

# The Association Between History of Violence and HIV Risk:

*A Cross-Sectional Study of HIV-  
Seronegative Incarcerated Women in  
Connecticut*

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# Study Rationale

- Rates of newly diagnosed HIV infections in United States rising fastest among women and people of color
- Women who have experienced violence are more likely than women who have not, to engage in HIV risk behavior, including unprotected sex
- Condom use consistency varies by partner type

**Incarcerated women are particularly vulnerable to HIV infection due in part to high-risk behaviors and partners**

# Purpose

Determine whether having a history of experiencing violence is associated with unprotected sex with primary and non-primary partners among HIV-negative female inmates in Connecticut.

# Definitions:

## Primary Study Outcomes

### 1) Unprotected Sex with a Primary Partner

Ever engaging in sex without a condom with respondent's current male primary sexual partner

### 2) Unprotected Sex with a Non-Primary Partner

Ever engaging in sex without a condom/dental dam with someone other than a primary partner

# Definitions: Violence

## Any Violence

Having experienced any of the following types of violence in a respondent's lifetime by any perpetrator:

## Physical violence (PV)

Ever beaten, bruised, physically harmed against will when not having sex

## Rape (R)

Ever forced to have sex against wishes

## Both

Combination of PV and R or being beaten, bruised or physically harmed when having sex

**November 2004- October 2006  
York Correctional Institution**

**4,945 Unique CT DOC  
Med Screening/ Health Hx**

Routine Phlebotomy

**Bonded out**

**3,156 (64%)  
Supplemental Intake**

**No discard sera**

**2,032 (64%) Discard Sera  
for anonymous HIV Testing**

**HIV positive**

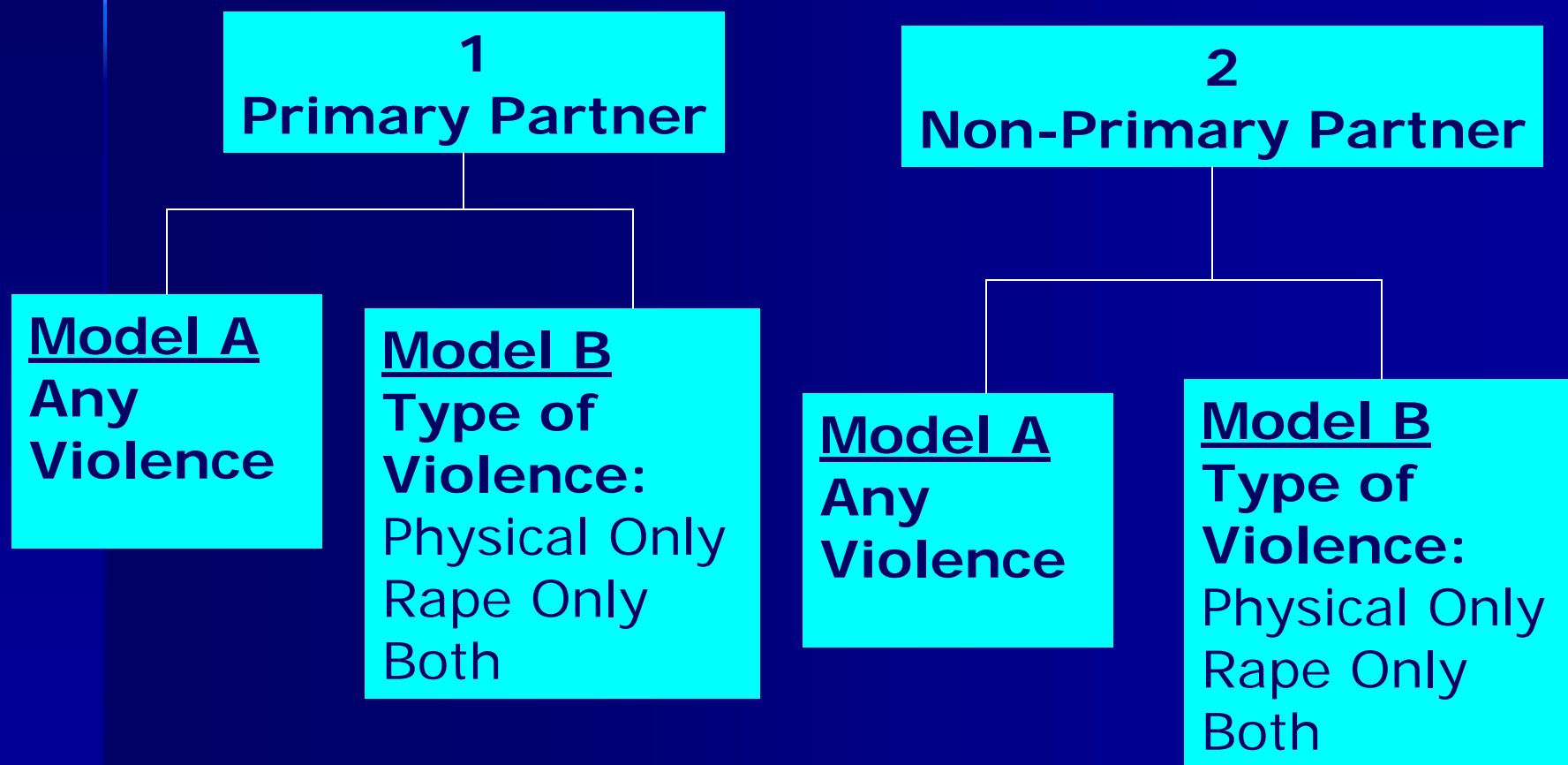
**1,884 (93%)  
HIV negative**

**No sex or sex w/  
women**

**1,588 (84%)  
Sex with man 6 mos.  
prior to incarceration**

# Methods:

## Multiple Logistic Regression Models



# Sample Characteristics

<u>Characteristic</u>	n	%
<b>Age (Mean ± SD)</b>	30.2 ± 7.8	
<b>Race</b>		
<i>White</i>	650	41.4
<i>African American</i>	658	41.9
<i>Hispanic</i>	232	16.7
<b>Sex Work History</b>	359	23.0
<b>Drug Use History</b>	721	45.4
<b>Partner Types</b>		
<i>Has Male Primary Partner</i>	1299	82.0
<i>Has Non-primary Partner(s)</i>	897	56.8

# Characteristics: History of Violence

<b>Characteristic</b>	<b>n</b>	<b>%</b>
<b>Any Violence</b>	1017	65.0
<b>Type of Violence</b>		
<i>Physical Violence Only</i>	458	45.0
<i>Rape Only</i>	82	8.1
<i>Both Physical Violence and Rape</i>	477	46.9

# RESULTS: PRIMARY PARTNER

	Model A		Model B	
Variables	OR	95% CI	OR	95% CI
Any Violence	<b>1.56*</b>	(1.09, 2.24)	--	--
TYPE: <i>None</i>	--	--	Ref	--
<i>Physical</i>	--	--	<b>1.93*</b>	(1.22, 3.05)
<i>Rape</i>	--	--	1.10	(.51, 3.38)
<i>Both</i>	--	--	1.37	(.89, 2.11)
RACE: <i>White</i>	Ref	--	Ref	--
<i>Black</i>	.98	(.67, 1.43)	.98	(.67, 1.43)
<i>Hispanic</i>	1.20	(.72, 2.00)	1.20	(.72, 2.01)
Sex Work	.76	(.49, 1.16)	.80	(.52, 1.24)
Drug Use	1.03	(.71, 1.50)	1.04	(.72, 1.51)
Employment	.97	(.67, 1.39)	.97	(.67, 1.39)
Non-Primary	.48	(.33, .70)	.48	(.33, .70)

## RESULTS: NON-PRIMARY PARTNER

	Model A		Model B	
Variables	OR	95% CI	OR	95% CI
Any Violence	.99	(.72, 1.35)	--	--
TYPE: <i>None</i>	--	--	Ref	--
<i>Physical</i>	--	--	.96	(.67, 1.38)
<i>Rape</i>	--	--	.71	(.38, 1.32)
<i>Both</i>	--	--	1.08	(.75, 1.54)
RACE: <i>White</i>	Ref	--	Ref	--
<i>Black</i>	.71	(.52, .95)	.71	(.53, .97)
<i>Hispanic</i>	.97	(.64, 1.46)	.98	(.65, 1.48)
Sex Work	.94	(.69, 1.29)	.92	(.67, 1.26)
Drug Use	.75	(.56, 1.01)	.76	(.57, 1.02)
Employment	.84	(.63, 1.12)	.84	(.63, 1.13)
Has Primary	.70	(.51, .96)	.70	(.51, .95)

# Summary of Findings

- **High prevalence of history of violence in study population**
- **The association between history of violence and unprotected sex differs by partner type**
- **Women who experienced any violence, particularly physical violence only, were at increased odds of having engaged in unprotected sex with their primary partner when compared to women who have not experienced any violence**

# Future Research & Implications

- For Researchers:

Exploring whether the relationship between the perpetrator of violence and the victim impacts condom use behavior

- For program coordinators:

Conducting violence screening and providing support and violence prevention services for inmates

Identifying inmates who disclose a history of physical violence as being at greater risk for HIV infection and customizing assistance efforts accordingly

- For HIV-Interventions:

Incorporating violence-associated elements including education and condom use negotiation in prison-based HIV programs

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