain health habit at intake. **Data should be interpreted carefully when sample sizes are small.**

Table 2: Maternal Substance Use during Pregnancy among Local NFP Clients

Pregnancy:	N	Frequency of client behavior at Intake	Frequency of client behavior at 36 Weeks of Pregnancy	Percent Changed
Cigarette smoker	275	70	60	-14%
Smoked 5+ cigarettes last 24 hrs.	275	41	31	-24%
Marijuana use	274	4	3	-25%
Alcohol use	272	5	3	-40%
Cocaine use	273	0	0	
Other drug use	275	1	0	-100%

Table 3: Maternal Substance Use during Pregnancy among National NFP Clients

Pregnancy:	N	Frequency of client behavior at Intake	Frequency of client behavior at 36 Weeks of Pregnancy	Percent Changed
Cigarette smoker				
Smoked 5+ cigarettes last 24 hrs.				
Marijuana use				
Alcohol use				
Cocaine use				
Other drug use				

Nurse home visitors also work with clients who are unwilling or unable to quit smoking to reduce the number of cigarettes smoked. Table 4 provides the change in the number of cigarettes smoked among those who reported at intake smoking 5 or more cigarettes per day. **Data should be interpreted carefully when sample sizes are small.**

Table 4: Reduction in Number of Cigarettes for Those who Continued to Smoke during Pregnancy

	Average Change
Local NFP (n=32)	-0.7
National NFP	
NFP Objective	-3.5

Change in Experience of Violence

Data should be interpreted carefully when sample sizes are small.

Table 5: Change in Experience of Violence Reported by Clients between Program Intake and 36 Weeks of Pregnancy

	Local NFP				National NFP		
	N	Frequency at Intake	Frequency at 36 Weeks of Pregnancy	% Change	Frequency at Intake	Frequency at 36 Weeks of Pregnancy	% Change
Physical Abuse	229	15	16	7%			
Fear of Partner	229	22	11	-50%			

Birth Outcomes - Preterm Births, Low Birth Weight and NICU Use

Gestational age and weight at birth are measures of infant health, with birth before 37 weeks gestation considered preterm, and weight less than 2500 grams considered low birth weight.

Preterm Births

Reduction of preterm births is considered the best way to reduce infant illness, disability, and death. Table 6 illustrates the rates of premature births for the local NFP and the national NFP sample, and provides the NFP Objectives.

The NFP Objective for preterm births is consistent with the target goal set in Healthy People 2010 Objectives for the percentage of preterm births among all women of childbearing age. Whereas it is a national goal to eliminate disparities in health outcomes among populations, health statistics for women from minority and low income populations served by the NFP substantiate the existence of disparities in rates of preterm and low birth weight infants by race and ethnicity. Thus, the progress that NFP Implementing Agencies can realistically achieve toward the goals may vary based on the racial and ethnic composition of the population served. To help Implementing Agencies monitor their progress toward the longer term target goal for 2010, we have established intermediate objectives for NFP implementing agencies that reflect the racial/ethnic distribution of the NFP clients served (see Appendix B). Table 6 also illustrates the rate(s) of preterm births for the predominant ethnic group(s) within the local NFP, along with the respective intermediate NFP Objectives for this group/these groups. Table 7 illustrates the rates of preterm births based on the client's age at the time of her infant's birth. **Data should be interpreted carefully when sample sizes are small.**

Table 6: Percentage of Preterm Birth Less than 37 Weeks by Client's Race/Ethnicity

	Local NFP		National NFP	NFP Objective
	Number of Births	Percent of Preterm Births	Percent of Preterm Births	Percent of Preterm Births
Total	311	8.7%		7.6%
Hispanic	92	11.9%		7.8%
Non-Hispanic White	141	9.2%		8.6%
African American/Black	42	0.0%		11.0%
Asian	7	0.0%		8.0%
Native American	18	0.0%		8.3%
Multiracial/Other	12	0.0%		8.0%

Table 7: Percentage of Preterm Birth Less than 37 Weeks by Age of Client at Infant Birth

Client's Age At Infant Birth	Local NFP			National NFP
	Number of Clients	Number of Preterm Births	Percent of Preterm Births	Percent of Preterm Births
Less than 15 years	10	3	30.0%	
15 - 17 years	73	5	6.8%	
18 - 19 years	92	10	10.9%	
20 - 24 years	105	8	7.6%	
25 - 29 years	24	1	4.2%	
30 years or older	7	0	0.0%	

Low Birth Weight

Birth weight is also used as an indicator of infant health, with the occurrence of infant death and/or delay/disability highly correlated with low birth weight (less than 2,500-grams/5.5 lbs.) Table 8 demonstrates the percentage of low birth weight (LBW) infants for the local NFP and the national NFP sample, and provides NFP Objectives. The overall rate is provided, along with the rate(s) for the predominant racial and ethnic group(s) within the local NFP. Table 9 illustrates the percentages of low birth weight infants based on the client's age at the time of her infant's birth. **Data should be interpreted carefully when sample sizes are small.**

Table 8: Percentage of Low Birth Weight Infants by Client Race/Ethnicity - Less than 2500 g

	Local NFP		National NFP	NFP Objective
	Number of Births	Percent of LBW	Percent of LBW	Percent of LBW
Total	312	7.4%		5.0%
Hispanic	92	11.9%		7.0%
Non-Hispanic White	141	7.1%		7.0%
African American/Black	42	17.0%		12.0%
Asian	7	0.0%		8.0%
Native American	18	0.0%		6.8%
Multiracial/Other	12	0.0%		6.0%

Table 9: Percentage of Low Birth Weight Infants by Age of the Client at Infant Birth - Less than 2500 g

Client's Age At Infant Birth	Local NFP			National NFP
	Number of Clients	Number of LBW Infants	Percent of LBW Infants	Percent of LBW Infants
Less than 15 years	10	3	30.0%	
15 - 17 years	73	4	5.5%	
18 - 19 years	92	7	7.6%	
20 - 24 years	105	5	4.8%	
25 - 29 years	25	4	16.0%	
30 years or older	7	0	0.0%	

Low birth weight is highly correlated with certain adverse infant health outcomes and a greater use of resources immediately following delivery. Those infants with marginal low birth weight (2268-2500 grams/5.0-5.5 pounds) use fewer resources and are at less risk for future health problems than infants below five pounds (less than 2268 grams). Table 10 provides the percentage of LBW infants who were of marginal LBW, as well as information regarding use of NICU.

Table 10: Other Infant Health Characteristics

	Local NFP		National NFP
	Frequency	Percent	Percent
Marginal LBW infants who were 5.0-5.5 lbs	8	3%	
VLBW infants ^a	4	1%	
Infants who spent time in NICU	20	8%	
Median number of days spent in NICU	5.5		

Note. Sample sizes presented are for the Local NFP.

^a VLBW: Very Low Birth Weight is less than 1500 grams regardless of gestational age.