

# **Gender, Sexuality, and HIV Risk Behavior among Amphetamine Injectors at US Syringe Exchange Programs**

**Yale School of Public Health  
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**Based on presentations at 1<sup>st</sup> and 2nd Methamphetamine, HIV and HCV: Science and Response Conferences  
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# Recent studies of amphetamine injectors

Street recruited and out-of-treatment drug users\*

Amphetamine injectors vs heroin injectors

Younger

Higher proportion white

Poly-substance use

Higher rates of sexual risk behavior

Similar rates of injection risk behavior

Elevated injection risk among females only

MSM\*: elevated sexual risk associated with amphetamine use

\* References available on request

# **Amphetamine injectors and syringe exchange:**

Participants at 13 U.S. Syringe Exchange Programs

Amphetamine injectors vs other SEP participants

- Life circumstances

- Medical history

- Drug use

- Receptive and distributive syringe sharing

- Sexual risk behavior

Number of casual and commercial partners

Condom use with different kinds of partners

Identify factors associated with receptive sharing

## **Methodology:**

### **National Study of Syringe Exchange Programs**

Data collection 2000-04

SEPs in the US distributing more than 60,000 syringes in 2000, 2002

23 programs, randomly selected in 2 waves

Random selection of SEP participants

Exchanged that day

Understand spoken English

Audio Computer Assisted Self Interviewing (ACASI)

Subsample of SEPs: 10% or more of participants inject amphetamines (SEP N=13, Respondent N=2,469)

## Gender Sex variable: sexual activity last 30 days

MSW(/NS) – men reporting only sex with women (or no sex)

WSM(/NS) – women reporting only sex with men (or no sex)

MSM – men reporting sex with men, may also report sex with women

WSW – women reporting sex with women, may also report sex with men

## Condom Use:

Never used condom vs any condom use

## HIV Risk:

Number of casual and commercial partners

Rates of condom use

Receptive and distributive syringe sharing

## Socio-demographic characteristics, amphetamine injectors and other injectors

	Amphetamine Injectors N=854 (%)	Other SEP participants N=1615 (%)
<u>Gender</u>		
Female	323 (37.8)	561 (34.7)
Male	524 (61.4)	1041 (64.5)
Transgender/Other	7 (.8)	13 (.8)
<u>Race**</u>		
White	568 (66.5)	784 (48.5)
African American	84 (9.8)	340 (21.0)
Latino	120 (14.1)	377 (23.3)
API/Native Am.	40 (4.7)	58 (3.6)
Other	42 (4.9)	56 (3.4)
<u>Age**</u>	34	38
<u>MSM/WSW**</u>	118 (13.8)	139 (8.6)
<u>Housing, last 6 months**</u>		
Own Apt/house	318 (37.2)	777 (48.1)
Other's apt/house	198 (23.2)	357 (22.1)
Hotel/shelter	77 (9.0)	154 (9.5)
Street	186 (21.8)	191 (11.8)
Jail/Other	75 (8.8)	136 (8.4)
Ever Homeless, last 6 months**	458 (53.6)	619 (38.3)
<u>Employed, last 6 months **</u>	561 (65.7)	970 (60.1)
<u>Education</u>		
Less than High School	281 (32.9)	545 (33.8)
H.S. Grad/GED	268 (31.4)	546 (33.8)
Some post-secondary	209 (24.5)	371 (23.0)
College Grad +	96 (11.2)	153 (9.5)
<u>Received Welfare, last 12 months</u>	335 (39.2)	602 (37.3)

\*\* p<.01

# Demographic characteristics by amphetamine use, gender and sexual partners

	MSW/NS N=1425 (%)		WSM/NS N=776 (%)		MSM N=140 (%)		WSW N=108 (%)	
	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth
	460 (32)	965 (68)	272 (35)	504 (65)	64 (46)	76 (54)	51 (47)	57 (53)
<u>Race</u>		*		*				
White	313 (68)	446 (46)	192 (71)	267 (53)	30 (47)	33 (43)	31 (61)	34 (60)
Black	49 (11)	234 (24)	20 (7)	81 (16)	10 (16)	16 (21)	4 (6)	8 (14)
Latino/a	55 (12)	234 (24)	38 (14)	107 (21)	16 (25)	24 (37)	10 (20)	11 (19)
Asian/PI/Native	23 (5)	25 (3)	8 (3)	26 (5)	5 (8)	2 (3)	3 (6)	0
Other	20 (4)	26 (3)	14 (5)	23 (5)	3 (5)	1 (1)	3 (6)	3 (5)
Age (average)	36	41***	32	36***	37	34	31	33
<u>Housing, last 6 mo</u>		*		*				*
Own apt/house	173 (38)	444 (46)	105 (39)	257 (51)	27 (42)	38 (50)	12 (24)	33 (58)
Other's apt/house	98 (21)	197 (20)	74 (27)	128 (25)	9 (14)	16 (21)	14 (28)	14 (25)
SRO/hotel	36 (8)	100 (10)	27 (10)	42 (8)	7 (11)	9 (12)	5 (10)	3 (5)
Street/shanty	106 (23)	127 (13)	52 (19)	50 (10)	15 (23)	6 (8)	13 (26)	6 (11)
Jail/other	47 (10)	97 (10)	14 (5)	27 (5)	6 (9)	7 (9)	7 (14)	1 (2)
Homeless, last 6 mo	252 (55)	375 (39) *	133 (49)	163 (32) *	42 (66)	48 (63)	27 (53)	27 (47)
Employed, last 6 mo	327 (71)	599 (62) *	157 (58)	272 (54)	47 (73)	61 (80)	26 (46)	30 (53)
Inject 5 years or less	99 (22)	179 (19)	79 (29)	112 (22) **	8 (13)	10 (13)	12 (24)	13 (23)

\* p<.05

\*\* p<.01

## Medical and mental health by amphetamine use, gender and sexual partners

	MSW/NS N=1425 (%)		WSM/NS N=776 (%)		MSM N=140 (%)		WSW N=108 (%)	
	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth
	460 (32)	965 (68)	272 (35)	504 (65)	64 (46)	76 (54)	51 (47)	57 (53)
HIV+	19 (4)	21 (2)**	3 (1)	10 (2)	7 (11)	3 (4)	2 (4)	4 (7)
Hepatitis	164 (36)	426 (44) **	93 (34)	235 (47) *	33 (52)	43 (57)	26 (51)	25 (44)
Abscess	117 (25)	325 (34) *	70 (26)	210 (42) *	31 (48)	42 (55)	29 (57)	21 (37) **
Gonorrhea	78 (17)	221 (23)**	44 (16)	98 (19)	30 (47)	35 (46)	18 (35)	22 (39)
Depression	226 (50)	457 (48)	169 (63)	312 (64)	22 (34)	24 (33)	29 (57)	37 (65)
Suicidal Ideation	185 (41)	300 (32)*	126 (47)	189 (38) **	20 (32)	23 (32)	27 (53)	19 (33)**
Ever Drug Tx	275 (60)	696 (72) *	168 (62)	318 (63)	46 (72)	56 (74)	39 (77)	41 (72)
Current Drug Tx	31 (7)	189 (20) *	25 (9)	112 (22) *	17 (27)	27 (36)	11 (22)	11 (20)

\* p<.05

\*\* p<.01

# Sexual behavior and risk, last 30 days

	MSW N=712 (%)		WSM N= 495 (%)		MSM N=140 (%)		WSW N=108 (%)	
	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth
	261 (37)	451 (63)*	189 (38)	306 (62) **	64 (46)	76 (54)	51 (47)	57 (53)
Any Sex Work	27 (10)	39 (9)	42 (22)	77 (25)	44 (69)	47 (62)	39 (77)	33 (58) **
Sex with Opposite Sex					Opposite Sex		Opposite Sex	
# casual partners	1.48	0.89 ***	2.31	1.44	3.10	1.86	5.40	5.08
Never used condoms	58 (22)	83 (18)	42 (22)	49 (16)^	19 (30)	35 (46) **	16 (31)	12 (21)
# sex for money	3.52	2.48	14.49	16.48	2.75	2.54	9.72	10.13
Never used condoms	10 (4)	16 (4)	5 (3)	10 (3)	16 (25)	30 (40) ^	8 (16)	11 (19)
# sex for drugs	5.20	2.19^	3.12	5.77	2.97	1.71^	4.89	2.22
Never used condoms	6 (2)	11 (2)	9 (5)	9 (3)	18 (28)	31 (41)	11 (22)	10 (18)
Sex with Same Sex					Same Sex		Same Sex	
# casual partners					4.77	2.20 ***	3.96	1.79 ***
Never used condoms					29 (45)	43 (57)	n/a	n/a
# sex for money					3.27	3.08	3.76	3.90
Never used condoms					14 (22)	28 (37) ^	n/a	n/a
# sex for drugs					2.67	2.76	2.12	1.14
Never used condoms					14 (22)	26 (34) ^	n/a	n/a

\* Chi-Square p<.01

\*\* Chi-Square p<.05

\*\*\* T-Test t <.05

^ borderline sig. p<.1

# Drug use and injection risk behavior, last 30 days

	MSW/NS N=1425 (%)		WSM/NS N=776 (%)		MSM <sup>1</sup> N=140 (%)		WSW <sup>1</sup> N=108 (%)	
	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth	Meth Inj	No Meth
<b><u>Inject Heroin Only</u></b>		*		*				
Never	195 (42)	186 (19)	140 (52)	129 (26)	29 (45)	34 (45)	15 (29)	20 (35)
Less than daily	117 (25)	280 (29)	61 (22)	125 (25)	14 (22)	17 (22)	15 (29)	9 (16)
Every Day	148 (32)	488 (51)	70 (26)	241 (48)	21 (33)	25 (33)	21 (41)	28 (49)
<b><u>Inject Cocaine Only</u></b>		*		*		^		*
Never	242 (53)	648 (67)	163 (60)	346 (69)	32 (50)	55 (72)	19 (37)	40 (70)
Less than daily	154 (33)	217 (22)	89 (33)	101 (20)	18 (28)	12 (16)	21 (41)	9 (16)
Every Day	64 (14)	90 (9)	19 (7)	49 (10)	14 (22)	9 (12)	11 (22)	8 (14)
<b><u>Inject Speedball</u></b>		*		*		*		*
Never	263 (57)	669 (69)	166 (61)	350 (69)	29 (45)	57 (75)	19 (37)	43 (75)
Less than daily	140 (30)	189 (20)	89 (33)	87 (17)	22 (34)	11 (14)	23 (45)	6 (11)
Every Day	56 (12)	99 (10)	16 (6)	58 (12)	13 (20)	8 (11)	9 (18)	8 (14)
<b><u>Smoke Crack</u></b>		*				^		^
Never	266 (58)	637 (66)	176 (65)	303 (60)	32 (50)	53 (70)	17 (33)	32 (56)
Less than daily	148 (32)	225 (23)	64 (24)	123 (24)	20 (31)	16 (21)	19 (37)	11 (19)
Every Day	46 (10)	94 (10)	32 (12)	71 (14)	12 (19)	7 (9)	15 (29)	14 (25)
<b><u>Distributive sharing</u></b>	128 (28)	189 (20) **	97 (36)	130 (26) **	24 (38)	14 (18) *	20 (39)	18 (32)
<b><u>Receptive sharing</u></b>	143 (31)	192 (20) **	85 (31)	107 (21) **	30 (47)	19 (39) **	23 (45)	16 (28) ^

## Factors Shaping Receptive Syringe Sharing

	<b>OR</b>	<b>95% CI</b>
Speed Injection	1.76	1.46-2.13
Homeless	1.66	1.38-2.00
Depression	1.49	1.23-1.80
MSM/WSW	1.58	1.19-2.10

## **Amphetamine injectors at SEP**

Poly-substance use

Demographically distinct

younger, white, high MSM/WSW

Social and medical risks

## **Amphetamine injection and HIV**

High rates of sexual risk overall

Elevated rates of injection risk behavior

Multiple risk factors

### Dynamics of risk:

Identity, community, contexts for use

Social vs pharmacological

Contexts, cultures and services