

Impact of Prenatal Home Visitation on Birth Outcomes: Evaluation of Health Families New York

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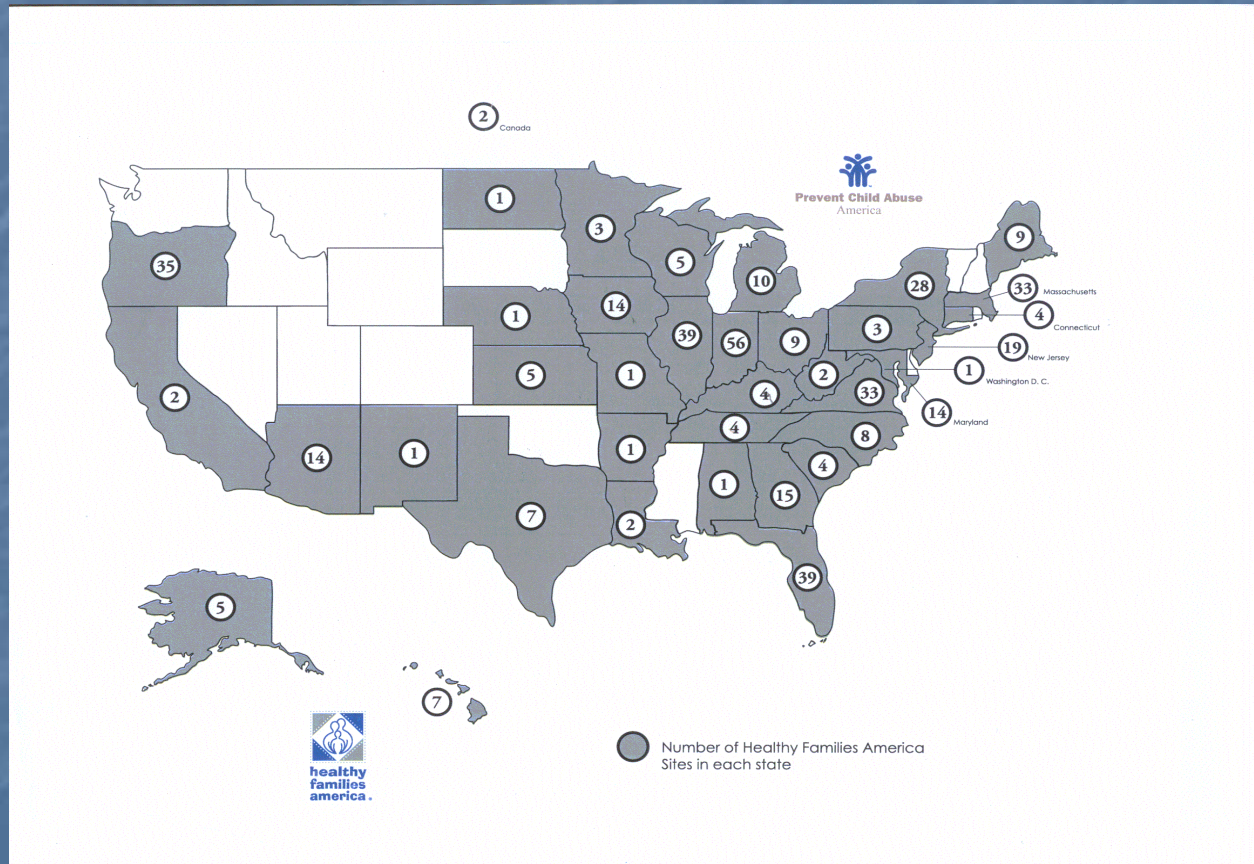
Center for Human Services Research,
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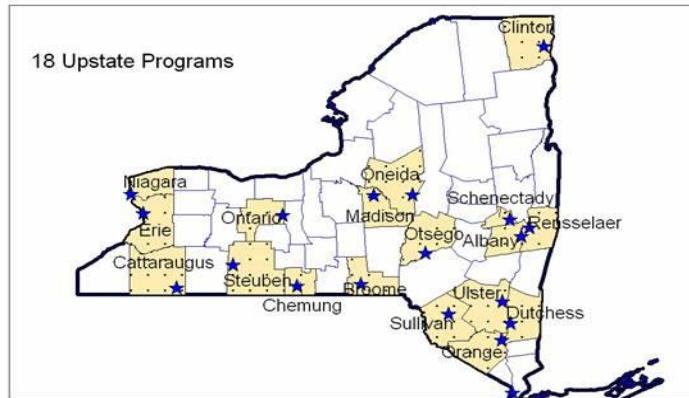
Outline of Presentation

- Describe Program Model
- Discuss Study Design
- Present Findings from Birth Outcome Study

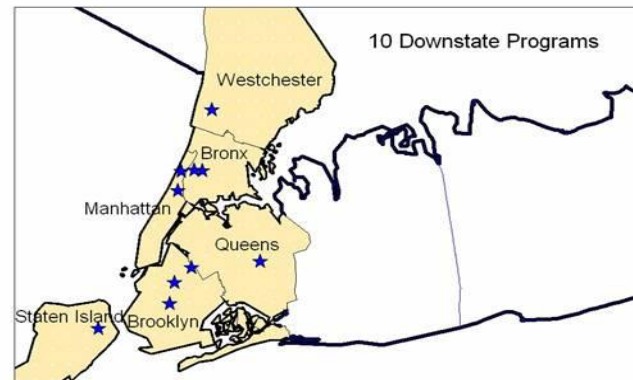
Map of HFA Sites in USA



Location of HFNY Sites



★ Program Sites



HFNY Program Goals

- To promote optimal child health and development
- To enhance positive parent-child interactions
- To prevent child abuse and neglect
- To increase parental self-sufficiency



HFNY Program Components

- Screening and assessment
- Paraprofessional workers
- Strength-based approach
- Expectant or new moms
- Until the child enters Headstart or turns 5
- In-home weekly visits



HFNY Program Activities

- Educate about child growth & development
- Promote parent-child bonding
- Establish goals with family
- Address family issues
- Coordinate access to health and community resources



HFNY Prenatal Topics

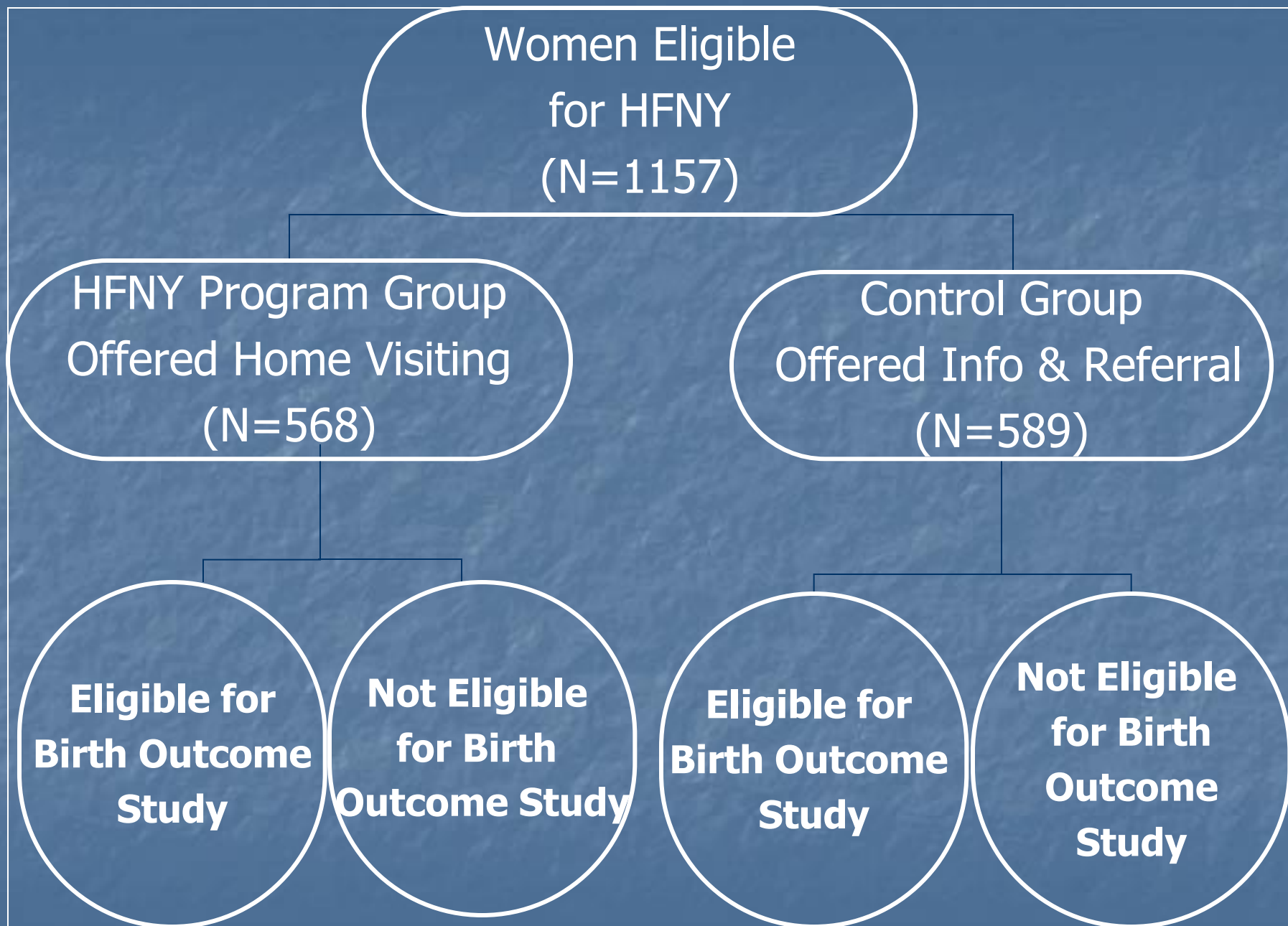
- Nutrition
- Smoking
- Prenatal Care
- Stress
- Environmental Factors
- Maternal and Fetal Development
- STDs-Testing and Treatment

Evaluation Design

- Three HFNY programs were selected to participate in a randomized trial
- All women eligible for HFNY who agreed to participate were randomly assigned between March 2000 and Dec. 2001
- Data were collected by research interviewers blind to treatment status

Evaluation Design

- In-home interviews were conducted at Intake, Birth, Year One, Two and Three
- Birth Outcome Study uses data collected at Intake and at Birth
- These data were self-reported by women in study sample



Birth Outcome Study Sample

- Birth Outcome Study only includes expectant mothers randomized at least two months before their child was born
- Women in the HFNY Program group received an average of 7 prenatal home visits
- Women in the Control group did not receive home visits, they were referred to other programs for services

Comparison of Program and Control Groups at Intake: The Healthy Family New York Program (N=1157) ^a

	HFNY	Control
Mean Age	22	22
Under 18 of age ^b	23%	19%
First Time Mom	58%	56%
No HS Education	62%	60%
Ever Married	18%	19%
Hispanic	17%	17%
Black	41%	43%
N	568	589

^a No significant differences between groups except % under 18 of age

^b $p < .10$

Risk Factors of Birth Outcome Study Sample: Randomized 2 months before the Child's Birth ^a

	HFNY	Control
Maternal Socio/ Demographic		
Under 18 of age ^b	25%	19%
First Time Mom	57%	61%
Race – Black	41%	43%
Race – Hispanic	17%	17%
Maternal Health Risk Behavior		
Smoking at Intake	53%	55%
Any Physical Domestic Violence	22%	23%
> 3 drinks when drinking	14%	13%
N	265	299

^a **Single Birth Only N= 564**

^b **p < .10**

Correlation Matrices

	LBW	Prem.	Neo.	Race	≥18	Smoke	>3 drink
Premature	.520**						
Neonatal	.310**	.406**					
Race							
≥ 18	-.099*						
Smoke		.090*		-.211**			
>3 Drink						.195**	
DV	-.139**				-.127**		

Only reporting statistically significant relationships

Race: 1 for Black 0 for others

DV: any physical domestic Violence

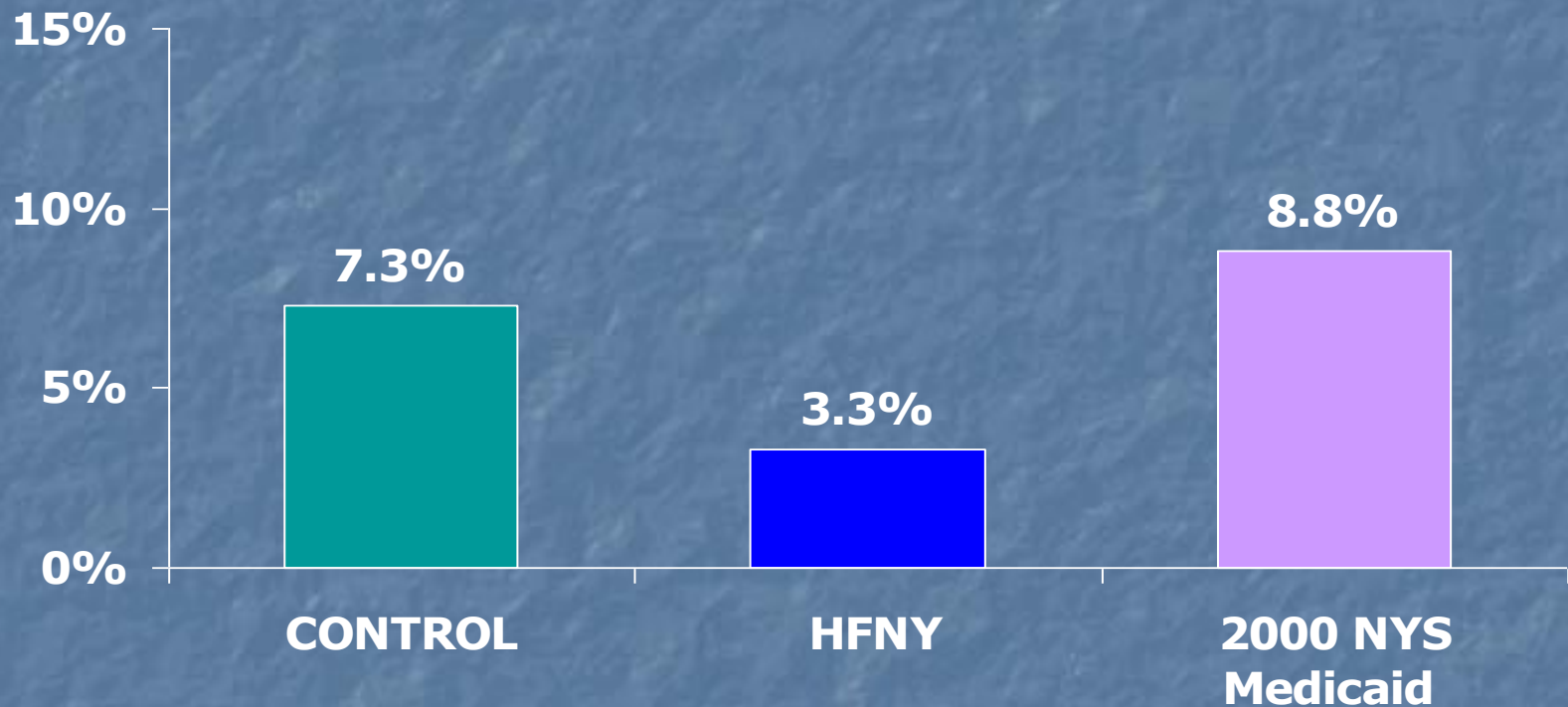
N=550 ** p < .01 * p < .05

Program Impact on Birth Outcomes

	Program	Control	OR
Low Birth Weight	4.7%	9.2%	1.97*
Prematurity	6.6%	6.9%	1.04
Under 18 years	4.7%	15.1%	3.22+
Neonatal Care	6.2%	7.8%	1.26
HS educated	2.2%	7.8%	3.17+
Number of cases	257	293	

- $p < .05$ + $p < .10$
- Based on 2x2 table.

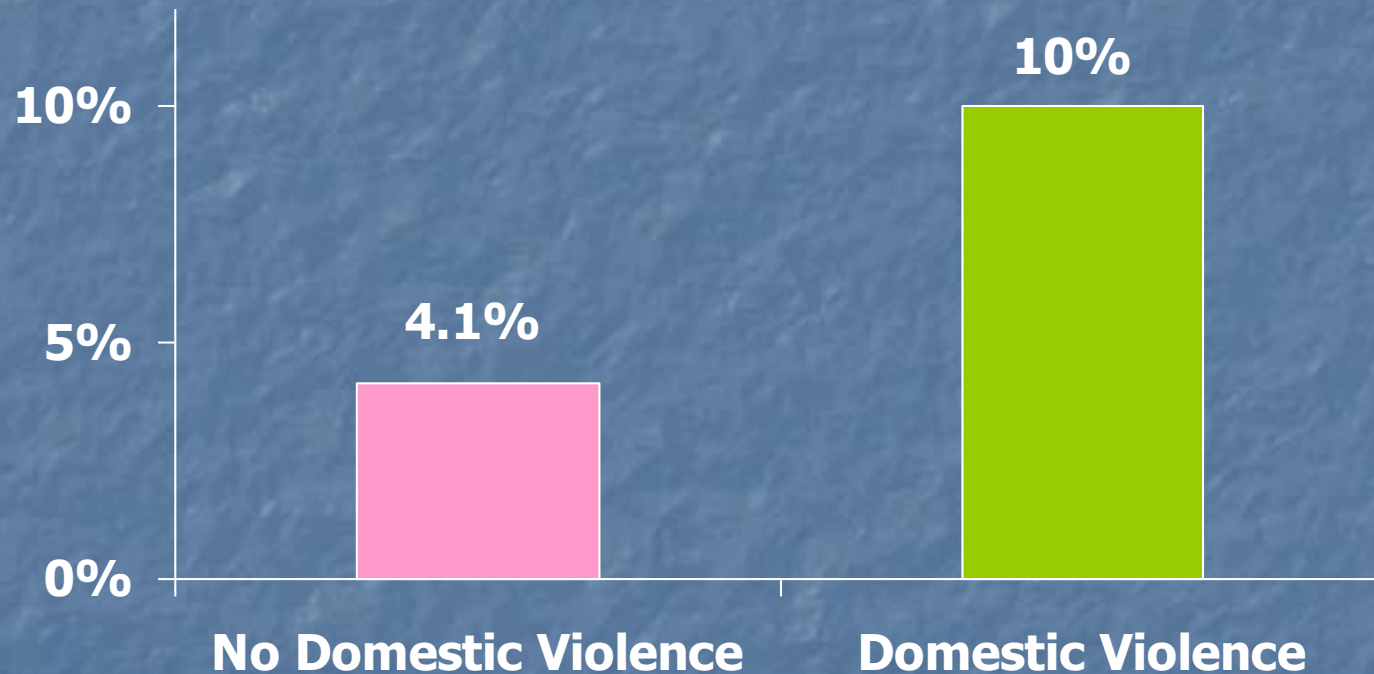
Low Birth Weight



Percentages are risk adjusted

Covariates for the study sample: Under 18, First time Mom, High School education, Smoking at Intake, more than 3 drinks, and any physical domestic violence

Domestic Violence and Low Birth Weight



Summary of Findings

- Program impact is statistically significant ($p < .05$) for reducing the rates of low birth weight babies while controlling social and health risk factors
 - Domestic Violence has a significant, independent impact on having low birth babies ($p < .01$)
- Program impact on premature birth and neonatal care is limited to subgroups
 - Among under 18 mothers, Program significantly reduces the likelihood of premature birth ($p < .05$) and DV increases the likelihood ($p < .01$)

Conclusions

- HFNY is a multifaceted program which aims at assisting socially & economically disadvantaged expectant and new mothers
- A social intervention model based on prenatal home visitations by non-medical paraprofessionals can produce better birth outcomes