

Increasing Methamphetamine Use among Non-MSM Who Inject Drugs in King County, WA

Sara Glick, PhD, MPH

Division of Allergy and Infectious Diseases

University of Washington

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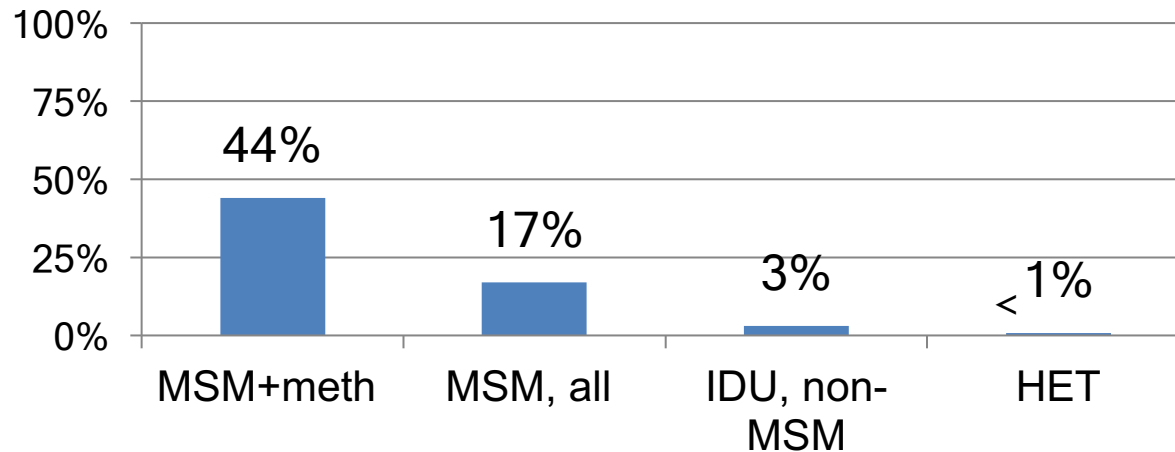
Caleb Banta-Green 

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BACKGROUND

**HIV Prevalence in King County,
National HIV Behavioral Surveillance (2013-2015)**



- Local drug problem indicators suggest recent increased meth use
 - Similar patterns in Denver (Al-Tayyib AA, Substance Use & Misuse 2017)
- Not known if this increase is among MSM or non-MSM, and if these networks are connected through injection equipment sharing

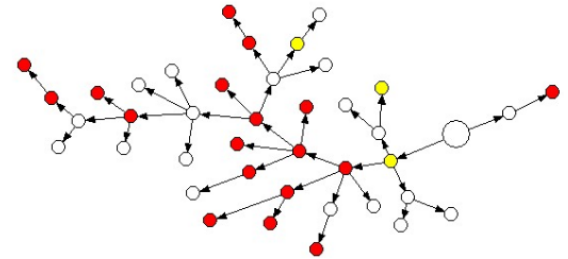
OBJECTIVES

- To describe temporal trends in meth use among PWID in King County among:
 - Men who have sex with men (MSM)
 - Men who have sex only with women (MSW)
 - Women
- To estimate frequency and characteristics of injection equipment sharing among PWID who inject meth

METHODS

- **National HIV Behavioral Surveillance (NHBS) IDU surveys**

- N=2,103
- 2005-2015, 4 cycles
- PWID in the past year
- Respondent-driven sampling
- Questions: Meth use, equipment sharing, sharing partners



- **PHSKC Syringe Exchange Program (SEP)**

- N=1,748
- 2009-2015, 4 surveys
- NX clients
- Convenience sample over a two week period
- Questions: Meth use (alone or in combination), equipment sharing



Photo from: KUOW.org

ANALYSIS

- Restricted to PWID who reported any sex in the past year
 - Stratified by MSM, MSW, and women
- Statistical methods
 - Frequencies
 - Poisson regression with a log link and robust standard errors to assess correlates of meth+heroin use

SAMPLE CHARACTERISTICS

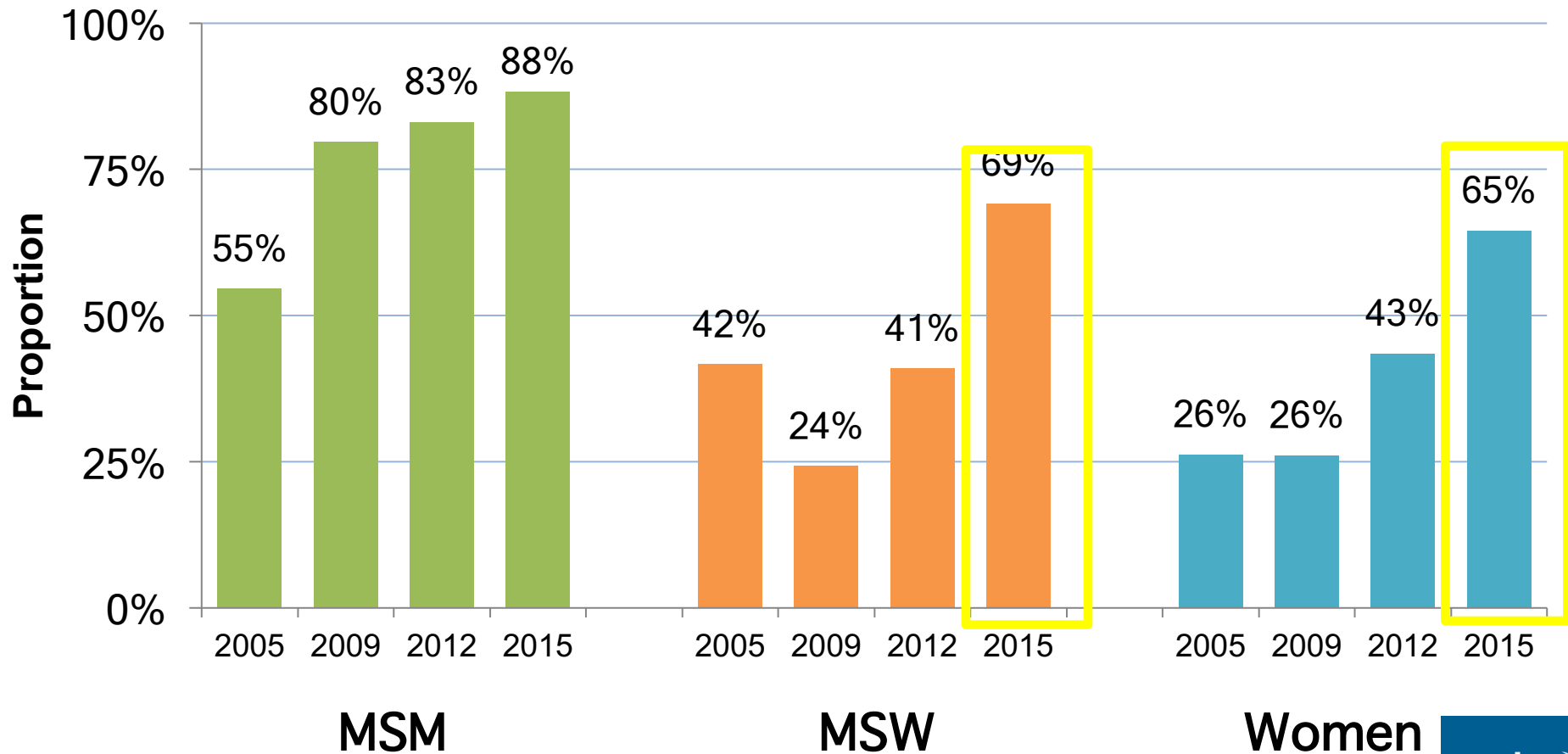
Characteristic	NHBS IDU (2005-2015) N=2,103	King County SEP (2009-2015) N=1,748
Age, mean	42.7 years	37.8 years
Gender + sex partners		
Men who had sex with men	217 (10.4)	193 (11.3)
Men who had sex only with women	890 (42.8)	751 (43.9)
Women, sexually active	606 (29.4)	437 (25.5)
No sex in the past year	367 (17.7)	331 (19.3)
White, non-Hispanic	1,259 (59.9)	1,219 (70.4)
Unstable housing, current	1,074 (51.1)	605 (35.0)
Injects daily	1,465 (71.3)	1,166 (67.6)
Overdosed, past year¹	259 (15.7)	293 (17.2)
HIV-infected¹	123 (7.1)	--
HCV-antibodies¹	1,042 (70.7)	--

¹Only measured in NHBS-IDU2 (2009), IDU3 (2012), and IDU4 (2015).

RESULT #1:

Methamphetamine injection increased substantially

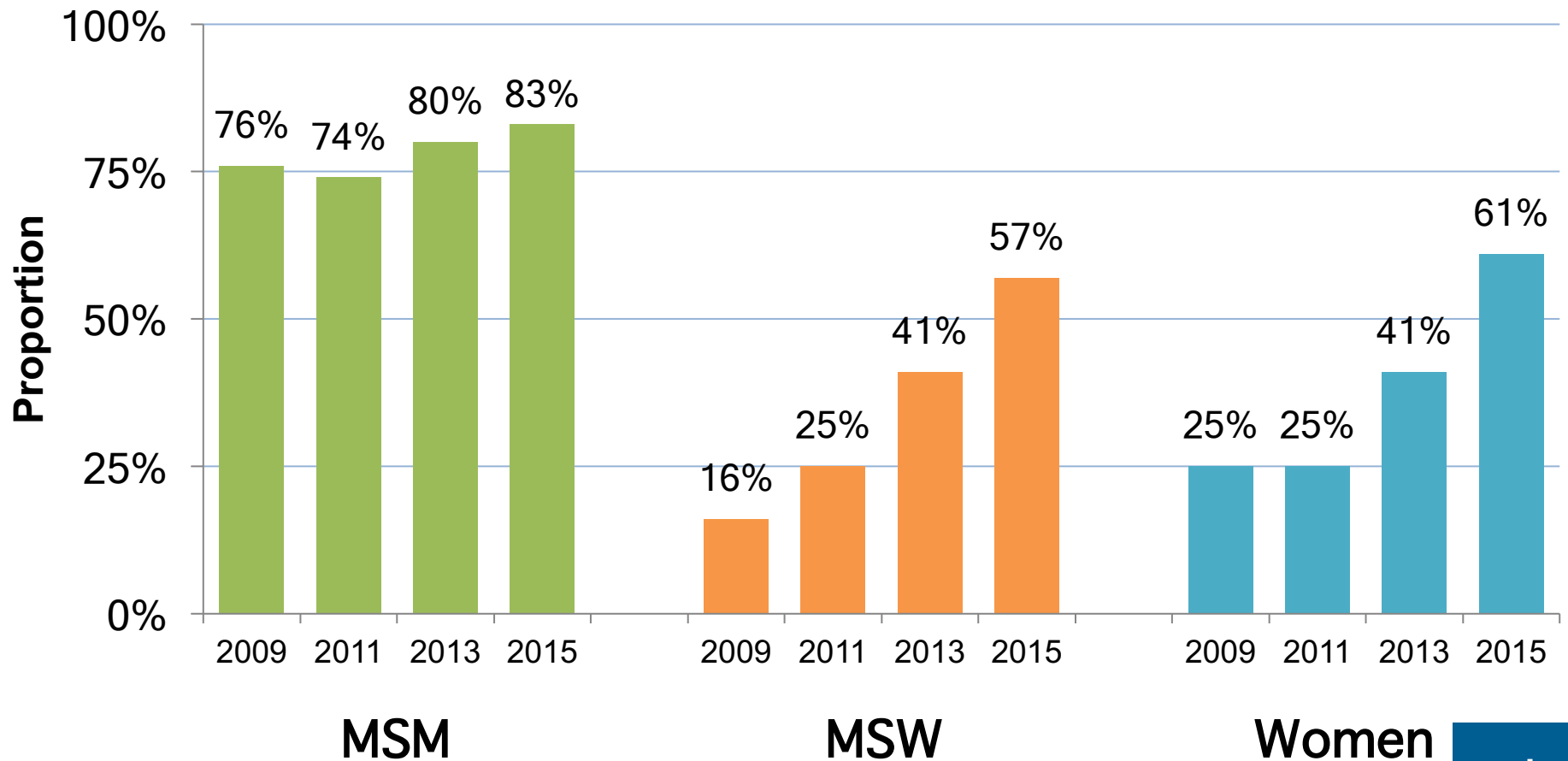
% NHBS-IDU Participants Reporting Methamphetamine Injection in the Past Year



RESULT #1:

Methamphetamine injection increased substantially

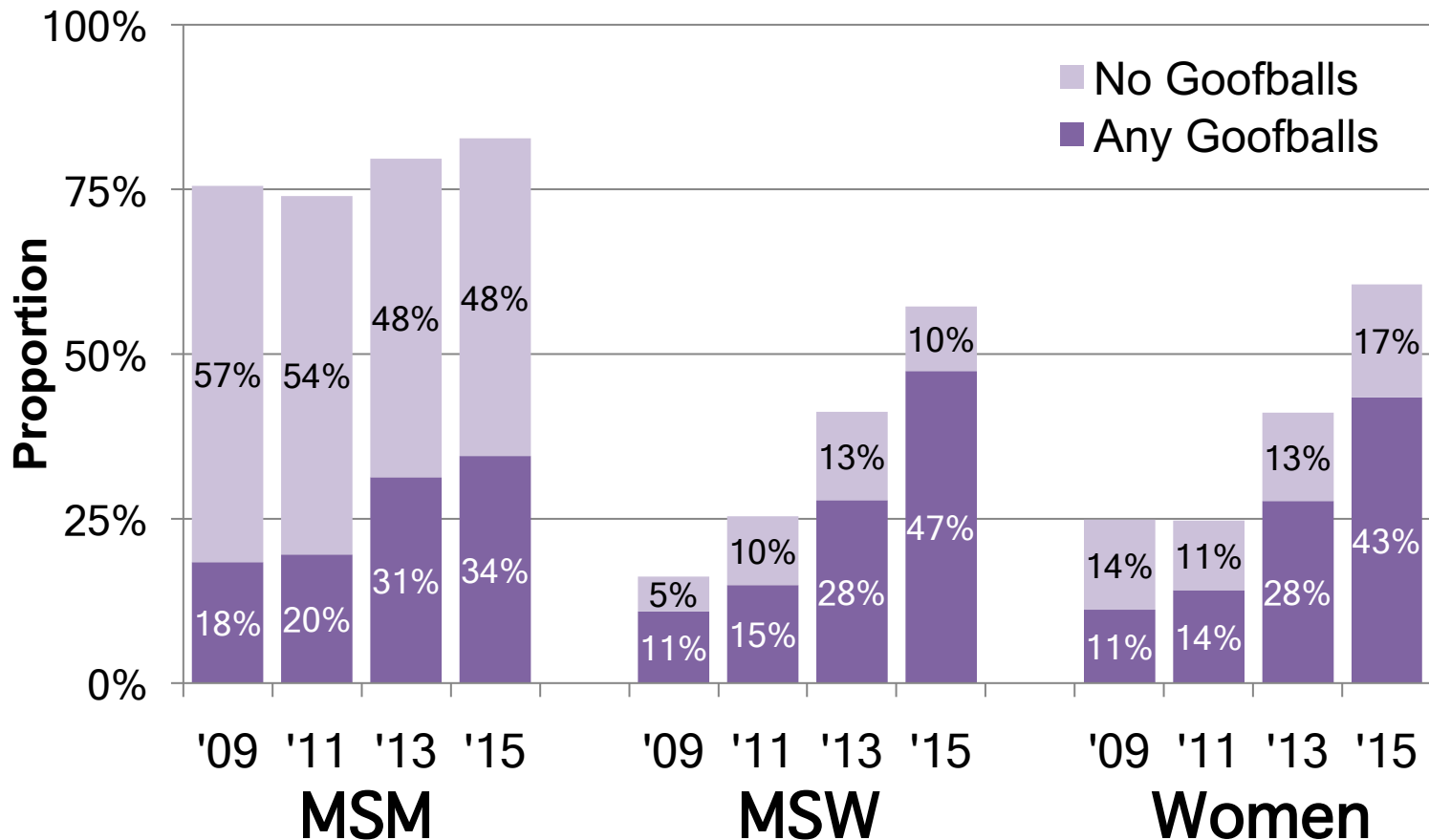
% PHSKC SEP Clients Reporting Methamphetamine Injection in the Past Three Months



Note: In 2009, the SEP survey asked about methamphetamine injection 'since the beginning of the year' vs. 'in the past 3 months'.

RESULT #2: Most of the increase in methamphetamine injection was attributable to injecting meth/heroin together (“goofballs”)

% PHSKC SEP Clients Reporting Methamphetamine Injection in the Past Three Months



Characteristics of non-MSM King County SEP Clients Reporting Goofball Injection vs. Meth Alone in the Past 3 Months (2009-15)

Characteristic	Meth + Heroin “Goofballs” N=272 # (%)	Meth Alone N=126 # (%)	Prevalence Ratio (95% CI)
Age, mean	32.2	37.2	0.98 (0.98-0.99)
Women	99 (36.4)	57 (45.2)	0.89 (0.77-1.02)
White, non-Hispanic	191 (71.3)	87 (69.1)	1.04 (0.89-1.21)
Unstable housing	144 (52.9)	45 (36.0)	1.24 (1.08-1.42)
Injects daily	215 (79.3)	76 (60.8)	1.39 (1.14-1.68)
Overdosed, past year	80 (29.4)	24 (19.5)	1.17 (1.02-1.33)

RESULT #3: Injection equipment sharing is common among PWID who inject methamphetamines

NHBS-IDU Participants (2005-15)
Equipment Sharing in Past Year



PHSKC SEP Clients (2009-15)
Equipment Sharing in Past 3 Months

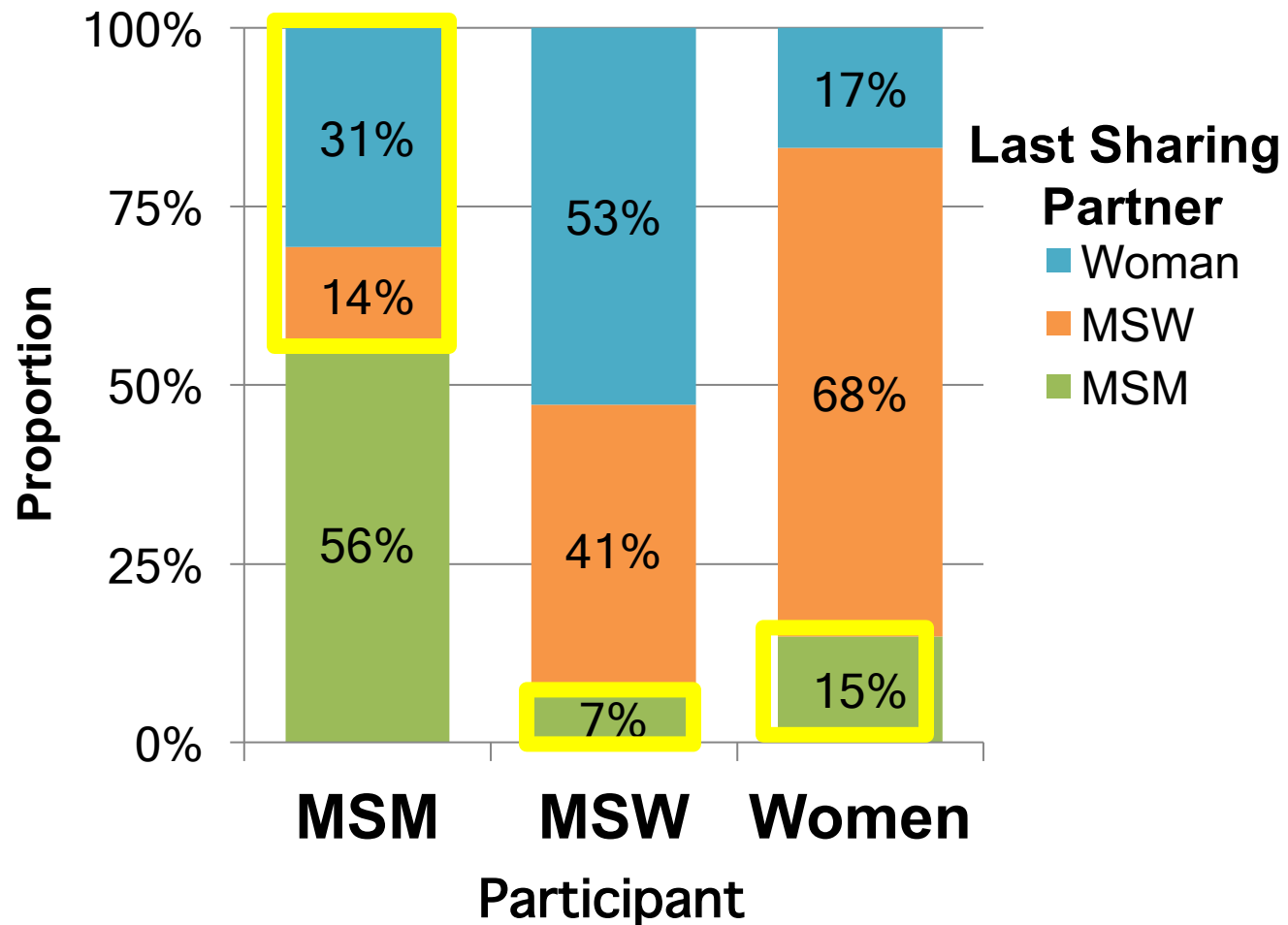


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RESULT #4: Evidence of injection equipment sharing between MSM and non-MSM who inject methamphetamines

Seattle area NHBS-IDU Participants who Report Sharing Injection Equipment, 2005-2015



SUMMARY

- Injecting methamphetamines is increasingly common among PWID
- Most of the increase is among:
 - Non-MSM
 - PWID injecting heroin + meth together (goofballs)
- Goofball use associated with overdose
- Sharing injection equipment is common
- Non-trivial rates of equipment sharing between MSM and non-MSM who inject meth

STRENGTHS & LIMITATIONS

STRENGTHS

- Consistent findings across two independent serial cross-sectional surveys of PWID
- Goofball measure in SEP survey

LIMITATIONS

- Limited data on injection equipment sharing partners
- Measures subject to social desirability bias
- Some variance in measures within/between surveys

DISCUSSION & CONCLUSIONS

- Why is methamphetamine injection increasing?
 - Goofballs appear to be a West Coast phenomenon
 - Reflects drug trafficking patterns
 - Coincides with a decline in speedballs (heroin + cocaine)
- **Non-MSM men and women who inject methamphetamines may be an emerging population at risk for HIV**
 - Sharing injection equipment with meth-using MSM
 - New HIV diagnosis rate among non-MSM PWID in King County is low
- Critical to maintain HIV prevention efforts among PWID
 - Syringe exchange programs
 - HIV testing and viral suppression
 - PrEP

QUESTIONS?

Sara Glick
snglick@uw.edu