

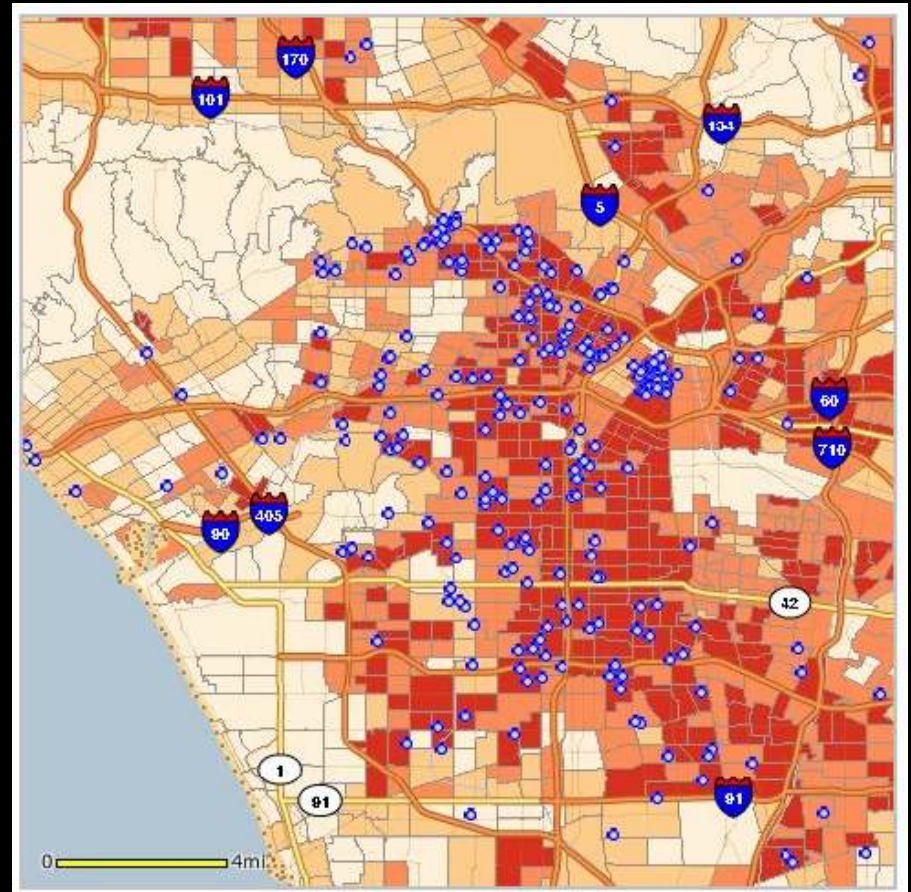
Ethnicity, drug use, homelessness, sexual behavior and HIV in a sample of men in Los Angeles

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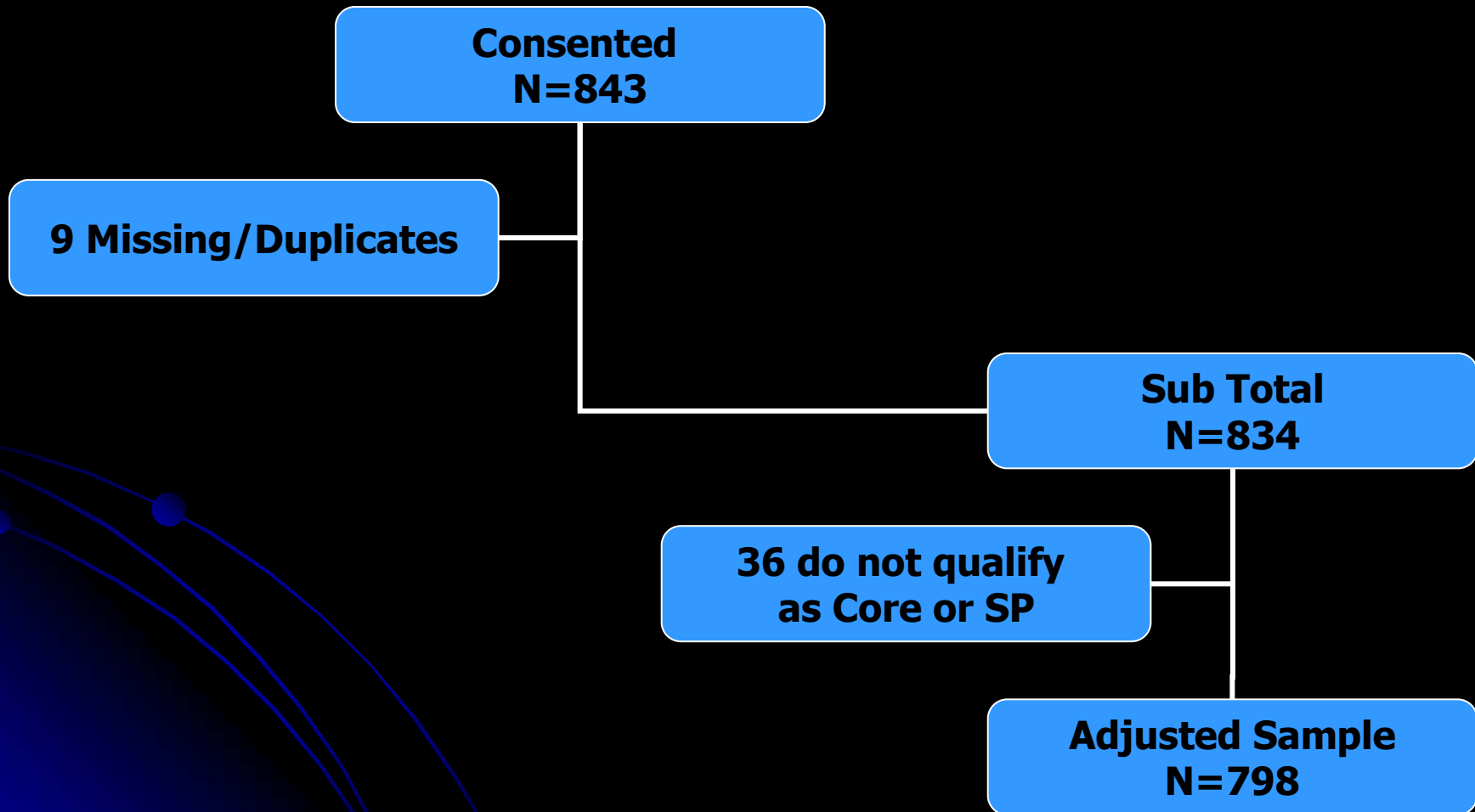
Objective

- Evaluate risk that HIV is moving outside MSM, DU in Los Angeles to the general population
- Identify factors associated with HIV, drug use and homelessness



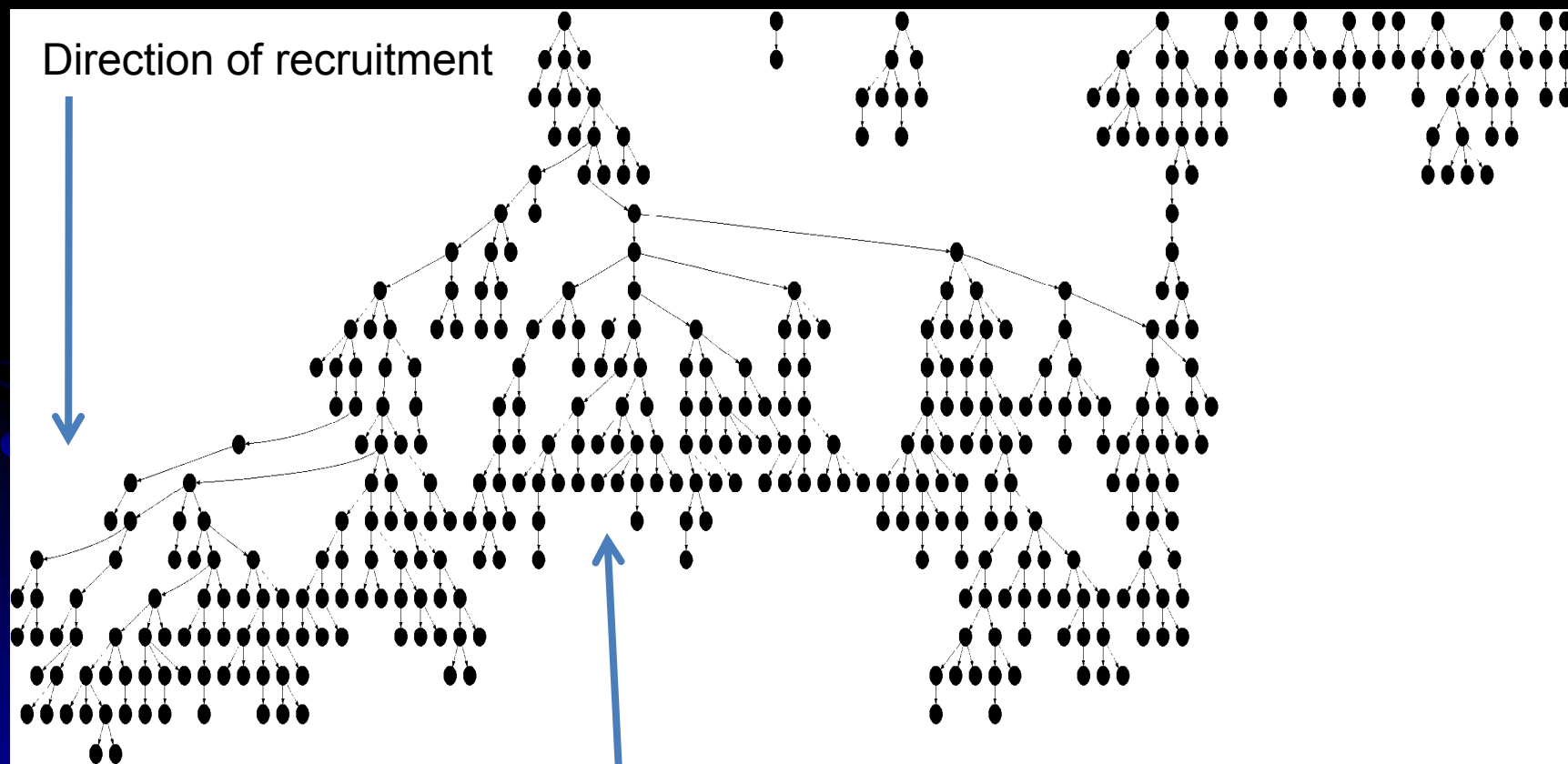
Participant residences plotted against poverty level for zip codes (deeper hues indicate higher poverty)

Wave 1: Los Angeles



Snapshot of the Data MSM and/or DU (N=424)

- RDS generates 'trees' of recruitment



'Giant' component

Demographics Total Sample (N=798)

Age in years		42.4 (9.3)
Gender	Male	86%
Race/ethnicity	Black	59%
	Hispanic	21%
	White	15%
	others	5%
Education	HS or less	93%
	Some college or above	7%
Employment	Unemployed	80%
	Employed	20%
Income	\$0-\$500	70%
	\$501-\$1000	18%
	\$1000+	12%
Self-report homeless		57%

STI Prevalence Total Sample (N=798)

STI	Percent
HIV	26%
Detuned Assay (n=6)	3%
Syphilis RPR (acute)	8% (<1%)
Chlamydia (urethral)	1%
Gonorrhea (urethral)	< 1%
Gonorrhea (rectal)	1%

Stimulant Use, Past 30 Days by STI/Risk Behavior (N=655)

	Meth (n=86)	Coc (n=194)	M+C (n=70)	No Drug (n=305)
HIV Pos	50%*	77%	80%	71%
RPR	8%	8%	6%	6%
Sex Partner, 1 Mo	2.9 (2)*	2.3 (2)*	2.9 (2)*	1.6 (1)
Sex Partner, 6 Mos	7.3 (3)*	5.4 (3)*	6.2 (4)*	4.0 (2)

Any Drug Use Past 30 Days **56%**

Any Injection Past 30 Days **16%**

*p < 0.05

STI Prevalence, Risk for MSM and MSMW by Past 30 Days Stimulant Use (n=450)

	Meth (n=60)	Coc (n=132)	M+C (n=51)	No Drug (n=207)
HIV Pos	54%**	24%*	22%*	39%
RPR	7%	10%	6%	9%
Sex Partner, 1 Mo	3.4 (2)*	2.4 (2)*	3.0 (2)*	1.7 (1)
Sex Partner, 6 Mos	9.9 (4)*	6.1 (3)	6.8 (4)**	4.9 (3)

Comparisons between groups and non drug users, *p < 0.05; **p < 0.01

Summary Objective 1

- In this sample, HIV prevalence averaged 26%
- Large percentage of Black and Hispanic participants
 - Very high rates of homelessness
 - Very low income
- Methamphetamine as a drug of abuse is uniquely associated with higher prevalence of HIV and sexual risk behavior

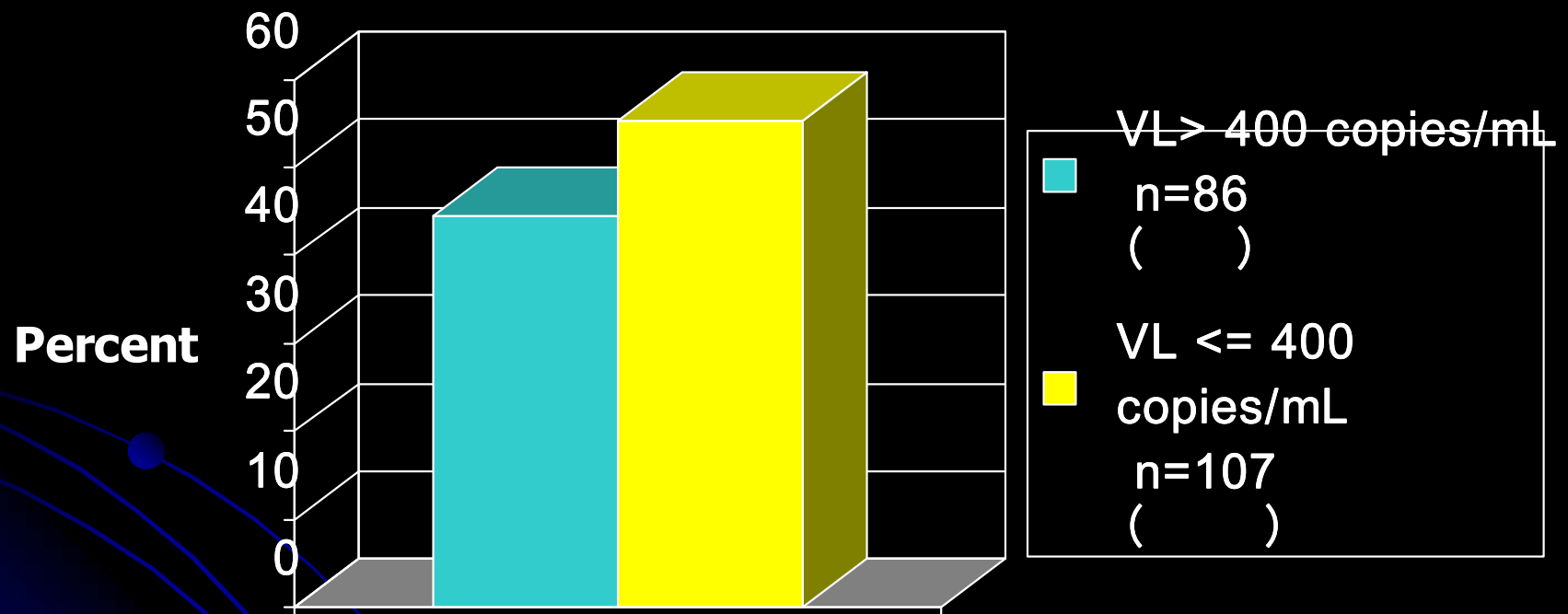
HIV Among Homeless

- Large numbers of homeless individuals captured in the LA sample
 - Role of homeless in the HIV epidemic unclear
 - Sexual networking in the street may represent transmission risks
 - HIV positive homeless men may be high transmitters

Socio-Demographic Profile of Homeless Men

- Factors associated with being homeless
 - Not being Hispanic: OR=2.9 (95% CI: 2.0-4.2)
 - Being born in the US: OR=2.9 (95% CI: 1.9-4.5)
 - Being married or formerly married versus never married: OR=1.5 (95% CI: 1.1-2.0)
- Factors not associated with being homeless
 - Age
 - Education

Low Viral Load in Most HIV+ Despite Low Income/Homeless



HIV prevalence in the full sample: 26%

Homelessness and HIV: Predictors of Viral Load

- Crude Model:
 - Meth use OR=2.36 (95% CI 1.09, 5.12)
 - Homelessness OR=2.83 (95% CI 1.57, 5.08)
 - Seeing an HIV MD OR=0.26 (95% CI 0.09, 0.76)
 - HIV Med-taking OR=0.05 (95% CI 0.01, 0.2)
- Multivariate model shows only HIV med-taking significantly associated with viral load
- Mediators of Viral Load
 - Meth use and Homelessness inversely correlate with HIV Med taking

Homeless Men More Likely to Inject Drugs Than Non-Homeless Men

	Homeless	Not Homeless
Injected any drugs (ever)	44.9%	30.8%
Injected amph/meth (ever)	22.9%	15.5%
Injected any drugs (30 days)	15.2%	8.5%
Injected amph/meth (30 days)	13.4%	6.3%

All χ^2 p value < 0.05

Homeless Men Engage Higher Sex Risks than Non-Homeless Men

- *Fewer sex partners*
 - Median: 1 versus 2 for non-homeless men (past 30 days)
- *More bisexual: more report both male and female partners*
 - 46% versus 33.6% for non-homeless men (past 6 months)
- *More trade money for sex**
 - 36.8% versus 25.0% for non-homeless men (any last 3 sex partners)
- *More unprotected receptive anal sex **
 - 23.1% versus 10.4% for non-homeless men (any last 3 sex partners)

All p value < 0.05

* No last 3 sex partner information for 78 men

Summary

- The majority of these participants were homeless
 - Homeless men were more likely to be born in the U.S. and to have been married
 - Homeless men were less likely to be Hispanic
- Homeless men have fewer sex partners, but engage in significantly higher rates of sexual risk behaviors
 - Trade sex; unprotected anal sex; behaviorally bisexual
- Homeless men more likely to inject drugs
- Homeless men represent a particularly vulnerable population due to the combination of high-risk sexual behaviors and injection drug use

Conclusions

- Significant associations between HIV/AIDS, drug use, sexually transmitted infections, and HIV sexual transmission behaviors in individuals from Black and Hispanic communities who are homeless or who have very low incomes
- Findings may describe the last stages of an established HIV epidemic in Los Angeles:
 - Individuals from this sample not likely to represent a sufficient “bridge” for infection to become established in the general population