

CEWG SUMMARY-- JUNE 2002

Sum of most recent trends for three major drugs—
cocaine, heroin, and methamphetamine—
with changes for each drug rated as follows:

Clearly upward	+ 2
Possibly upward	+ 1
No clear trend	0
Possibly downward	- 1
Clearly downward	- 2

Miami	+ 5	+2
New York	+ 4	0
Detroit	+ 2	+3 .
St. Louis	+ 2	0
New Orleans	+ 2	-2
Los Angeles	+ 2	+3 .
Honolulu	+ 2	+1 .
Boston	+ 1	+3
Atlanta	+ 1	+4
Chicago	+ 1	+1 .
Minneapolis	+ 1	+2 .
Texas	+ 1	+1 .
Washington DC	0	0 .
Philadelphia	0	0 .
Newark	0	0 .
Denver	0	+1 .
Phoenix	0	+1 .
Baltimore	- 2	0
Seattle	- 2	0
San Francisco	- 4	0

RANKING OF 20 CEWG CITIES ON USAGE OF "BIG THREE" SUBSTANCES, 2002

Lowest Five

- 16. Phoenix**
- 17. Boston**
- 18. San Francisco**
- 19. New York**
- 20. Los Angeles**

Source: *Men's Fitness*, February 2002

"Big Three" Substances: Alcohol, Tobacco, Sugar/Fat

"BIG THREE"
(Alcohol,
Tobacco,
Sugar/Fat)

HIGH

Atlanta
Minneapolis
St. Louis

New Orleans
Miami
Seattle

LOW

Los Angeles
Phoenix
San Diego

New York
San Francisco

LOW

HIGH

"LITTLE THREE"
(Cocaine, Heroin, "Speed")

RANKING OF 20 CEWG CITIES ON USAGE OF "BIG THREE" SUBSTANCES, 2002

Second Lowest Five

- 11. Washington, DC**
- 12. Chicago**
- 13. Honolulu**
- 14. Detroit**
- 15. San Diego**

Source: *Men's Fitness*, February 2002

"Big Three" Substances: Alcohol, Tobacco, Sugar/Fat

RANKING OF 20 CEWG CITIES ON USAGE OF "BIG THREE" SUBSTANCES, 2002

Second Highest Five

- 6. Denver**
- 7. Seattle**
- 8. Philadelphia**
- 9. Baltimore**
- 10. Dallas**

Source: *Men's Fitness*, February 2002

"Big Three" Substances: Alcohol, Tobacco, Sugar/Fat

RANKING OF 20 CEWG CITIES ON USAGE OF "BIG THREE" SUBSTANCES, 2002

High Five

- 1. St. Louis**
- 2. Miami**
- 3. Atlanta**
- 4. New Orleans**
- 5. Minneapolis**

Source: *Men's Fitness*, February 2002

"Big Three" Substances: Alcohol, Tobacco, Sugar/Fat

CORRELATION MATRIX FOR SUBSTANCE USE INDICATORS, 19 DAWN CITIES

	COCAINE	HEROIN	"SPEED"
BIG 3	+ .16	- .24	- .15
COCAINE		+ .55	- .52
HEROIN			- .26

RANKINGS OF 19 DAWN CITIES ON SUBSTANCE USE INDICATORS

<u>DAWN City</u>	<u>Cocaine</u>	<u>Heroin</u>	<u>Speed</u>	<u>"Big Three"</u>
Atlanta	3	18	16	3
Baltimore	5	1	13	9
Boston	11	6	12	16
Chicago	1	2	14	12
Dallas	14	17	7	10
Denver	16	14	6	6
Detroit	6	9	18.5	13
Los Angeles	12	16	5	19
Miami	2	10	15	2
Minneapolis	19	19	8	5
New Orleans	9	8	11	4
New York	8	4	18.5	18
Philadelphia	4	7	10	8
Phoenix	15	15	2	15
St. Louis	13	12	9	1
San Diego	18	13	1	14
San Francisco	10	3	3	17
Seattle	7	5	4	7
Washington	17	11	17	11

**RATINGS OF 9 URBAN AREAS ON 3 LEGAL SUBSTANCES
AND RANKINGS OF 5 AREAS AMONG 19 DAWN AREAS
ON 3 ILLEGAL SUBSTANCES**

City	Tobacco	Alcohol	“Junk Food”	Cocaine	Heroin	“Speed”
Sacramento	2	4	10			
San Francisco	2	6	4	10th	3rd	3rd
Oakland	1	3	3			
San Jose	0	1	4			
Fresno	1	1	9			
Los Angeles	0	2	3	12th	16th	5th
San Diego	1	1	3	18th	13th	1st
Minneapolis	3	9	9	19th	19th	8th
St. Louis	11	9	12	13th	12th	9th

Source: *Men's Fitness*, February 2002; DAWN, 2001

CEWG Meta-Analysis: San Francisco

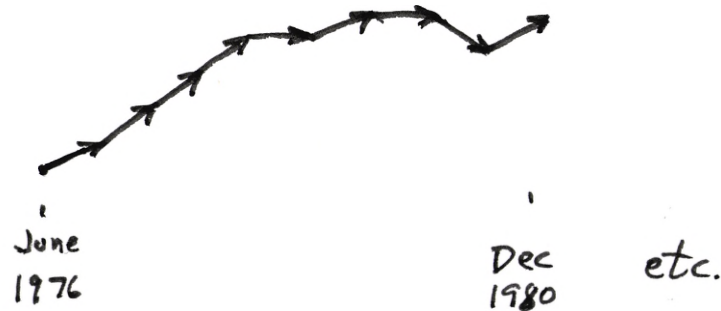
(1) Review Semiannual CEWG Reports, 1977-1998. Then Prepare "Arrows" as Follows:

"Strong Increase" or "Increase" =		(+10%)
"Slight Increase", "Some Indicators Up", etc. =		(+ 5%)
"Mixed", "No Change", etc. =		(<u>±</u> 0%)
"Slight Decrease", "Some Indicators Down", etc. =		(- 5%)
"Strong Decrease" or "Decrease" =		(-10%)

(2) Set "Arrows" in Half-Year-Interval Slots, Lagged One Year

For example, the arrow for December 1997 data is placed into the June-December 1996 slot.

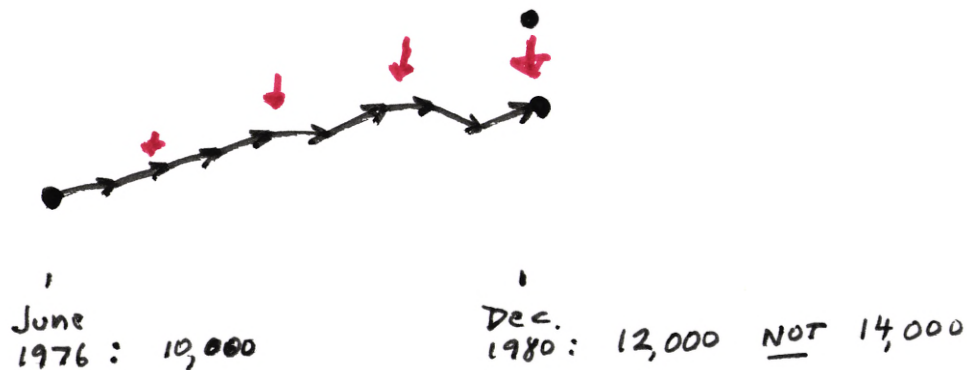
(3) Link the Arrows Together, 1976 to 1997



(4) At Points in Time Where Prevalence is Well-Estimated, "Fix" the Linked Arrows, Then Squoosh the Linkage Tighter or Looser

This will reduce or increase the intervening slopes.

(Do not attempt this if the later prevalence estimate is higher than the earlier, but the sum of intervening slopes is negative; that way lies madness or discredit.)



(5) Smooth the Graph and Scale the X- and Y-Axes

Usefulness of Completed Graph:

- **Relation to mortality**
- **Relation to property crimes**
- **Relation to treatment admissions and capacity**
- **Size of HIV risk population**
- **Back-calculation for HIV disease**
- **Comparison with other drug prevalence trends**

Marijuana Policy Indicator

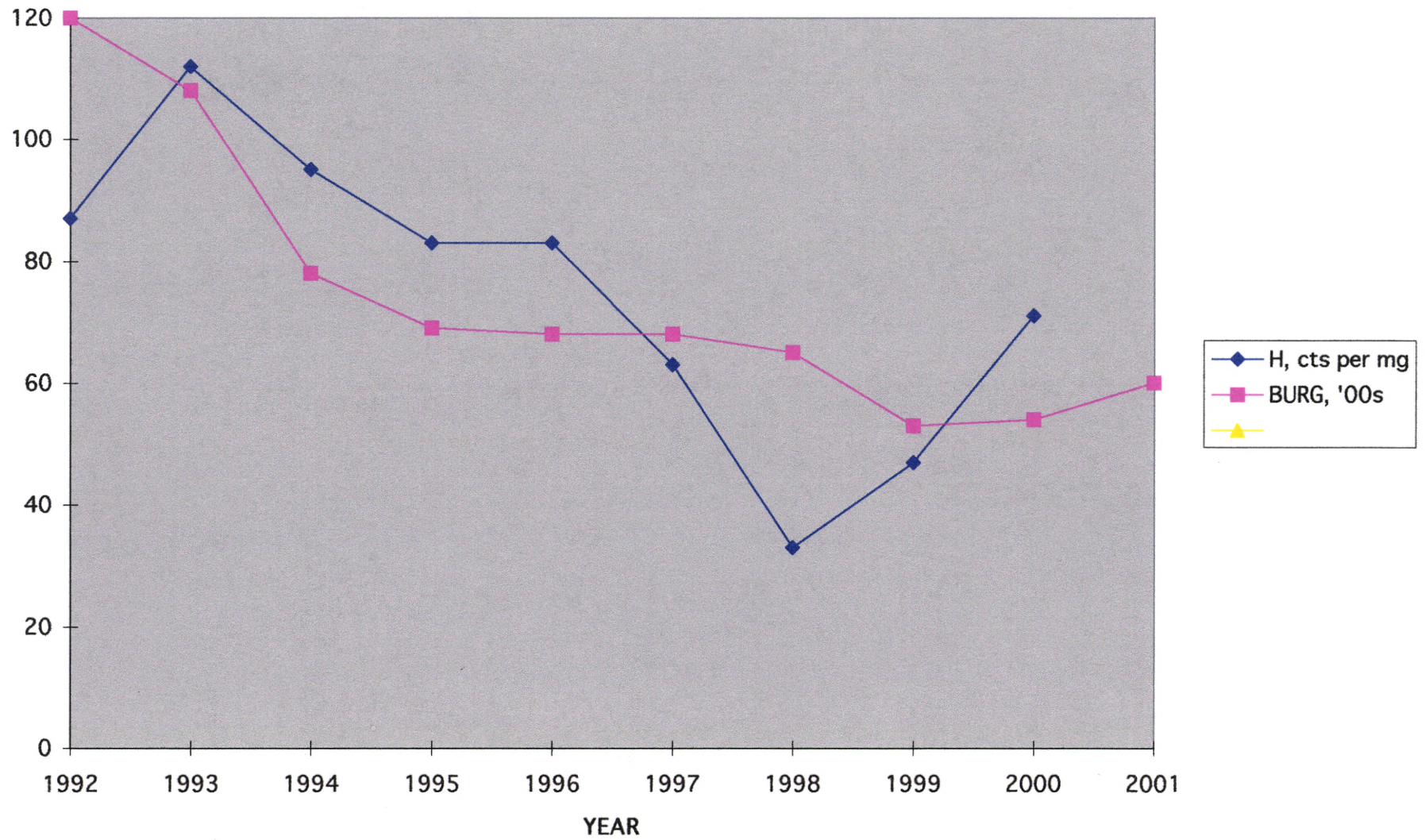
$$\text{MPI} = \frac{\Delta I_L}{\Delta I_G}$$

where ΔI_L = the proportional change in law-enforcement
marijuana indicators between time 1 and time 2

and ΔI_G = the proportional change in marijuana
indicators other than law enforcement
between time 1 and time 2

An MPI close to 1 suggests that law-enforcement policy is
“following” actual changes in marijuana usage. An MPI close
to 0 suggests that law-enforcement policy is “ignoring” those
changes.

HEROIN PRICE AND BURGLARIES, S.F., 1992-2001



$$I = N \times R \times P$$

where

I = Probability of infection

N = Number of risky acts

R = Risk probability of each act

P = Proportion of partners who are infected

**Example: unprotected receptive anal intercourse
by a fairly high-risk man having sex with
men in San Francisco**

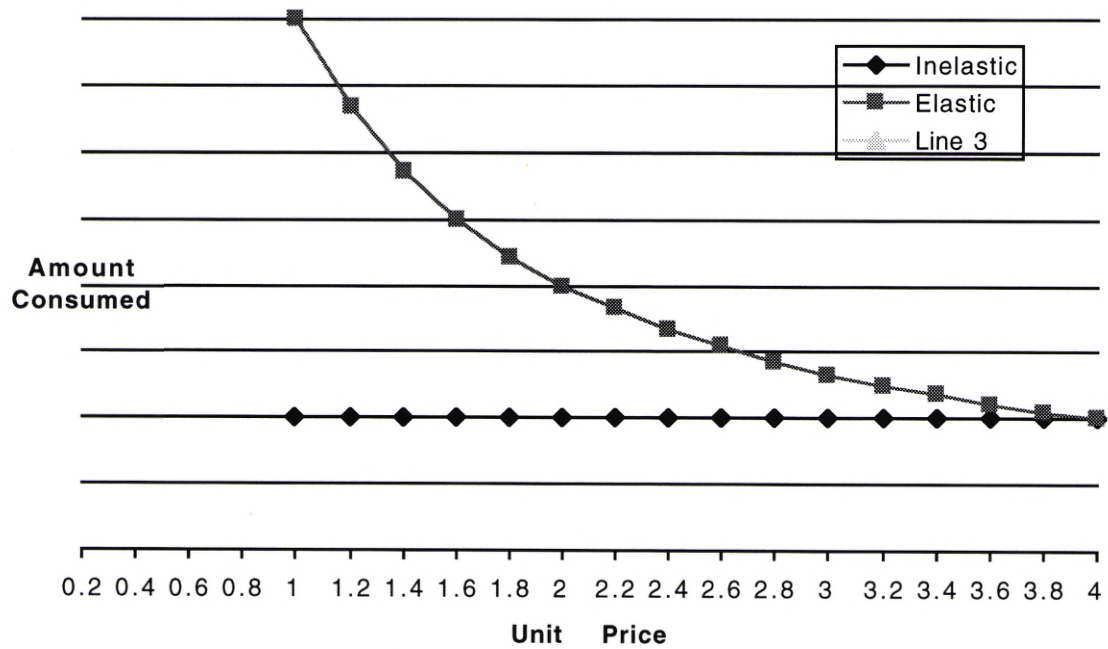
N = 10 times in one year

R = 1 in 100, or .01

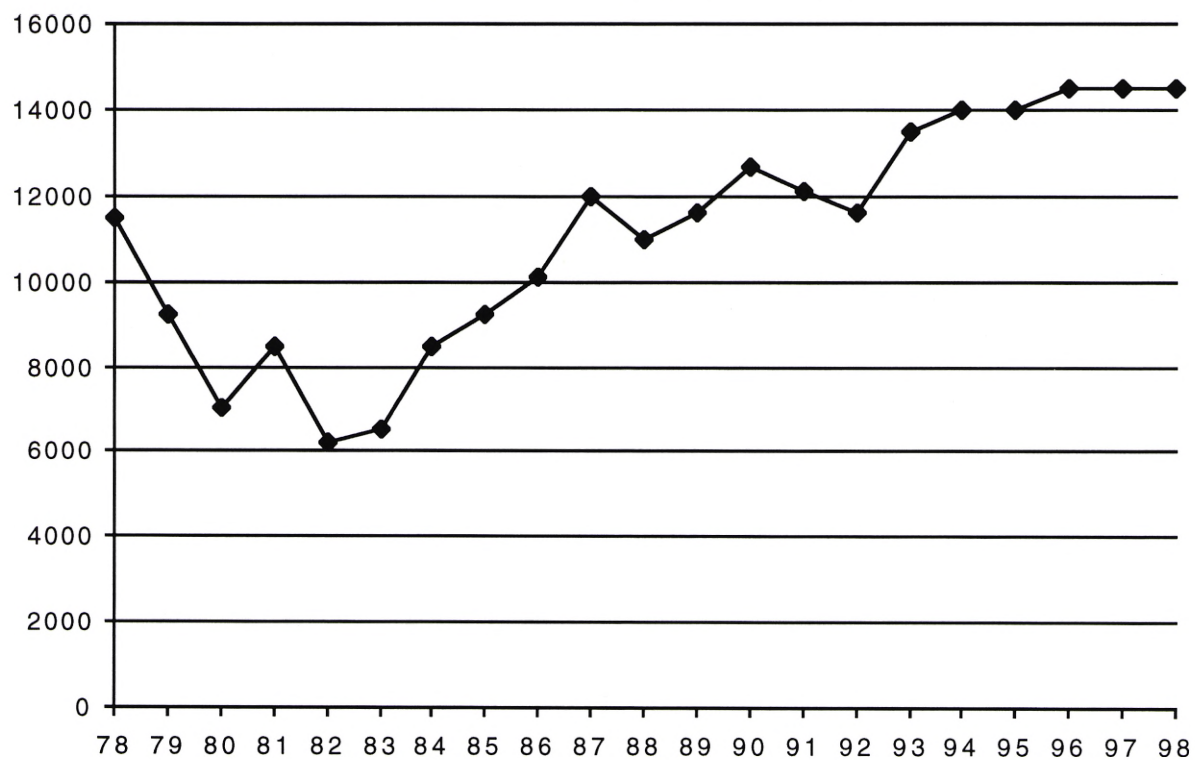
P = 30%, or .30

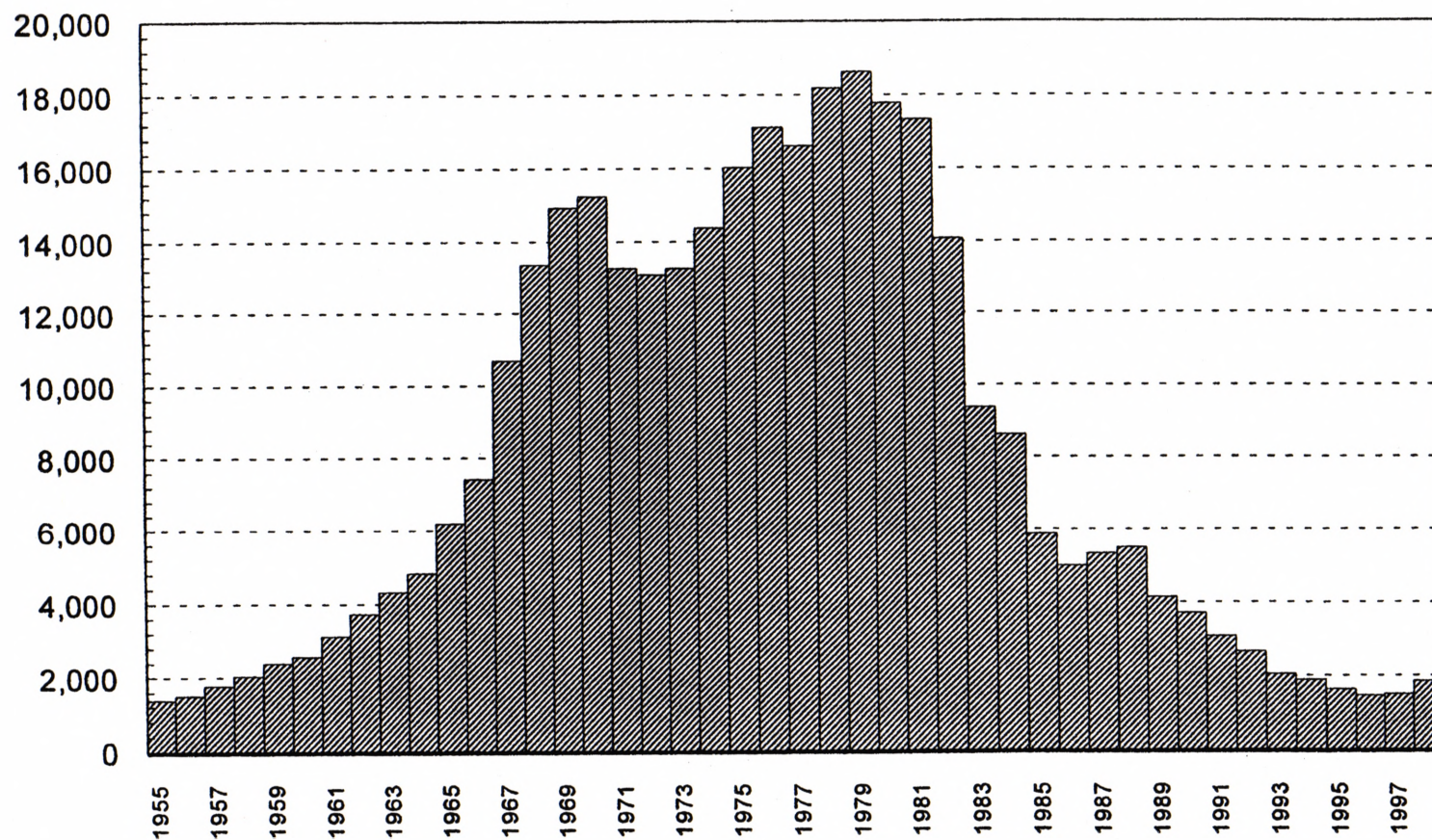
**then $I = 10 \times .01 \times .30 = .03$, or a 3% probability of
HIV infection in one year**

Price/Consumption Curve for Heroin



Estimated Heroin Period Prevalence San Francisco, 1978-1996





2. Reported gonorrhea cases, San Francisco, 1955-1998.

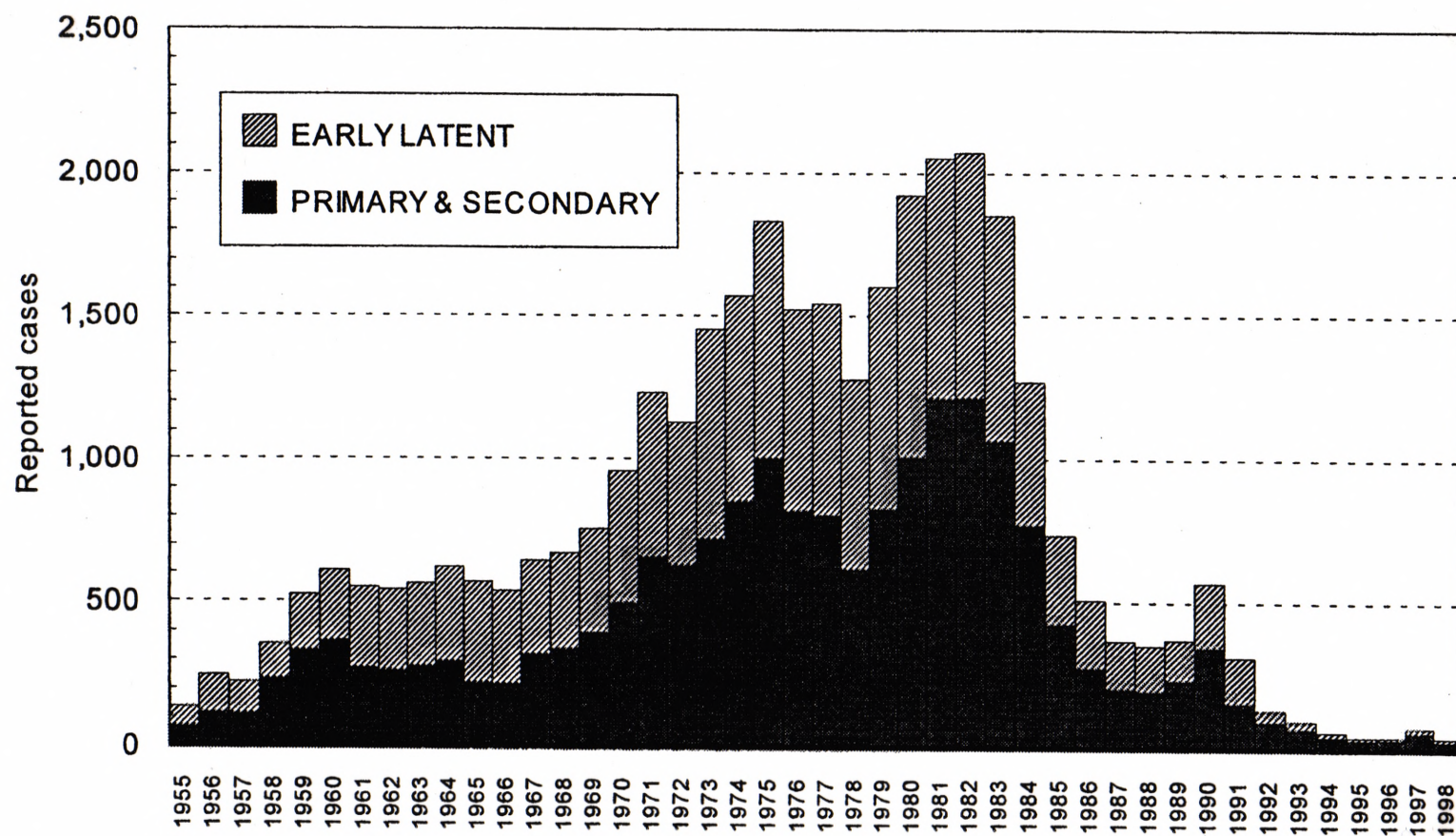
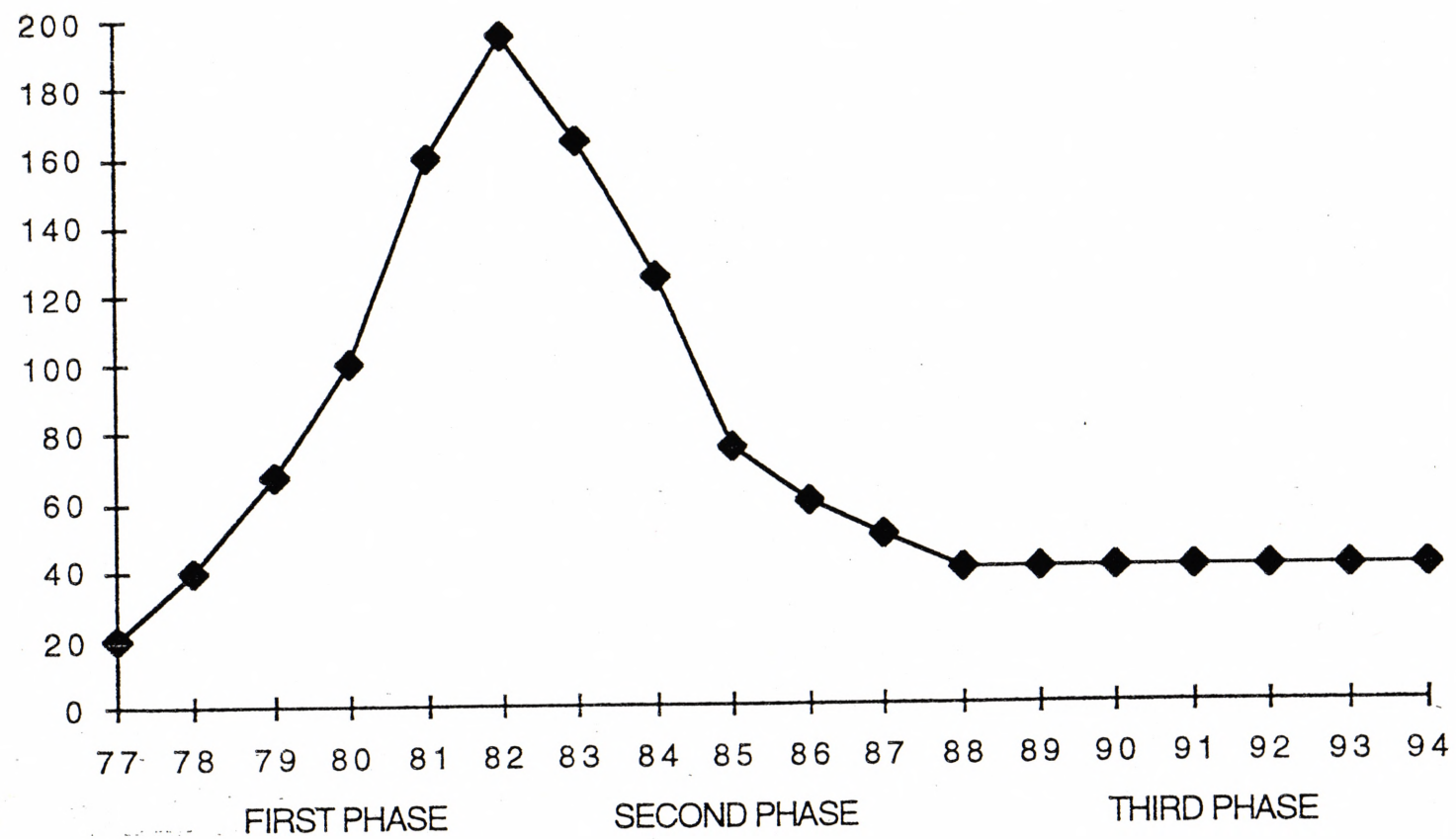
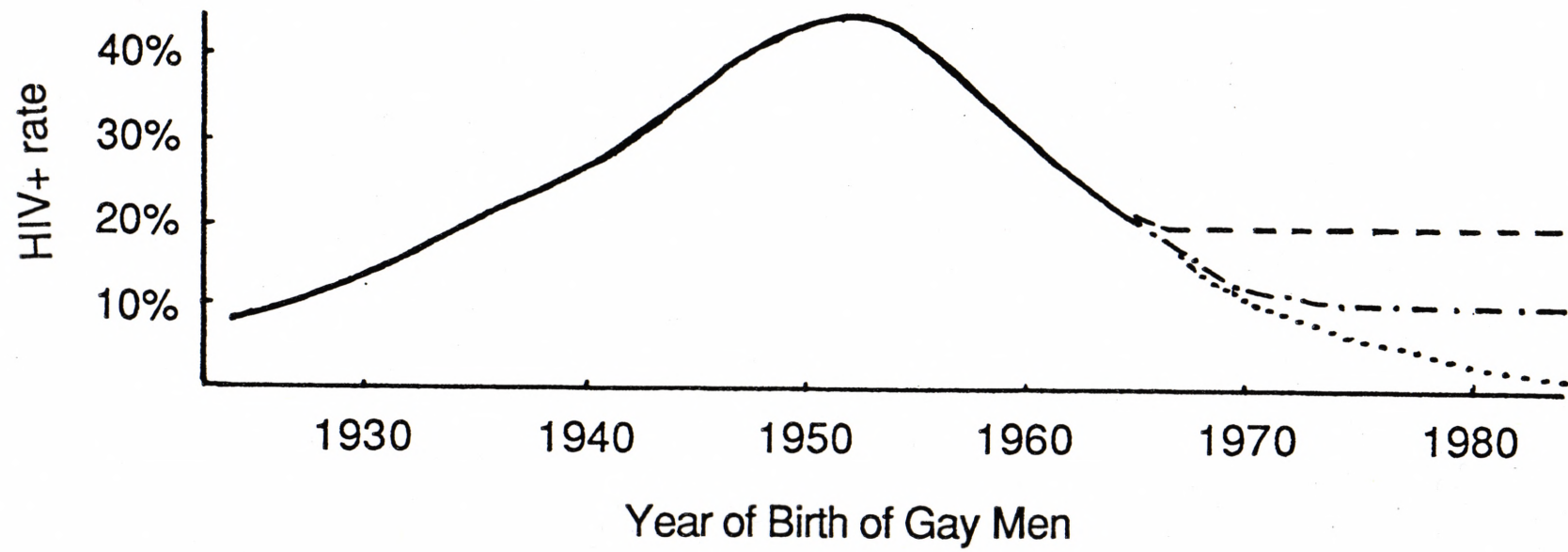


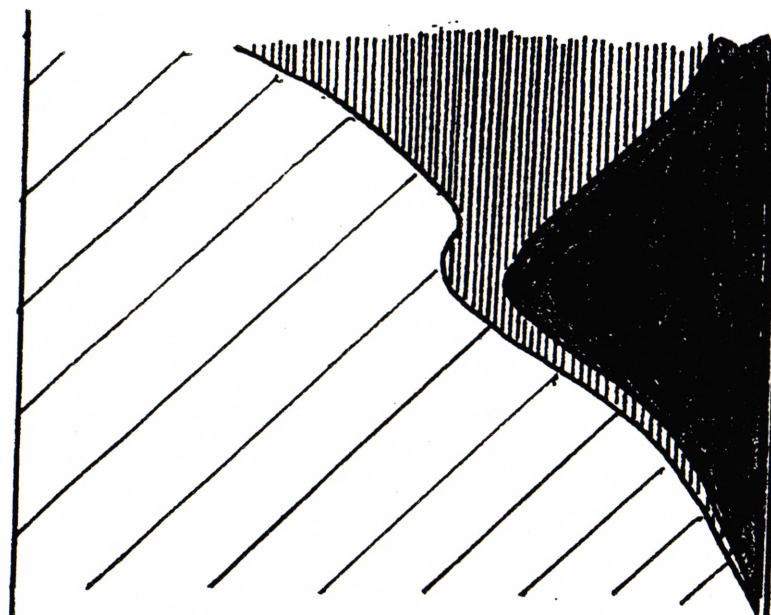
Figure 8. Reported early syphilis cases, San Francisco, 1955-1998.





Age in 2010

85
80
75
70
65
60
55
50
45
40
35
30
25



Year of Birth

1925
1930
1935
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985

Subj: **RE: Can you imagine using this indicator in your CEWG report?**
Date: Thursday, March 30, 2006 10:13:32 AM
From: jcmawell@sbcglobal.net
To: Jnewmeyer@aol.com, rrawson@mednet.ucla.edu, finnerty@ucla.edu, cfalkowski@hazelden.org, UpFrontin@aol.com, IDode@aol.com, sstrathdee@ucsd.edu, calebbg@u.washington.edu, dwwood@hawaii.rr.com, sam.cutler@phila.gov, rozannemarel@oasas.state.ny.us

Ok, the challenge is now laid down. Instead of sugar, in Minneapolis you need to wax eloquent about this as a new indicator of substance use. However, you might have to change your approach from that of the barefoot epidemiologist! Perhaps the epidemiologist in hip waders?

-----Original Message-----

From: Jnewmeyer@aol.com [mailto:Jnewmeyer@aol.com]
Sent: Thursday, March 30, 2006 12:09 PM
To: jcmawell@sbcglobal.net; rrawson@mednet.ucla.edu; finnerty@ucla.edu; cfalkowski@hazelden.org; UpFrontin@aol.com; IDode@aol.com; sstrathdee@ucsd.edu; calebbg@u.washington.edu; dwwood@hawaii.rr.com; sam.cutler@phila.gov; rozannemarel@oasas.state.ny.us
Subject: Re: Can you imagine using this indicator in your CEWG report?

Actually it was my idea, as Mark Kleiman can attest. I suggested it at a conference about ten years ago. I gave it the title "Cloaca Maxima": all the drains of ancient Rome were connected into a single huge channel of that name, which emptied into the Tiber downstream of the city. I argued, why bother to measure a million individual (urinary) channels when it all eventually collects into one great channel...

I would have used this indicator in my CEWG report, but I didn't have the wherewithal to do the actual research, only the imagination to make a Platonic speculation. It seems that Washington does have the wherewithal. Or as the saying goes, "Greeks for brains, Romans for drains".

--John

Subj: **Re: Can you imagine using this indicator in your CEWG report?**
Date: Thursday, March 30, 2006 9:41:40 AM
To: jcmawell@sbcglobal.net, rrawson@mednet.ucla.edu, finnerty@ucla.edu, cfalkowski@hazelden.org, Upfrontin@aol.com, idode@aol.com, sstrathdee@ucsd.edu, calebbg@u.washington.edu, dwwood@hawaii.rr.com, sam.cutler@phila.gov, rozannemarel@oasas.state.ny.us

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--John

JULIE'S
CHAIR
36 w. x 39 d.
x 36 h.
7715400
* Daniel Spitzer
Collectors Garden

John Newmeyer, Ph.D.
Haight-Ashbury Free Clinics, Inc.
Jnewmeyer@aol.com

* B Ryzdan

Cloaca Maxima in Rural America

Classical Rome did many things well, among them water supply and ~~sewer drains~~: "Greece for brains, Rome for drains". The greatest drain was the Cloaca Maxima, the huge pipe discharging into the Tiber at the downstream end of the great city. An oak-tree like network of smaller sewer lines fed into the Cloaca Maxima. Thus most of the waste of Rome passed through a single huge stone - / ~ d orifice.

sewer system:
sewer lines.

Towns and other communities in America have their own Cloaca Maxima, the last section of pipe which connects the areas public and private buildings to the master sewage treatment facility.

These days there are many labs in rural America where methamphetamine is "cooked".

Speed is "cooked" by several different chemical processes, of which the three most common are.

Research
• Cloaca Maxima
• Types of "cook"
• Rural sewer systems

Each of these cookings has a distinct signature of waste products. These waste products can be detected, depending on the disposal system chosen by the "cooker". Much is flushed into the septic fields common to many rural residences; much else is simply dumped into holes in the ground. But much is also flushed into the drains hooked up to the community sewage system, where it can be detected and distinguished from the background "noise" of other waste products, or similar waste products from non-speed sources (after all, most households use ammonia). Thus it is possible to measure these qualities of the collection of all "cooks" which occur in the last-named venue:

- type of cooking process
- how much per month
- the timing of the disposal of wastes
- by following "upstream" to the source

The advantage of the master drain method is early detection, and the ready measurement of regional hotspots of "cooks" which are disposed into the public system.

This study explored the feasibility of gathering substance use data in the mountainous rural area of Plumas County, California. The largest data source identified was substance abuse treatment programs. Anecdotal reports about health problems and drug seizures also proved useful.

Plumas County, some 50 miles northwest of Lake Tahoe in the Sierra Mountains, has a population of about 21,000. The great majority of residents are White (88 percent); 6 percent are Hispanic, 2.5 percent are Native American, and 3.5 percent are of other racial/ethnic groups. The county is attractive to retirees: 18 percent of the population is older than 65. The population annual growth rate is about 0.5 percent.

The average household income in the county is about one-third lower than the rest of California. However, the homeownership rate is significantly higher than the rest of California.

Over the past 5 years, about 200 to 250 persons were admitted annually to drug treatment in the county. Approximately 80 percent were primary alcohol users and 13 percent primary methamphetamine abusers. Seven percent were treated for problems with narcotic analgesics or other prescription drugs. About 40 percent of treatment referrals were from law enforcement, a reflection of Proposition 36 which mandates treatment for some categories of drug-law arrestees. Notably, the rate of methamphetamine admissions in Plumas County is about the same as that for the San Francisco bay area: roughly 150 per 100,000 population per year. This suggests that there may not be major differences between rural and urban California in some drug abuse patterns, although it is noteworthy that Plumas doesn't seem to approach the urban areas in terms of cocaine or heroin use.

There were virtually no admissions for abuse of "club drugs". However, anecdotal reports suggest that county residents leave the area to use these drugs at "raves".

There were reports of hepatitis-C cases in the county, but these are not necessarily the result of injection drug use.

Methamphetamine labs are very numerous in rural California. Plumas County apparently has its share of these, as evidenced by a handful of "busts" that have occurred there.

While there are few sources of drug abuse data in this rural county, this exploratory effort showed that it is possible to gain a general idea of drug use patterns from treatment data and anecdotal reports.



HOTELS • RESORTS • SUITES

10 TOP DIFFERENCES IN Nick's WORLDS OF 1975 AND 2002

- ① Then, the world had ~~for~~ fewer than 4 billion people. Now, it has ~~for~~ more than 6 billion.
- ② Capitalism has triumphed — giving us
③ new respect for ~~enterprise and marketing~~ entrepreneurs who market ~~of~~ illicit drugs.
- ④ Then, city centers were decrepit and unsafe, while the countryside was thriving and drug-free.
- ⑤ In 1975, sex was clean and the air was dirty.
- ⑥ Then, our reports had to be typed, our graphs had to be drawn by hand, and we barely knew about overhead displays.
- ⑦ On the other hand, door-to-door travel for CEWG members ^{then} averaged 5.2 hours ~~then~~. Now, it averages 6.4 hours.

Your Marriott AwaitsSM

For reservations or information visit Marriott.com
or call 1-800-228-9290

- ⑤ ~~②~~ Then, French wines and Mexican marijuana were ~~universally regarded as~~ ^{highly} ~~much~~ better than the domestic products... ^{California style}
- ⑥ ~~③~~ In 1975, a day's stay in a hospital room cost a ~~couple~~ ^{few} hundred dollars and a basic computer ^{cost five times as much as a day's stay in a hospital room} ~~a few thousand dollars~~...
- ⑧ ~~④~~ In 1975, a Republican President — widely ^{'not-a-bright' spark} regarded as ~~less-than-a-great~~ intellect — had just ^{got} ~~extracted~~ us ^{out of} ~~from~~ a messy Asian war...
- ① ~~⑤~~ Twenty-seven years of disastrous policies have given several million more Americans drug-crime histories; Nick and his colleagues have been unable to stop, or even to slow down This process — but merely to measure it.

Boston, MA
12:30 PM
Tuesday, June 23rd

To the Community Epidemiology Work Group:

Please accept our sincere apologies for the awkward noises outside your meeting-room this morning.

The Parker House traditionally provides its workmen with a hearty breakfast. However, recent overfishing of the Grand Banks by Canadians has obliged us to substitute Boston baked beans for the usual cod.

The problem should gradually diminish during the afternoon.

The Management
Omni Parker House Hotel

Newmeyer -

I love your letter. Absolutely wonderful. It is clearly the highlight of the day. If we get bored this afternoon, maybe we could organize/orchestrate a similar set of sound effects to prevent everyone's falling asleep this afternoon. Maybe East v West; those who have already presented v. those who haven't; good presentations v. bad presentations; color v black & white; air bags v. succinct presentors. Cheers. Jane

The Indian Summer of Hypocrisy

Sometimes, when my tiny head is spinning with disinfotainment and other artifacts of the mediasphere, I try to think what archaeologists and social historians 2,000 years from now might make of our particular little epoch. How, for instance, would they parse the word "drug"?

Is a "drug dealer" a pharmacist or a petty criminal? When we talk about "reasonably priced drugs for seniors," are we discussing marijuana or Lipitor? What would they make of the fact that the last four administrations have declared a "war on drugs" while taking money from drug companies?

Why is it bad when residents of Colombia build mansions from profits on the sale of drugs, but it's good when residents of Newport, R.I., do the same thing?

When one person cannot live without "lifesaving drugs," we express great sympathy, unless that person is a "drug addict," in which case we may even throw him in jail. When a mood-altering drug is sold in pill form in stores, it's called an antidepressant and hailed as a medical breakthrough. When a mood-altering drug is sold on the streets, it's called felony drug trafficking and subject to stiff criminal penalties.

Because we are native speakers of American, we can wend our way through the contradictions. We know that the bad drugs are the ones that cause euphoria and impair judgment, unless the drug is alcohol, but that's not ever called a drug, so there's no confusion there. We know that the good drugs are the ones that cure disease or relieve symptoms, except sometimes the good drugs are ineffective or even counterproductive in achieving these goals. Street dealers do not finance experimental trials on the effectiveness of the drugs they sell. Drug companies do, but they fudge the results. Street dealers have a small feedback loop because customers can tell pretty quickly whether they're loaded or not. Drug companies have a long feedback loop because human beings can't instantly tell whether their cholesterol is being lowered or their blood thinned or their insulin production stimulated.

A drug with a long feedback loop is clearly more profitable than one with a short feedback loop because the dealer can keep an ineffective drug on

the shelves much longer. Interestingly, the people who sell ineffective drugs are generally said to have made "honest mistakes."

If a street dealer sold you an ineffective drug, you could take five of your friends and go back and have a brisk conversation with him. If a behind-the-counter dealer sold you an ineffective drug, you'd have to hire a lawyer and file a lawsuit and maybe, maybe, 10 years later you'd get some money, although probably you'd be dead by then.

Street dealers don't have patents on their drugs, which means they'll always have plenty of competition. Drug companies do have patents, so they can set their prices without worrying about market economics. And when the patents run out, they can put out a drug with a slightly different formulation, promote it like mad and sell the new drug in a monopolistic setting.

You have to wonder when street dealers are going to come up with Cocaine XR or LSD Reditabs.

Since the street dealer works in a competitive atmosphere, he has to keep his prices relatively low. In order to increase his profitability, he can "step on" his product, that is, dilute it. It would be unwise for a drug company to adulterate its product, but since it owns a monopoly, it can set prices artificially high and achieve the same profitability.

A street dealer who knowingly poisons his clientele is called "the scum of the earth." A drug corporation that knowingly poisons its clientele is called "a tobacco company."

People who sell illegal drugs often rot in jail for 20 or 30 years. People who sell legal drugs are often forced to attend tedious day-long board meetings. People who take illegal drugs are called "losers." People who take legal drugs are called "everyone in America."

Glad I'm not an archaeologist in 4040; my brain would ache a whole lot.

Jon Carroll
San Francisco Chronicle, August 6, 2004

* Treatment fails because it isn't sustained

- American pattern: go in, spend lots of money, professionalize, lose interest
- 12 Step

* Rationale for Costly Condoms

- 700 MSM seroconversions / year
 - $\times 150$ unsafe +/- acts per seroconversion
 - $\cong 105,000$ unsafe +/- acts / year
- 40,000 sexually active MSM
 - ≈ 100 acts / year
 - $\cong 2,000,000$ acts

THE PARTY & PLAY STUDY:

**HIV Risk in a Late-Night
Population of MSM**

Descriptive Results



**San Francisco Department of Public Health
HIV Prevention Section**

February 4, 2003

THE PARTY AND PLAY STUDY

Research Associates:

Carla Clynes, Stephen Dempsey, Jelousy Jiggetts, Damian Ochoa, Nashanta Stanley, Seth Watkins.

Study Coordinator:

Eileen Loughran

Investigators:

Mike Pendo, MPH; Rani Marx, PhD, MPH; Kristen Clements-Nolle, PhD, MPH; Mitchell Katz, MD.

Community Advisory Board Members:

Michael Crosby, Jed Herman, Mario Hernandez, Michael Siever, Mike Shriver, Tony Tran.

A Special Thanks To Our Participants

Funding for the Party & Play Study was provided by the Center for Disease Control & the California State Office of AIDS. STD testing provided by the SFDPH- STD Prevention and Control Services.

For More Information Contact:

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EXECUTIVE SUMMARY

Increasing HIV incidence among men who have sex with men (MSM) in San Francisco makes it imperative to identify those MSM who may be at increased risk for HIV and are not being effectively reached by existing HIV prevention interventions. The Party and Play Study was designed to assess HIV and sexually transmitted disease (STD) prevalence, risk behaviors, and the HIV prevention and health service needs of MSM recruited from street and venue-based locations during late-night and early morning hours, a population thought to be at high risk and not accessing prevention services. From September 23, 2000 through April 12, 2001 we enrolled 356 MSM to complete an anonymous interview, HIV testing and STD testing.

Our sample was extremely diverse in terms of age, race/ethnicity, and socioeconomic status. The majority of participants were often out past midnight several times a week. They frequented a variety of venues including bars, dance clubs, public sex environments (PSEs), cruising areas, adult video arcades, and sex clubs, and often met sex partners at these locations.

Almost a third of participants tested positive for HIV, of whom 23% tested positive for the first time through our study. A relatively high proportion of our sample who were HIV negative or unaware of their status (36%) had not tested for HIV in the past year, had never tested, or tested but did not return for their results. Among first-time positives, over two-thirds had not tested in the past year, had never tested, or tested but did not return for their results.

Participants reported high levels of HIV and STD sexual risk behaviors in the past three months. Sixty-nine percent of participants engaged in insertive anal intercourse, of whom 64% reported one or more episodes of unprotected insertive anal intercourse (UIAI). Fifty-four percent of our sample engaged in receptive anal intercourse, of whom 67% had unprotected receptive anal intercourse (URAI) at least once. Individuals who knew they were HIV positive

were more likely to report both UIAI and URAI than individuals who were HIV negative or unaware of their status. Although we have not yet assessed whether unprotected anal intercourse (UAI) occurred between seroconcordant (same HIV status) or serodiscordant partners, 38% of our sample had UAI with a partner of unknown HIV status, an important risk factor for HIV transmission and acquisition.

Recreational drug use in the past three months was extremely high. Eighty-three percent of participants used non-injection drugs and 35% injected drugs. Marijuana, alcohol, and methamphetamine were the most frequently used non-injection drugs; almost all injection drug users injected methamphetamine. Almost three-quarters of the sample reported engaging in anal intercourse when high on alcohol or other drugs. Injection risk behaviors were also common in our sample. Among recent injection drug users, 58% reported sharing syringes at least once. Sharing of other drug paraphernalia was also common.

Almost all participants who knew they were HIV positive were receiving care for their HIV disease and just over half were on highly active antiretroviral treatment (HAART). HIV prevention service use in the past three months was fairly low: a quarter of HIV negative participants, 27% of those who knew they were HIV positive, and only 4% of first-time positives attended an HIV prevention group or received some type of counseling about HIV risk reduction. The counseling provided with HIV antibody testing likely accounts for a considerable proportion of this exposure to HIV prevention interventions.

High HIV prevalence and risk behaviors coupled with infrequent HIV antibody testing and relatively low exposure to HIV prevention interventions demonstrates an urgent need for HIV prevention interventions among MSM who frequent late-night street and venue-based locations. Interventions should include HIV and STD risk reduction, a focus on HIV status

disclosure and sexual negotiation, substance use harm reduction, and referrals to substance abuse treatment services.

Late-night HIV and STD testing in the field and outreach are interventions that may be effective in reaching this population and could increase the frequency of testing, the detection of HIV and STD infections, provide individual counseling and risk assessments, as well as get persons unaware of their HIV positive status into care sooner. Safer sex supplies, brief counseling, and referrals to more intensive HIV prevention interventions could be provided by outreach conducted at locations frequented by participants. Since most individuals who knew they were infected were accessing HIV care, delivering prevention interventions in combination with HIV care may be an effective way to provide prevention services for HIV positive individuals.

We believe that MSM who frequent late-night street and venue-based locations are contributing to the growing number of new HIV infections among MSM in San Francisco. Current HIV prevention efforts do not appear to be effectively reaching this population, underscoring the need for increased HIV prevention efforts.

BACKGROUND

Estimates of new HIV infections among men who have sex with men (MSM) in San Francisco have increased sharply since 1997 (from 336 in 1997 to 835 in 2001).^{1,2} In addition, recent studies suggest that rates of unprotected anal intercourse (UAI) and rectal gonorrhea (a good surrogate marker for UAI) have increased among San Francisco MSM.³⁻⁵ Thus, it is imperative to reach MSMs who may be at increased risk for HIV, are not being effectively reached by current prevention interventions, and are not linked to HIV care services. A group of particular concern is MSM who are out during the late-night hours. Qualitative data and anecdotal reports suggest that this subgroup of MSM may be at increased risk for HIV due to high rates of drug use, especially in conjunction with sexual intercourse.⁶⁻¹⁰ However, no quantitative data on HIV prevalence and risk behaviors, or information on prevention service use is available for this late-night population.

To address this limitation, the San Francisco HIV Prevention Planning Council prioritized a quantitative cross-sectional HIV/STD prevalence and risk behavior study (The Party and Play Study) among MSM who frequent late-night street and venue-based locations in San Francisco.

STUDY OBJECTIVES

The objectives of the Party and Play Study were to determine the:

- § prevalence of HIV and STDs;
- § prevalence of HIV and STD risk behaviors; and
- § HIV prevention and health service needs

of MSM who frequent street and venue-based locations during the late night and early morning hours in the Polk, Mission, Castro, and South of Market neighborhoods.

STUDY DESIGN AND METHODS

Subjects and Recruitment

We conducted over seven months of formative research prior to beginning the quantitative study. The formative phase consisted of field observations and informal conversations with service providers and members of the target population to assist in the development of the study protocol, recruitment methods, survey instrument, and the identification of locations and venues for recruitment. A community advisory board comprised of service providers and researchers who worked with the target population assisted with the development of the study design.

Quantitative data collection was conducted from September 23, 2000 through April 12, 2001. Recruitment was conducted Thursday through Sunday between midnight and 4:00 a.m. at street and venue-based locations including bars, dance clubs, sex clubs, video stores, public sex environments (PSEs), and cruising areas in the Castro, Mission, Polk, and South of Market neighborhoods in San Francisco. Individuals were approached at these locations and asked if they would be interested in participating in the study. Interested individuals were given a numbered recruitment card with a toll-free phone number to call for eligibility screening and study participation at a later time. Alternatively, individuals could be screened and participate at the time of recruitment if they expressed an interest.

Individuals were eligible to participate if they: (1) were male or male-to-female transgender (MTF)^a; (2) were at least 16 years of age; (3) reported any kind of sex with a male in the past six months; (3) spoke English or Spanish; and (4) had a numbered recruitment card that they received during late night outreach.

^a Due to the small number of self-identified MTF's in our study (n=35) this report will focus on MSM.

Survey Procedures

Prior to participation, informed consent was obtained from all participants. Study participation included a face-to-face interview conducted in English or Spanish, followed by HIV risk reduction counseling, as well as referrals to needed services. After the interview and counseling session, participants had the option of testing for HIV, syphilis, gonorrhea and chlamydia. Given the difficulty of collecting blood and urine in the field during late night hours, only oral HIV testing was conducted for field interviews. Participants who tested for HIV or STDs were scheduled for a follow-up appointment two weeks later to receive their test results, as well as additional counseling and referrals. Individuals who tested HIV positive for the first time were referred to HIV test sites for confirmatory testing, as well as to HIV primary care and supportive services. Those who had a positive urine test for gonorrhea or chlamydia received treatment at their follow-up visit.

Participants received \$30.00 cash for completing the interview, a \$10.00 gift certificate to a local supermarket if they chose to test for HIV, another \$10.00 gift certificate if they chose to test for gonorrhea, chlamydia, or syphilis, and \$10.00 cash for completing their follow-up appointment.

Measures

In the interview we assessed: 1) sociodemographics; 2) sexual and drug use behaviors; 3) HIV testing history and knowledge of HIV status; 4) HIV prevention, health, and substance abuse service use; and 5) psychosocial factors that may be associated with HIV risk behaviors. HIV testing was conducted either by a blood draw or oral HIV test, syphilis screening was conducted by blood draw, and urine was collected to test for gonorrhea and chlamydia.

RESULTS

Participation

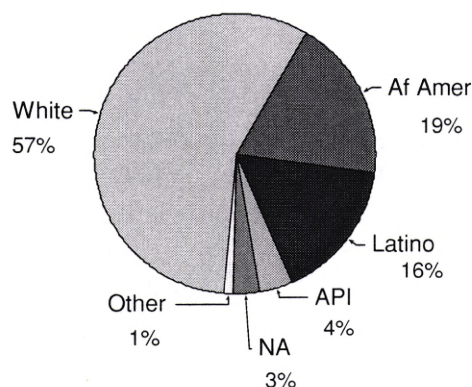
A total of 5,417 study recruitment cards were distributed during our six months of recruitment (some individuals received multiple recruitment cards). We screened 460 males, of whom 93% (n=428) met the study eligibility criteria. Of these, 10% (n=43) did not show up for their appointment and 6% (n=26) were identified as already having participated in the study. Participants were identified as duplicates by research associates' observations. The final sample size was 356 MSM (77% of those screened for participation).

Almost all interviews and HIV/STD testing (96%) were conducted at our offices. Most participants chose to test for HIV (96%), as well as for gonorrhea and chlamydia (92%). Fewer individuals (73%) tested for syphilis, most likely because it required a blood draw. Of the 347 participants who tested for HIV or STDs, 81% returned for their follow-up results.

Sample Characteristics

As shown in Figures 1 through 6 our sample was extremely diverse. The age of participants ranged from 16-58 years old with a median of 33 years. Over two-thirds (70 %) of participants were between the ages of 20-40 years. Forty-two percent identified as African American, Latino, Asian/ Pacific Islander (API), or Native American (NA). Monthly income ranged from \$0 - \$9,000 (median = \$1,200), with almost half of participants earning \$1,000 or less a month. Forty-two

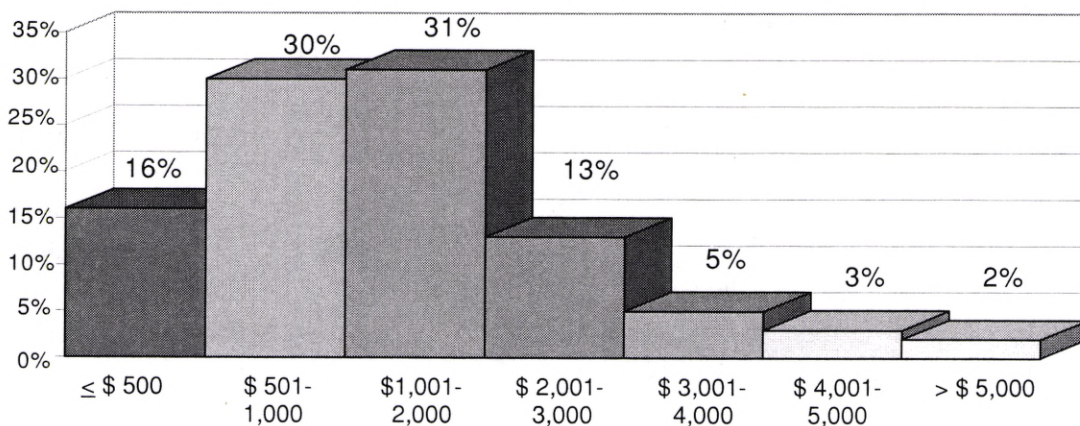
Figure 1. Race/Ethnicity (n=355)



* Other Category includes multicultural (1), Cajun (1), Middle Eastern (1), American (1)

percent of participants reported a main source of income other than full or part-time employment (including SSI/SSDI, sex work, general assistance [GA], and drug dealing) (non-mutually exclusive). The majority of participants (90%) were currently residing in San Francisco; 43% indicated that their current living situation was unstable (single residence occupancy hotel [SRO], homeless, or crashing with friends). Eighteen percent of participants reported less than a high school education. Slightly over half of the sample did not have health insurance. Almost all participants self-identified as gay or bisexual, with 68% identifying as gay and 30% as bisexual.

Figure 2. Monthly Income Past Three Months (n=354)



Mean Income = \$ 1,592

Median Income = \$ 1,200

Range \$0-\$9,000

Figure 3. Main Sources of Income Past Three Months (non-mutually exclusive)

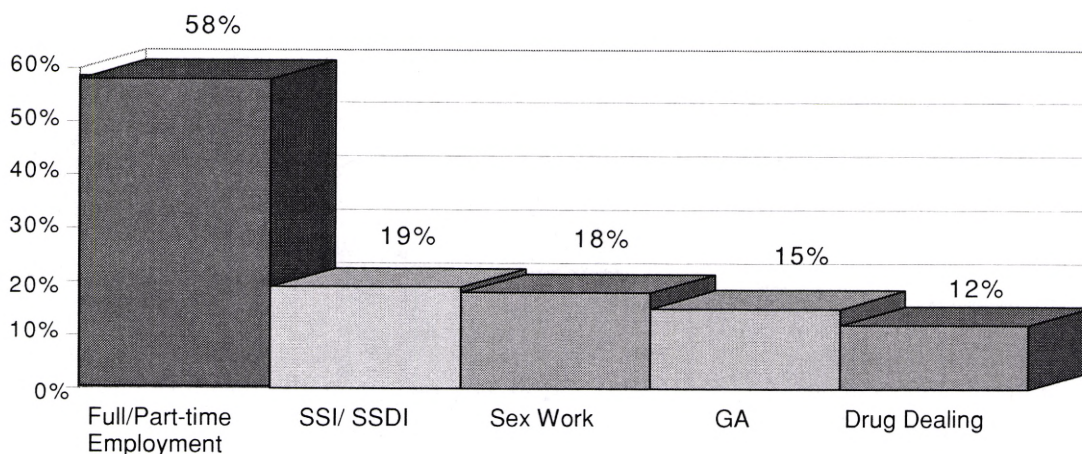


Figure 4. Current Living Situation (n=356)

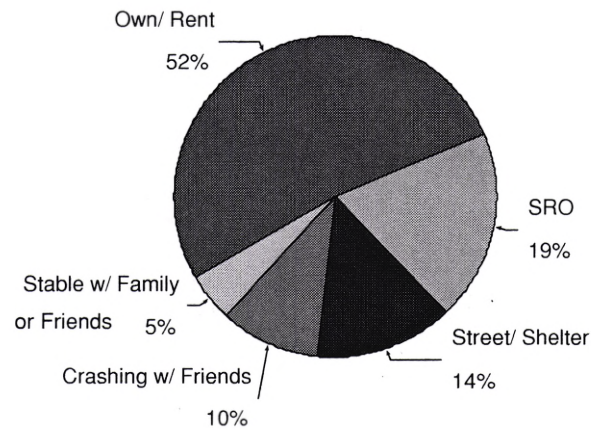


Figure 5. Education (n=356)

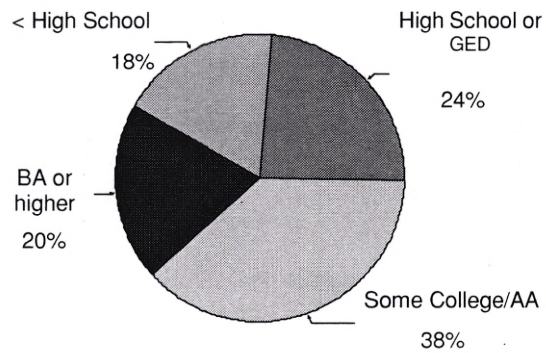
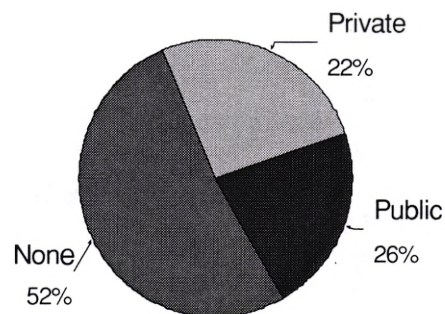


Figure 6. Health Insurance (n=353)



Late night Socializing

As shown in Figures 7 and 8, participants were frequently out late several times a week; about a quarter were out past midnight every day. Over half of participants were out past 4:00 a.m. on weekends and over a third were out past 4:00 a.m. on weeknights.

Figure 7. When Out Past Midnight in Past Three Months (n=356)

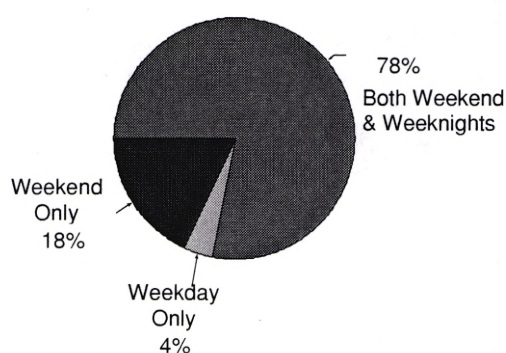
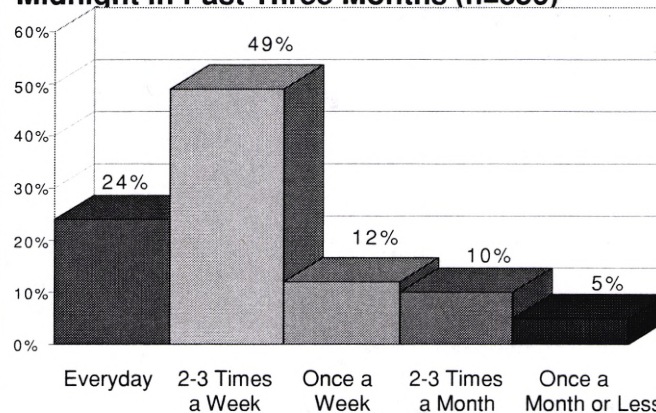
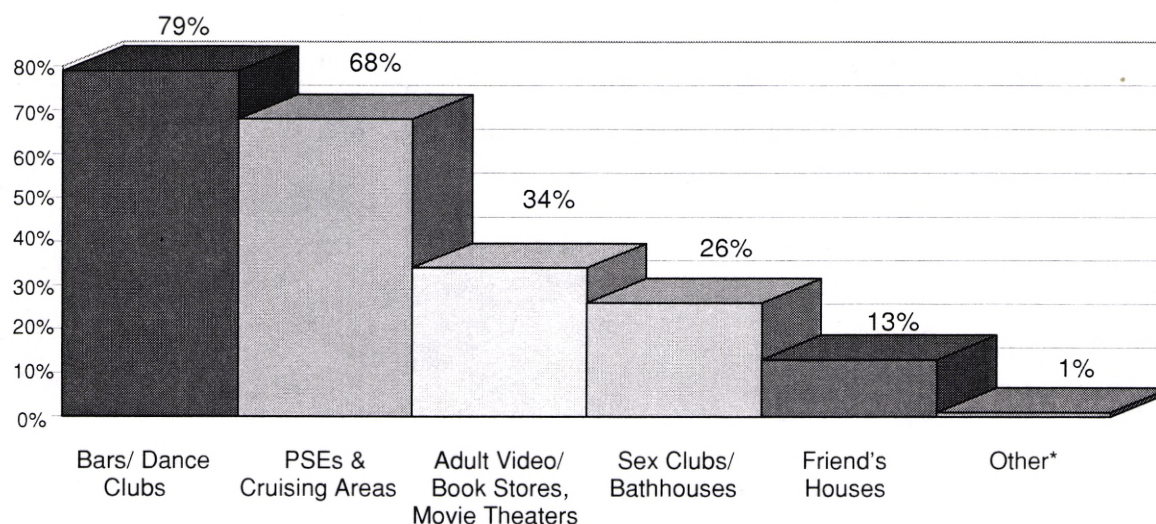


Figure 8. Frequency of Being Out Past Midnight in Past Three Months (n=356)



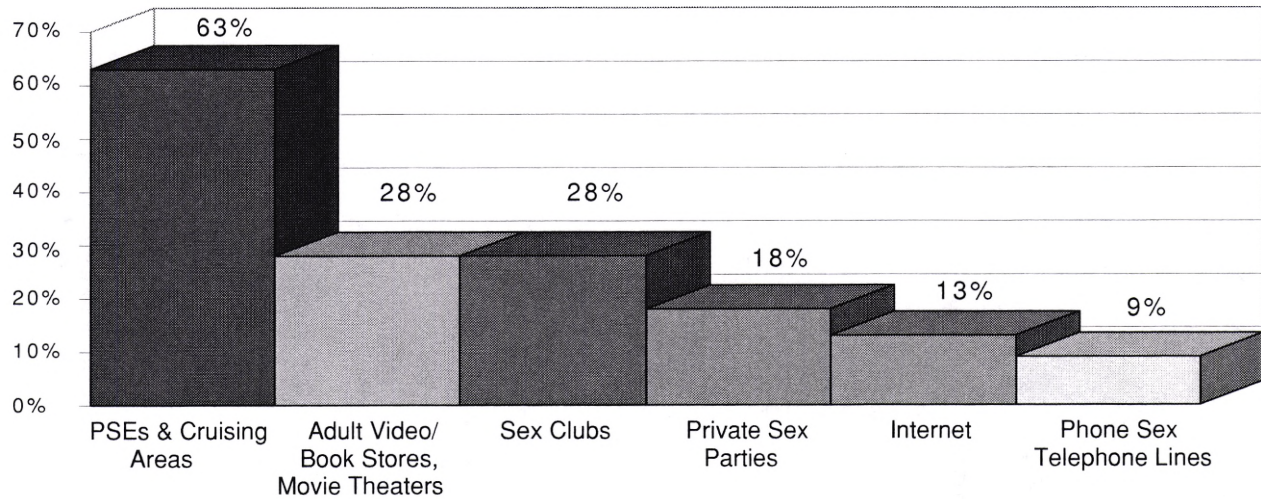
Participants frequented a variety of venues in the past three months, ranging from bars to sex clubs and often met sex partners at these locations (See Figures 9 and 10).

Figure 9. Venues Frequented by Participants in Past Three Months (non-mutually exclusive) (n=356)



* Other category includes johns' houses, hot tubs, and coffee houses

Figure 10. Locations of Meeting Sex Partners in Past Three Months (non-mutually exclusive) (n=356)



HIV/STDs and Hepatitis B

HIV Prevalence and Testing

Among the 342 participants who tested for HIV in our study, prevalence was 31%. Seven percent of all participants who tested for HIV or 23% who tested HIV positive were testing positive for the first time through our study (See Figure 11). As shown in Table 1, HIV prevalence was highest among Whites and Latinos, and among individuals between the ages of 30 and 50 years old. HIV prevalence was higher among individuals who had ever injected drugs compared to those who never injected.

Figure 11. HIV Prevalence (n=342)

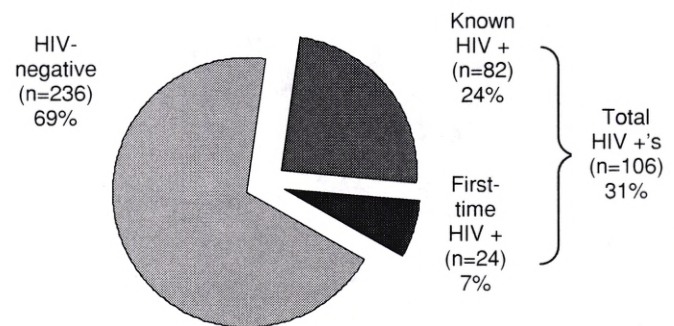


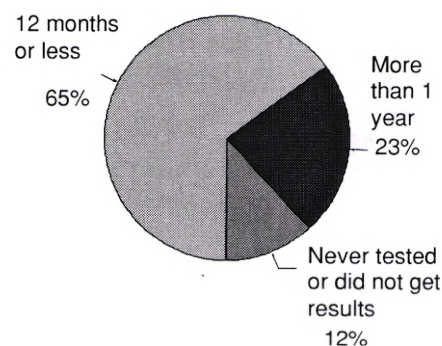
Table 1. HIV Prevalence by Race/Ethnicity, Age, and Injection Drug Use (n=342)			
		HIV Positive/ All	% HIV Positive
Race/ Ethnicity			
	White	67/197	34%
	Latino	17/52	33%
	African American	16/63	25%
	A/PI	2/14	14%
	Native American	1/11	9%
	Other	2/4	50%
Age			
	13-19	0/15	0%
	20-24	6/69	9%
	25-29	12/60	20%
	30-39	51/110	46%
	40-49	33/76	43%
	≥ 50	4/12	33%
Ever injected			
	Yes	59/157	38%
	No	47/185	25%

While almost two-thirds of participants who were HIV negative or unaware of their HIV positive status tested for HIV in the past year, almost a quarter had not tested in the past year and 12% never tested, or did not return for results (See Figure 11). Among first time positives, 67% had not tested in more than a year, never tested, or did not return for results.

Sexually Transmitted Diseases

A small proportion of participants (4%) reporting having received an STD diagnosis by a medical provider in the past three months. Among the 352 testing for chlamydia and gonorrhea, 2% tested positive for urethral chlamydia and 1% tested positive for urethral gonorrhea. All but one of the participants who tested positive for gonorrhea or chlamydia returned for their follow-

Figure 11. Time Since Last HIV Test Among Participants Who Had Never Received an HIV Positive Test Result (n=266)



up appointment and received treatment. None of the 281 participants who tested for syphilis had a reactive test result.

Hepatitis B

Forty-four percent of the sample reported previous vaccination for Hepatitis B of whom 64% (n= 155) reported receiving at least three vaccinations. The primary reasons for not being vaccinated were prior exposure to Hepatitis B (29%) and not being aware of the vaccine (23%).

HIV Risk

Sexual Risk Behaviors

As shown in Table 2, 69% of participants engaged in insertive anal intercourse in the past three months, of whom 63% reported UIAI. Just over half of the sample (54%) engaged in receptive anal intercourse; 67% of this group reported URAI. Just under a third of individuals who had UIAI and a third who had URAI, reported unprotected anal intercourse with a partner of unknown HIV status. Individuals who knew their HIV positive status were more likely to report engaging in both UIAI and URAI in the past three months than those who had never tested HIV positive. We have not yet assessed whether they engaged in UIAI or URAI with a serodiscordant or seroconcordant partner. The proportion of HIV positive and HIV negative participants engaging in UIAI or URAI with a partner of unknown HIV status was similar.

In addition, almost a third (31%) of our sample reported that they received money, drugs, food or a place to stay in exchange for sex, while 12% gave money, drugs, food or a place to stay in exchange for sex in the past three months.

Table 2 -- Anal Intercourse Among MSM in the Past Three Months

Behavior	All n (%)	HIV Neg or UK HIV Status n (%)	Known HIV + Status n (%)
Insertive Anal Intercourse	247/356 (69%)	184/269 (68%)	63/87 (72%)
<i>Unprotected Insertive Anal</i>	157/247 (64%)	104/184 (57%)	53/63 (84%)
<i>Unprotected Insertive Anal w/ Partner of Unknown HIV Status</i>	77/247 (31%)	59/184 (32%)	18/63 (29%)
Receptive Anal Intercourse	192/356 (54%)	134/269 (50%)	58/87 (67%)
<i>Unprotected Receptive Anal</i>	121/192 (63%)	76/134 (57%)	45/58 (78%)
<i>Unprotected Receptive Anal w/ Partner of Unknown HIV Status</i>	62/192 (32%)	43/134 (32%)	19/58 (33%)

Injection Risk Behaviors

Among the 124 recent injectors in our study, over half reported sharing syringes; 52% reported someone using a needle after they used it, and 42% reported using a needle after someone else. Sharing other drug paraphernalia such as cookers, rinse water, or filters was also common (See Figure 12). Most recent injectors reported that needle exchange sites were their most common sources of needles (See Figure 13).

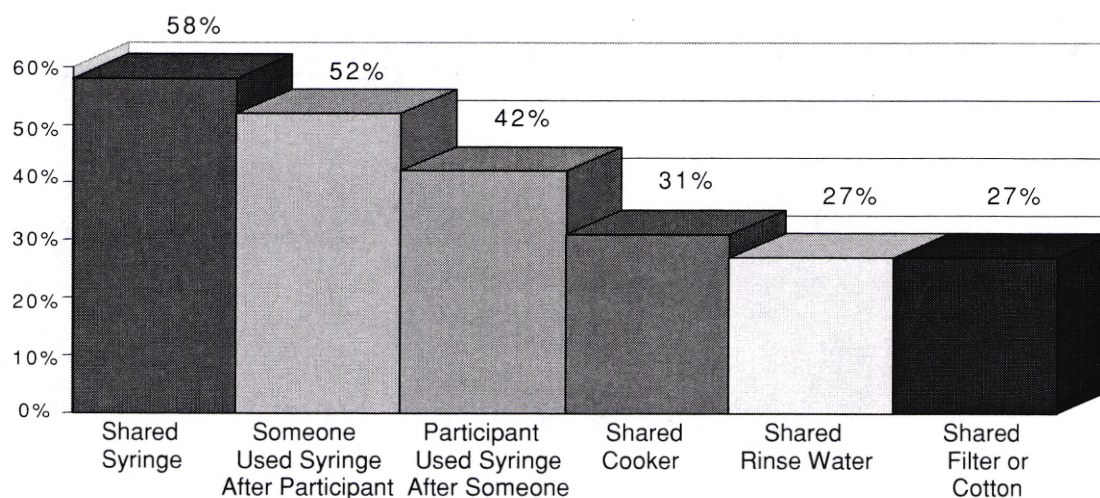
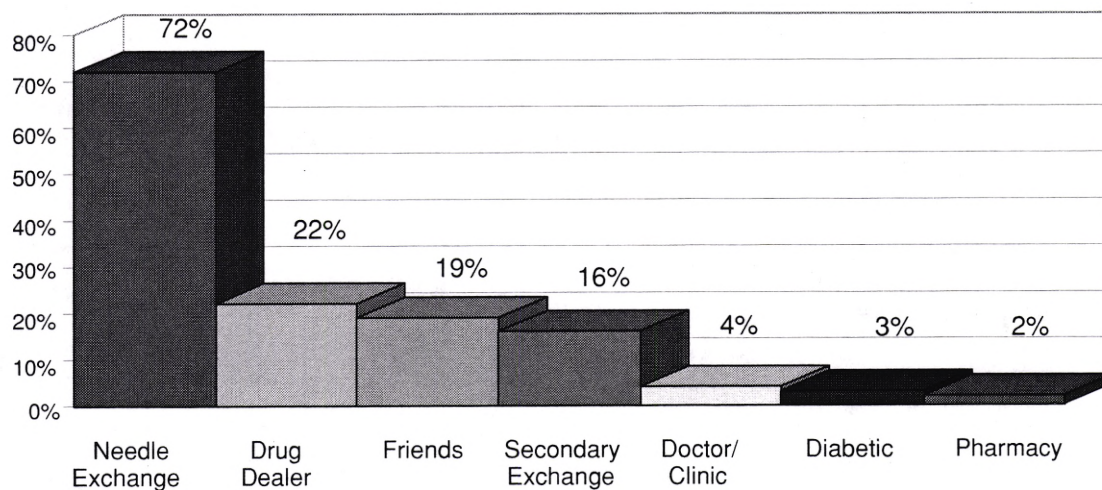
Figure 12. Sharing Behaviors Among Injection Drug Users, Past Three Months (non-mutually exclusive) (n=124)

Figure 13. Most Common Sources of Needles in Past Three Months (non-mutually exclusive) (N=124)



Substance Use

Almost all participants (96%) reported alcohol and other substance use in the past three months. Over three-quarters of participants (83%) reported non-injection recreational drug use and 35% reported injection drug use (See Figure 14). As shown in Figure 15, while marijuana, alcohol, and methamphetamine were the most commonly used drugs, participants reported using a wide variety of drugs, and many participants were poly-drug users.

Many participants (46%) had a history of injection drug use and over a third injected in the past three months. As shown in Figure 16 almost all recent injectors injected methamphetamine.

Figure 14. Drug Use in Past Three Months (non-mutually exclusive) (n=356)

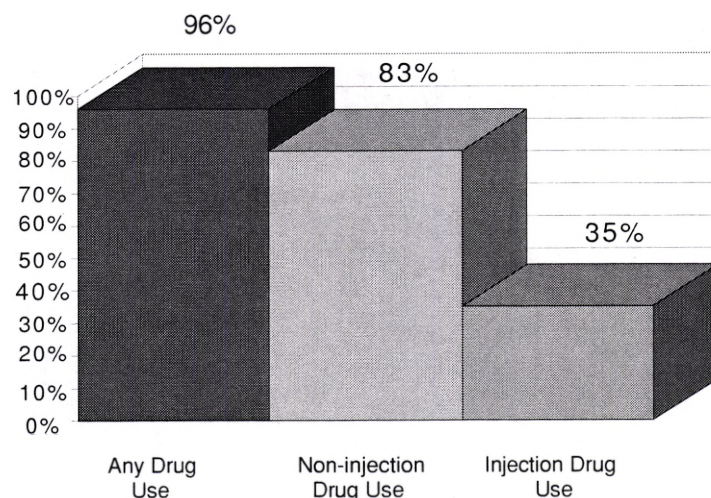


Figure 15. Non-Injection Drug Use in the Past Three Months (non-mutually exclusive) (n=356)

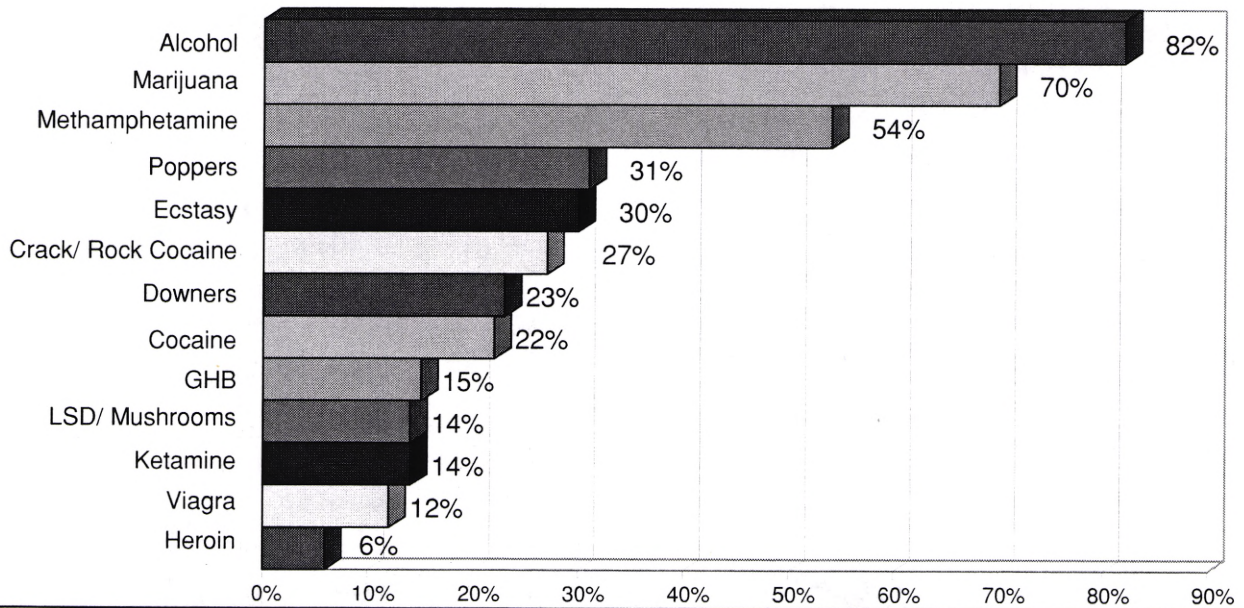
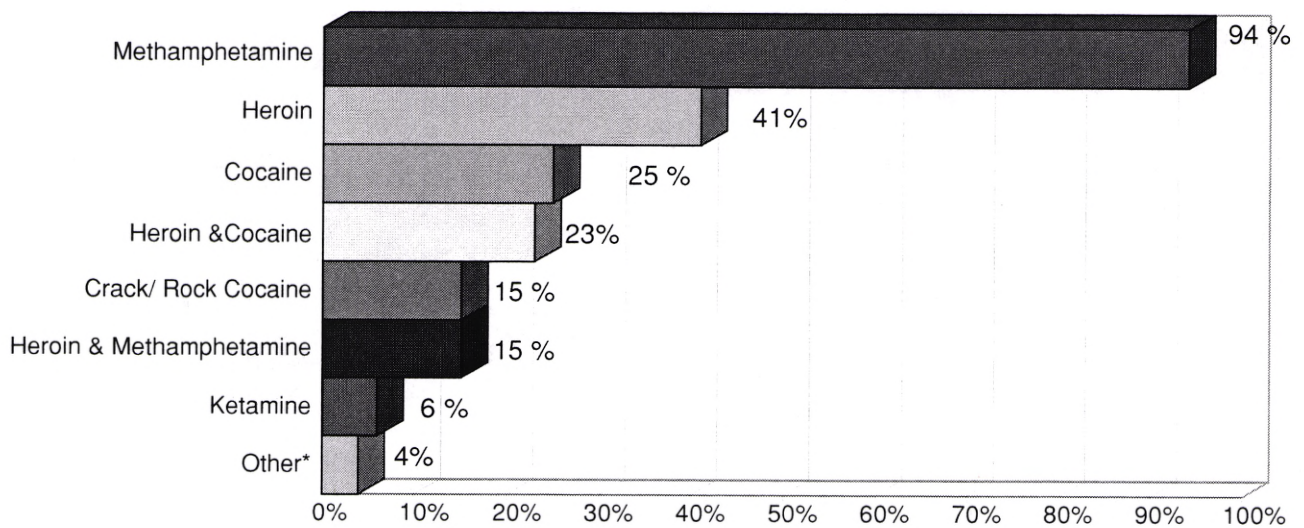


Figure 16. Drugs Most Frequently Injected in Past Three Months (non-mutually exclusive) (n = 124)

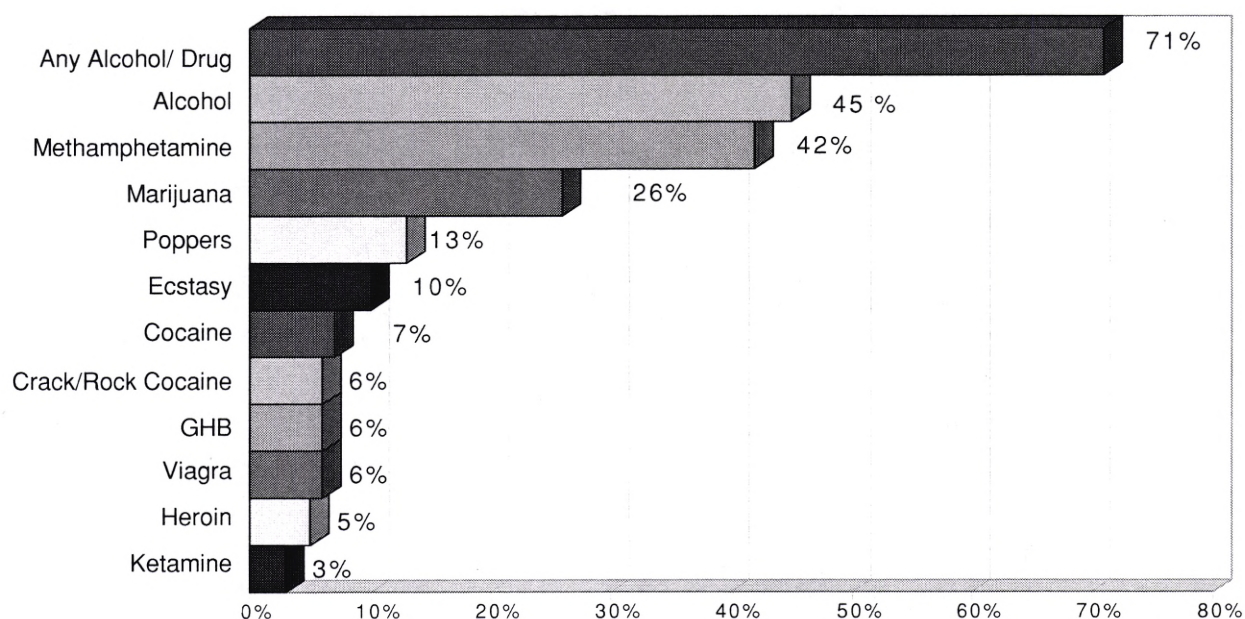


*Other category includes ecstasy, ecstasy and methamphetamines, crack and methamphetamines, and LSD

As shown in Figure 17, a large proportion of our sample reported engaging in anal intercourse while high in the past three months. Alcohol and methamphetamine were the drugs most commonly used. We did not assess the type of anal intercourse participants engaged in or whether condoms were used when high.

A quarter of participants reported a history of alcohol treatment and a third reported a history of substance abuse treatment. The most common types of alcohol treatment modalities were residential programs (46%) and 12-step programs (32%); residential treatment was the most common for drug abuse (58%).

Figure 17. Feeling the Effects of Alcohol and Drugs During Anal Intercourse in Past Three Months (non-mutually exclusive) (n=356)

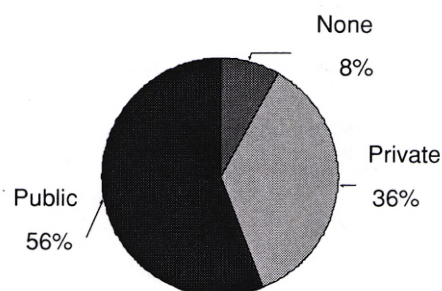


HIV Care and Prevention Service Use

HIV Care Services

Almost all participants (92%) who knew their HIV positive status were receiving care for HIV disease. Over half received care through publicly funded sources (See Figure 18). Fifty-two percent were currently on HAART for HIV disease.

Figure 18. Sources of HIV Care* (n=87)

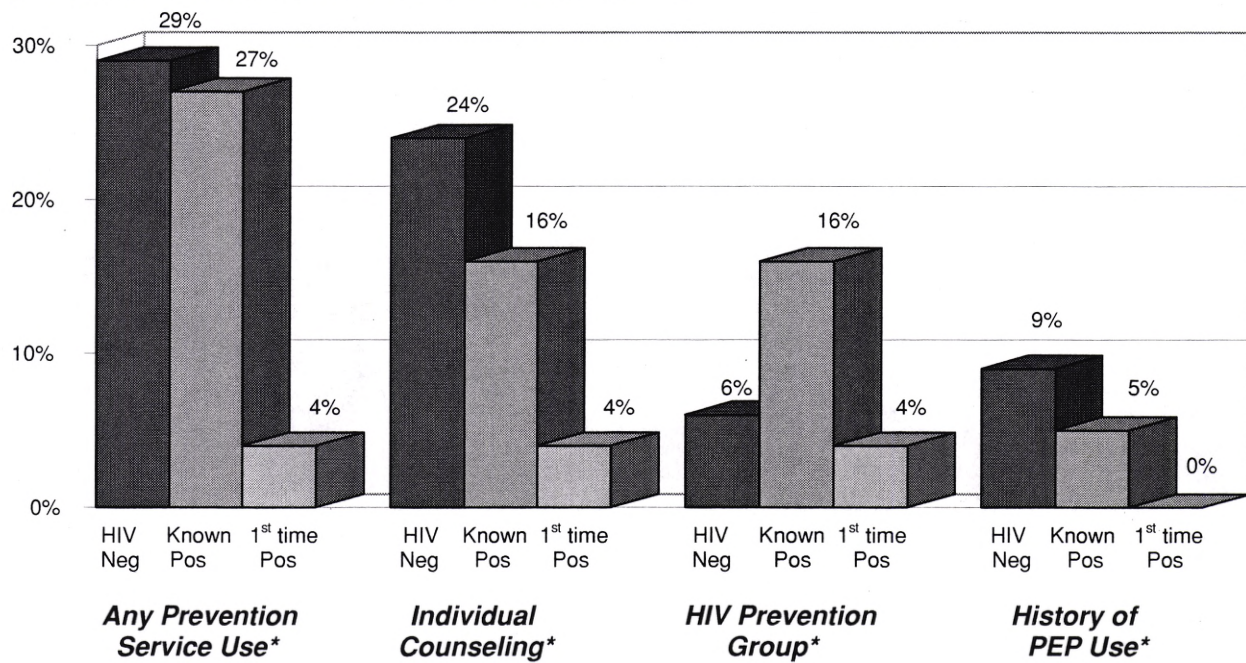


* Includes five participants who reported being HIV positive but did not consent to HIV testing in our study.

HIV Prevention

As shown in Figure 19, HIV prevention service use varied by type of intervention and by HIV status. Overall, over a quarter of HIV negative and known positive individuals had used a prevention service in the past three months; however only 4% of first-time positives had done so. Use of individual counseling services was higher than use of HIV prevention groups for HIV negative participants but equal for individuals aware of their HIV positive status and first-time positives. Forty-three percent of HIV negative individuals, 40% of known positives, and 29% of first-time positives were aware of Post Exposure Prevention (PEP). Nine percent of HIV negative individuals, 5% of known positive individuals, and no first-time positives had used PEP for exposure to HIV.

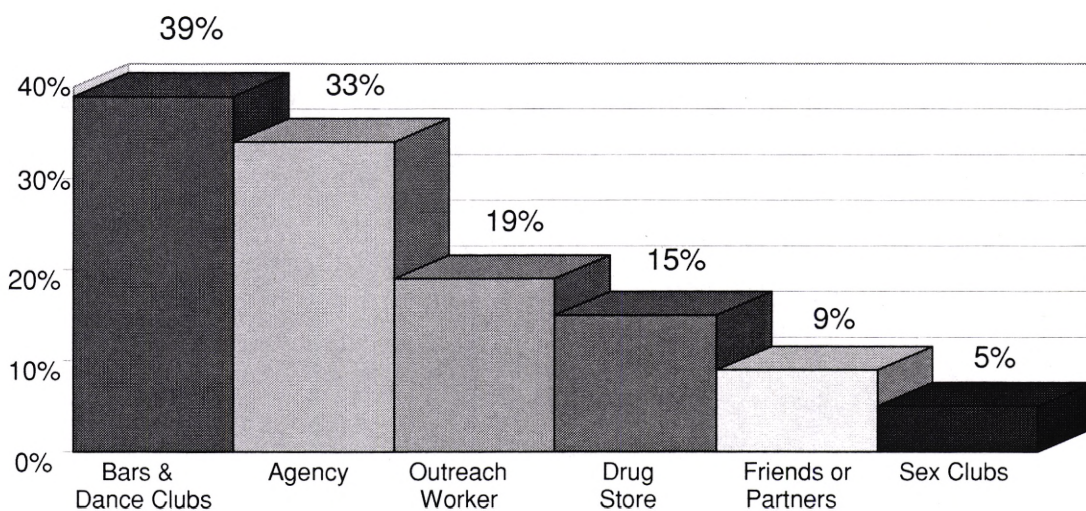
Figure 19. HIV Prevention Service Use by HIV Status (n=342)



* Non-mutually exclusive

As shown in Figure 20, participants reported that their most common sources of condoms were bars/dance clubs and agencies. Most participants (79%) reported seeing condoms at bars and dance clubs in the past three months, and over half of this group took condoms from the bar.

Figure 20. Main Sources of Condoms Past Three Months (non-mutually exclusive)(n=356)



DISCUSSION

To our knowledge, this is the first study to assess HIV prevalence and risk behaviors in a group of MSM recruited exclusively during late night hours in San Francisco. We found a strikingly diverse population in terms of age, race/ethnicity, and socioeconomic status. HIV prevalence overall was high; nearly a third of the sample was infected and a large proportion of individuals tested positive for the first time through our study. Many of these first-time positives had not tested in the past year and may have unknowingly transmitted HIV to others. Late night testing in the field is an intervention that could reduce the number of individuals who are not testing on a regular basis, reach those individuals who are unaware of their HIV positive status, and facilitate risk reduction in this population. As the vast majority of known positives were receiving medical care for their HIV disease, there is reason to believe that earlier detection of HIV infection among those unaware of their status would lead to more timely medical intervention as well.

We believe we have identified a population that is contributing to increased HIV and STD infection rates in San Francisco. Recent sexual risk behaviors were alarmingly high. Among known positives, UAI was practiced by more than three-quarters of participants. More than half of the HIV negative individuals and first-time positives engaged in UAI. Although we have not yet determined whether UAI occurred between seroconcordant or serodiscordant partners, the relatively large proportion of both HIV positive and HIV negative individuals reporting UAI with a partner of unknown status suggests high risk for HIV transmission and acquisition. In addition, the high proportion of our sample engaging in UAI indicates a significant risk for STDs. Recent substance use was also highly prevalent in this population: over three-quarters of our sample used non-injection drugs and almost a third injected drugs in

the past three months. Participants used a wide range of drugs and many reported engaging in anal intercourse while high. Among recent injection drug users, sharing of injection equipment was common, contributing to additional HIV risk. A quarter of our sample reported previous alcohol abuse treatment and slightly over a third reported substance abuse treatment. However, the high proportion of substance use among our sample and the relatively low proportion receiving treatment in the past suggests the need for more effective alcohol and substance abuse treatment services.

We believe that current HIV prevention interventions are not reaching this late night population. HIV prevention service use was low, particularly among first-time positives. Almost none of the first-time positives reported receiving individual counseling or attending an HIV prevention group in the previous three months. Although nearly a quarter of HIV negative individuals received individual counseling, much of this counseling is likely a component of HIV testing. The higher proportion of known HIV positive individuals attending an HIV prevention group is probably the result of receiving care for HIV disease and being linked to services. While condom distribution programs appear to be effective in providing condoms to this population (condoms were often seen and obtained at late night venues), the high proportion of UAI suggests that they were used inconsistently.

Given the diversity of our sample, a wide range of prevention interventions may be needed to successfully reach this late night population. However, all interventions should include HIV and STD risk reduction, a focus on HIV status disclosure and negotiation skills around safer sex, harm reduction, and referrals to substance abuse treatment services. Late night outreach and HIV/STD testing at the locations frequented by a large proportion of our sample may be effective in providing supplies, brief counseling, and referrals to more intensive HIV

prevention interventions such as prevention case management, individual risk reduction counseling, and group interventions. The extremely high proportion of known HIV positive participants that were currently receiving medical care suggests that coupling HIV prevention with HIV care services may be an effective way to promote risk reduction among HIV positive individuals.

Our study is subject to a number of limitations. We used convenience sampling and our findings may not be representative of all MSM who frequent late night street and venue-based locations in San Francisco. In addition, individuals who declined recruitment or who took cards but did not participate in the study may be different than those who chose to participate. Despite these limitations, we believe that our data provide a good picture of HIV risk, substance use, and HIV prevention needs of MSM who are out during late night hours in San Francisco.

Our findings demonstrate an urgent need for HIV prevention interventions targeting MSM who frequent late-night street and venue-based locations. High HIV prevalence coupled with frequent HIV risk behaviors, substance use, and low levels of HIV antibody testing and HIV prevention service use suggests that this population is contributing to the increasing number of new HIV infections among MSM in San Francisco. Unless effective and timely approaches to providing HIV prevention are implemented, it is likely that new HIV infections will continue.

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