# Trends and Correlates of Methamphetamine Use Among Men who Have Sex with Men in the US, 2015-2022

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## Background

- Meth use facilitates HIV transmission and poses a barrier to HIV/PrEP care through behavioral and physiological pathways.
- Recent meth use is attributable for as many as 1-in-3 new HIV infections among MSM.

## Objectives

(1) Estimate the one-year period prevalence of non-injection meth use among MSM

(2) Identify correlates of non-injection meth use among (a) MSM overall and (b) HIV-negative MSM not using PrEP, where risk of HIV acquisition is concentrated.

## Methods

Data source:

The American Men's Internet Survey (AMIS), a cross-sectional, a web-based survey of MSM in the US conducted by Emory University (2015-2022)

Analytic approach:

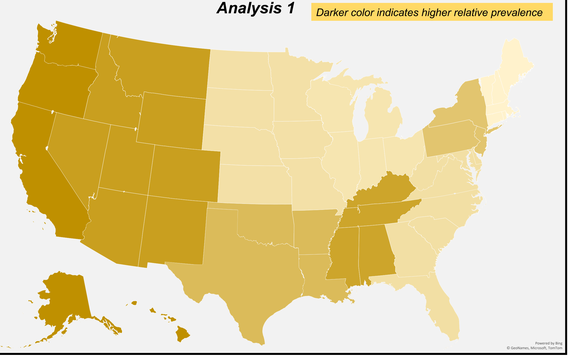
- Univariable log binomial regression to identify correlates associated with meth use
- Multivariable models to mitigate confounding, with correlates found significant in the univariable analyses.

Sub-samples:

*Analysis 1* All respondents (N=75,246)

*Analysis 2* HIV-negative respondents with no PrEP use in the last 12 months (N=57,445)

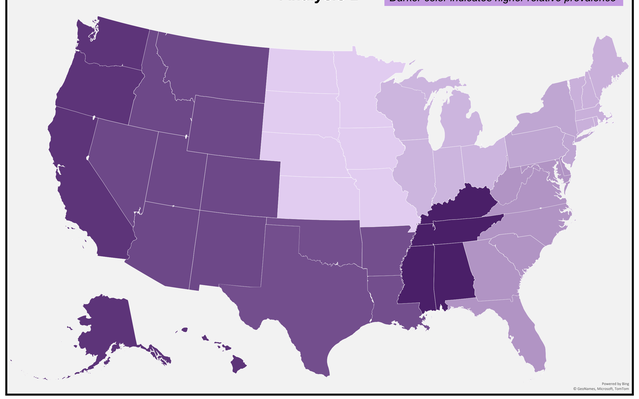
**Fig 1: Adjusted relative prevalence of last-year meth use among MSM by US Census Region**




Compared to the start of the study period (2015), meth use among US MSM was 23% lower in 2018, but 42% higher in 2022.

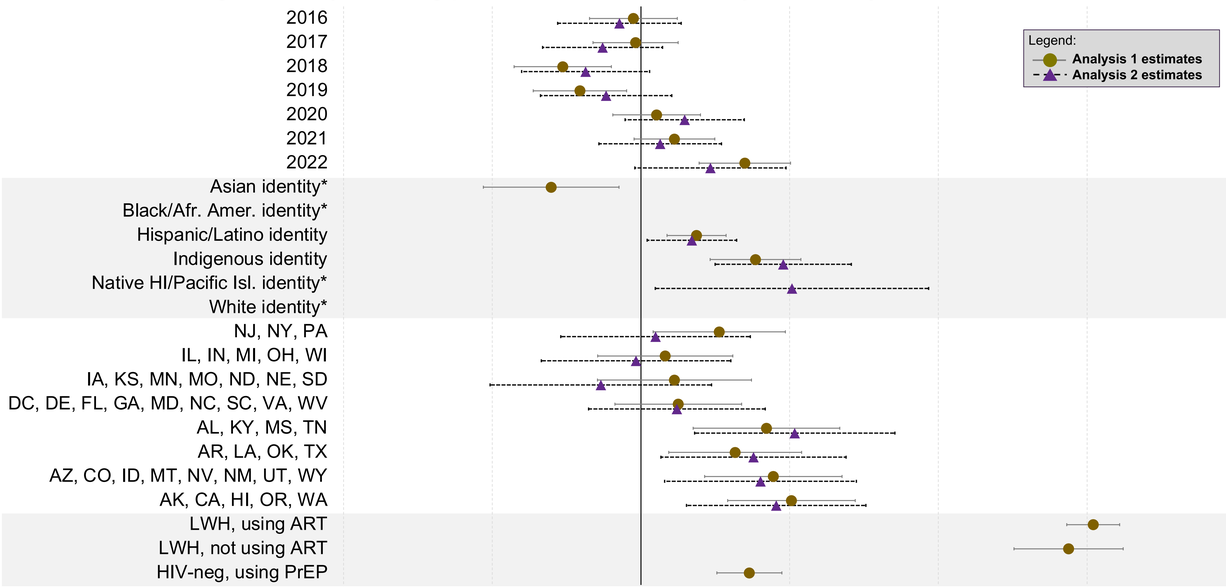
Throughout the study period, we observed key disparities in meth use among MSM in the US; living with HIV, living in South-Central and Western states, and Indigenous & Hispanic/Latino identity were the strongest correlates of meth use.

**Figure 3: Adjusted relative prevalence of last year meth use among HIV-negative MSM not using PrEP, by US Census Region**




## Results

**Figure 2: Adjusted log prevalence ratios for last-year non-injection meth use**




Note: participants could select multiple racial/ethnic identities; in statistical analyses, these are treated as indicator variables. Individuals appear in as many groups as they selected in the survey. *In bivariable analyses, not all racial/ethnic indicator variables were statistically significant; those marked with an asterisk were excluded from >1 multivariable analysis. Referent groups: (1) 2015; (2) New England states; and (3) HIV-neg, not using PrEP. Adjustment variables: recruitment source; age (both analyses).

### *Analysis 1*

- 3.6% (95% CI: 3.5, 3.8) prevalence of last-year meth use
- Compared to 2014, significant lower prevalence in 2018-2019 followed later by significantly higher prevalence of last-year meth use in 2022.

### *Analysis 2*

- 2.2% (95% CI: 2.1, 2.3) prevalence of last-year meth use
- No significant changes in prevalence of last-year meth use throughout the period.

## Conclusions

*Analysis 1*

- Meth use among US MSM increased in recent years, implying that the syndemic of meth and HIV in this population may be worsening.
- Meth use is highest among MSM living with HIV, suggesting the need for future research specific to meth use in this population.

*Analysis 2*

- Hispanic/Latino, Indigenous, and Native Hawaiian/Pacific Islander identity were strongly associated with meth use.
- The region comprised of AL, KY, MS, & TN had the highest adjusted prevalence of meth use nationally.
- Findings suggest an unmet need for PrEP coverage in these populations of HIV-negative MSM who use meth.

## Limitations

- AMIS leverages an online convenience sample; data may be biased and may not be nationally representative.
- Could not include injection meth use in study.
- Cross-sectional analyses prohibit causal inference.

***Key***
ART: antiretroviral therapy
LWH: living with HIV
Meth: methamphetamine
MSM: men who have sex with men
PrEP: pre-exposure prophylaxis

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