

Temporal trends in methamphetamine use among young injectors in San Francisco (1998 to 2004): The UFO Study

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Background

- Methamphetamine use is reportedly increasing and has been associated with increased risky sexual behavior and HIV incidence among men who have sex with men (MSM).
- Trends in methamphetamine use in other at-risk populations, such as young injection drug users (IDU), have not been described.

Objectives

- We examine trends in methamphetamine use among young (<30 years) IDU in San Francisco, paying attention to age and gender groups.

Methods: The UFO Study

- Young IDU were recruited via street-based outreach for participation in prospective studies of HIV, HBV, and HCV infections.
- Eligibility:
 - Age <30
 - Injected in prior month
 - English speaking
- Baseline screening for cohort eligibility includes a structured interview assessing self-reported behavioral risk and drug exposures.
- Baseline data were examined to assess temporal trends in:
 - self-reported injected methamphetamine use “ever” and recently (last 30 days)
 - Self-reported non-injected methamphetamine use in the past year and in the past 3 months
- Trends were also examined by age, gender and risk group (MSM-IDU, male non-MSM-IDU and female IDU).



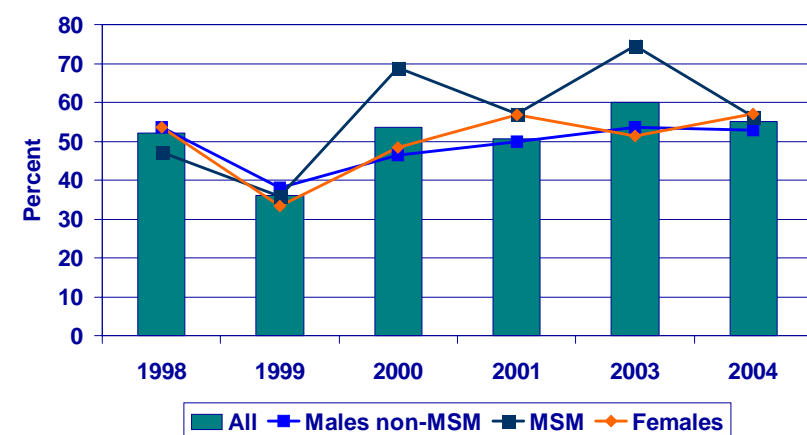
Results

- From 1998-2004, 1443 participants were screened for participation in the UFO study of young injection drug users.
 - 438 (30.5%) female
 - 640 (44.5%) male non-MSM-IDU
 - 359 (25.0%) MSM-IDU
 - 761 (52.7%) <=22 years
 - 682 (47.3%) >22 years

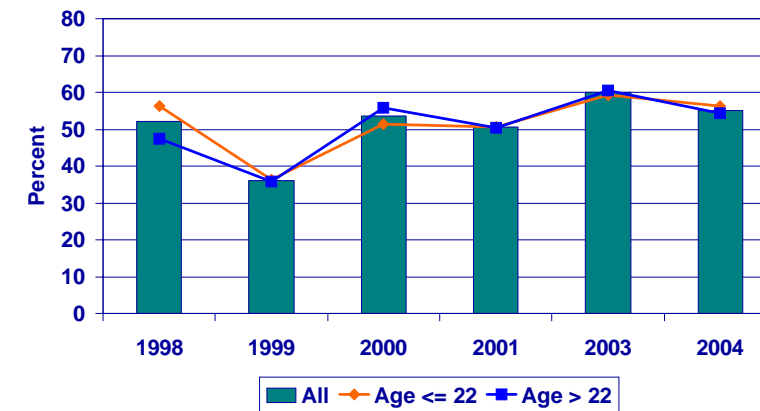
Characteristics, selected risk exposures of young IDU in the UFO Study

| Characteristic | Median (IQR) or % |
|-------------------------|-------------------|
| Age | 22 (20 - 25) |
| Male | 69.7% |
| Years injecting | 5 (2 - 7) |
| Daily injection: Yes | 36.6% |
| Recent heroin injection | 79.6% |
| Incarceration (ever) | 85.0% |
| Sexual risk: MSM-ever | 28.2% |
| Male non-MSM | 41.8% |
| Female | 30.0% |
| HIV infection (yes) | 4.0% |
| HIV infection (no) | 61.4% |

Trends in self-reported *injected* methamphetamine use in the last 30 days among young IDU in San Francisco by year and by gender



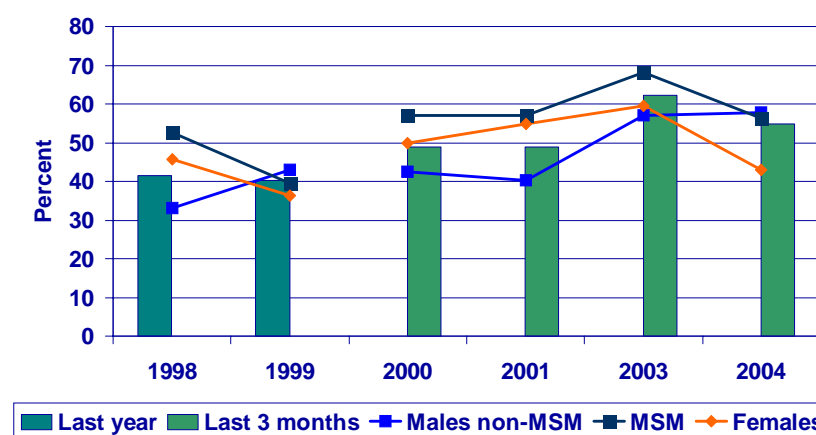
Trends in self-reported *injected* methamphetamine use in the last 30 days among young IDU in San Francisco by year and by age



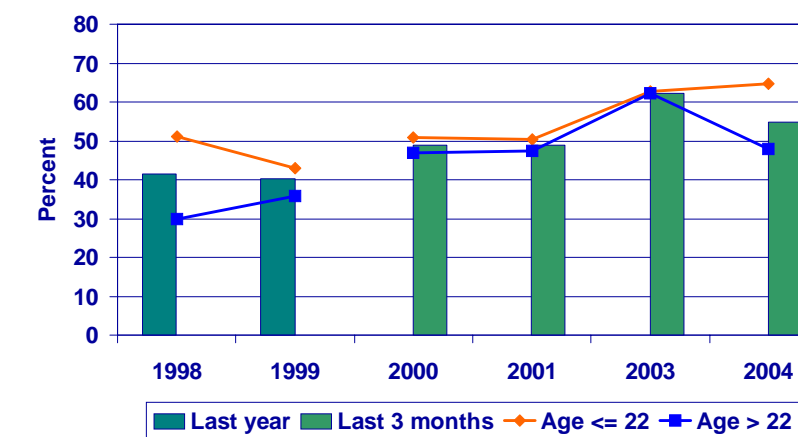
- No differences were found between older (>22) compared to younger (<=22) participants' reported use of injected methamphetamine overall or over time.
 - Ever: 85.8% vs. 81.6%
 - Recently: 49.3% vs. 50.9%
- Methamphetamine injection use varied significantly by sexual risk group:

| Group | Ever | Recent |
|------------------|-------|--------|
| MSM-IDU | 92.3% | 70.0% |
| Male non-MSM-IDU | 81.6% | 54.3% |
| Female | 78.4% | 52.0% |

Trends in self-reported *non-injected* methamphetamine use among young IDU in San Francisco by year and by gender



Trends in self-reported *non-injected* methamphetamine use among young IDU in San Francisco by year and by age



Characteristics of young IDU by recent (last 30 days) methamphetamine use compared to No recent methamphetamine use

| | Recent methamphetamine use (n=496) | No recent methamphetamine use (n=429) | OR (95% CI) |
|-------------------------|------------------------------------|---------------------------------------|------------------|
| Age: <= 22 | 48.4% | 51.5% | 0.9 (0.7 - 1.1) |
| Male | 72.6% | 66.4% | 1.3 (1.0 - 1.8) |
| Years injecting | 5 (2 - 8) | 4 (2 - 7) | 1.0 (1.0 - 1.0) |
| Daily injection: Yes | 32.9% | 41.0% | 0.7 (0.5 - 0.9)* |
| Recent heroin injection | 67.1% | 94.6% | 0.1 (0.1 - 0.2)* |
| Incarceration (recent) | 29.8% | 30.4% | 1.0 (0.7 - 1.3) |
| Sexual risk:MSM-ever | 34.9% | 20.8% | 2.0 (1.5 - 2.8)* |
| HIV infection (yes) | 6.0% | 1.7% | 3.8 (1.5 - 9.3)* |
| HCV infection (no) | 60.7% | 62.4% | 0.9 (0.7 - 1.2) |

p < 0.01

Conclusions

- Methamphetamine use in young IDU has been high since 1998. Despite recent reports of increasing methamphetamine use, no temporal trends were seen in this population to suggest that use has increased over the last 5 years.
- Young MSM-IDU report higher use of methamphetamine than other groups. This sexual risk group is also at highest risk of HIV infection and requires increased attention for prevention and intervention.
- We hypothesize that the “methamphetamine epidemic” was underway among young IDU earlier than among other risk groups.

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