

**Synthesis of Data on
Methamphetamine Use in San Francisco:
March, 2007**

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Introduction

This report summarizes the available population based methamphetamine (MA) use data from San Francisco. Each single source of information cannot give the entire picture by itself; moreover, all data have potential biases. Therefore, the focus of this report is to examine the currently available, relevant data, and search for consistency and convergence on plausible estimates of MA use. A list of data sources is provided in Appendix A.

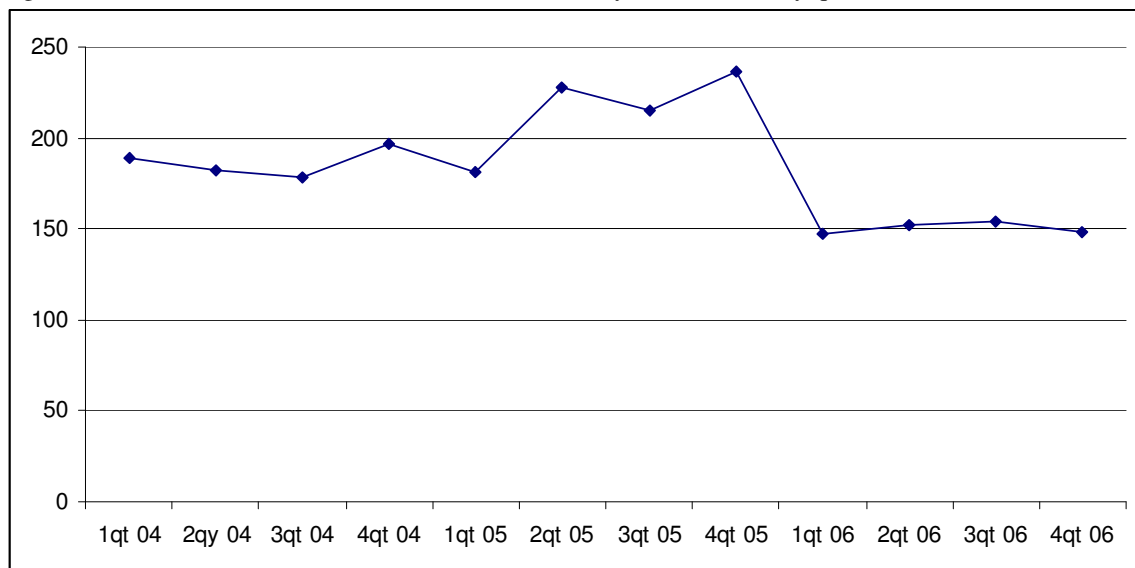
Overall Trend Data

San Francisco General Hospital (SFGH)

Data is collected at SFGH's emergency room and psychiatric emergency room when MA is mentioned in the medical chart. These data are the most consistently collected MA data for the entire population of San Francisco.

The following figures show overall MA mentions in SFGH's Emergency Department and Psychiatric Emergency Department. Data here are simple counts and are not prevalence estimates.

Figure 1. Overall MA Mentions SFGH: ED Visits, and Pysch ED Visits by quarter 2004-2006



The following figures show the same SFGH MA data but stratified by gender, race/ethnicity, and age.

Figure 2. SFGH ED MA Mentions by Gender, 2004-2006.

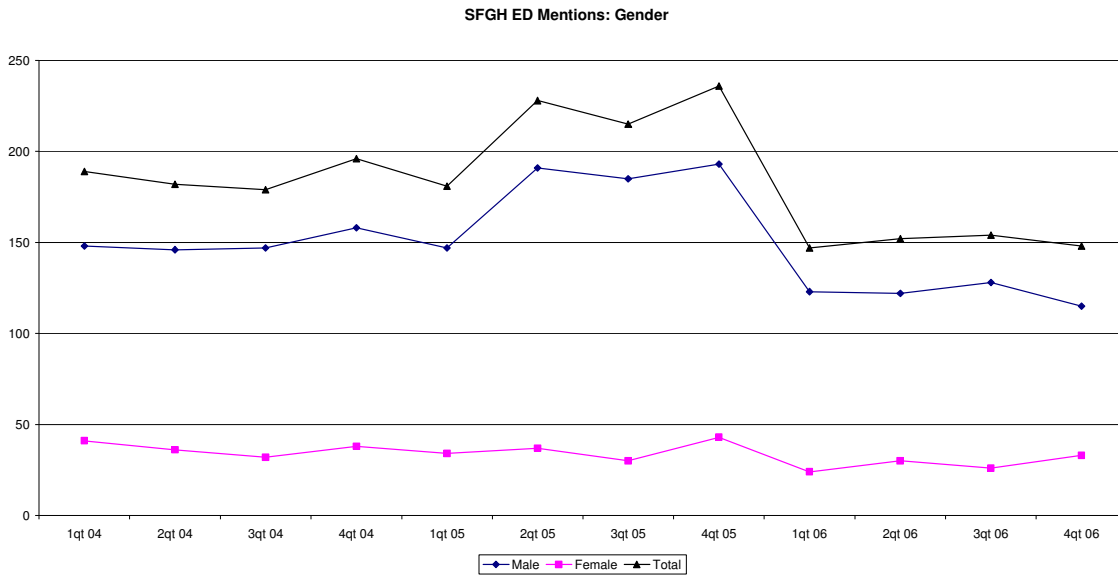


Figure 3. SFGH ED MA Mentions by Race / Ethnicity, 2004-2006.

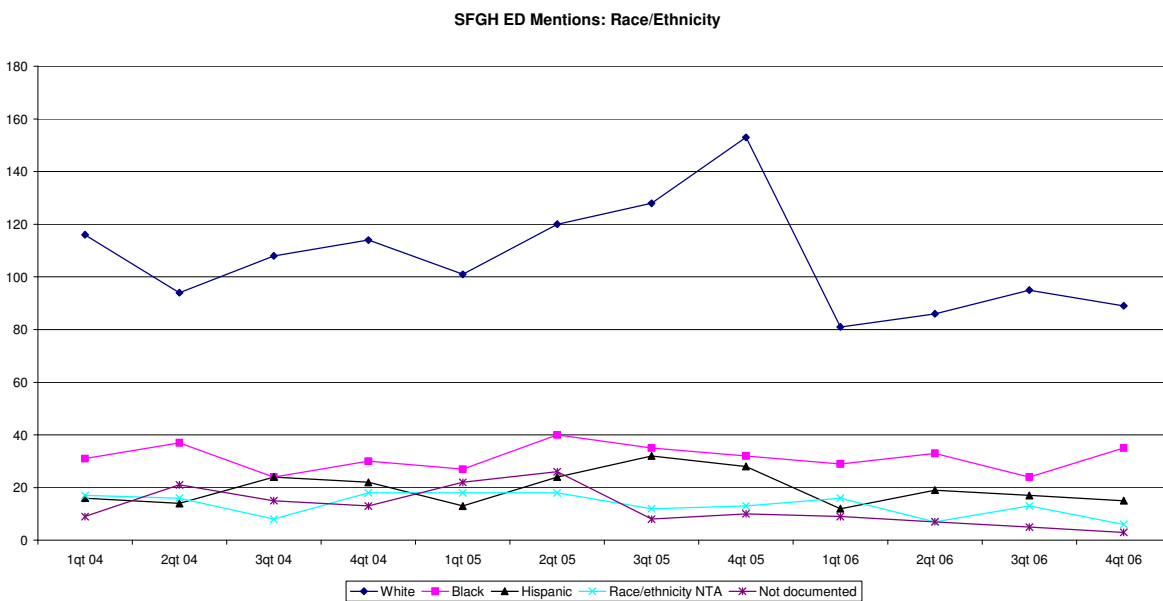
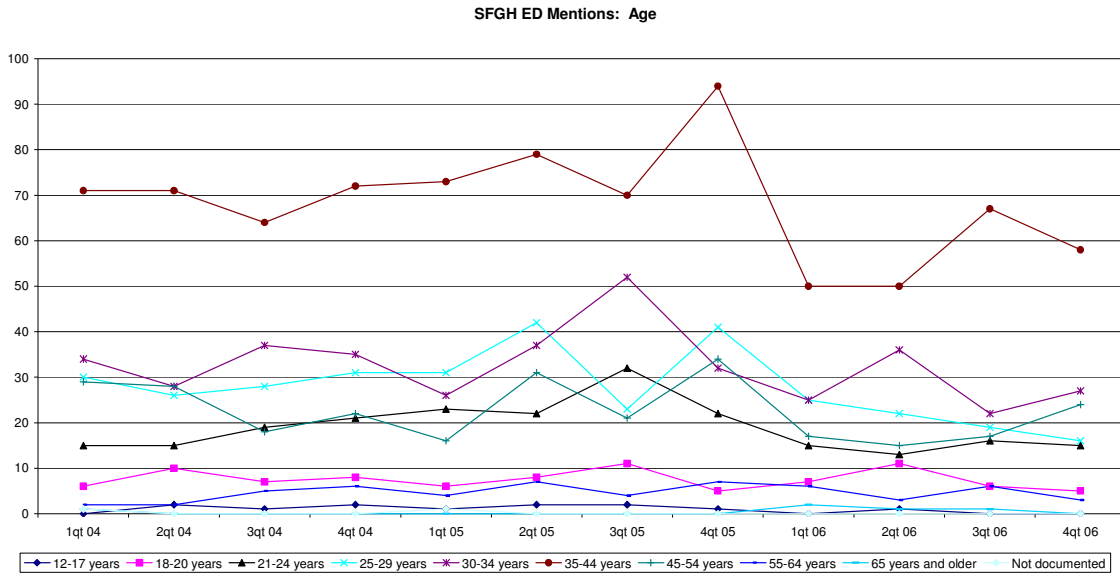


Figure 4. SFGH ED MA Mentions by Age, 2004-2006.

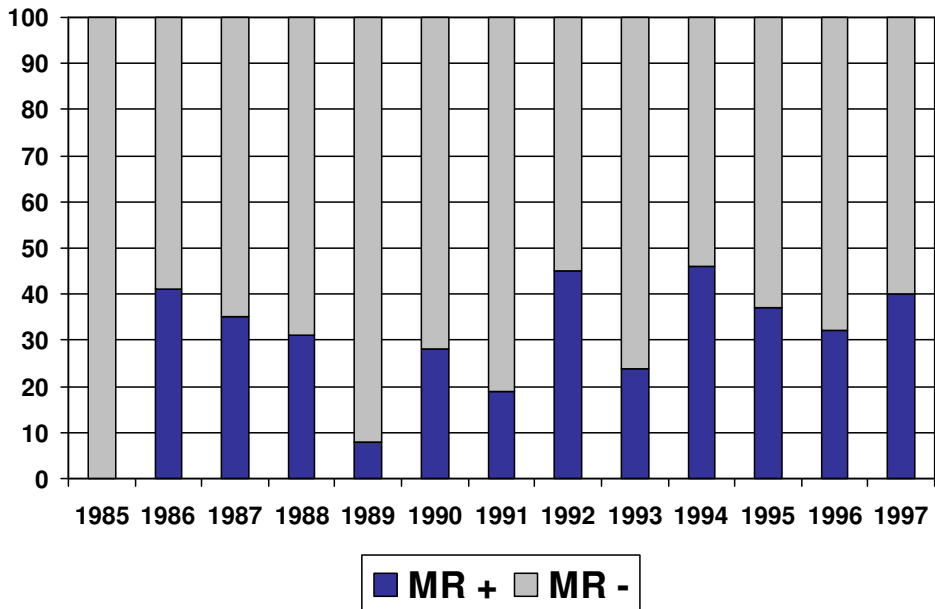


Generally, trends in MA mentions have been stable since the beginning of 2006. Notably, during 2005 there appears to have been a sharp increase in MA mentions involving men, Caucasians, and 35-40 year olds.

Coroner's Office

S.B. Karch (1998), a former Chief Medical Examiner for the City and County of San Francisco, investigated 413 deaths of individuals who tested positive for MA from 1985 to 1997. Mean age of decedents was 36.8 years, (75% were under the age of 43), majority male (85.2%) and Caucasian (75%). Nearly 41 (16.0) of the 262 accidental deaths were traumatic in nature and unrelated to drug use. There has been no research conducted at the Coroner's Office since 1997.

Figure 5. Proportion of decedents testing positive for methamphetamine: San Francisco, 1985-1997

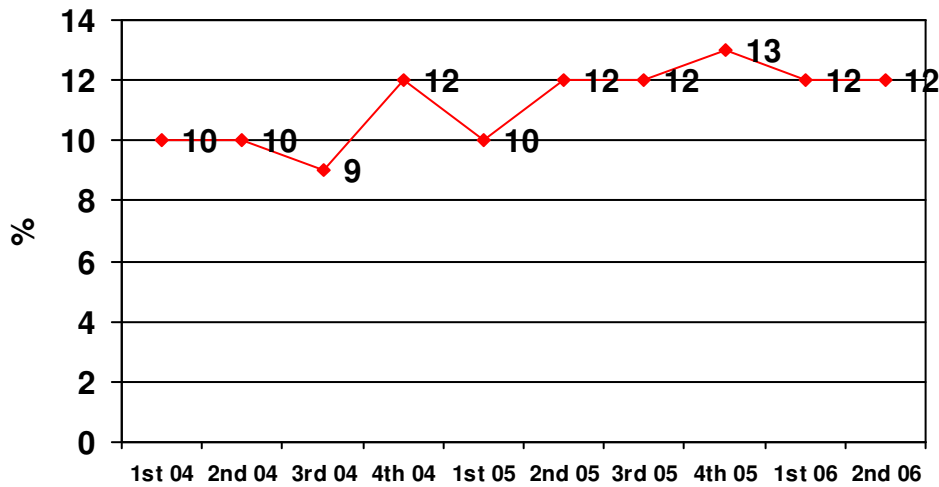


Karch, S.B., Stephens, B.G., Ho, CH. (1998) Methamphetamine-Related Deaths In San Francisco: Demographic, Pathologic, and Toxicological Profiles. *Journal of Forensic Science*. 44(2):1-10

HIV Test Site Data

Another source of MA data is collected during pre-test counseling at State funded HIV testing services in San Francisco. SFDPH routinely collates all of the HIV-6 data collected at these sites. The following figure shows MA use reported in the six months before the pre-test visit among all testers. These data have a few limitations. The unit of analysis is HIV tests and not individuals, leading to a possible inflation of the number of MA users. The data presented have been stratified by quarter to help mitigate this issue. These data are also prone to self-report bias.

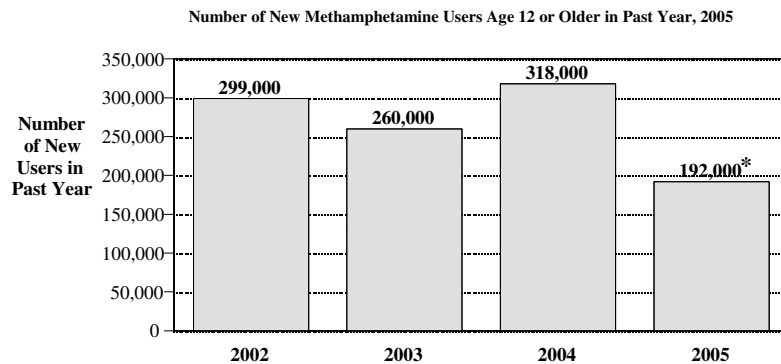
Figure 6. Proportion of all testers reporting MA Use past 6 months, HIV Test Sites, San Francisco



National Trends

Some national statistics are encouraging. The following figure depicts a drop in the number of new MS users in the United States from 2002 to 2005.

Figure 7. National MA Trends: New Users 2002-2005



*The difference between the 2004 and 2005 estimates is statistically significant at the $p \leq 0.01$ level.

SOURCE: Adapted by CESAR from Substance Abuse and Mental Health Services Administration (SAMHSA). "Methamphetamine Use," *The NSDUH Report*, January 26, 2007. Available online at <http://www.oas.samhsa.gov/2k6/meth/meth.cfm>.

Sub-population MA Use Indicators

Of particular interest are: 1) the prevalence and 2) range of MA use in specific populations, 3) whether a particular racial or ethnic group is disproportionately represented in the MA users for a given population, and 4) which age group or groups in a given population are most affected. These indicators and how they were determined are outlined below:

- **Median prevalence:** We selected the median of prevalence reported by all studies for that particular sub-population because the median is less influenced by outliers or extremes.
- **Range of prevalence:** low and high prevalence reported by all studies for a given population. Wide ranges in prevalence can be attributed to the diverse sampling methods utilized, specific composition of the sample population, etc.
- **Race / Ethnicity Rank:** Race /Ethnicity composition of MA users was compared to race / ethnicity composition of the whole sample. Race/Ethnicity were then ranked from most affected to least effected. If a particular race / ethnicity was represented equally or less in the MA using composition and the overall composition that race / ethnicity was defined as not being disproportionately effected.
- **Age group most affected:** The age group or groups most affected by MA use in a given population.

Of note, data such as emergency room mentions or arrest data can provide overall trend indicators for the City of San Francisco but are limited in ability to illustrate levels of use or trends in use of MA in specific populations.

Table 1 below briefly summarizes these four indicators.

Table 1. Summary of MA use by Behavioral Risk Population (BRP)

Population	Median Prevalence %	Range in prevalence %	Race / Ethnicity Ranking	Age Group Most Affected²
MSM	13	8-31	1. Hispanic 2. African American 3. Asian	25-45
MSM IDU	63	22-80	1. Other Race 2. African American 3. Hispanic	35-50+
Male IDU	42	18-55	1. Caucasian 2. African American	30-50+
Female IDU	33	23-62	1. Caucasian 2. African American	35-50+
Youth (both male and female)	4.45	4.3-4.6	NA ¹	NA ¹
Male Non-IDU / Non-MSM	5	0.9-7	1. African American 2. Hispanic 3. Caucasian	25-35
Female Non-IDU	4	1-5	1. Caucasian 2. African American 3. Hispanic	25-45
TG	31	15-39	1. Hispanic 2. Other Race	18-50
TG-IDU	83	78-100	1. Other Race 2. Caucasian	30-50+

¹NA- Data not available ² Age ranges are particularly wide thus not lending themselves easily to targeting particular ages groups. However, it should be noted that most of the burden of MA use is not among youth or late adolescents.

Median prevalence of MA use should not be considered without taking the range in prevalence into account. With scant data routinely collected, median prevalence may not accurately reflect the true prevalence among any particular population. Figures illustrating the range of prevalence estimates in select sub-populations can be found in Appendices B and C.

Additional Sub-population Groups

High Risk Youth

Data on high-risk youth ages 14-24 years suggest that 46% of these youth have used MA at some point in their lifetime while 24% have used in the previous 12 months. MA use in this population is associated with homelessness, estrangement from family, and trauma. Further efforts to research these associations in vulnerable youth are needed.

Latino MSM

Data from a time location sample of MSM attending predominantly Latino venues indicates that about 18% of Latino MSM use stimulants, primarily MA and cocaine.

Trends in use among MSM

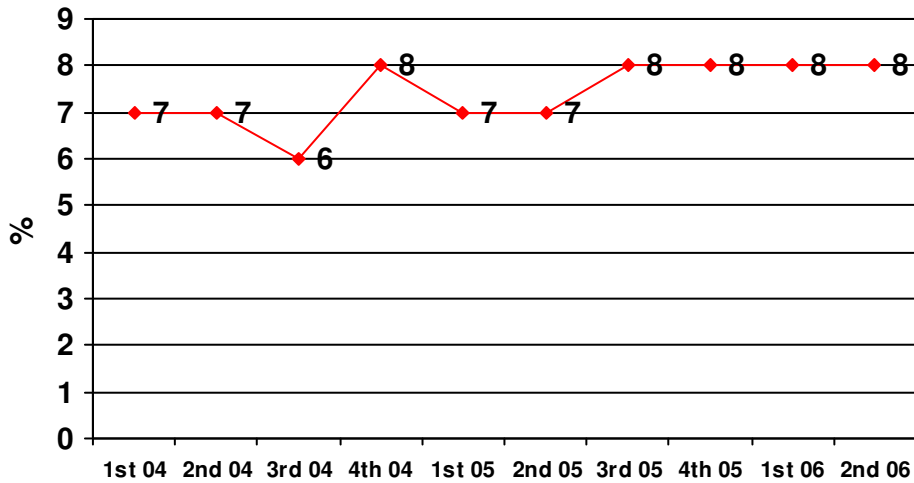
Trend data is currently unavailable for most sub-populations. However, there are a few sources of trend data for MSM. Trend data for MSM collected by the STOP AIDS Project is presented in the figure below.

Table 2. Recent MSM MA Use. Source: SAP

Survey Period	Total Surveys Completed	MA use past 6 months n(%)	MA use with sex past 6 months n(%)
July- Dec., 2003	1305	231(18)	180(14)
Jan-June, 2004	1067	139(13)	97(9)
July-Dec, 2004	1016	131(13)	85(8)
Jan-June, 2005	809	80(10)	56(7)
July-Dec., 2005	618	60(10)	37(6)
Jan-June, 2006	1051	116(11)	90(9)

Trend data is also available from HIV test site data. The following figure illustrates the proportion of MSM HIV testers who report using MA in the six months prior to testing.

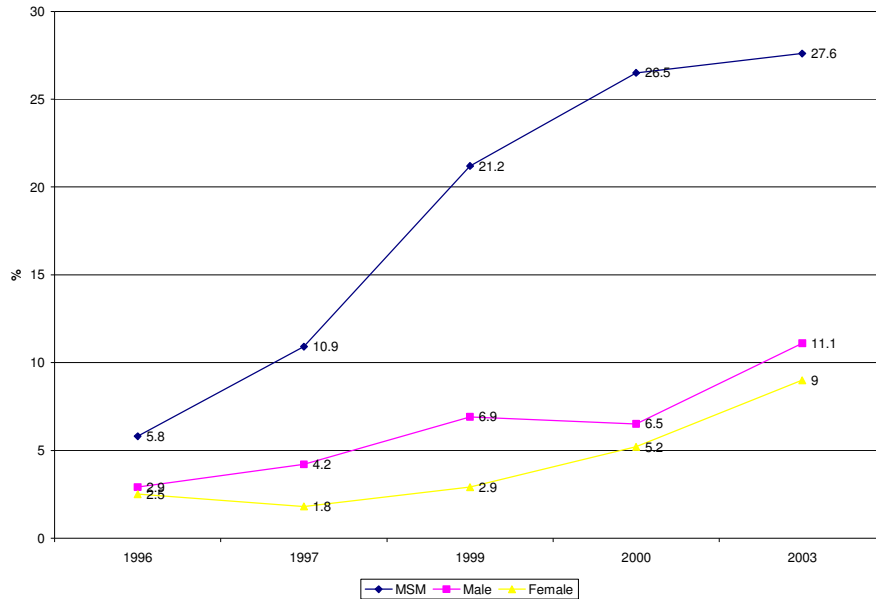
Figure 8. MSM non-IDU MA use, past 6 months, HIV Test Sites, San Francisco by quarter 2004-2006



Trends among Homeless persons

Data from Reach, a long term study of homeless persons in San Francisco, show increasing trends in MA use among this population from 1996 through 2003.

Figure 9. Trends in MA use among homeless persons by sexual orientation: San Francisco, 1996-2003



Trends among IDU

Data from the Urban Health Study (UHS) and the UFO study provide trend data on MA use by IDU in San Francisco. UHS samples all IDU while UFO focuses on young injectors age 15-29. MA use among IDU appears to have risen between 1989 and 2004 as shown in Figure 10. MA use among younger injectors appears to have remained stable between 2000 and 2004. See Figure 11.

Figure 10. IDU MA use past 30 days, San Francisco: 1989-2004

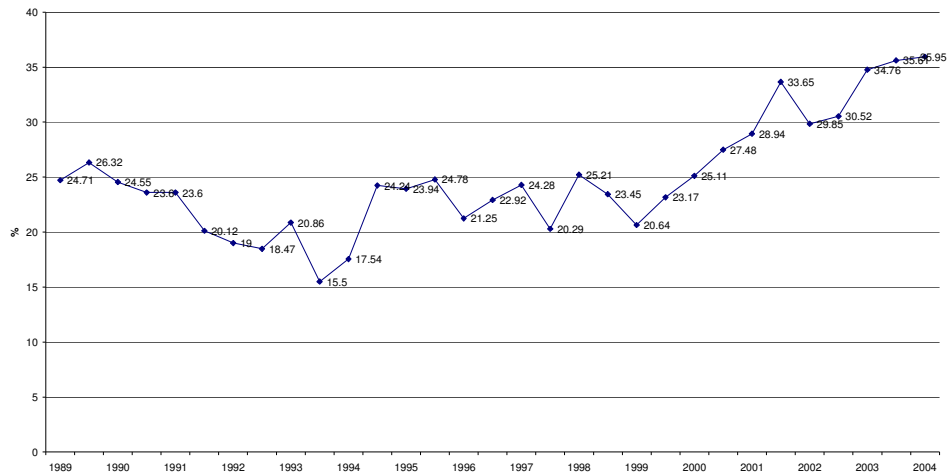
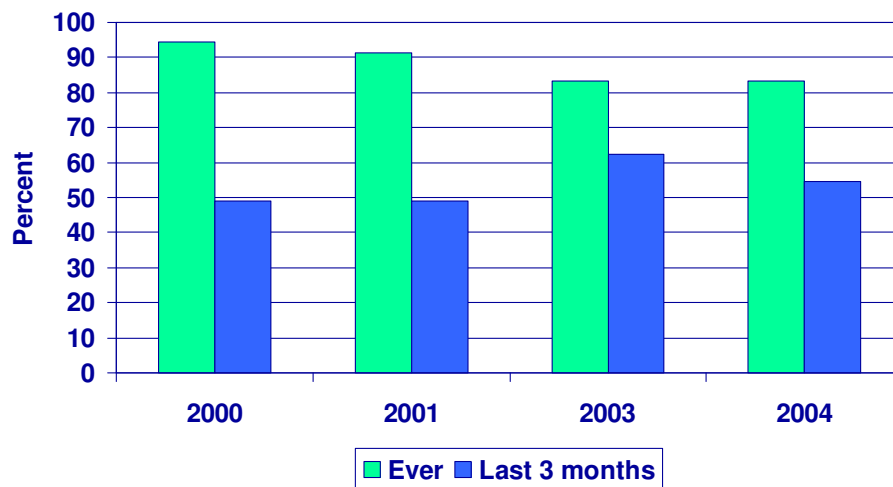


Figure 11. Trends in self-reported injected MA use among young IDU: San Francisco, 2000-2004 (UFO)



Absolute Numbers

In terms of absolute numbers, prevalence data, used in conjunction with population size estimates, can provide estimates of the actual numbers of persons that use MA. The following table illustrates estimated numbers of persons who use MA by BRP.

Table 3. Estimates of absolute numbers of MA users by BRP.

Population	Median Prevalence %	Est. Pop. Size	# of MA users
MSM	13	54,000	7,020
MSM IDU	63	5,524	3,480
Male IDU	42	7,075	2,971
Female IDU	33	4,029	1,329
Youth (both male and female)	4.45	62,494	2,781
Male Non-IDU / Non-MSM	5	307,428	15,371
Female Non-IDU	4	299,566	11,982
TG	31	1,180	445
TG-IDU	83	478	373

Frequency of use

Frequency of use can also be used to determining the severity of the impact of MA use among sub-populations. The following briefly describes frequency of use among sub-populations where those data are available.

Use MA once a day or more:

- 3% of MSM
- 17% of MSM-IDU
- 13% of Male IDU (non-MSM)
- 31% of female IDU
- 29% of TG-IDU

Use MA once a month or less:

- 73 % of MSM
- 21% of MSM-IDU
- 41% of Male IDU (non MSM)
- 26% of female IDU
- 14% of TG-IDU

Limitations

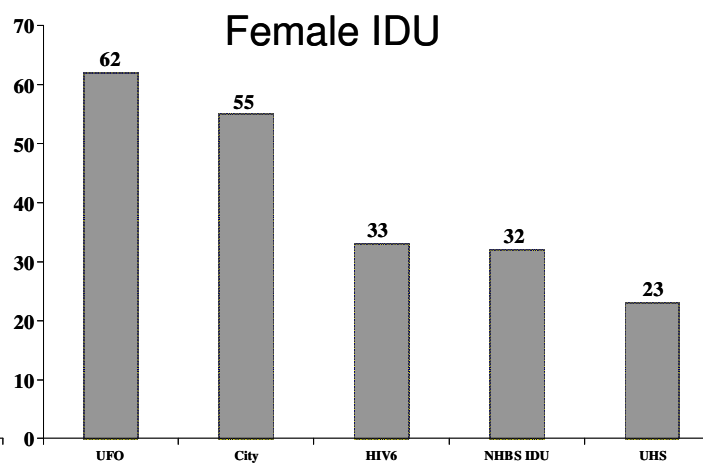
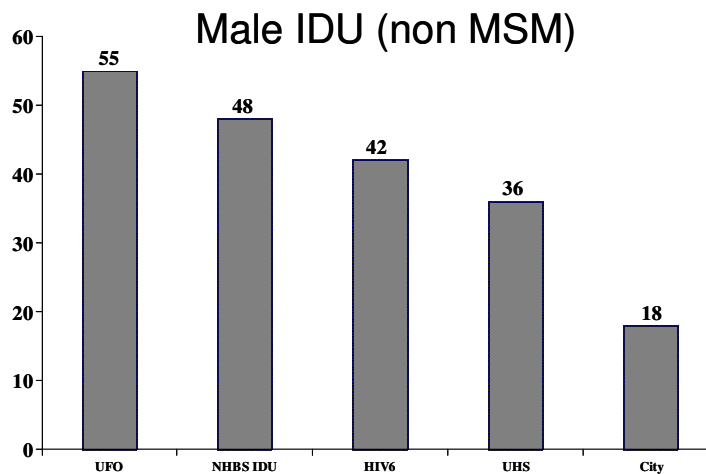
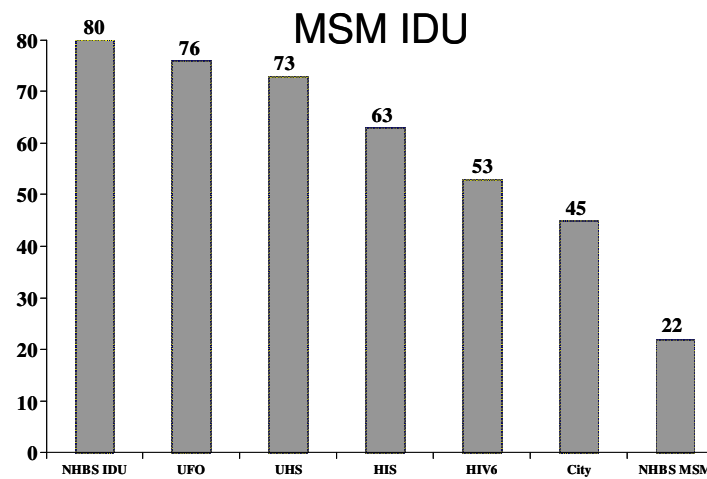
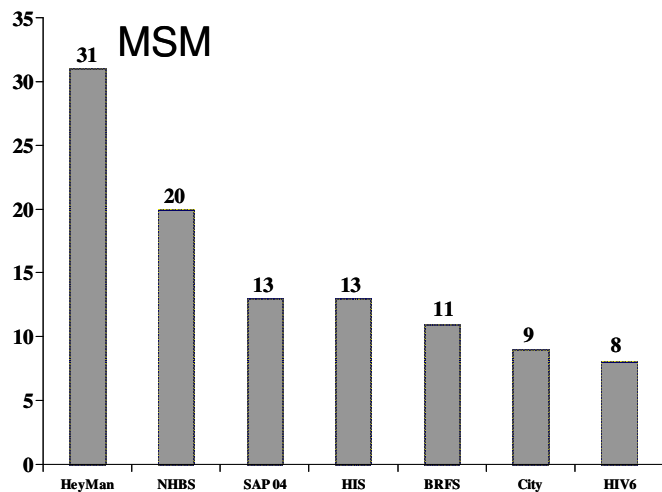
There are a number of limitations to available data on MA use in San Francisco. Of note is the lack of data on some specific sub-populations in San Francisco. Data on transgenders are lacking sufficient sample sizes to be able to make conclusions about this population's MA use. Overall, trend data is lacking for almost all of the populations. Efforts incorporating data on substance use, particularly the use of MA, should be made in ongoing and new studies of all populations in San Francisco.

Minimal data appears to exist that addresses the use of MA by San Franciscans younger than 18 years of age. The San Francisco Unified School District and CDC conducted YRBS, a behavioral risk survey of 9-12 grade students, in 2001. Approximately, 4.3 % of males and 4.6% of females surveyed indicated having used MA one or more times in their lifetime.

Appendix A: Sources of Data

Study (acronym)	Years	Design and objectives	Investigator / Contact
National HIV Behavioral Surveillance MSM 1 (NHBS-MSM1)	Nov. 2003-Dec 2004	Cross-sectional probability survey of MSM attending venues. Behavioral surveillance and sero-surveillance	SFDPH/ Raymond
STOP AIDS Project (SAP)	Ongoing	Serial cross-sectional convenience survey of MSM attending venues. Behavioral Surveillance	STOP AIDS Project / Riggs
HIV Incidence Survey (HIS)	2002-2003	Population Based RDD Survey	SFDPH/ Schwarcz
UFO3a	2/2003-Current	HIV, Hep C, and behavioral survey of young injectors 15 to 29	UCSF/ Page-Shafer
National HIV Behavioral Surveillance IDU 1 (NHBS-IDU1)	June 2004- December 2004	Cross-sectional population based survey of IDU	SFDPH/ Raymond
City Clinic	Calendar 2004	Confidential HIV testers	SFDPH/ Klausner
HeyMan!	Nov. 2001- Dec. 2005	Population based health survey of men 18-35 residing in low-income neighborhoods	SFDPH, UCSF/ Raymond, McFarland, Page-Shafer
Transgender HIV Testing Survey (TG-HITS)	2002	TG recruited at venues in San Francisco	SFDPH / Scheer
Behavioral Risk Factor Survey (BRFS)	2001-2002	Household based RDD sample of SF residents 18 and older	SFDPH/ Scheer
Larkin Street Youth Services (LSYS) HIV Testing Data	2002-2005 2004-2006	Client intakes City wide State funded HIV test data , HIV 6	LSYS/ Gibson SFDPH/ Packer
Reach Study	1996-2003	Homeless persons 18 and up	UCSF/ Hahn
Urban Health Study	2004-2005 2003	IDU 18 and up Latino MSM 18 and up	UCSF/ Kral SFSU/ Diaz

Appendix B. Range in MA use prevalence in % by BRP: San Francisco



Appendix C. Range in MA use prevalence in % by BRP: San Francisco

