

# Formal and Informal HIV Transmission Risk Reduction Strategies among 3,818 HIV-Infected Persons in 4 Cities in the United States

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## Background

- HIV transmission risk reduction strategies among HIV-infected persons may be grouped into two categories: formal and informal.
- Formal categories are those promoted by public health messages such as: abstinence, monogamy, fewer partners, fewer intercourse acts, and condom use.
- Informal strategies include: HIV sero-sorting (choosing HIV infected sex partners) and sexual positioning among MSM (choosing receptive intercourse roles with HIV[-] or unknown status partners).

## HIV Transmission Risk Reduction Strategies

- Formal (the ABC's):
  - "Abstinence" or fewer partners
  - "Be faithful" or monogamy
  - "Condom" use
- (s) "Safer" acts, fewer intercourse acts
- Informal:
  - Sero-sorting [sex with HIV(+) partners]
  - Sexual positioning among MSM [choosing receptive intercourse roles with HIV(-) or unknown-status partners]

## Methods

### Subjects

- Subjects were 3,818 participants of the Healthy Living Project, a randomized behavioral intervention trial of HIV-infected persons in Los Angeles, Milwaukee, New York, and San Francisco.

### Interview

- Audio Computer-Assisted Self-Interviewing (ACASI)
- Detailed sexual activity data of subjects' last five male and last five female sex partners was obtained.
- We determined the prevalence of formal and informal strategy use among HIV-infected persons by gender and HIV risk group.

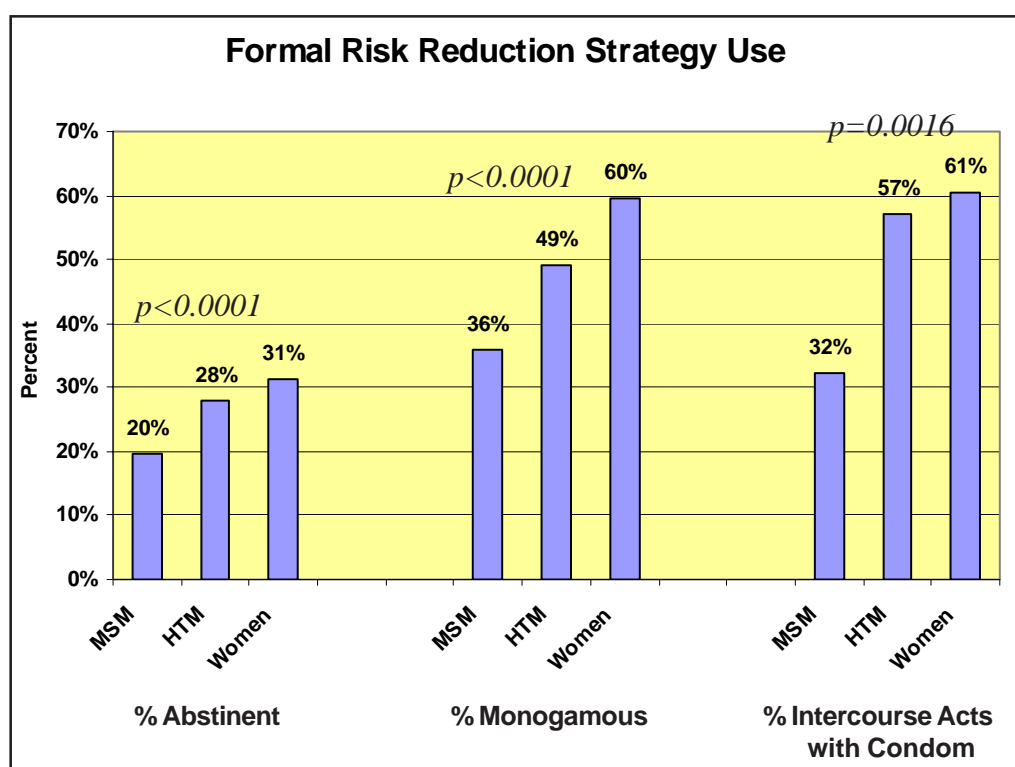
### Risk Group Definitions

- Men-who-have-Sex-with-Men (MSM)
  - N=2034
  - Includes heterosexually identified men who report sex acts with men, and transgendered (MTF) persons
- Women
  - N=978
  - Biologic women only
- Heterosexual Men (HTM)
  - N=806
  - Excludes men who report any sex acts with men in the last 3 months

## Results

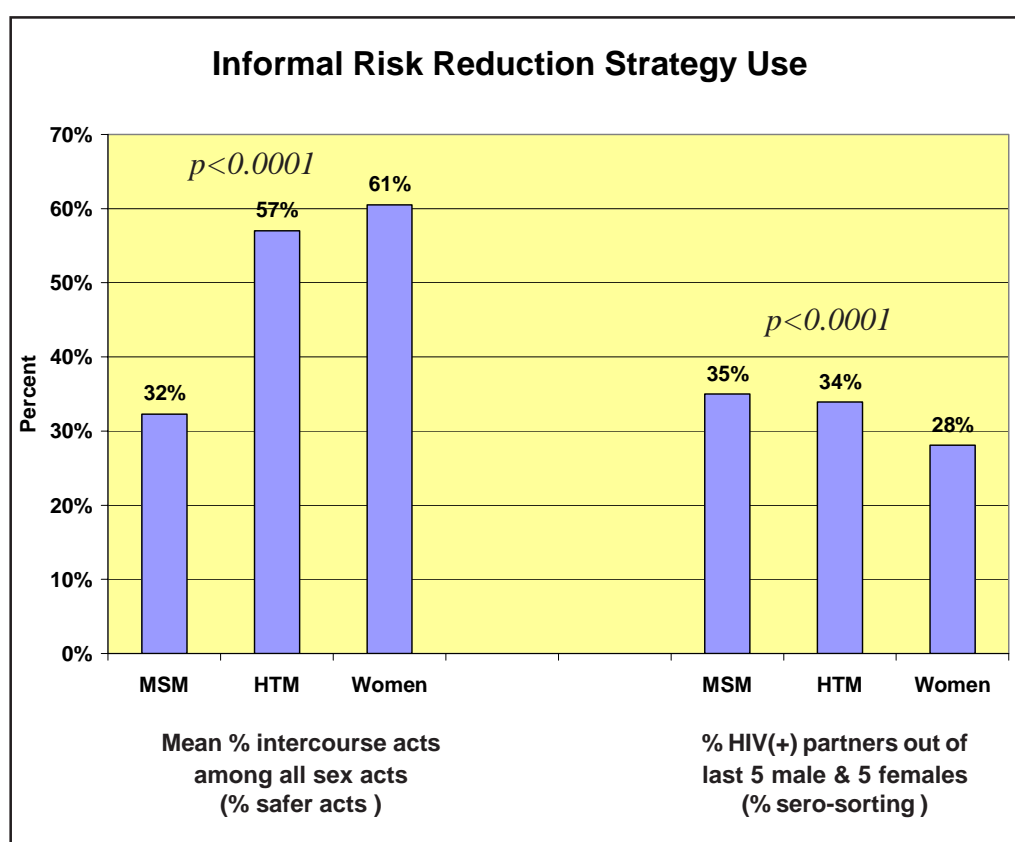
### Subject Characteristics

	All	MSM	Women	HTM
<b>City</b>				
Los Angeles	32.3%	39.8%	24.3%	23.0%
Milwaukee	10.5%	10.2%	10.8%	10.8%
New York	34.5%	19.5%	47.6%	56.6%
San Francisco	22.7%	30.5%	17.3%	9.7%
<b>Sex</b>				
Male	74.4%	100%	0%	100%
Female	25.6%	0%	100%	0%
<b>Age (median)</b>	41	40	41	44
<b>Race</b>				
White	25.6%	36.6%	13.9%	12.2%
Black	49.5%	38.5%	62.3%	61.8%
Hispanic	17.8%	16.3%	18.5%	20.7%
Other	7.1%	8.6%	5.3%	5.3%



### Mean Total Partners in Last 3 Months

Group	N	Mean	
MSM	2034	5.6	
HTM	806	1.8	p<0.0001
Women	978	1.7	



### Sero-sorting Measures

Group	% With Any Unprotected Intercourse with HIV(-) or (?) Status Partner	
MSM	13.3	
HTM	7.9	p<.0001
Women	15.3	

Group	Mean % HIV(+) Partners Out of Last 5 Male and 5 Female Partners	
MSM	35.0	
HTM	33.9	p<.0001
Women	28.1	

Group	% With Any Unprotected Intercourse with HIV(-) or (?) Status Partner	
MSM	13.3	
HTM	7.9	p<.0001
Women	15.3	

### Sexual Positioning (among MSM)\*

Partner Group	Position	mean % Unprotected Intercourse Acts	mean #
HIV(+) Partners	Insertive	10.9	mean # = 1.7
HIV(+) Partners	Receptive	13.3	mean # = 1.8
HIV(- or ?) Partners	Insertive	5.0	mean # = 0.35
HIV(- or ?) Partners	Receptive	10.3	mean # = 0.89

Partner Group	Mean Ratio Insertive/Receptive Unprotected Intercourse Acts
HIV(+) Partners	0.22
HIV(- or ?) Partners	0.11

\*among MSM reporting any anal intercourse; individual subject ratios approaching infinity were re-assigned to 1.0; individual subjects with no acts were re-assigned to 0

## Conclusions

- Evidence for the use of different formal strategies was apparent for women, HTM, and MSM.
- Evidence for the informal strategy of HIV sero-sorting was strongest for MSM.
- Sexual positioning was evident among MSM.

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