

# Trends in Methamphetamine use among at risk populations in Los Angeles County

Kwa Sey, PhD

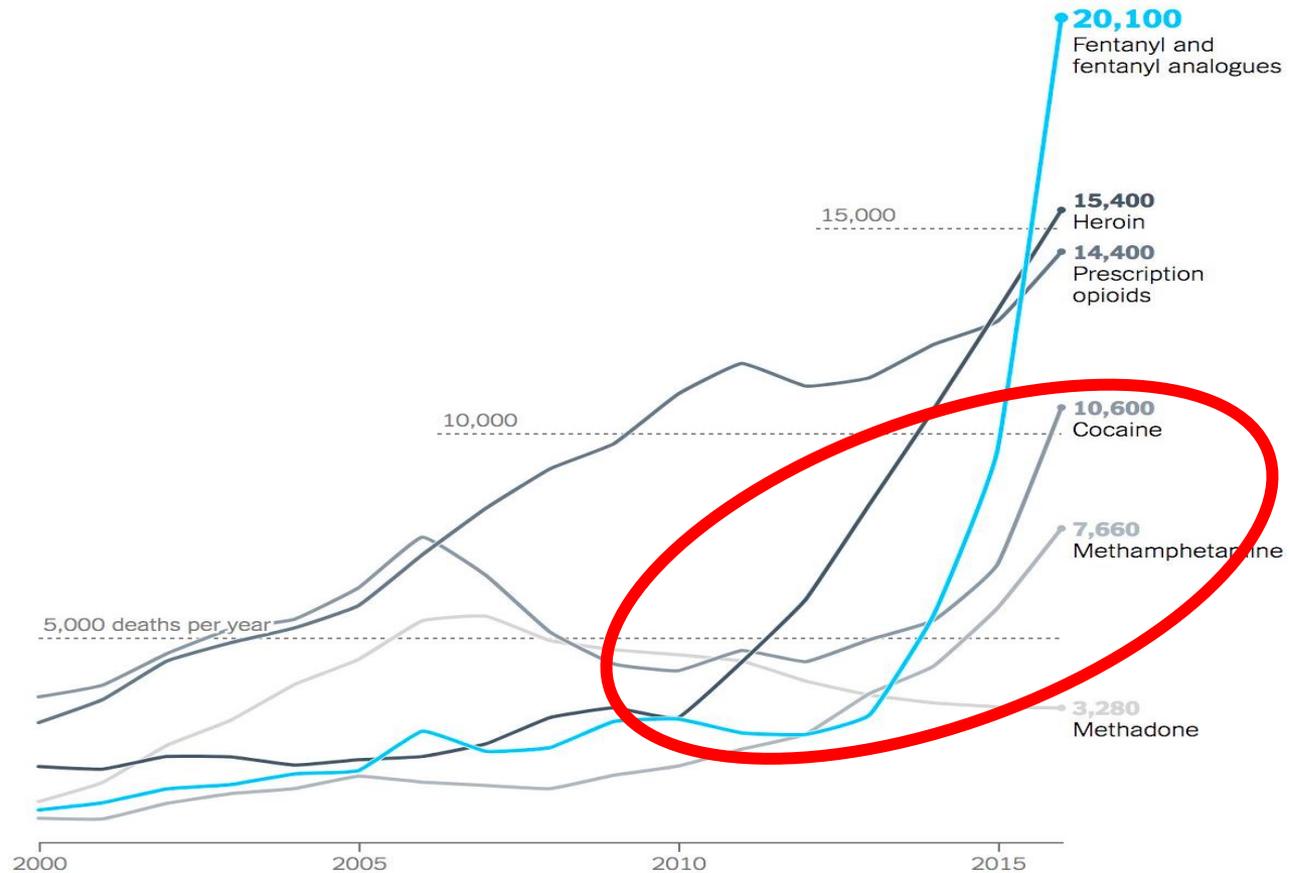
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Division of HIV and STD Programs



# Drugs involved in overdose deaths, 2000-2016



\*NYT Interactive, 09/02/2017, National Center for Health Statistics

## Presentation Purpose

- To use NHBS data to describe trends in methamphetamine use in Los Angeles County among:
  - Men who have sex with men
  - **People who inject drugs (PWID)**
  - Heterosexuals at increased risk for HIV

# National HIV Behavioral Surveillance System

## History

In 2003, CDC created NHBS for conducting behavioral surveillance among persons at high risk for HIV infection.

## Objectives

Monitor HIV prevalence and trends in behavior among the populations at highest risk for HIV infection in the US.

## Data collected

- Risk Behaviors for HIV (sexual and drug use risk behaviors)
- HIV Testing Behaviors
- HIV Seroprevalence
- HBV/HCV Seroprevalence
- Exposure to and use of HIV prevention services

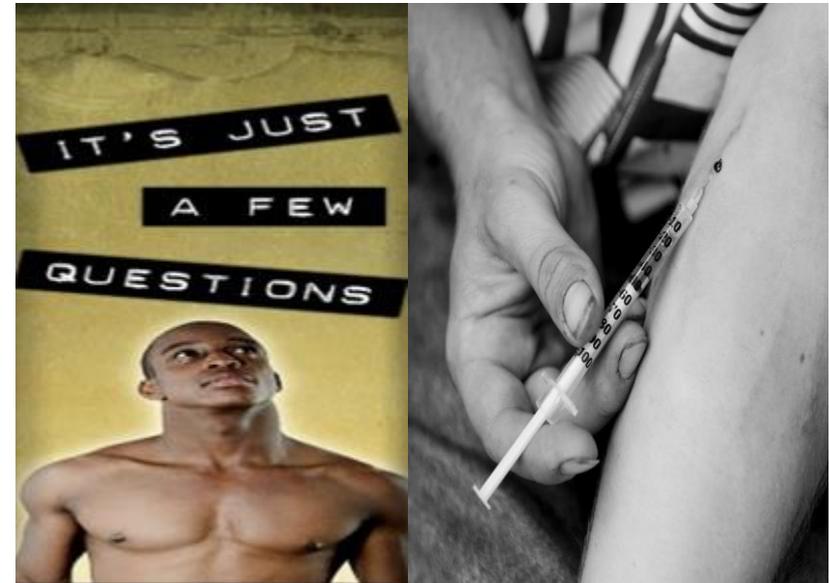
# Where is NHBS being conducted?



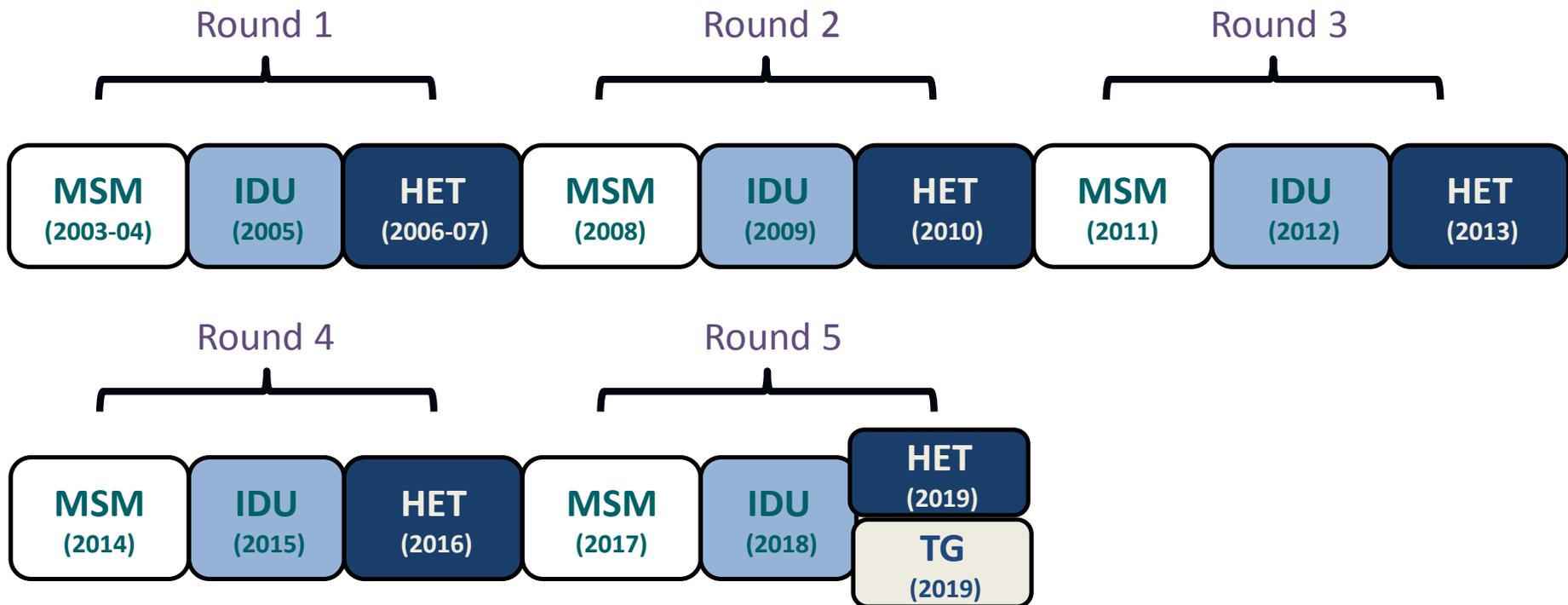
Currently 23 jurisdiction including Los Angeles County are funded to conduct NHBS.

# Targeted Populations

- Men who have sex with Men
- People who inject drugs
- Heterosexuals
- Transgender persons
- Young Men who have Sex with Men



# NHBS annual rotating cycles



NHBS is implemented in annual rotating cycles such that each population is surveyed once every 3 years.

\*MSM: Men who have sex with men \*IDU: Injection drug users \*HET: Heterosexuals at increased risk for HIV infection (HET). Transgender (TG) will be piloted in 2019 as part of Round 5

# Eligibility Requirements

- **OVERALL ELIGIBILITY (applies to all cycles)**
  - Has not participated in the current cycle
  - Resident of the participating MSA
  - Aged 18 or above
  - Alert and able to complete the interview in English or Spanish (interviewer assessment)
  
- **MSM-specific**
  - Male at birth and identify as male
  - Ever had oral or anal sex with another man
  
- **IDU-specific**
  - Reports having injected drugs that were not prescribed for them in the past 12 months;
  - Evidence of injection
  - Has physical signs of recent injection, and/or
  - has adequate knowledge of injection
  
- **HET-specific**
  - ≤ 60 years of age
  - Male or female
  - Had vaginal or anal sex with a person of the opposite-sex in the past 12 months

# Sampling Approach

- **Time Location Sampling (TLS)**
  - 3 stage sampling approach
  - Venue Day Times are randomly selected as proxies for randomly selecting MSM
  - TLS is widely accepted as the gold standard for sampling populations where no sampling frame exists
  - TLS relies on the fact that the targeted population attends a universe of venues at identifiable and specific days and times
  - Recruitment venues range from bars and dance clubs to social organizations
- **Respondent Driven Sampling**
  - RDS is a chain-referral strategy similar to snowball sampling
  - Peer Recruitment with quota
  - Dual incentive structure
  - Final sample is independent of the “seeds” that began the sample
  - Can make inferences about the broader population

## Sample Size

- 500

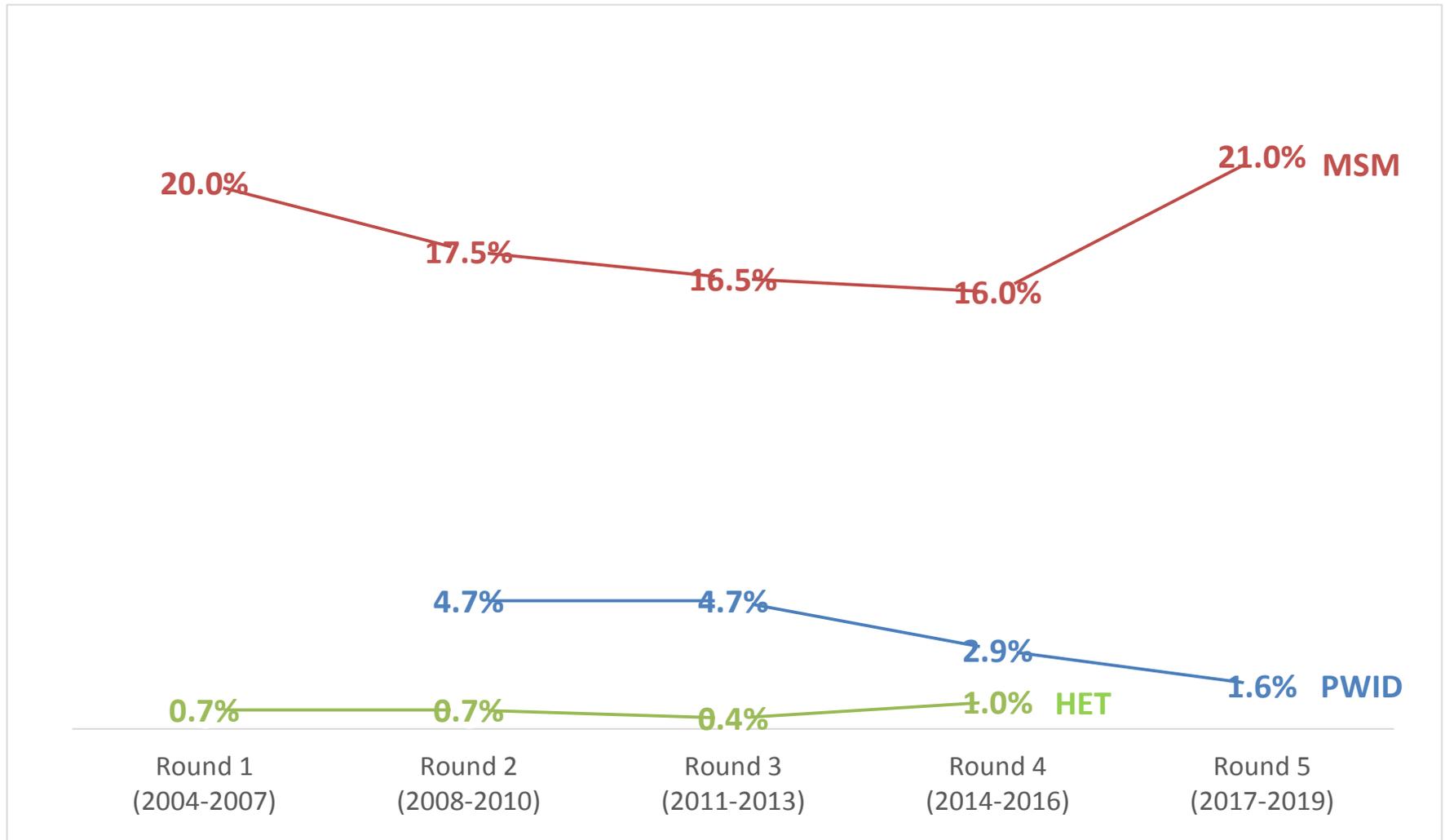
## Interview methods

- Conduct interviews in a mobile van
- Interviewer-administered survey (45 -60 minutes)
- Use laptop computers (CAPI)
- Offer optional HIV and Hepatitis testing
- \$25 for survey, \$25 HIV, \$20 HBV/HCV
- Provide risk-reduction counseling
- Rapid test results disclosed after completion of behavioral questionnaire.
- Participants call back for lab test results



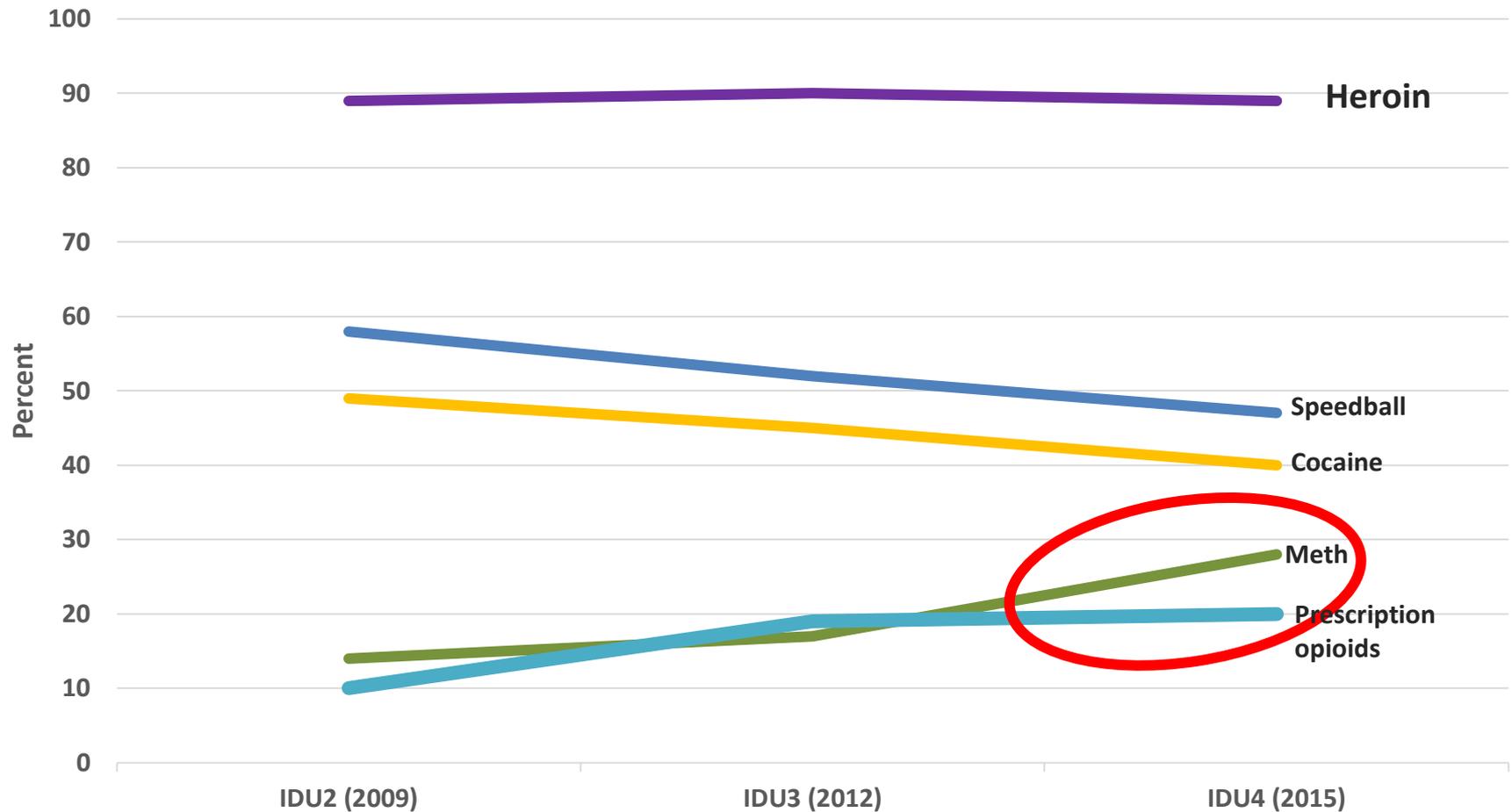
# RESULTS

# HIV Prevalence by NHBS Target Population (2004-2018)

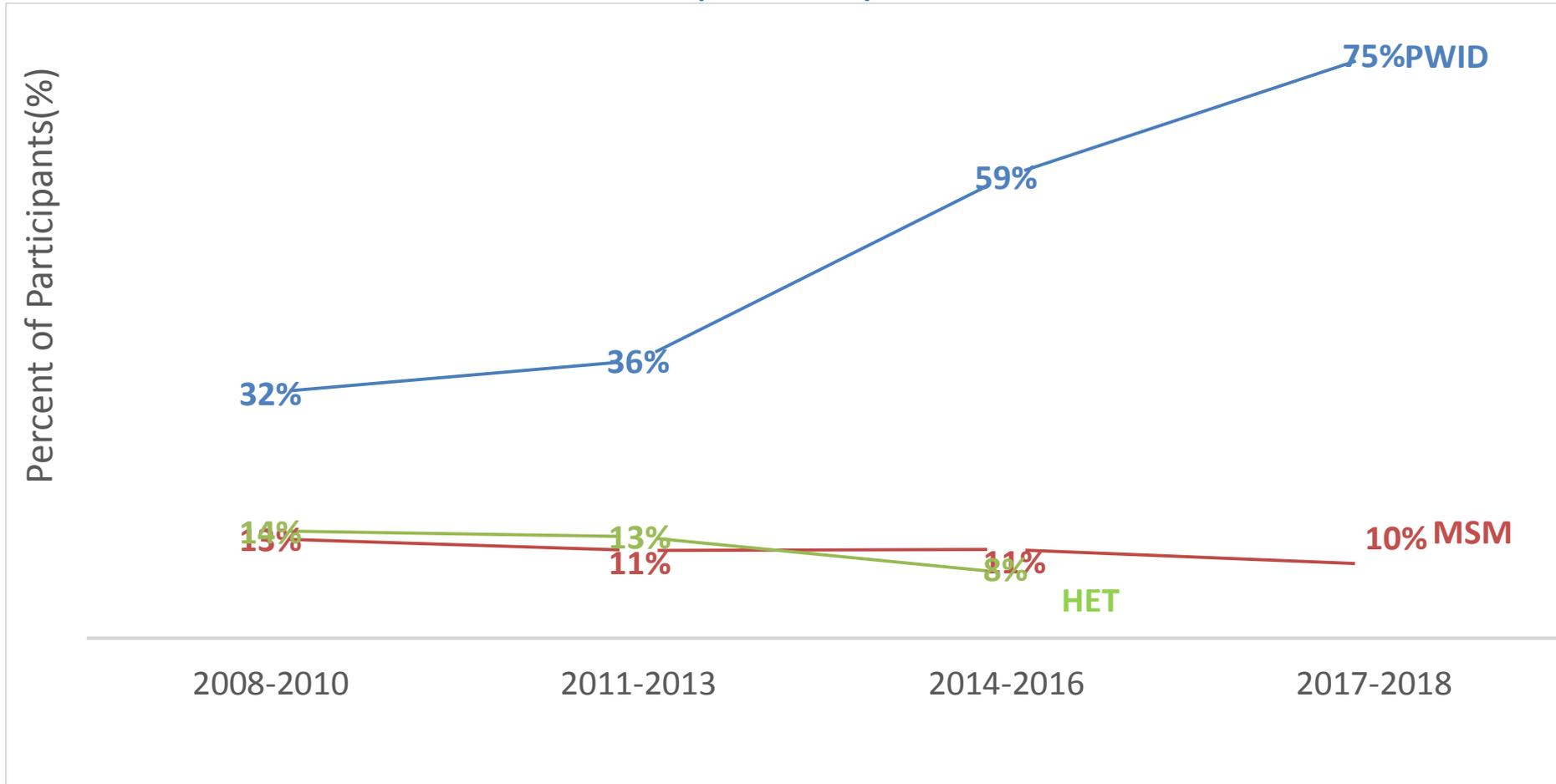


Note: HIV prevalence was not assessed in IDU Round 1

## Drug injected in the past 12 months among PWID (NHBS National Level: 2009-2015)

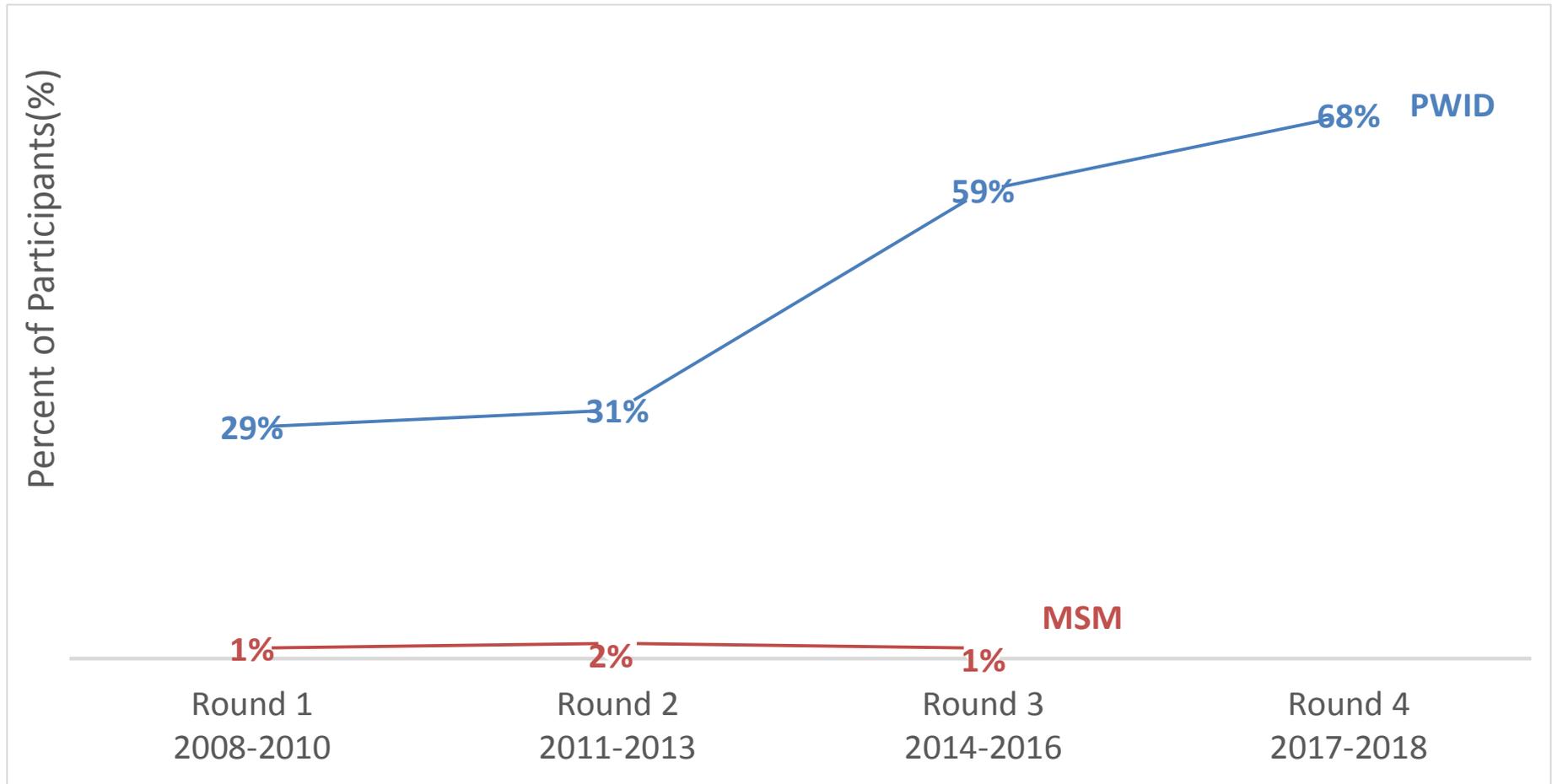


# Non-Injection Methamphetamine Use among NHBS Participants, Los Angeles County, (2009-2018)



Non-Injection use of methamphetamine **increased significantly** among PWID from 2009-2018 ( $p < .0001$ )  
Comparable increase not observed among MSM and HET

## Injection Methamphetamine Use among NHBS Participants, Los Angeles County (2008-2018)



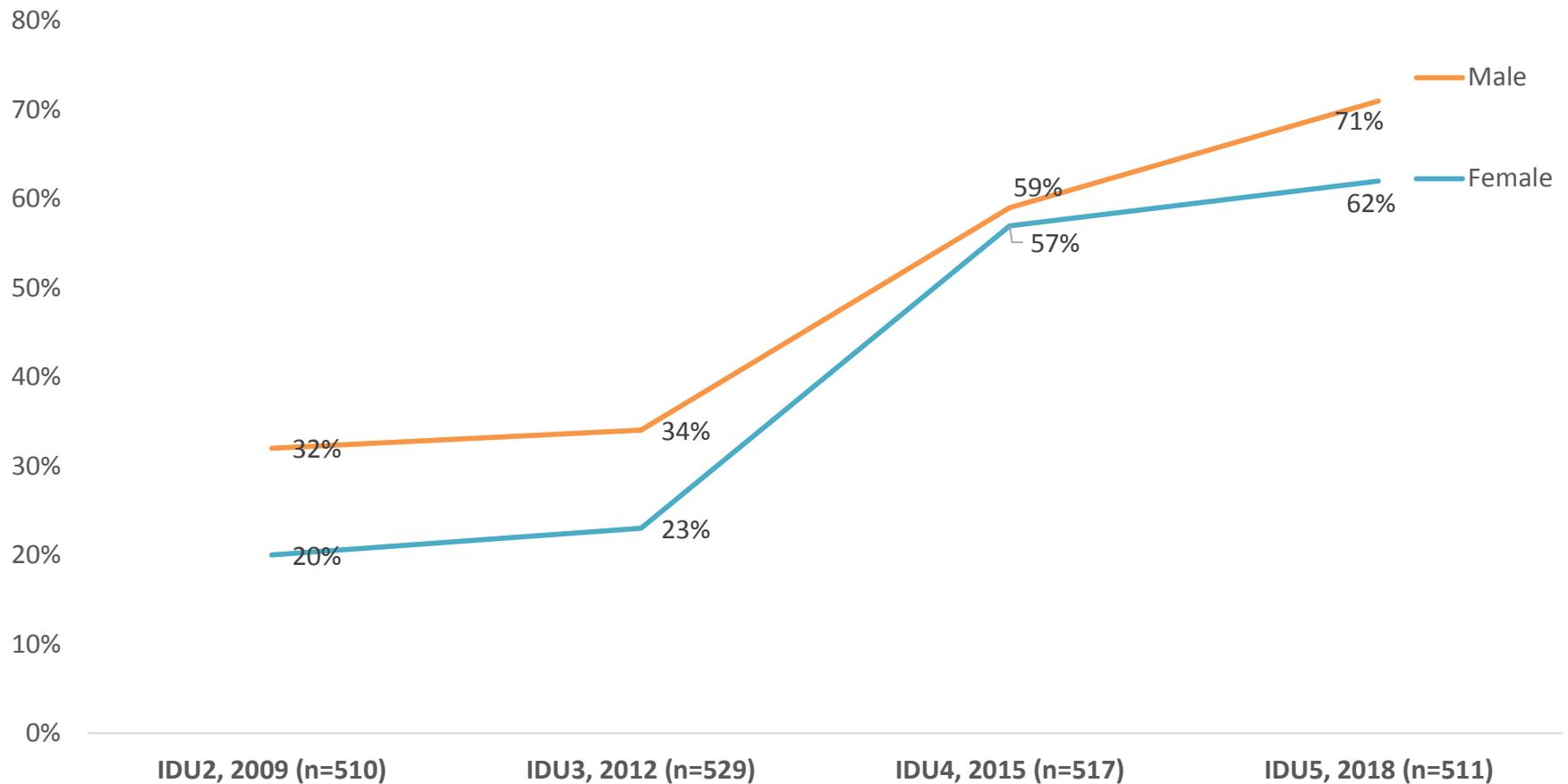
Injection methamphetamine use **increased significantly** among PWID from 2009-2018

## Gender, Race/Ethnicity, Age and Homelessness NHBS-IDU (2006 – 2018)

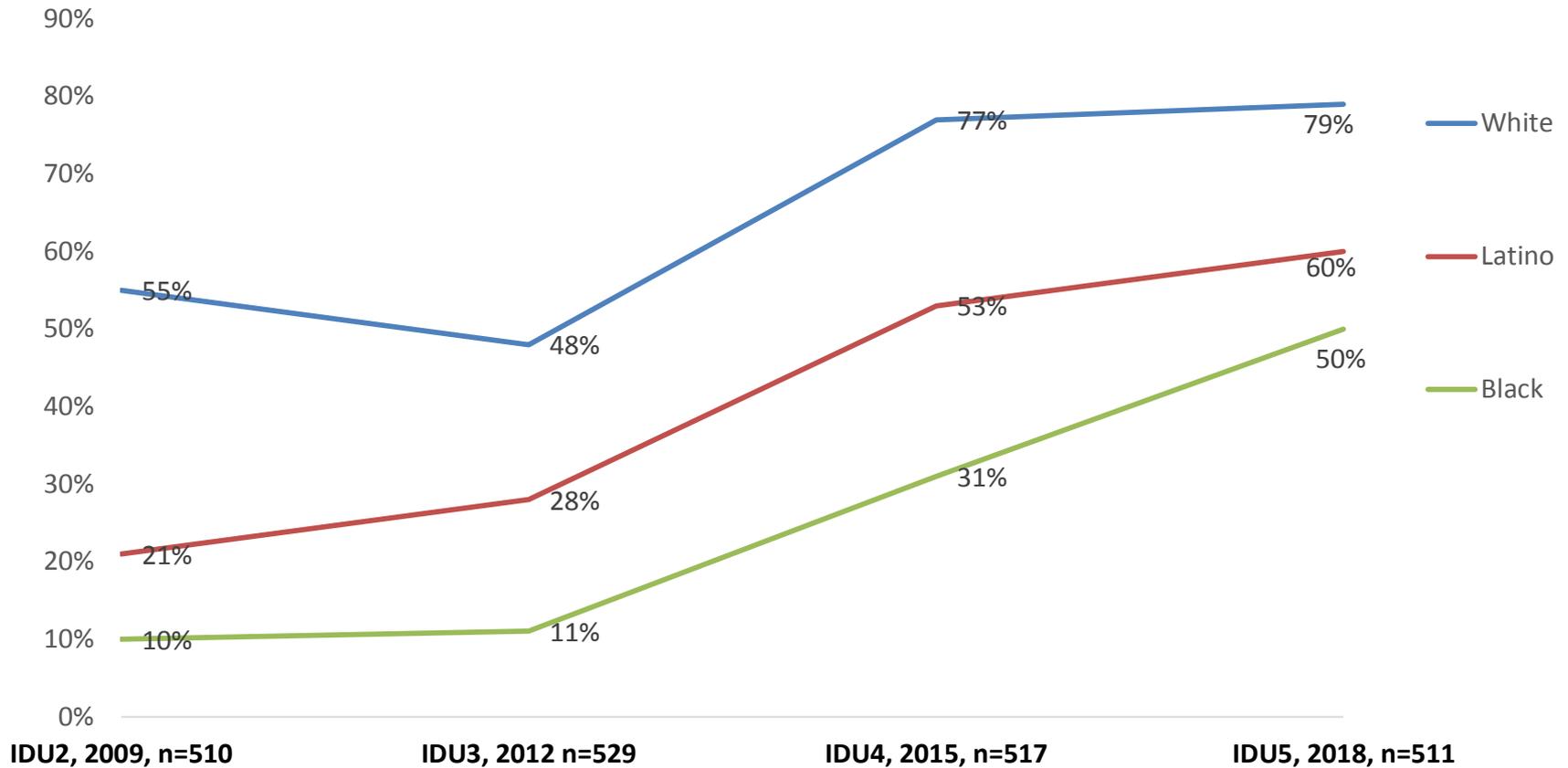
	IDU1, 2006	IDU2, 2009	IDU3, 2012	IDU4,2015	IDU5,2018
	N=545	N=510	N=529	N=517	N=511
<b>Gender</b>					
Male	72%	74%	73%	72%	67%
Female	28%	26%	27%	28%	33%
<b>Race/Ethnicity*</b>					
Black	23%	26%	21%	17%	10%
Latino	45%	37%	41%	41%	40%
White	23%	28%	30%	34%	42%
<b>Age</b>					
18-29	5%	5%	10%	20%	22%
>=30	95%	95%	90%	80%	78%
<b>Homelessness</b>					
Not homeless	31%	28%	37%	26%	23%
Currently homeless	55%	54%	45%	54%	64%
Homeless in the past 12 months(not currently)	13%	18%	18%	20%	13%

\*Racial/Ethnic groups representing less than 5% are not displayed

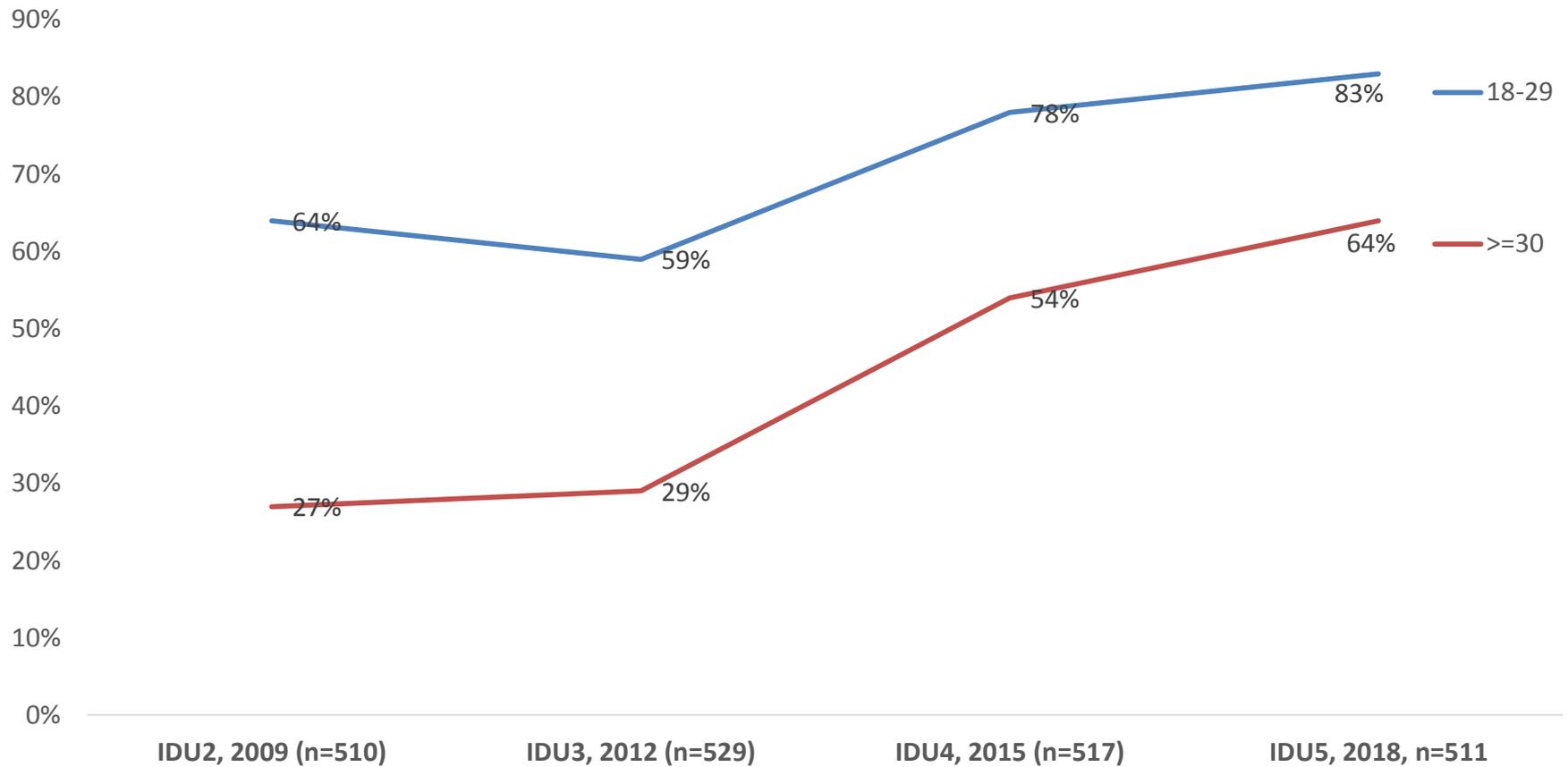
## Injection Meth use among PWID by Gender, 2009-2018



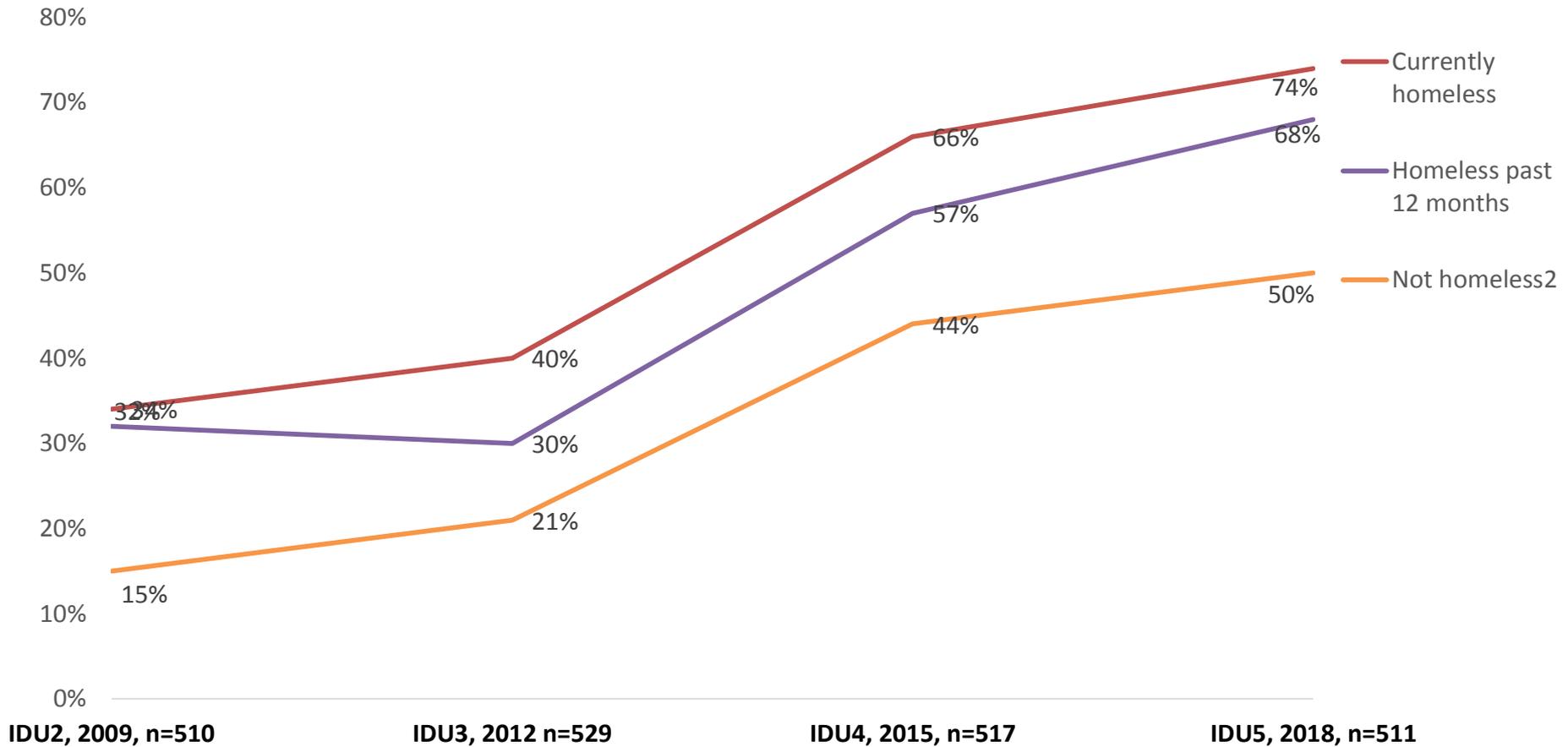
## Injection Meth use among PWID by Race/Ethnicity, 2009-2018



## Injection Meth use among PWID by Age groups, 2009-2018



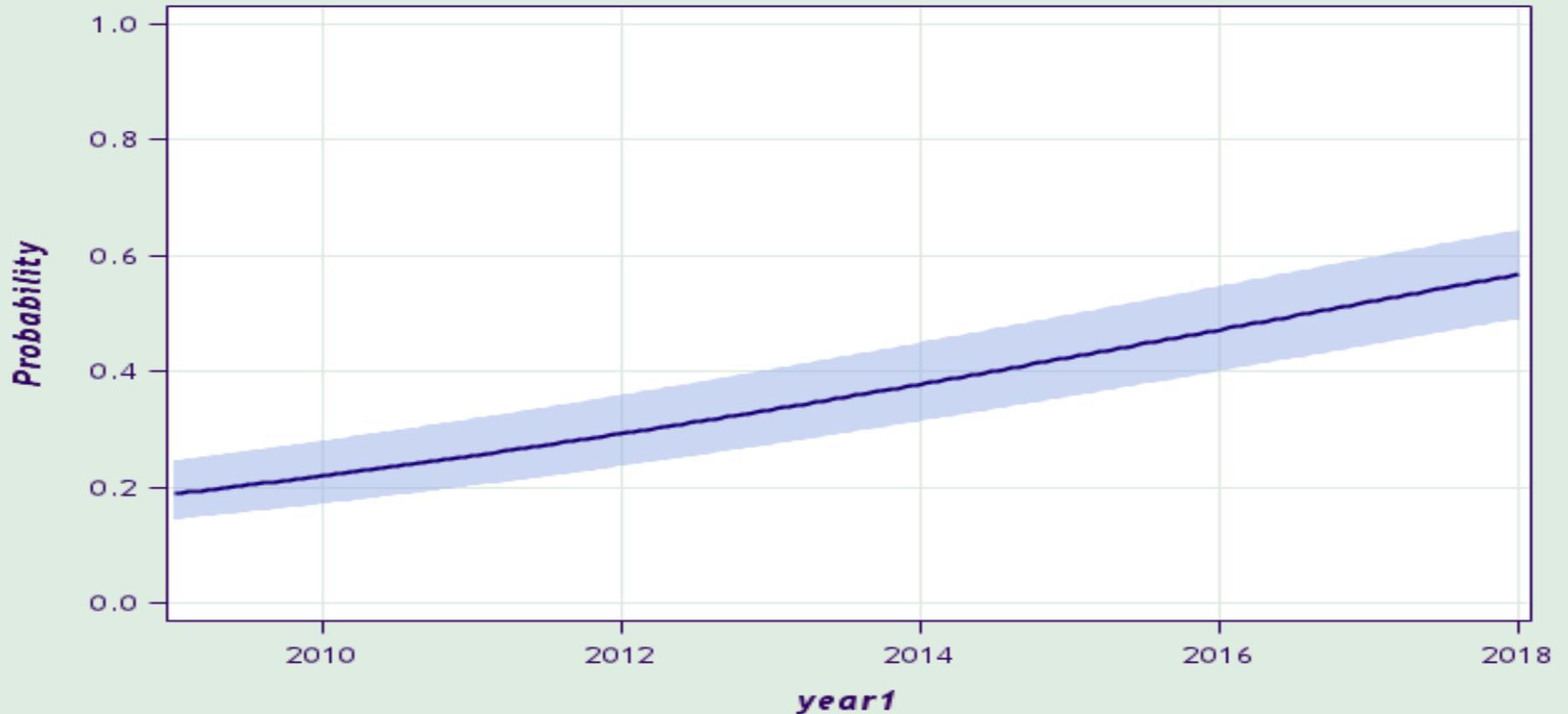
# Injection Meth use among PWID by Homelessness, 2009-2018



# ADJUSTED RESULTS

## Adjusted Injection Meth use among PWID, 2009-2018

**Predicted Probabilities for `_inj_meth = 1-Yes`**  
With 95% Confidence Limits



Fit computed at AGE=>=30 \_racecat=White GENDER=2-Female \_homeless=0-Not homeless

## Summary of Key Findings

- Over the observation period (2009 -2018) Meth injection has increased among PWID in LAC.
- Elevated meth injection has consistently been observed in the following subgroups
  - **Young PWID (<30 years)**
  - White PWID
  - Homeless PWID
  - Male PWID

## Important Considerations

- Young PWID (<30years)
- More recently initiated into drug injection, and thus better represent recent trends in drug use and injection
- More likely to engage in higher risk behaviors that place them at increased risk of HIV
- Less likely to be HIV positive, thus important for targeted prevention effort

# 2015 HIV Outbreak in Indiana

- Public health emergency, March 26, 2015
- 181 HIV diagnoses between Nov 2014 and Nov 2015
  - 92% also diagnosed with HCV
  - 230 as of March, 2018

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**Health emergency declared after Indiana HIV 'epidemic'**

26 March 2015 | US & Canada



Governor Pence met with local officials about the HIV outbreak on Wednesday

The governor of Indiana has declared a public health emergency after an HIV outbreak "reached epidemic proportions" in part of the state.

Scott County, a poor area where needle-sharing by drug users is common, has seen 79 new cases in recent weeks - up from an annual average of five.

Governor Mike Pence has authorised health officials to implement a needle exchange programme - a remedy he has opposed in the past.

HIV is the virus that causes Aids.

# Thank You !

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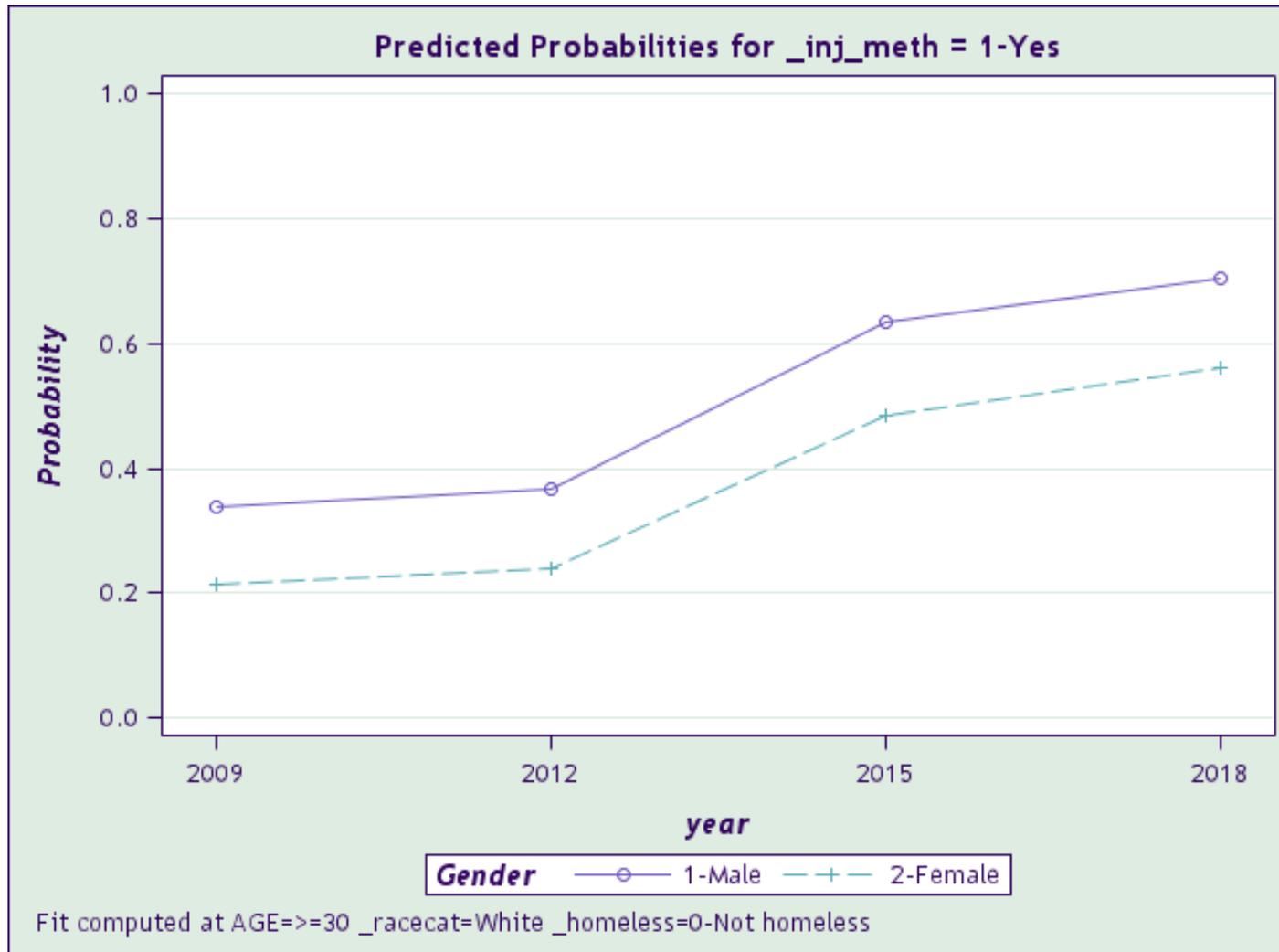
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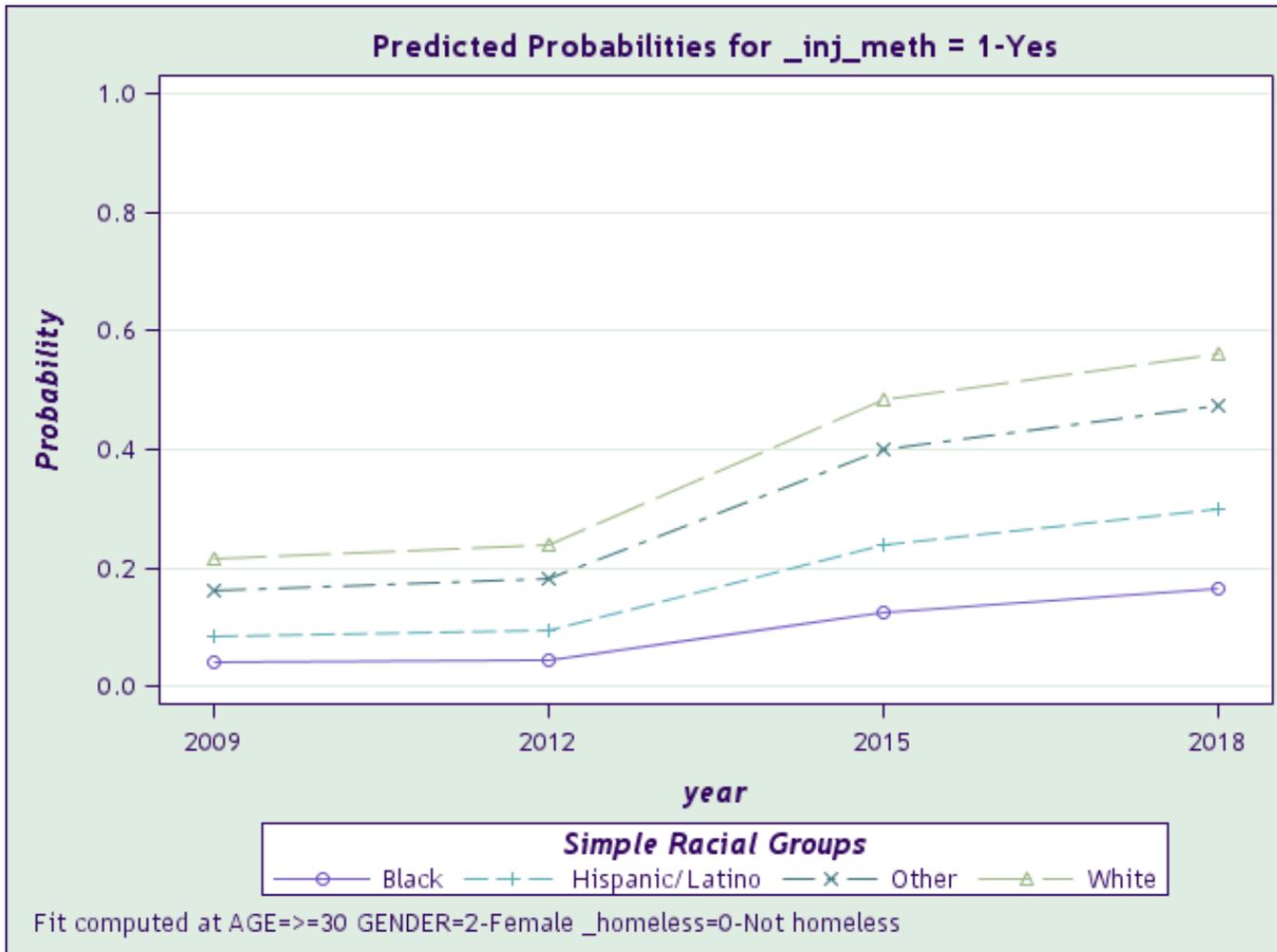




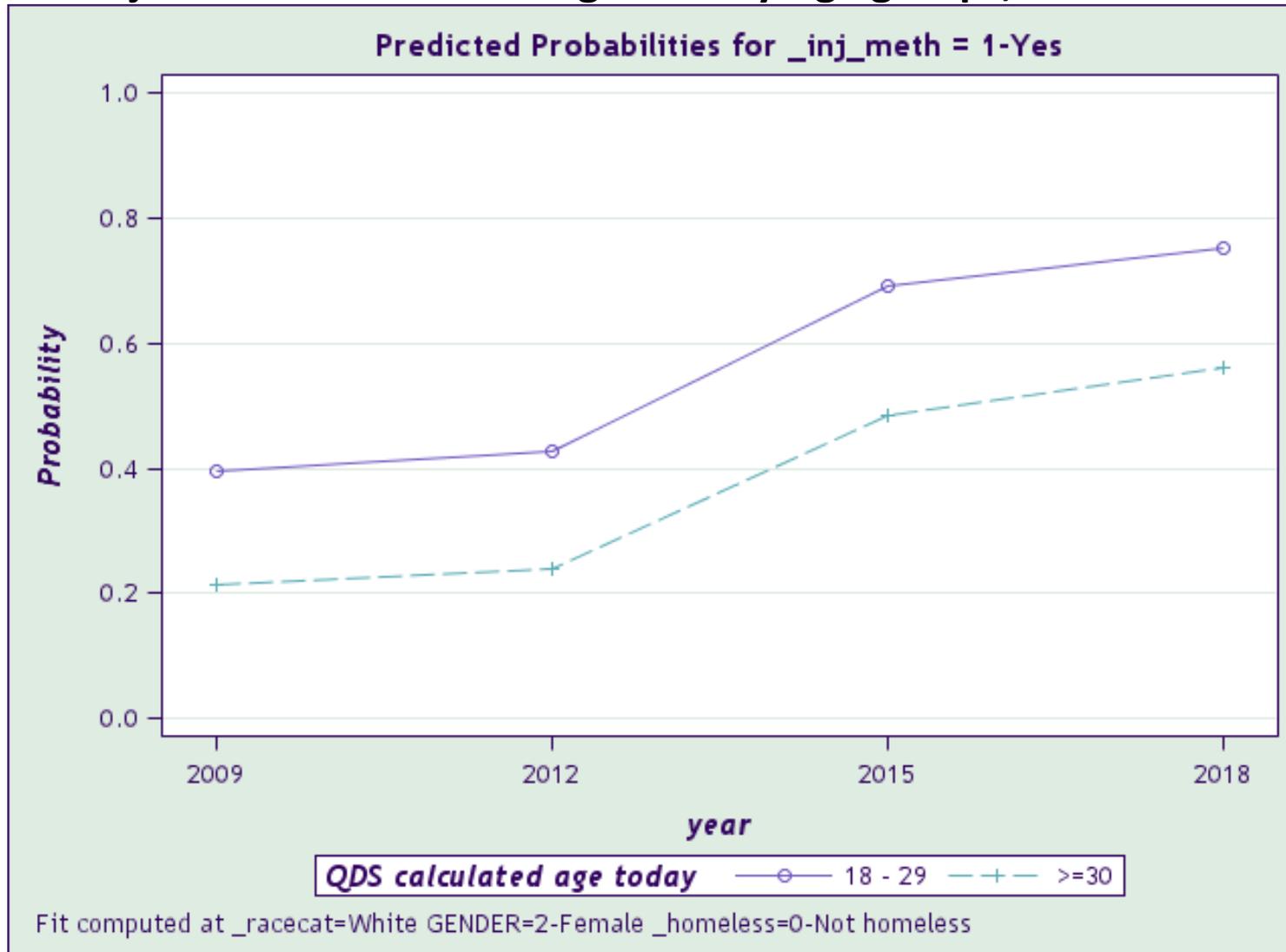
## Adjusted Injection Meth use among PWID by Gender, 2009-2018



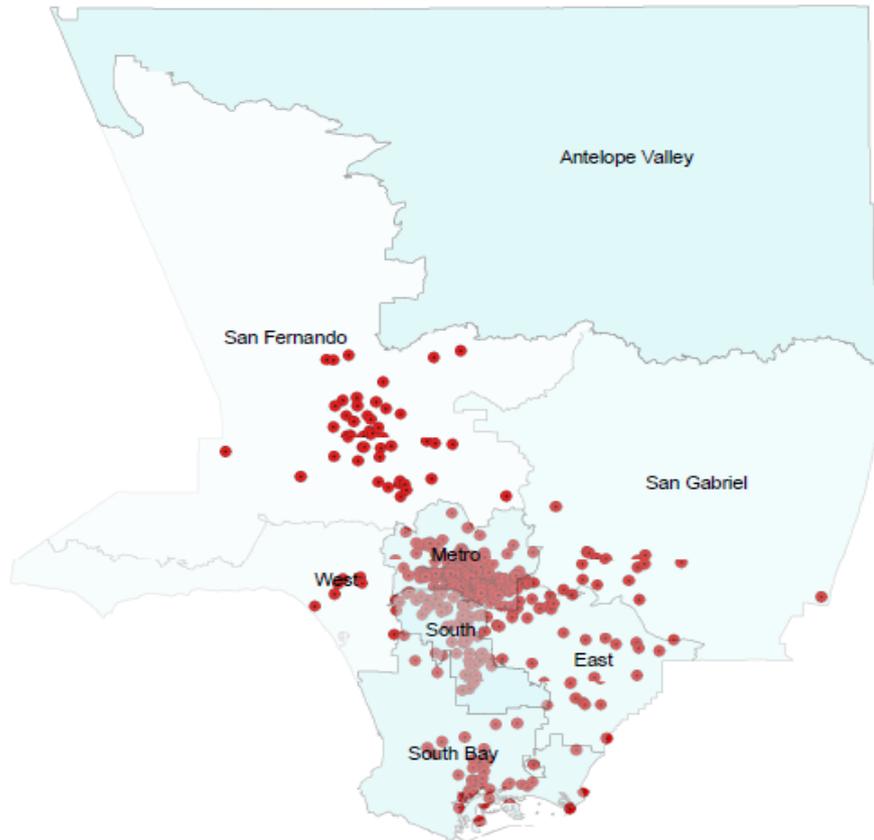
## Adjusted Injection Meth use among PWID by Race/ethnicity, 2009-2018



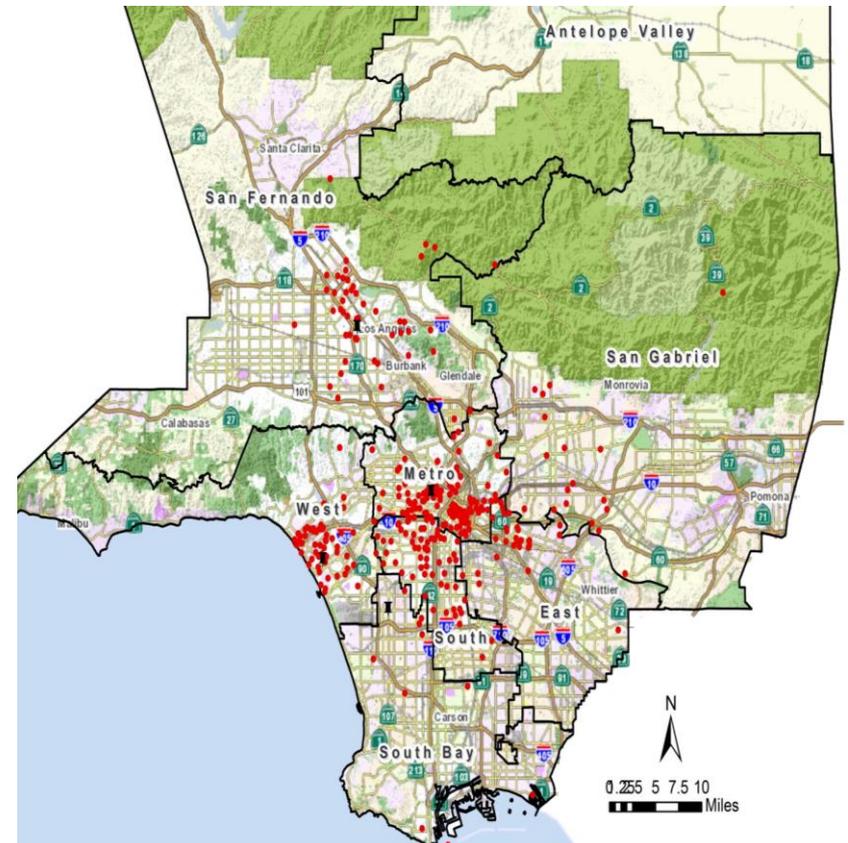
## Adjusted Injection Meth use among PWID by Age groups, 2009-2018



# MAPS

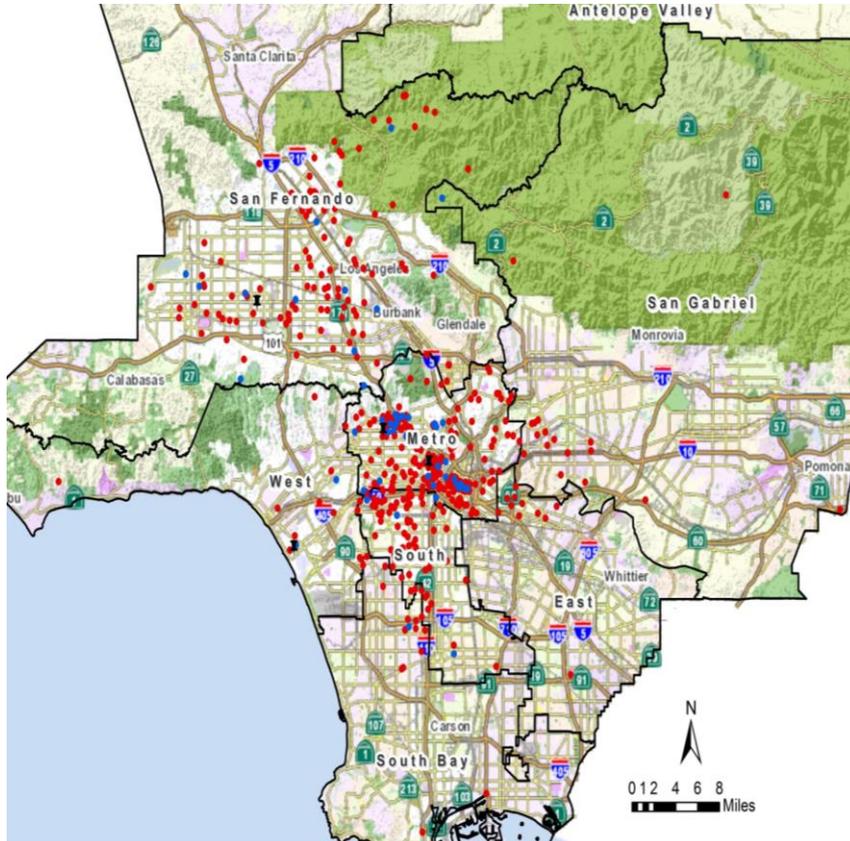


IDU 1

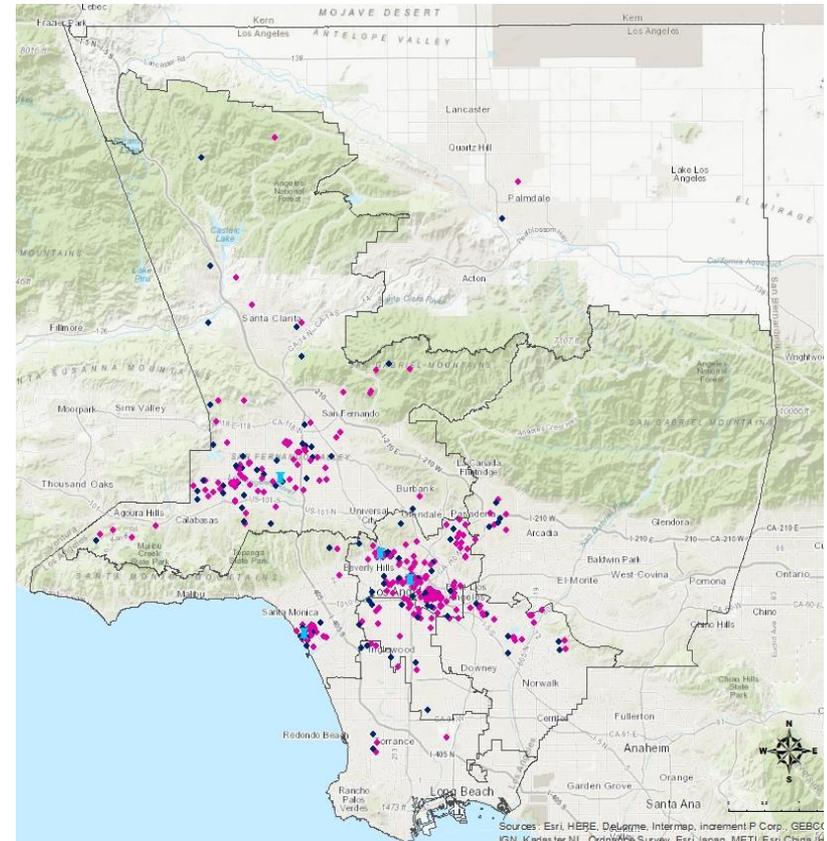


IDU 2

# MAPS



IDU 3



IDU 4