

Methamphetamine in LA County: An Update

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The Rise in Treatment Admissions for Methamphetamine (MA) Use in Los Angeles County from 2001 through 2005

Background:

Relative to other areas of Southern California, notably San Diego, San Bernardino, and Riverside counties, MA use has only recently emerged as a major problem in Los Angeles County (Anglin et al., 2000; Rutkowski, 2006).

In fiscal year 2000-01, the most frequently reported primary drug of abuse among county funded treatment admissions in Los Angeles County was heroin. By fiscal year 2004-05, treatment admissions in virtually all California counties, including Los Angeles, were dominated by those seeking help for MA use (Carr, 2006).

The present research sought to investigate some of the specific demographics and other characteristics of people (e.g., male vs. female, different age groups, different racial/ethnic groups, etc.) admitted to Los Angeles County funded treatment services for primary MA use.

The Rise in Treatment Admissions for Methamphetamine (MA) Use in Los Angeles County from 2001 through 2005

Sample:

The sample consisted of admissions from 64 geographically distributed outpatient counseling, residential treatment, and daycare habilitative programs that participate in the Los Angeles County Evaluation System (LACES).

This sample was drawn from the pool of admissions from 2001 through 2005.

Data was collected with The Los Angeles County Participant Reporting System (LACPRS) Admission and Discharge questionnaire.

The participants included men and women between the ages of 18 and 79 who were African American, Asian, Latino, Native American, or White.

Programs that did not collect data for all five years from 2001 through 2005 or serviced fewer than 10 participants in any given year were not included.

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Sample:

The resulting total number of participant admission records analyzed was 79,449, ranging from a low of 12,115 in 2004 to a high of 20,651 in 2001.

Demographics of Sample:

63.2% male

36.8% female

mean age = 35 years old

33.4% African American

1.9% Asian

33.0% Latino

0.9% Native American

30.8% White

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Key Findings:

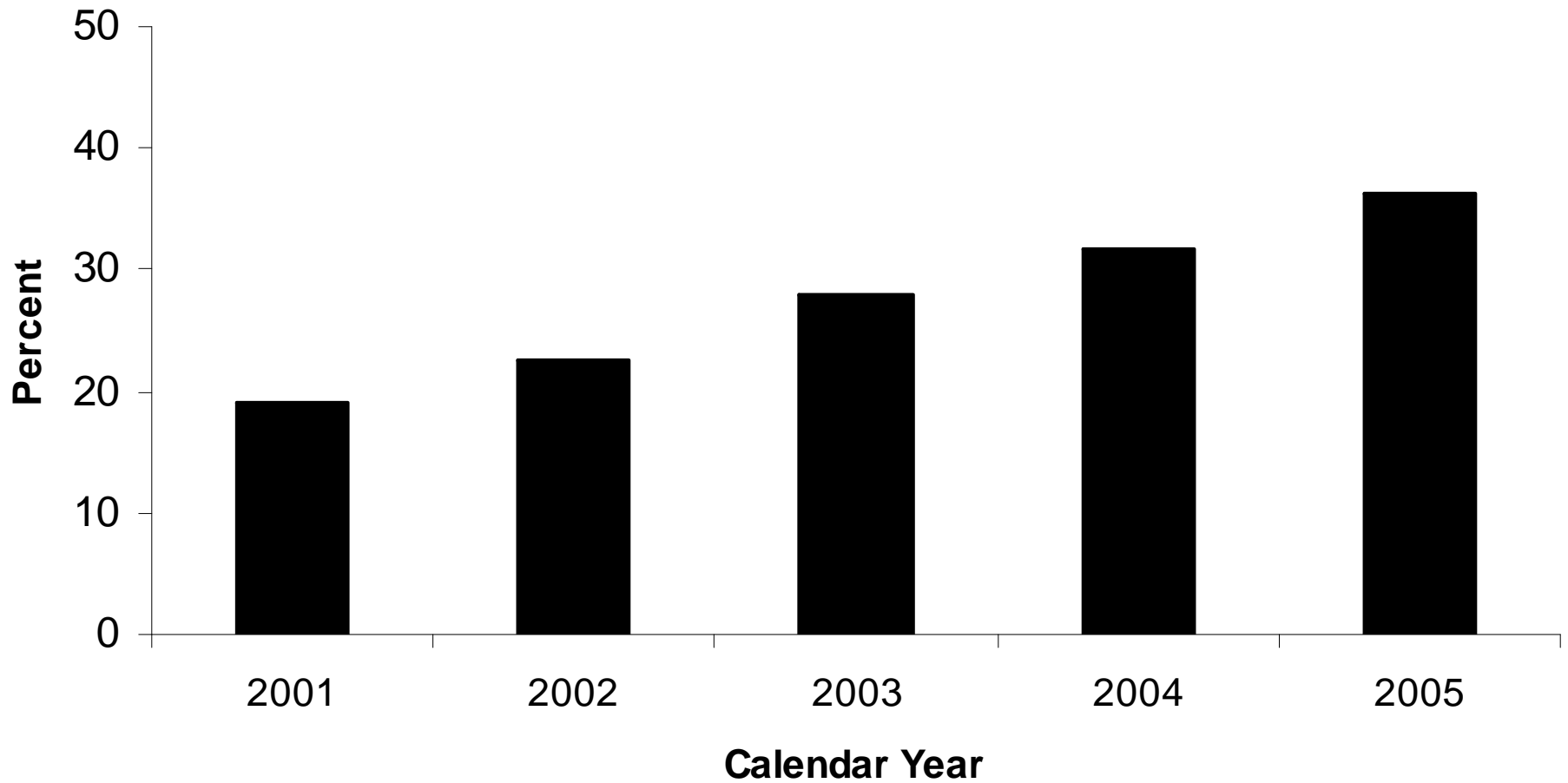
In the MA sample, there was a higher proportion of women than in the non-MA sample (MA sample = 41.6% vs. non-MA sample = 35%).

Participants reporting primary MA use were younger than participants not reporting primary MA use (mean age: MA sample = 31 years vs. non-MA sample = 37 years).

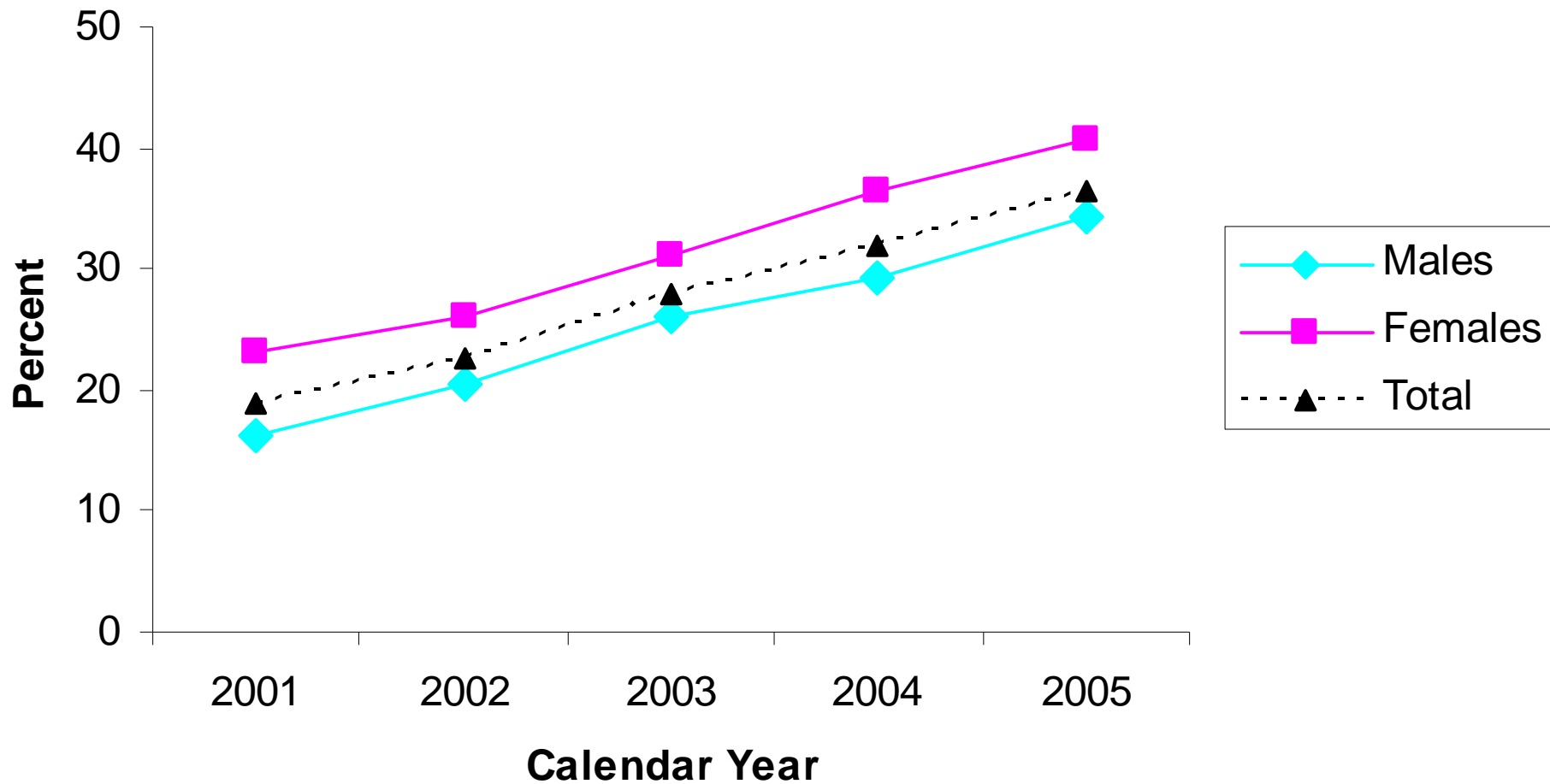
The racial/ethnic distribution of participants reporting primary MA use was 4.1% African American, 3.2% Asian, 44.1% Latino, 1.1% Native American, and 47.5% White.

Considering the distribution of participants reporting a primary substance other than MA (44.1% African American, 1.5% Asian, 29.0% Latino, 0.8% Native American, and 24.7% White), it is noteworthy that Asians, Latinos, Native Americans, and Whites each account for higher percentages of the MA sample than they do in the non-MA sample.

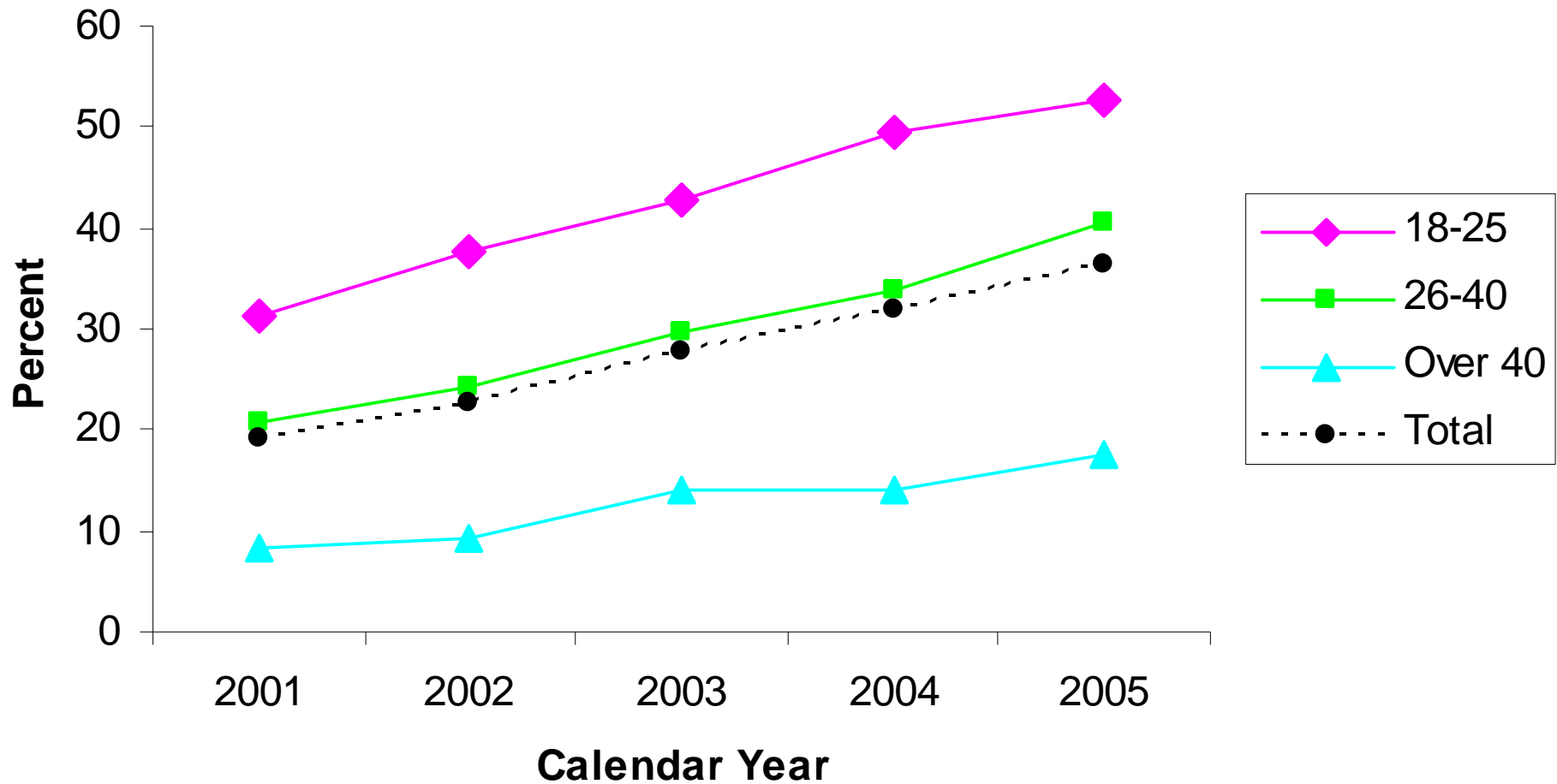
The number of participants admitted for primary MA use increased from 19% in 2001 to 36.4% in 2005.



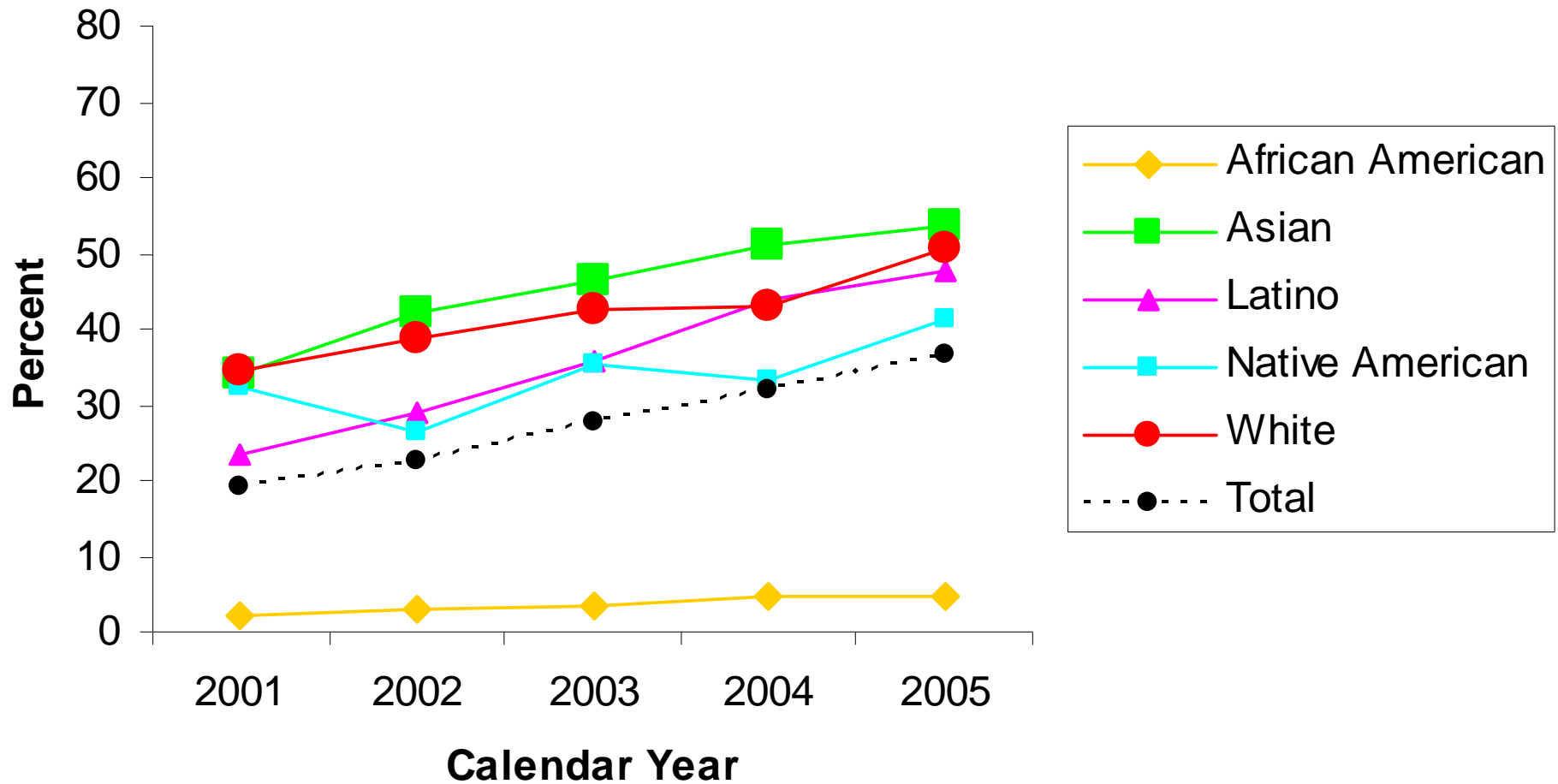
Female participants were more likely to report primary MA use than were male participants over the entire 5 years, although rates of MA as the primary drug at admission increased over the 5 years for both females and males (23.1% to 40.8% for females and 16.3% to 34.2% for males).



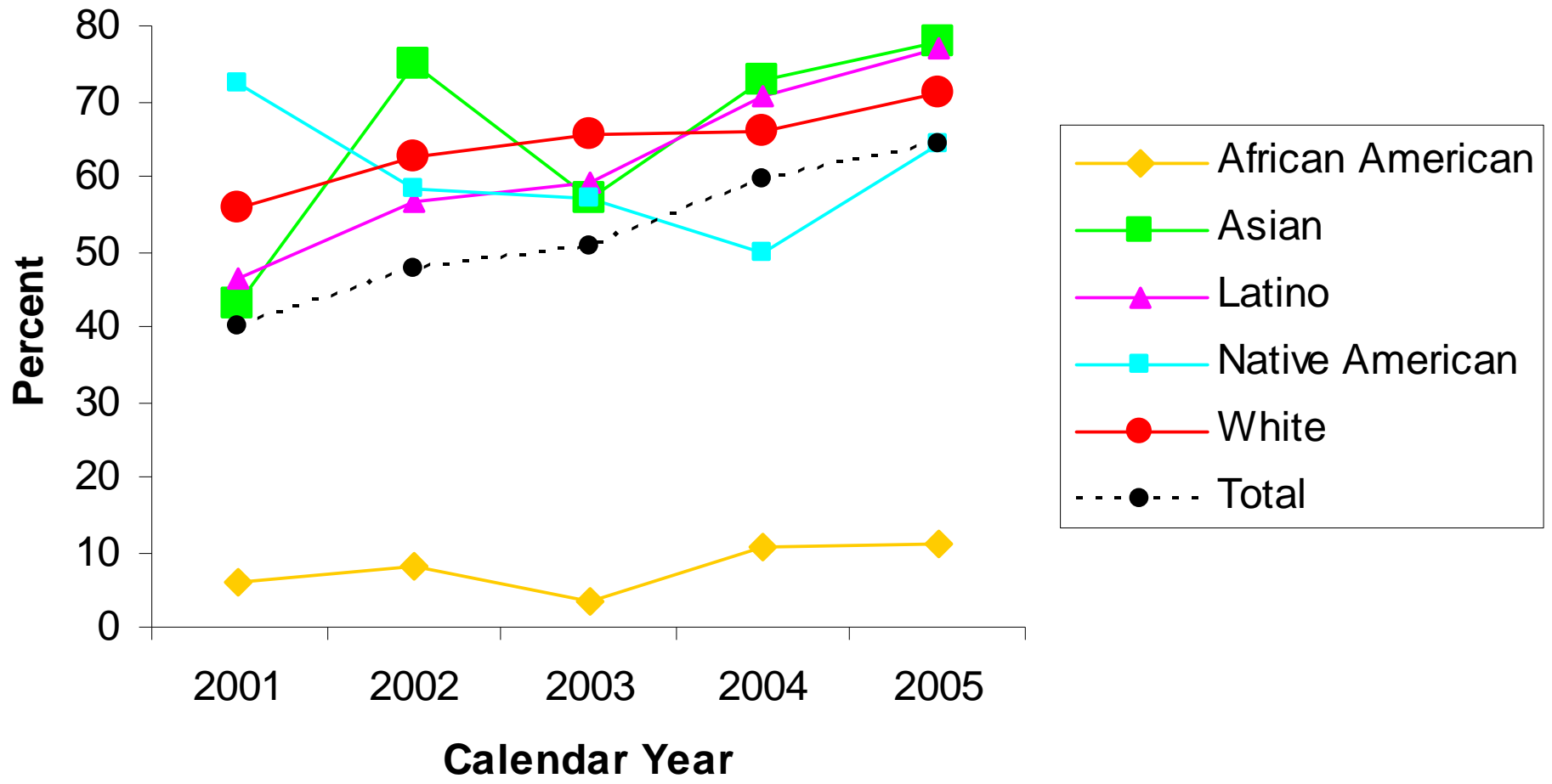
From 2001 through 2005, the proportion of 18- to 25-year-olds reporting primary MA use relative to other drug use increased from 31.3% to 52.8%. For 26- to 40-year-olds, the proportion rose from 20.8% to 40.5%, and for participants over the age of 40, it rose from 8.2% to 17.5%.



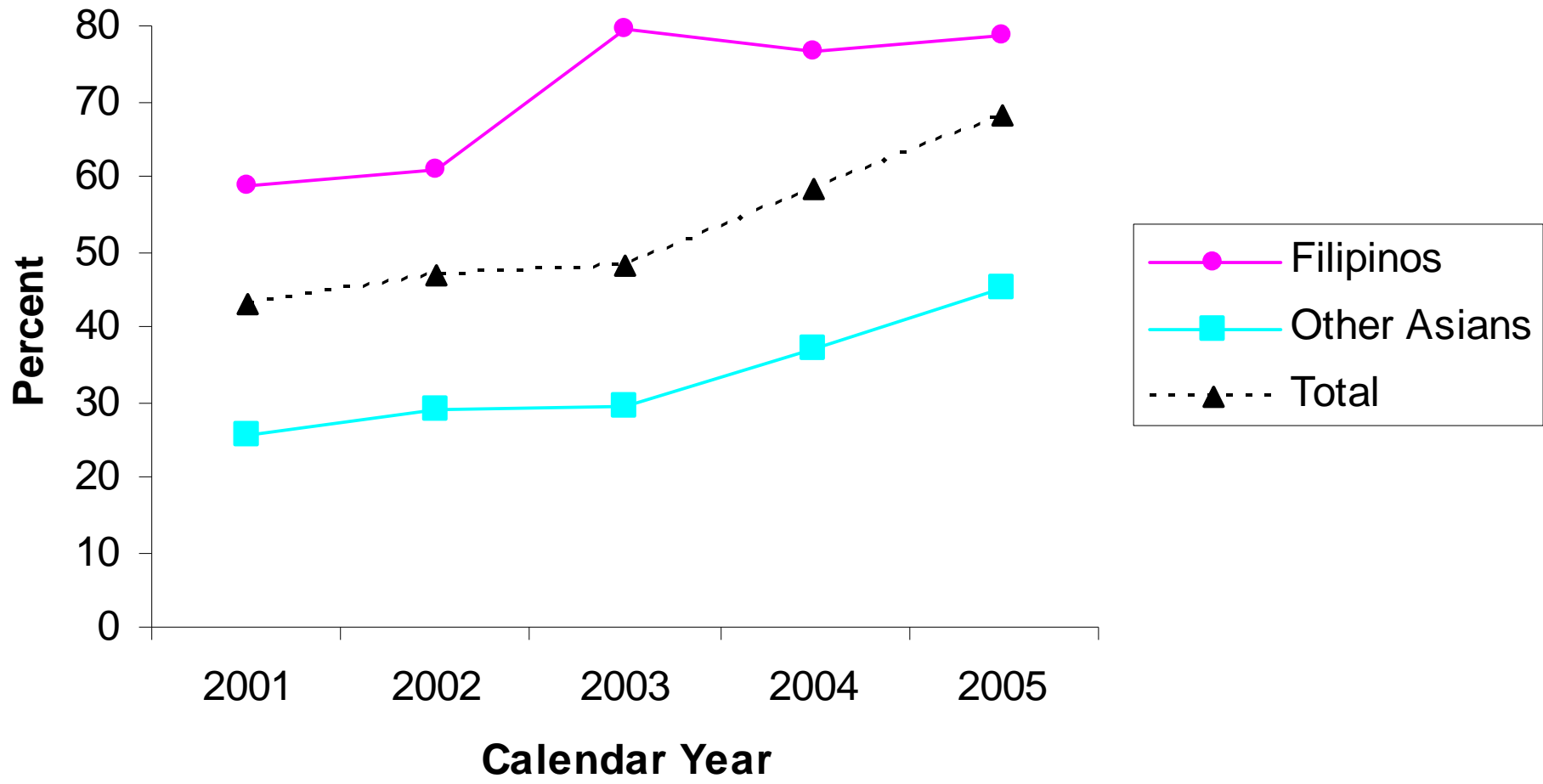
The percentage of Asians, Latinos, Native Americans, and Whites entering county funded treatment for primary MA use relative to other drug use increased from 29.3% in 2001 to 49.0% in 2005. However, during this time period, an average of only 3.3% of African-American participants entered treatment for primary MA use.



Young Latino women and young Asian women experienced particular high increases in treatment admissions for primary MA use from 2001 to 2005, although less than 100 young Asian women account for these findings.



A total of 69.8% of all Filipino participants entering treatment from 2001 through 2005 were primary MA users. This is more than double the percentage of participants of other Asian ethnicities entering treatment from 2001 through 2005 for primary MA use (33.6%).



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Conclusions:

Considering that Latinos and Whites account for approximately two thirds of the illicit drug using population seeking county funded treatment in Los Angeles County, there is a need for greater attention to the rise of primary MA use among these groups.

The present data show that primary MA use is predominantly a problem for those 40 years of age or younger, and particularly for those under 26. It is also a problem that affects women somewhat more than it does men.

While MA was a primary concern in other Southern Californian counties before the turn of the present century (Anglin et al., 2000; Pennell et al., 1999), trends observed in this research support previous findings (Rutkowski, 2006; Crevecoeur, et al, 2006) showing that MA has now become the most common drug for which people seek county funded treatment in Los Angeles County.

Men-Who-Have-Sex-With-Men

Introduction

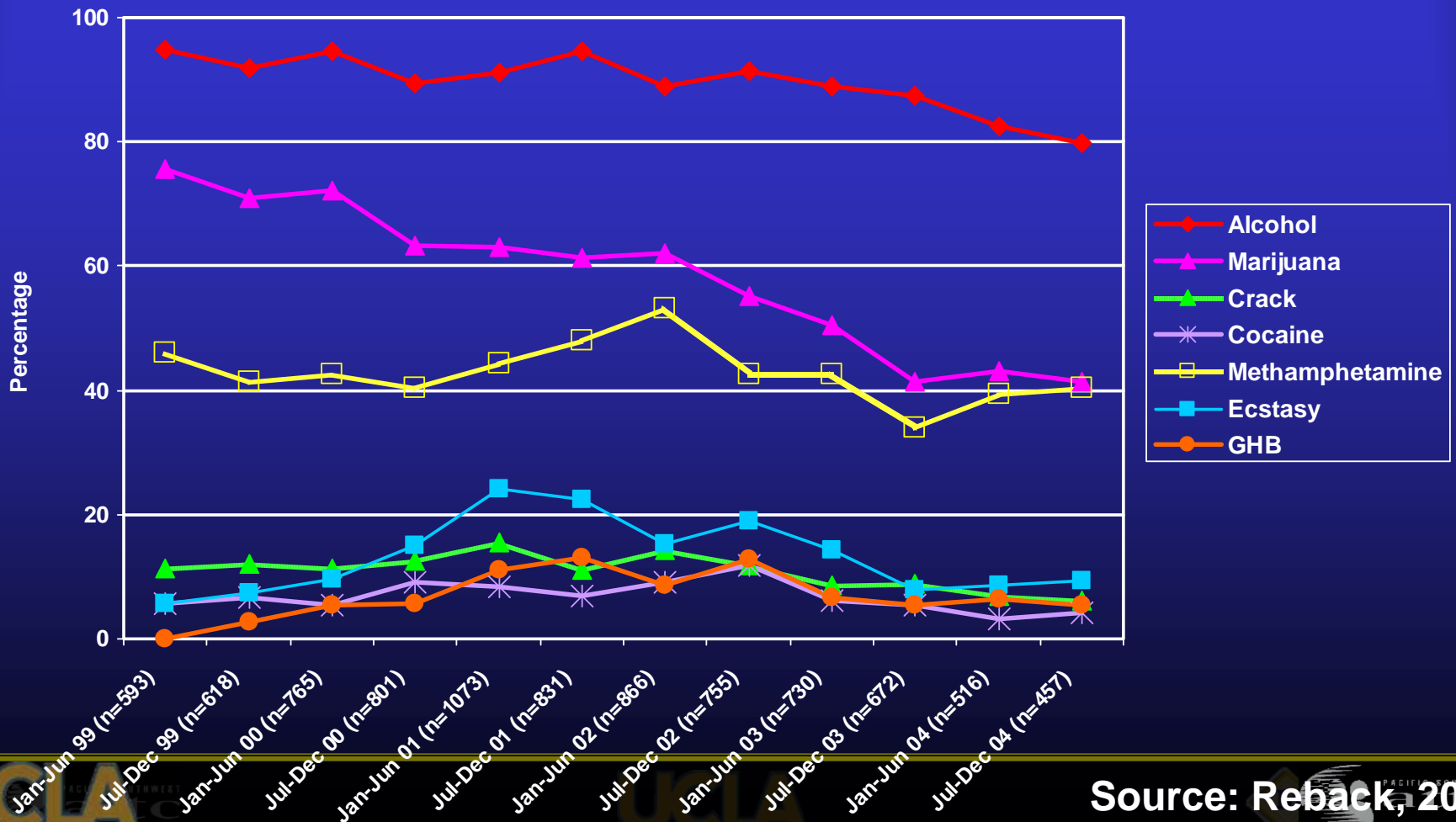
- Through the 1980's and 1990's, methamphetamine (MA) became the most widely used illicit drug among MSM on the West Coast
- Other “party drugs” also became popular – ecstasy, Special K, GHB, poppers
- Increasing reports over last 5 years of MA use among MSM in Midwest and East Coast cities

Why Do HIV+ MSM Use MA?

- Enhances sexual experience
- Facilitates sexual experimentation (decreases inhibitions)
- Makes approaching guys easier (decreases social anxiety)
- Cope with initial HIV dx
- Temporary escape from awareness of being HIV+, negative self-perceptions, continuing social stigma of being positive

(Semple et al., 2002)

Substance Use Trends of Out-of-Treatment MSM, January 1, 1999 – December 31, 2004, N=8,677



Source: Reback, 2007

HIV Status, Sexual Risks and Substance Use, January 1, 2003 – December 31, 2004, N=2,282

Variable		Non-Substance User (n=588)	Other Substance User (n=1,348)	Meth User (n=822)
HIV Status	Infected	17.1	13.1	21.6
Sex w/ Male Partners	Received Oral	59.6	79.8	80.5
	Gave Oral	50.9	69.8	73.0
	URAI	7.4	10.8	28.8
	UIAI	6.9	15.3	31.0
Exchange Sex w/ Male Partner	Received Oral	1.5	3.8	16.5
	Gave Oral	1.4	2.9	13.3
	URAI	1.2	1.3	5.7
	UIAI	-0-	0.3	2.6
Substance Use	Alcohol	N/A	88.5	79.8
	Marijuana		38.4	57.3
	Ecstasy		6.6	17.3
	GHB		2.2	12.2
	Crack		6.4	10.9
	Cocaine		2.7	8.0
	IDU		1.1	20.3

Source: Reback, 2007

MA and Sexual Risk Behaviors

- Strong connection between MA use and sexual risk **behaviors** in MSM (Shoptaw et al., 2005; Reback, 1997)
- Methamphetamine, when used by MSM, is closely connected to sexual **identity** & sexual **expression** (Reback, 1997; Frosch et al. 1996; Gorman et al., 1995), “sexual sociality” (Isaiah, Green & Halkitis, 2006), impulsivity (Semple et al, 2005), and sexual compulsivity (Semple et al, 2006)
- 56% of MSM surveyed in 4 U.S. cities who reported MA use in past 6 months also reported UAI (CDC, 2001)

Association with HIV/STI risk

- Sexual behaviors associated with MA use put users at significant risk for transmission and/or incident infection with HIV and numerous other STI's (Peck et al, 2005; Molitor et al., 1998)
 - High number of sexual partners (Shoptaw et al., 2005; Reback & Grella, 1999)
 - Decreased condom use (Semple et al., 2002)
 - Increased use of sildenafil (Viagra) (Mansergh et al, 2006)

Association with HIV/STI risk

- Of the 24% of MSM in Pacific region (CA, OR, WA, HI, AK, Guam) reporting recent MA use, those reporting recent UAI are 4 times more likely to have used MA before or during sex than those reporting no UAI (Hirshfield et al., 2004).

Association with HIV/STI risk

- Meth use among MSM associated with:
 - Changes in nature of sexual behaviors (MA impact on the limbic system, drive toward more “novel” experiences)
 - Impaired judgment/decision-making (MA impact on prefrontal cortex)

Consequences of MA Use by HIV+ MSM

- MA use by HIV+ MSM is associated with decreased medication adherence, which threatens tx goal of viral suppression (Arnsten et al., 2002)
- May contribute to development of medication-resistant strains of HIV (Salomon et al., 2000; Ahmad, 2002; Simon et al., 2002)

Consequences of MA Use by HIV+ MSM

- Unprotected sex between HIV+ MSM with different strains of virus may lead to “superinfection” (Blackard et al., 2002; Ramos et al., 2002).
- Binge use of MA by HIV+ MSM associated with weight loss, hallucinations, and paranoia (Semple, Patterson, & Grant, 2003); further health challenges for already immune-compromised individuals.

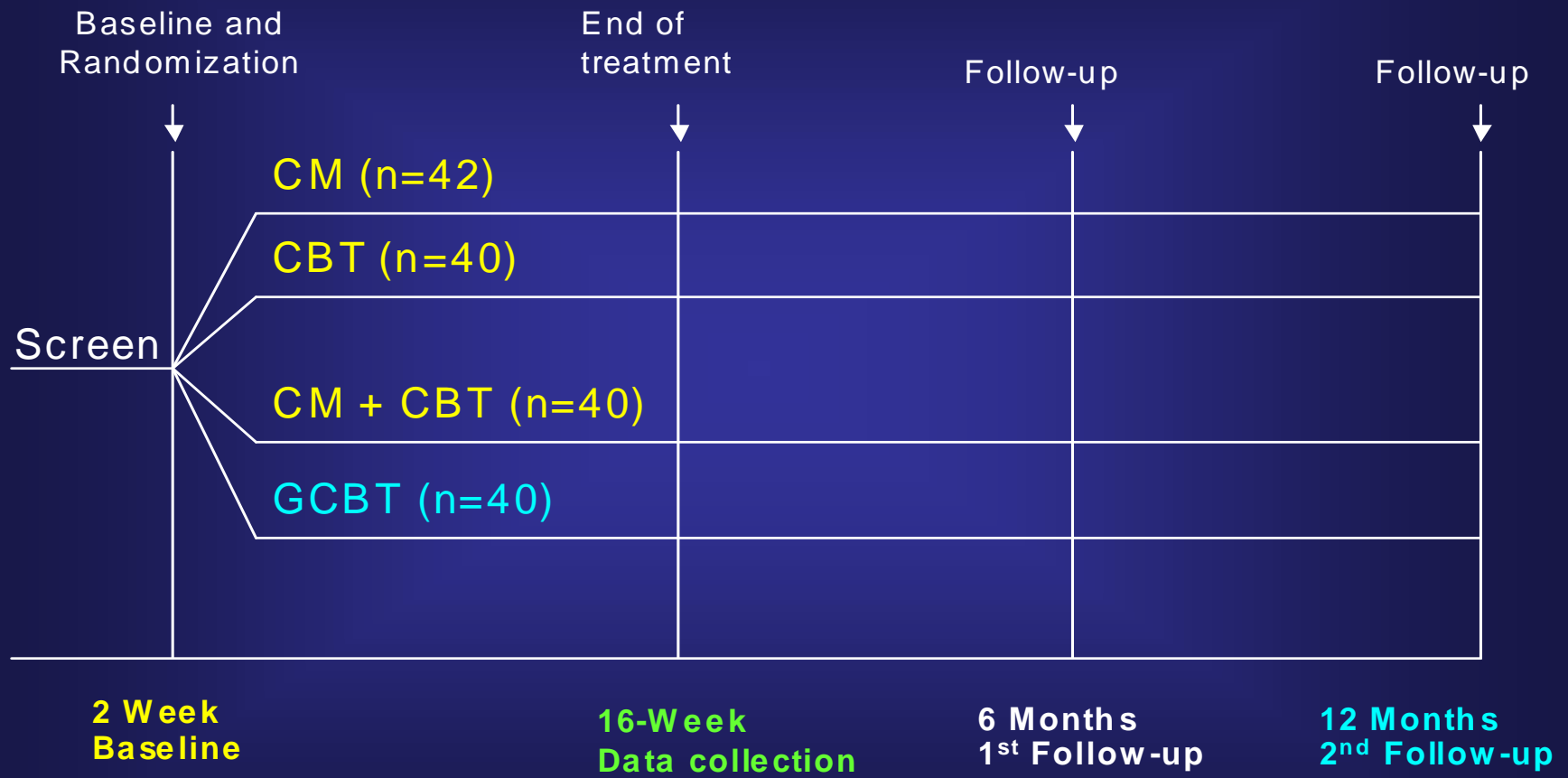
From a public health perspective, it's equally important to decrease sexual risk behaviors as well as meth use.

How do we do this?

Study questions

- What are the drug use and sexual risk behavior changes for gay and bisexual men with methamphetamine dependence that result from treatment using the following interventions?
 - Contingency Management (CM)
 - Cognitive-Behavioral therapy (CBT)
 - Combined (CBT+CM)
 - Gay-specific Cognitive-Behavioral Therapy (GCBT)

DESIGN



Interventions

MSM-Specific CBT

- Tailored CBT approach that integrated language, cultural references, and discussions of triggers specific to urban MA-abusing MSM with material designed to help them examine the powerful connection between MA use and high-risk sex
- Closer to a “therapy group”; included more experiential exercises and process

Baseline drug use

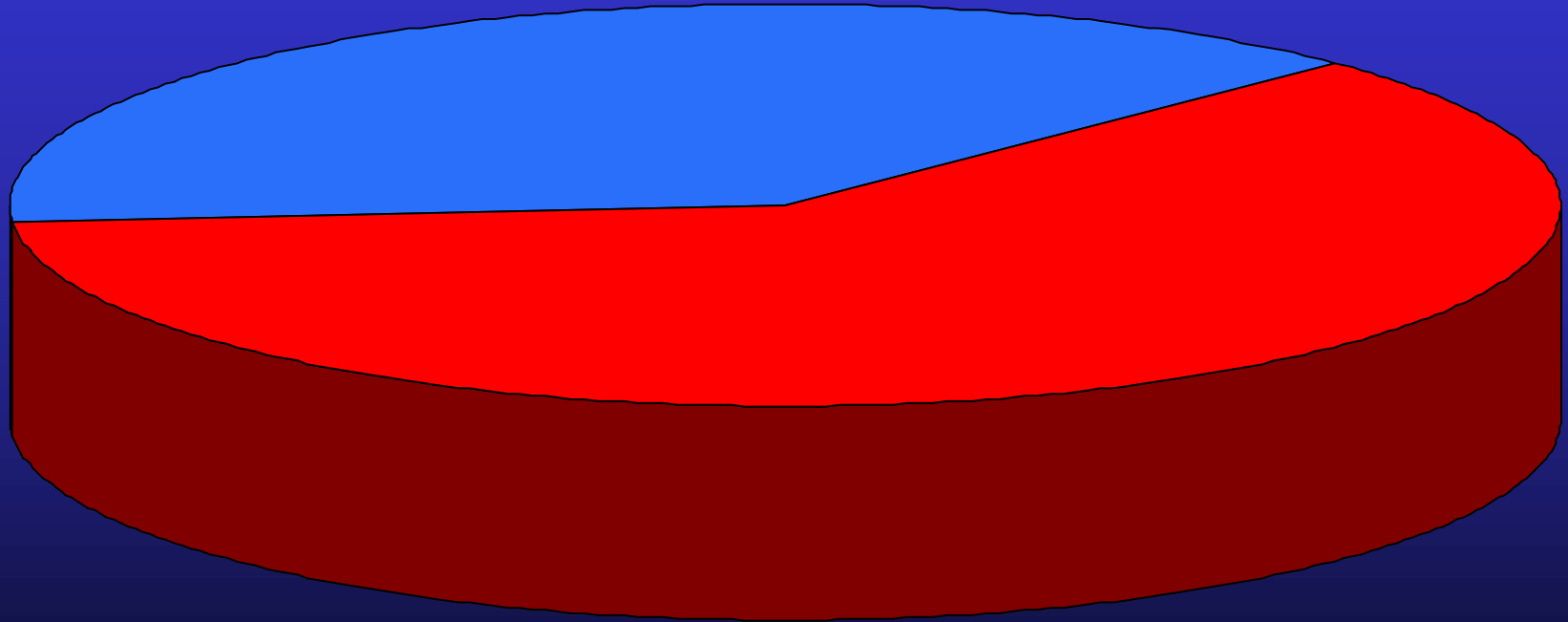
- Drug use behaviors
 - Lifetime MA use: 8.34 yrs (SD=5.9)
 - Lifetime heavy MA use: 3.39 yrs (SD=4.07)
 - Lifetime other drugs used: 2.3 (SD=1.4)
 - Lifetime injection MA use: 32.1%
 - MA use in past 30 days: 9.7 days (SD=7.4)
 - \$ spent on MA past 30 days: \$293 (SD=\$399)

Baseline sexual risk behaviors

- Sexual partners, past 30 days: 9.9 (SD=20.9)
- Sexual partners, past 6 months: 44.3 (SD=78.3)
- Sex in public place (e.g. bathhouse), past 30 days: 43.8%
- Unprotected anal intercourse (UAI) with other than primary partner in past 30 days: 49.4%
 - Of these, 83.8% took place while high on MA

HIV Status(n=162)

39% HIV
negative
(n=64)



61% HIV
positive
(n=98)

Treatment Outcomes

Results

Drug Use Outcomes

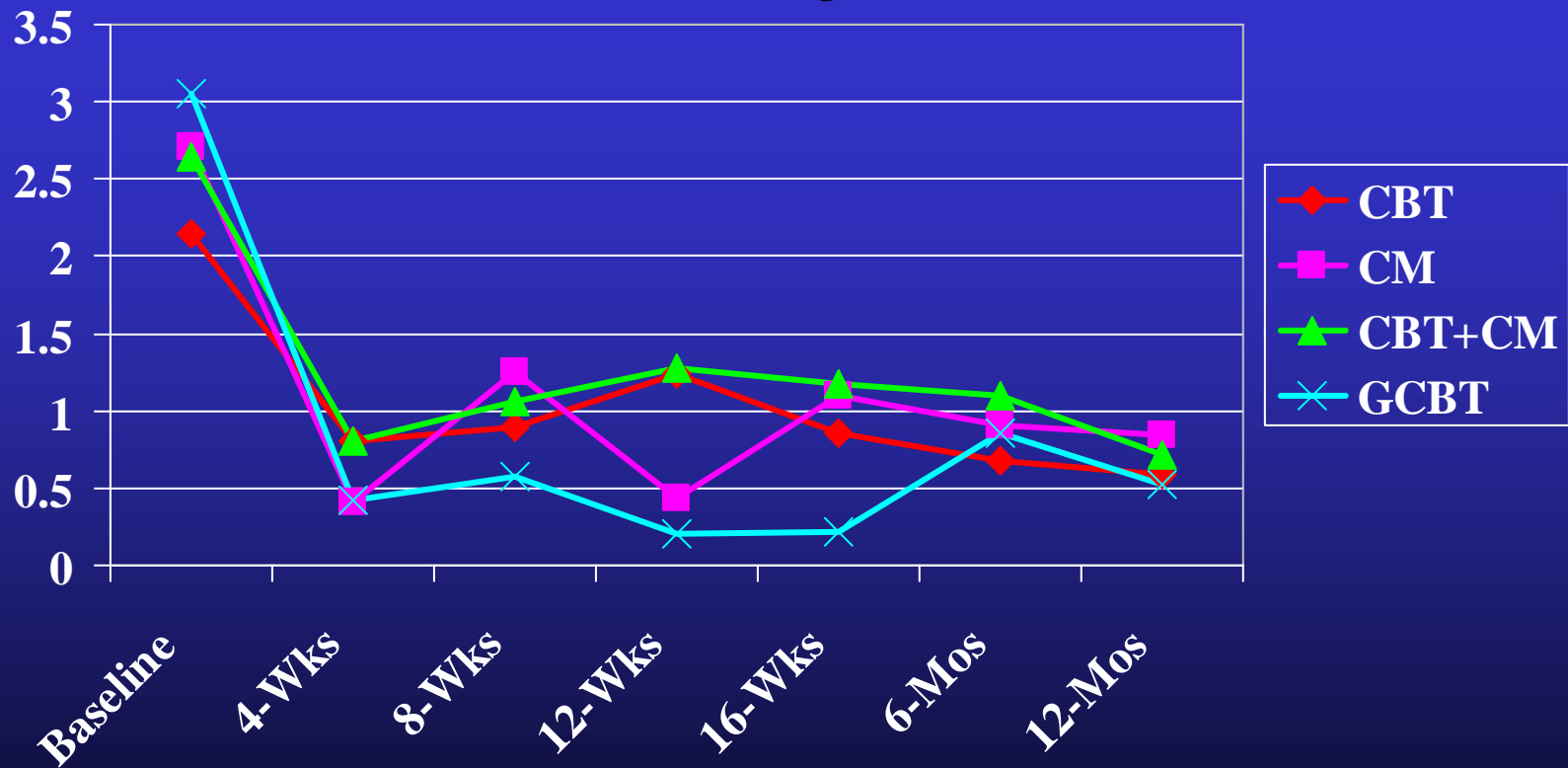
- CBT+CM condition produced:
 - Highest # of consecutive clean urine samples;
 - Treatment Effectiveness Scores (TES)-a composite score of total # of clean urine samples provided (max possible was 48);
 - Retention (completed all 16 weeks)

Results

Drug Use Outcomes

- CBT-only has poorest outcomes
- No statistical differences between CM-only and MSM-specific Cognitive-Behavioral Therapy

Sex Risks Reduced with Treatment: UARI Past 30 Days



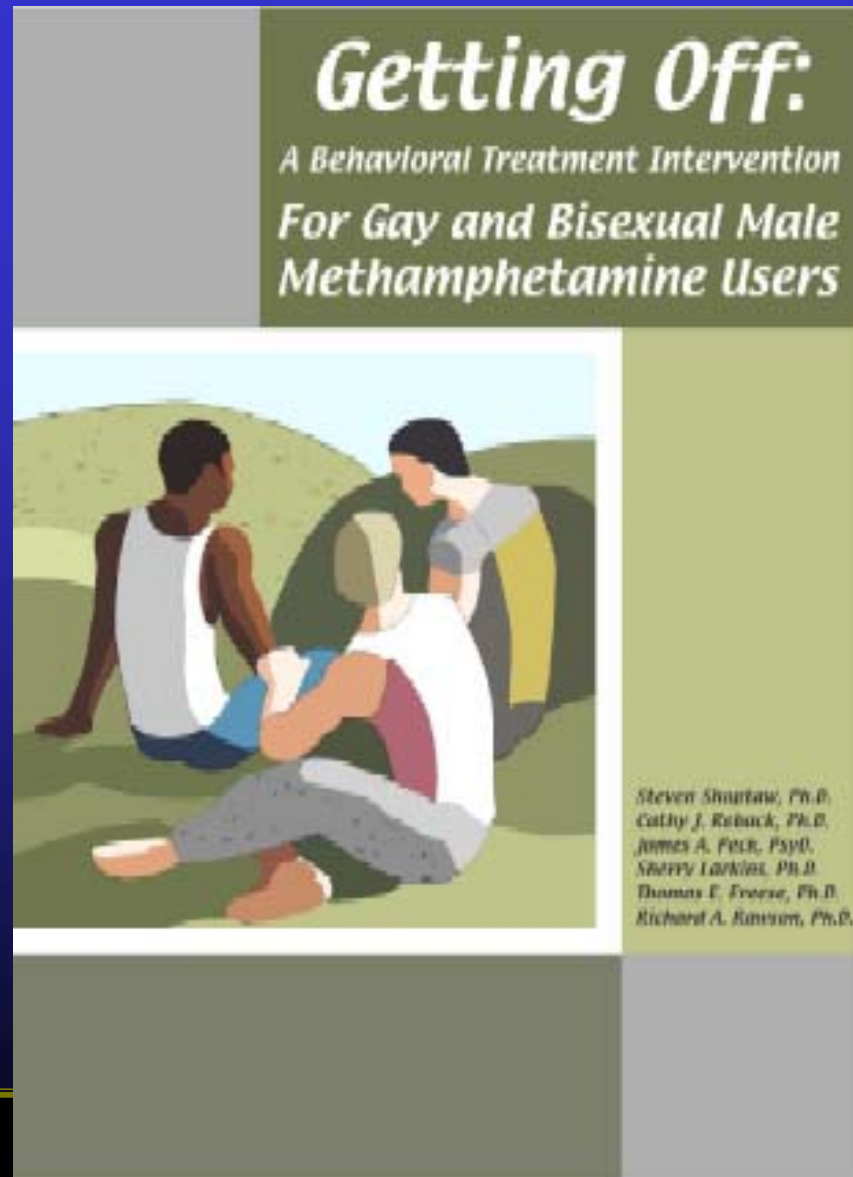
$\chi^2_{(3)} = 6.75, p < .01$

Results

Sexual Risk Behaviors

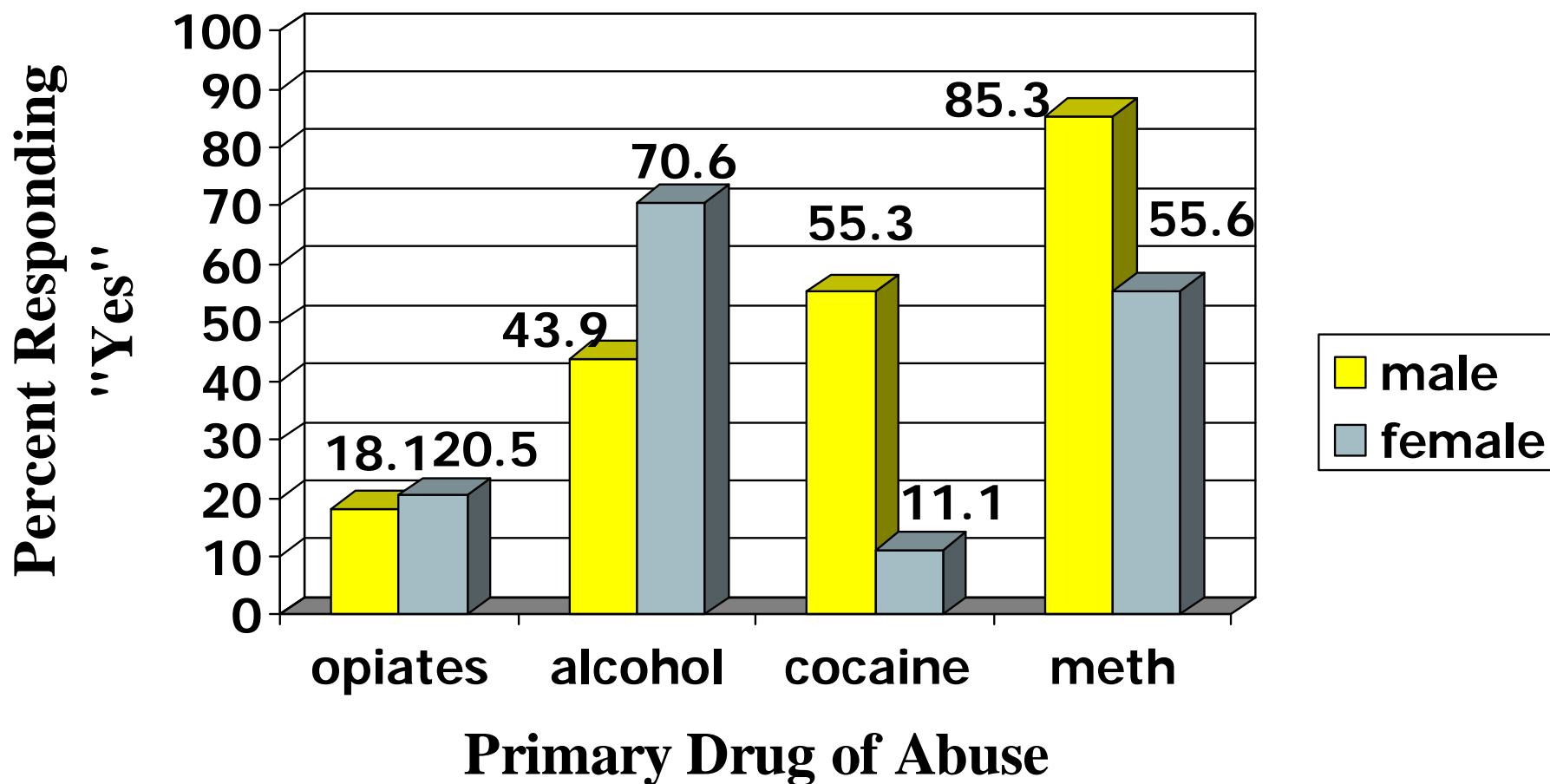
- MSM-CBT condition produced steepest rate of decrease in reported unprotected anal intercourse from baseline to week 4 and maintained the reduction over the entire 16 weeks, which contrasts with all other conditions.

Substance Abuse Treatment

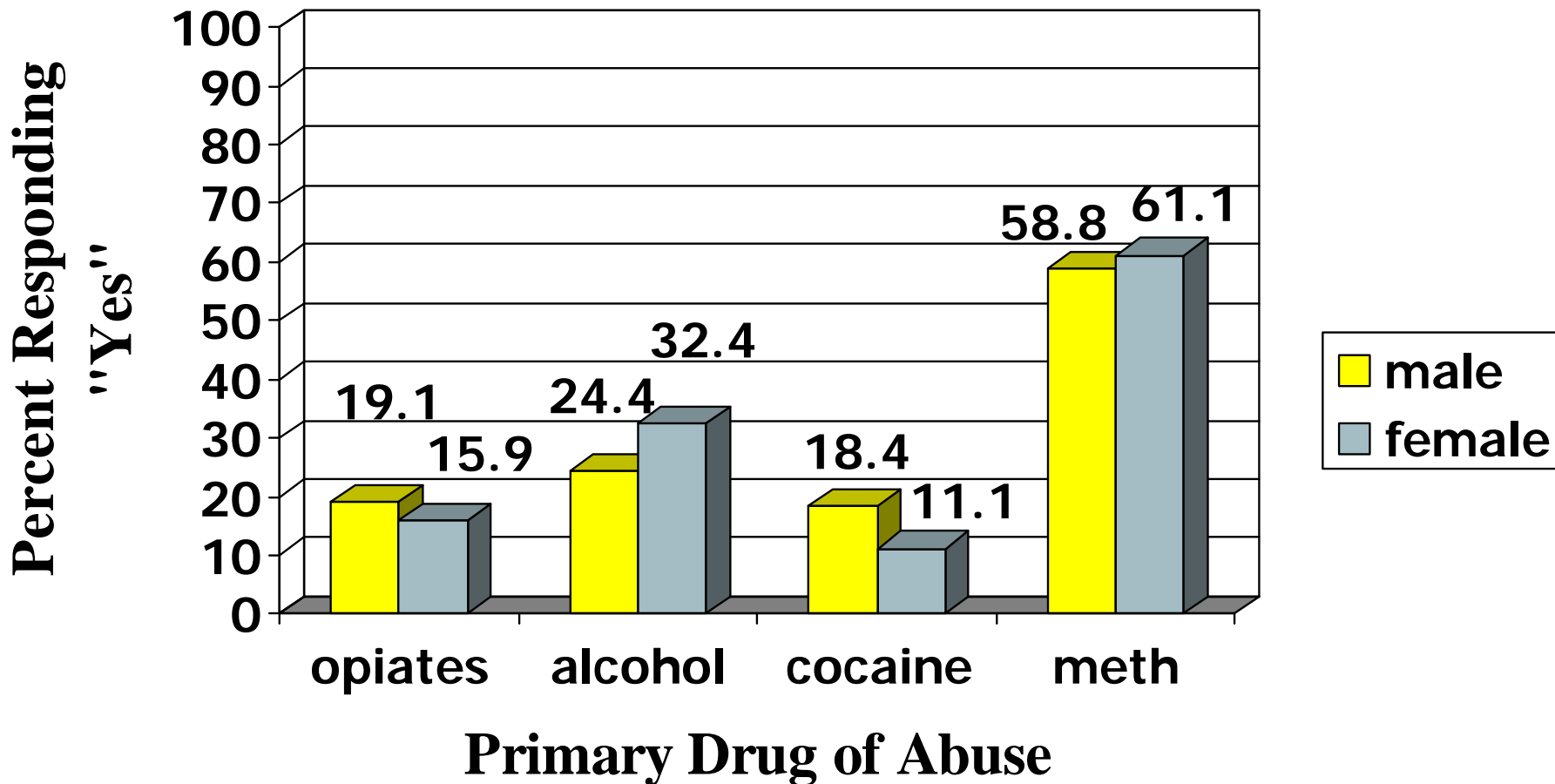


Methamphetamine Use, Sexual Behavior: Other Samples

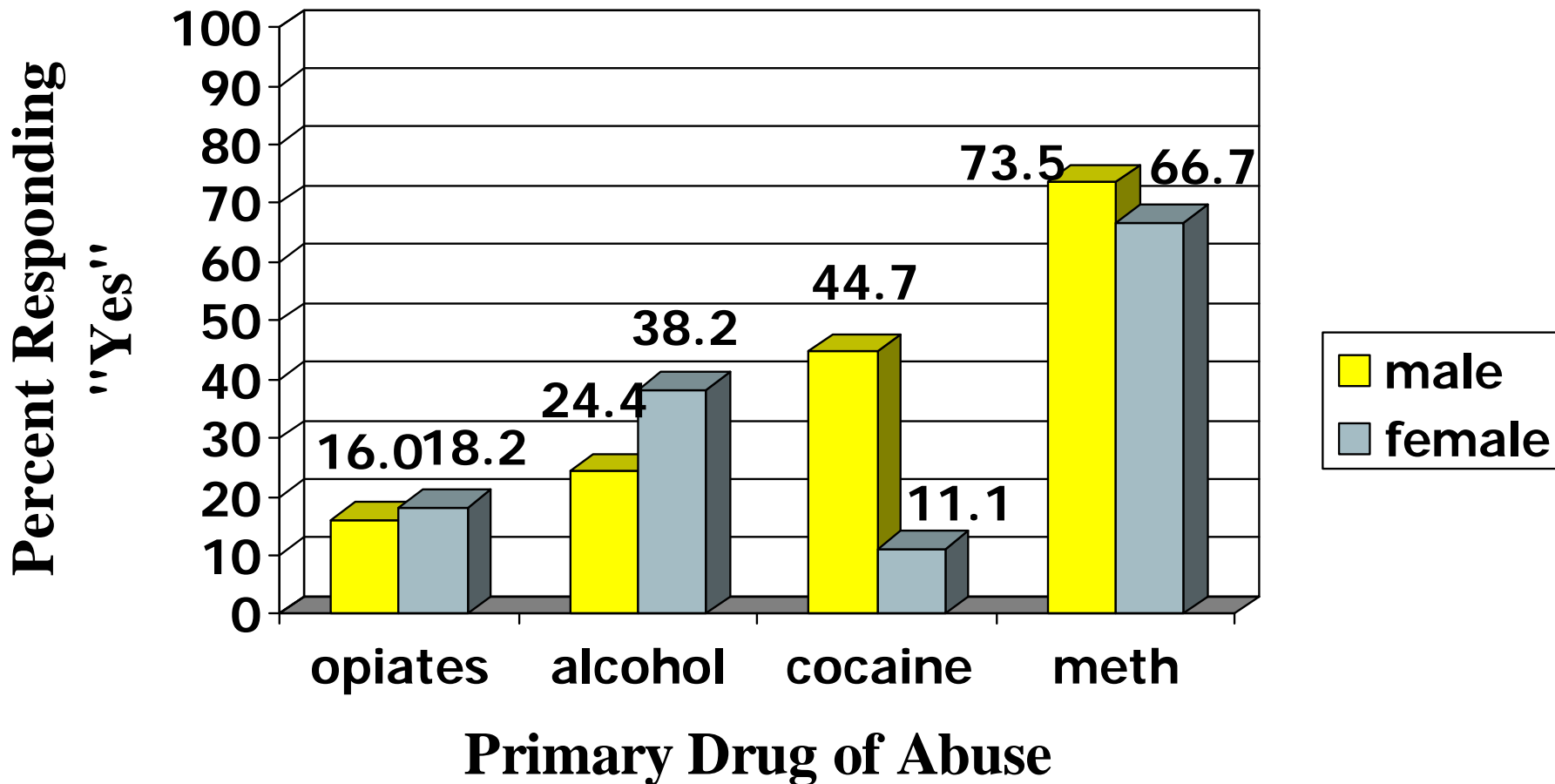
Q.2: My sexual drive is *increased* by the use of ...



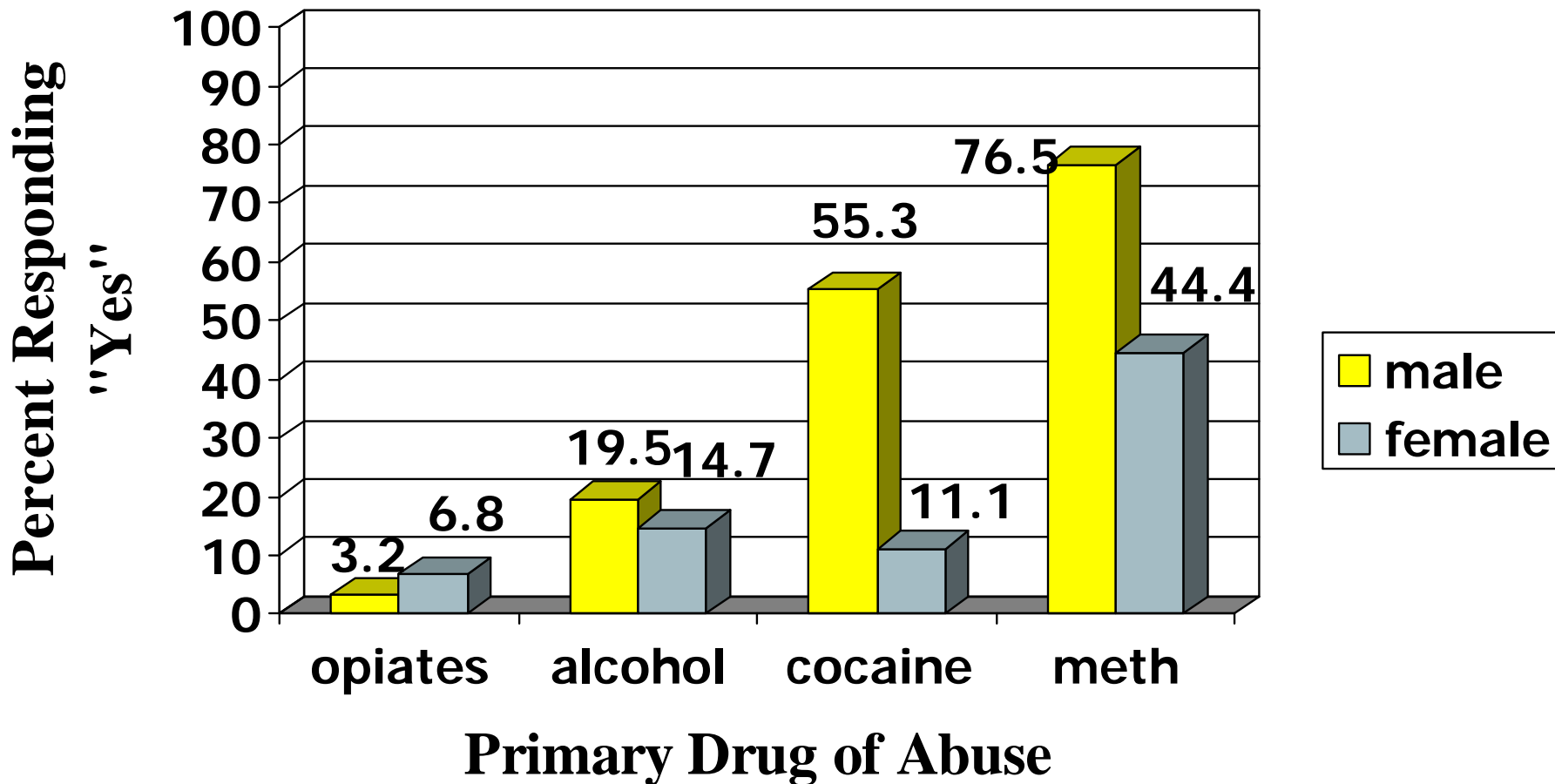
Q.4: My sexual performance is *improved* by the use of ...



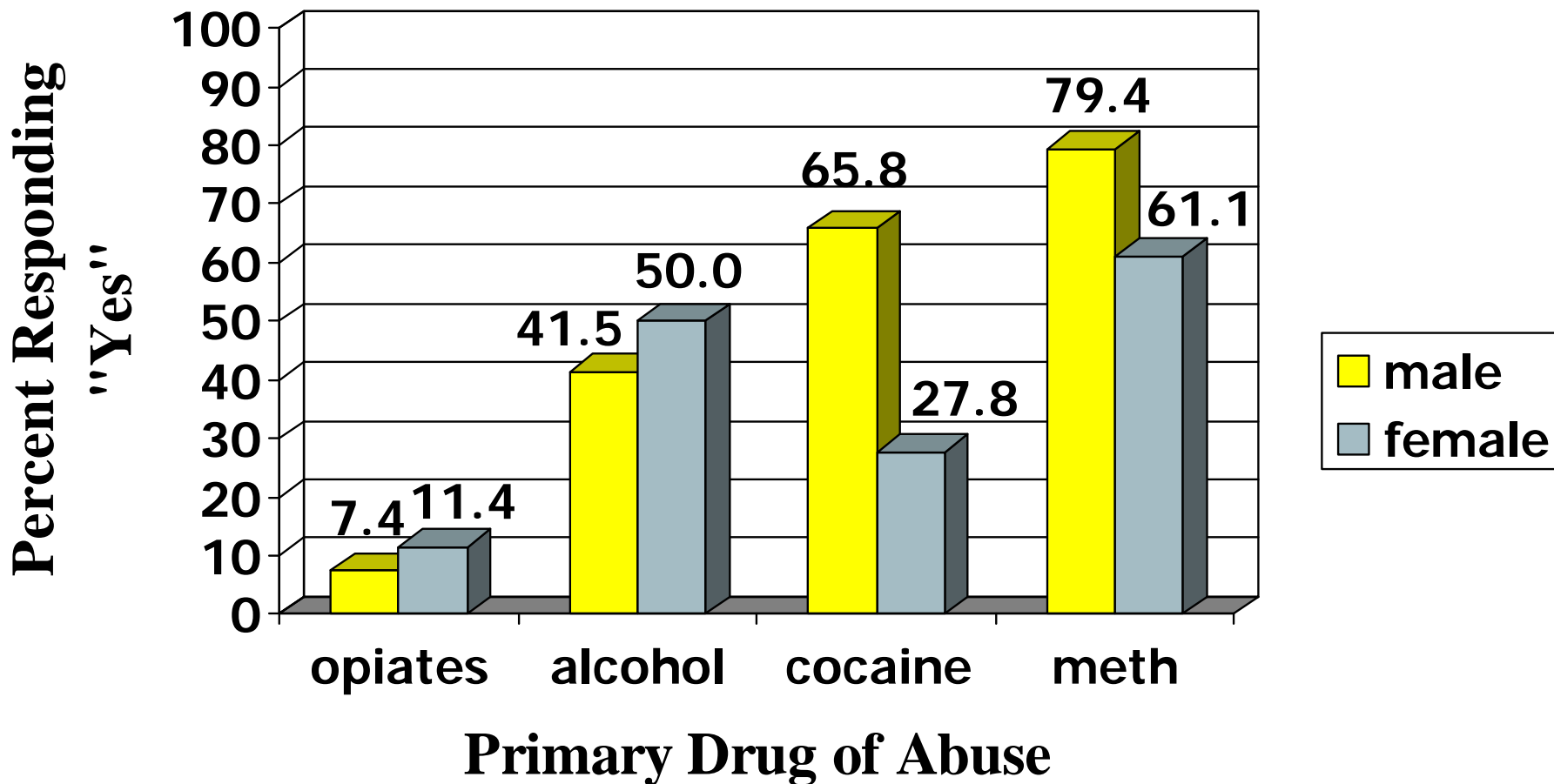
Q.6: My sexual pleasure is *enhanced* by the use of ...



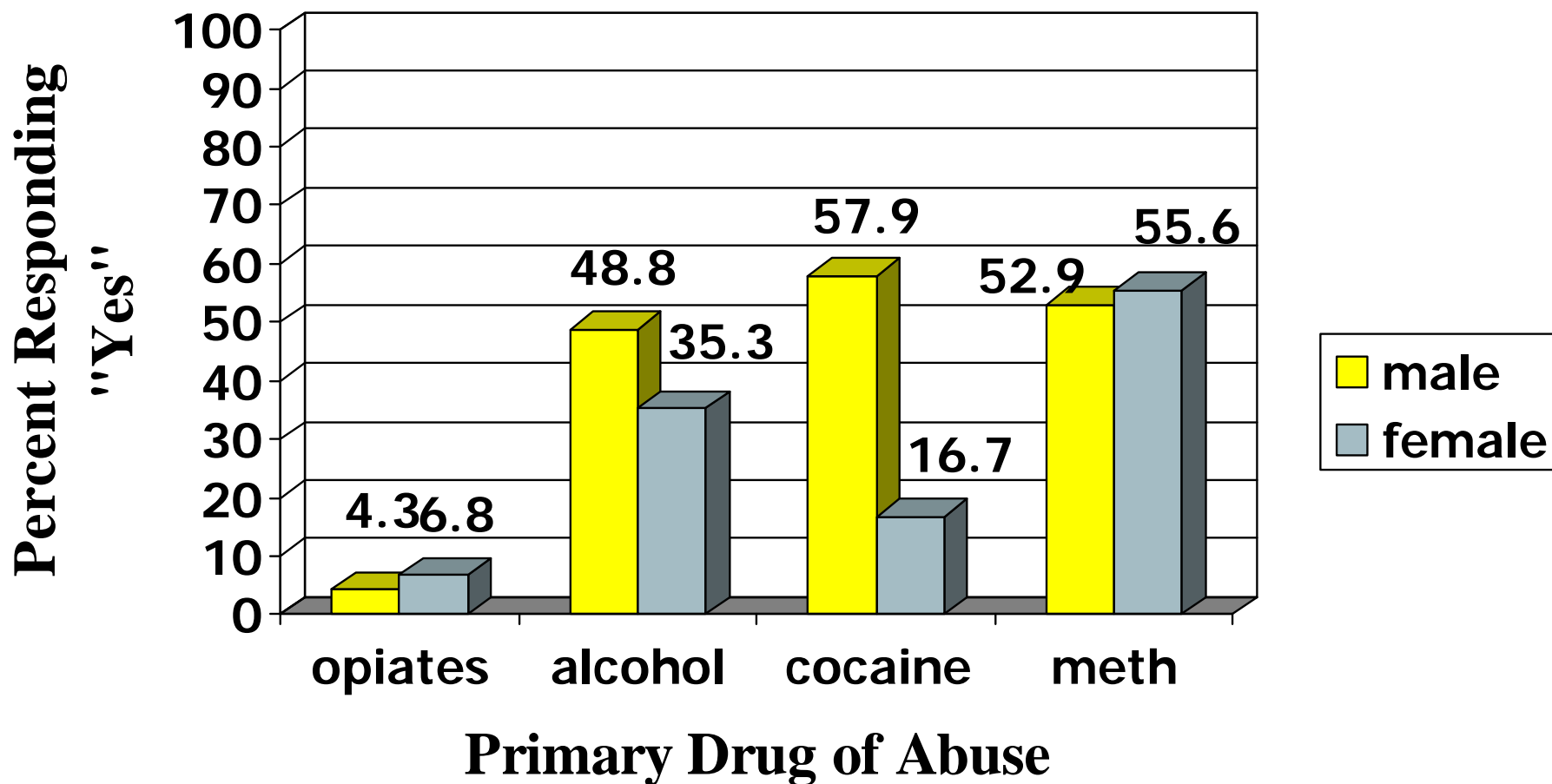
Q.8: My use of ... has made me become *obsessed* with sex and/or made my sex drive abnormally *high*.



Q.10: I am *more likely* to have sex (e.g., intercourse, oral sex, masturbation, etc.) when using ...



Q.12: I am *more likely* to practice “risky” sex under the influence of ... (e.g., not use condoms, be less careful about who you choose as a sex partner, etc.)



High-Risk Sexual Behaviors of Day Laborers

- 2005 study conducted by Charles Drew University and Bienestar
 - 450 Latino immigrant day laborers at six sites in LA where websites reported day laborers could be hired for sexual activity

High-Risk Sexual Behaviors of Day Laborers

- 38% reported they had been approached for sex, of which almost 10% participated in sexual activities
- Approximately three-fourths of those engaging in sex reported unsafe practices
- Day laborers who were more likely to have sex tended to also experience drug dependency, have lower education levels, and had been day laborers for a longer period (five or more years)

Crystal Methamphetamine Use By Latino Men

- Study conducted by Los Angeles County's HIV Epidemiology Program
 - Over 1500 participants of all race and ethnic groups

Source: Bienestar (March 21, 2006). *State and local Leaders Call for Action on Alarming New Latino HIV/AIDS Trends. Day Laborers, Crystal Meth emerge on Latino HIV prevention agenda.* Press release.

Crystal Methamphetamine Use By Latino Men

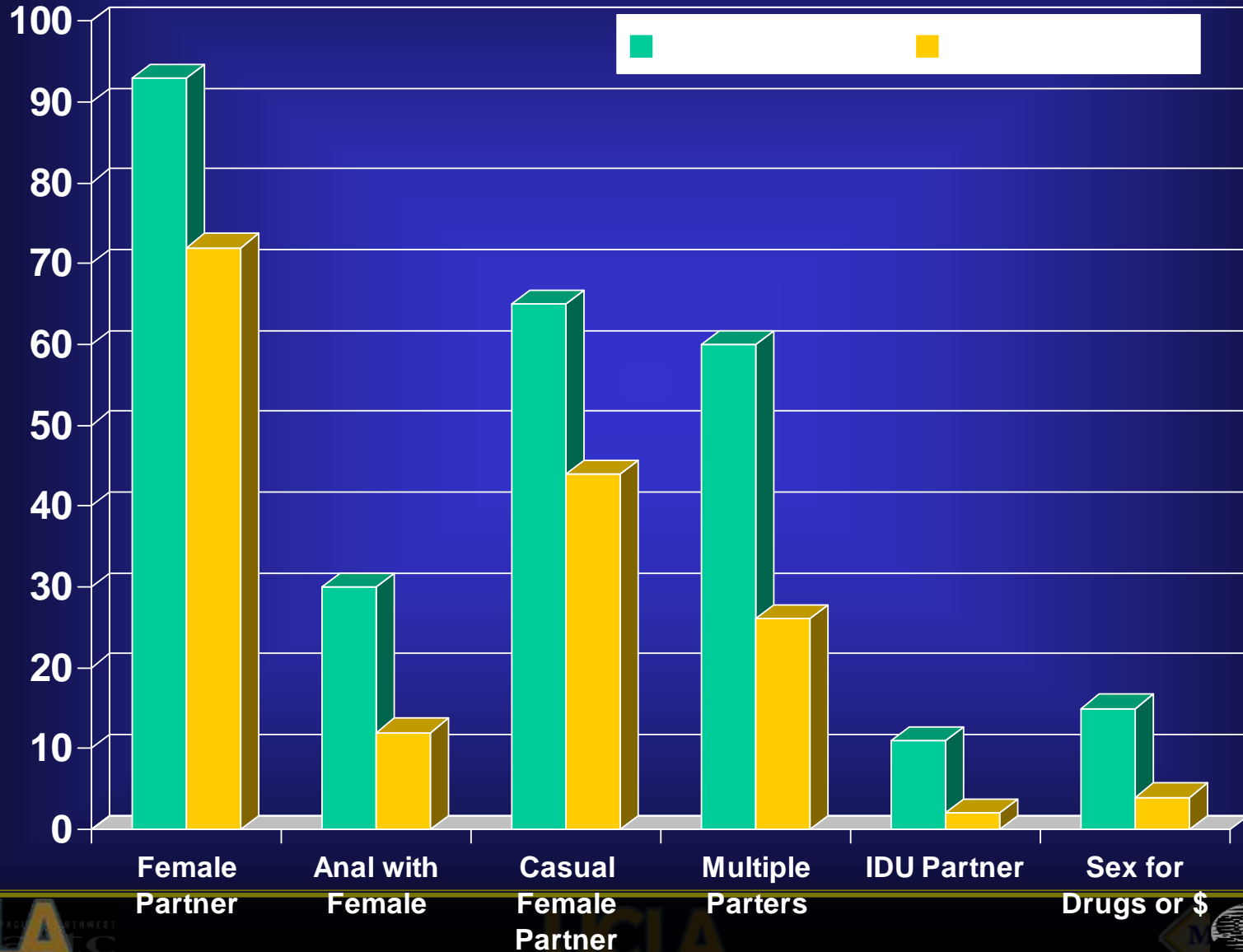
- Newly diagnosed HIV-positive Latino men who have sex with men were almost 9 times more likely to report crystal use than HIV-negative men
- Crystal use was highest among Latinos (20%)
- Crystal was associated with a higher prevalence of unprotected anal sex and with newly diagnosed HIV

Methamphetamine Use and HIV Risk
Behaviors Among Heterosexual Men -
- Preliminary Results from Five
Northern California Counties,
December 2001-November 2003

CS Krawczyk, et al., 2006,
The Body

(http://www.thebody.com/cdc/straights_meth.html#tab2)

Recent Versus Never Meth Use*



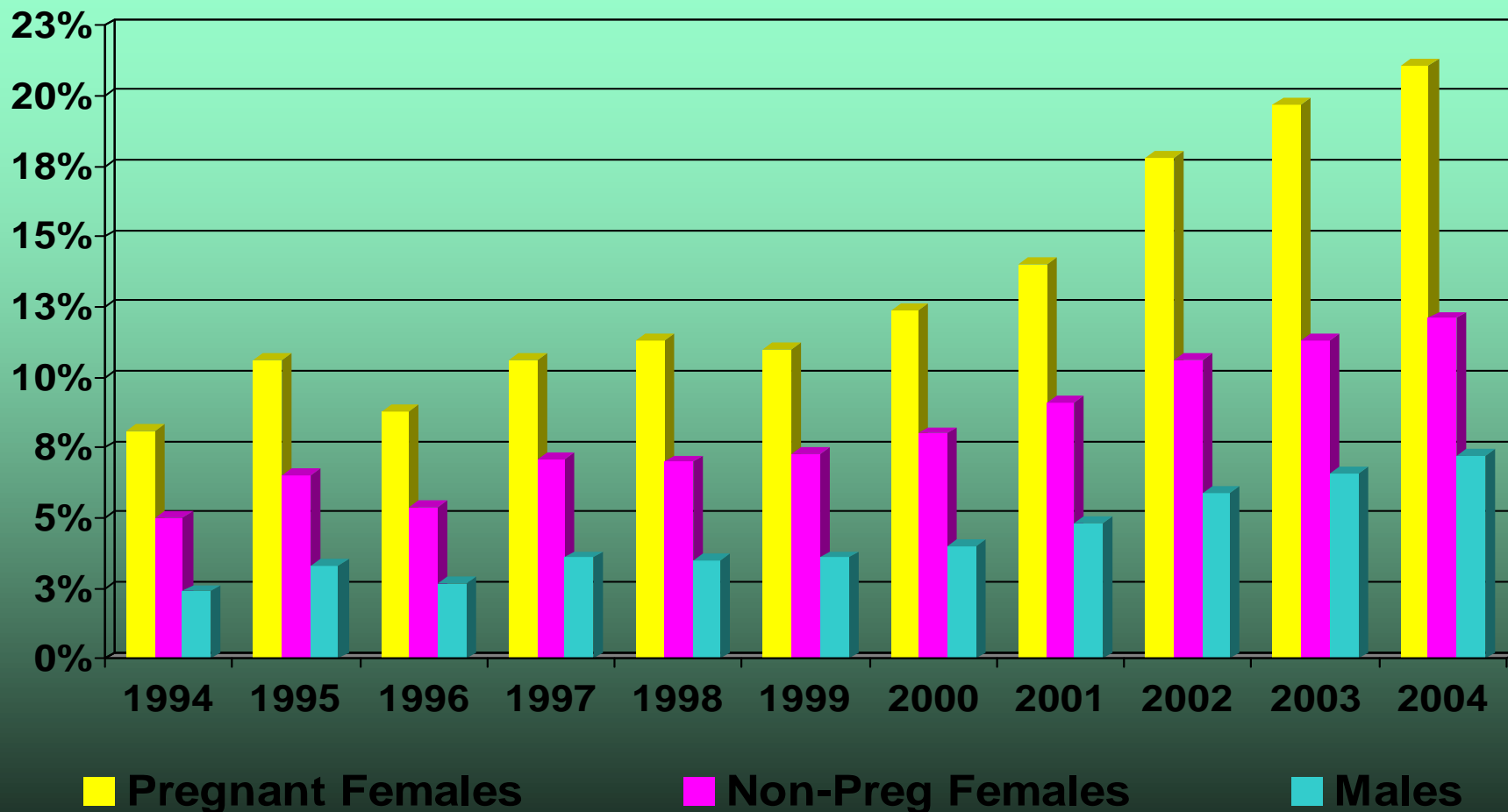
Comparisons of Male Meth Users and Non-Users

- Recent meth use was **not associated** with:
 - Reported condom use during the preceding 6 months.
 - Testing for HIV or chlamydial infection.
- Recent and historical meth use **was associated** with
 - Recent use of one or more other illicit drugs,
 - Use of club drugs,.

Methamphetamine Use and Women

Methamphetamines as Primary Substance by Gender and Pregnancy Status: 1994-2004

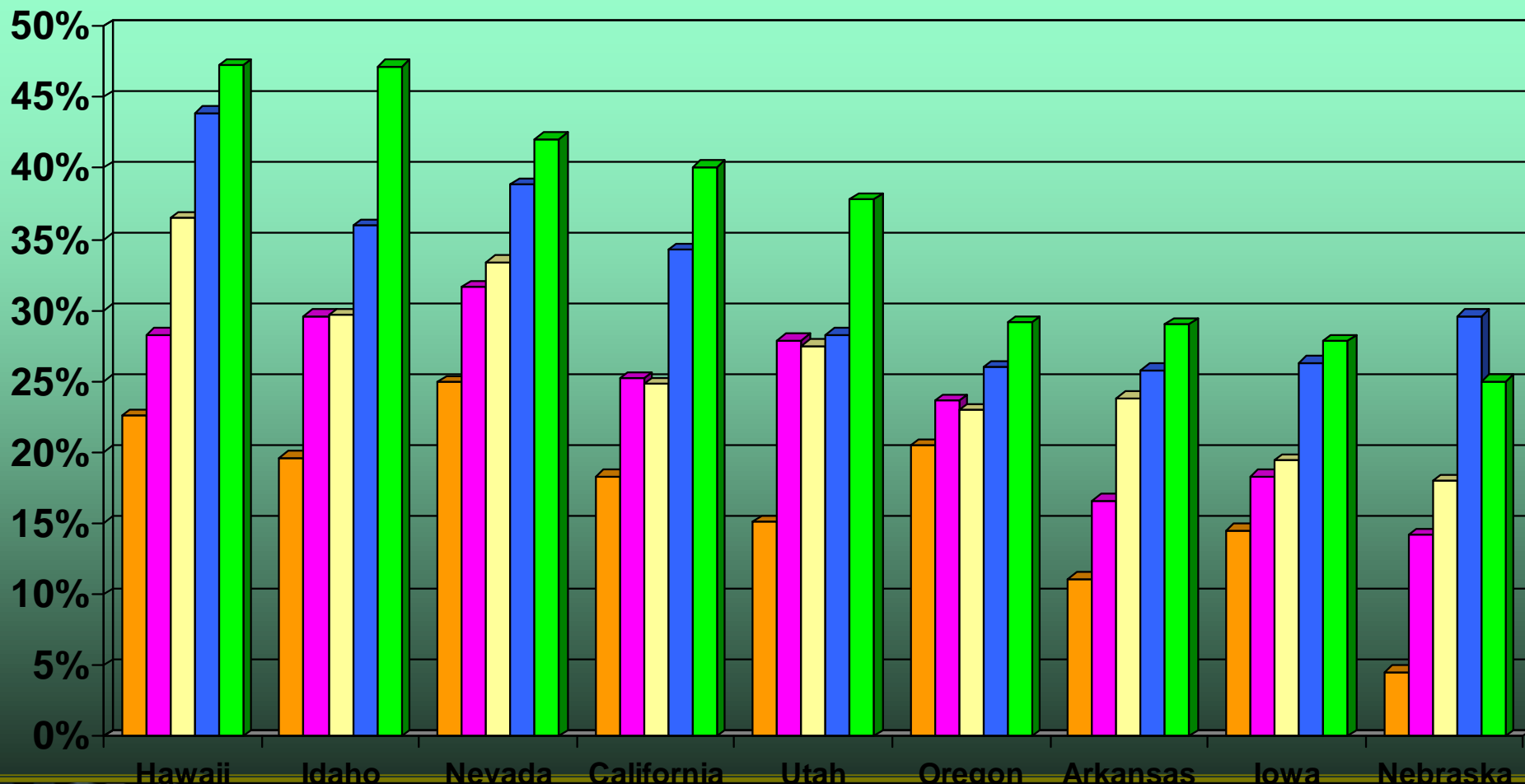
Percent of Total Admissions



Female Treatment Admissions

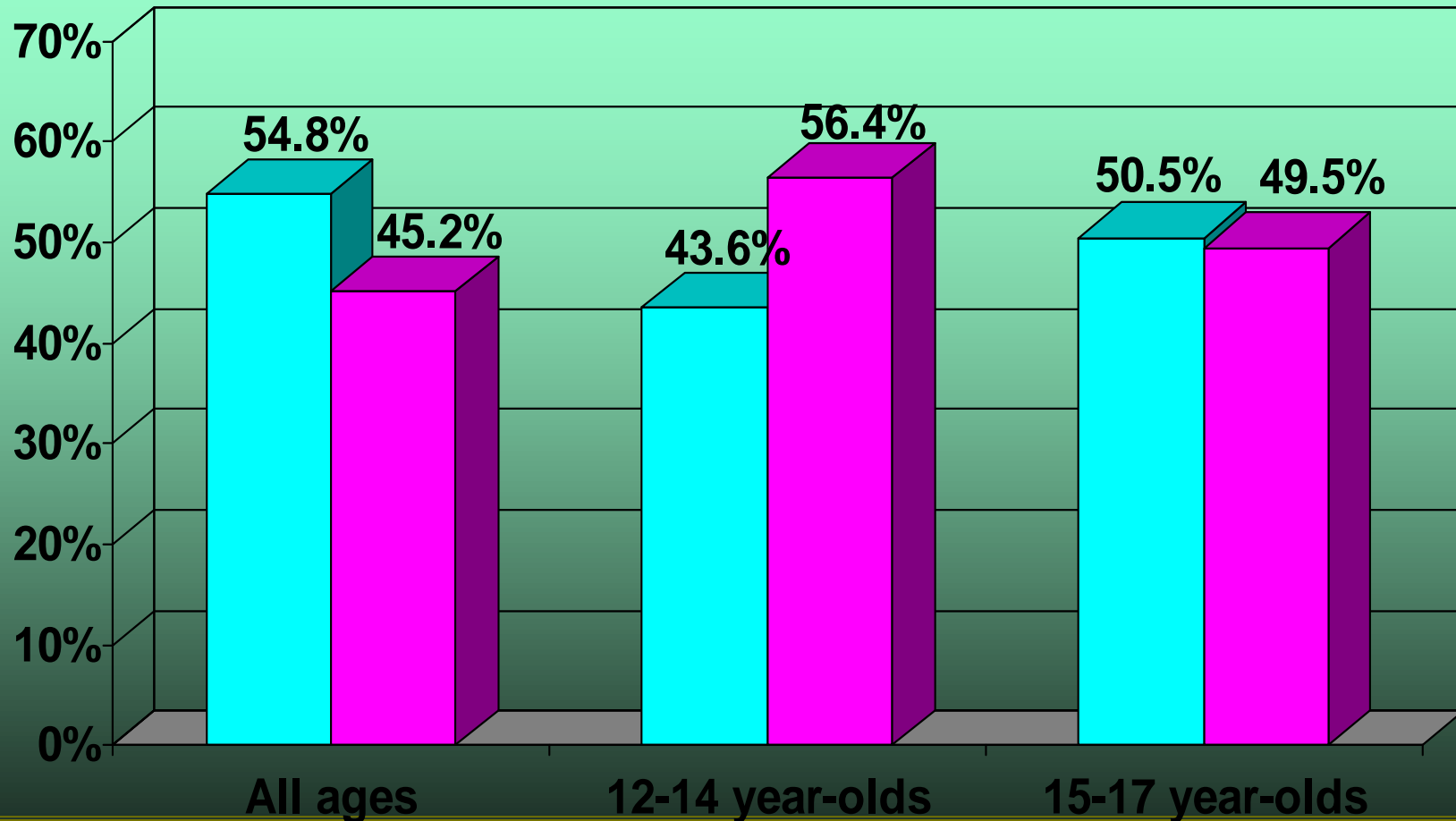
States with Highest Percentage of Meth/Amphetamine as Primary Substance

■ 1996
 ■ 1998
 ■ 2000
 ■ 2002
 ■ 2004



Meth/Amphetamine Admissions By Gender - 2004

Male Female



Female Methamphetamine Users: Social Characteristics and Sexual Risk Behavior

Semple SJ, Grant I, Patterson TL
Women and Health
Vol. 40(3), 2004

Demographics (n=98)

- Ethnicity
 - 44% Caucasian
 - 33% African American
 - 16% Latina
 - 2% Native American
 - 5% Other
- Education
 - 96% had less than a college education
- Marital Status
 - 54% had never been married
- Employment
 - 77% were unemployed

Demographics

- Psychiatric Health Status
 - 38% reported having a psychiatric diagnosis
 - 53% depression
 - 17% bipolar
 - 14% schizophrenia
- Patterns of Use
 - 83% smoked
- Context of Meth Use
 - Meth was used primarily with either a friend (95%) or a sexual partner (84%).
- Social and Legal Problems
 - 36% reported having a felony conviction.

Sexual Partners of Meth-Using Women

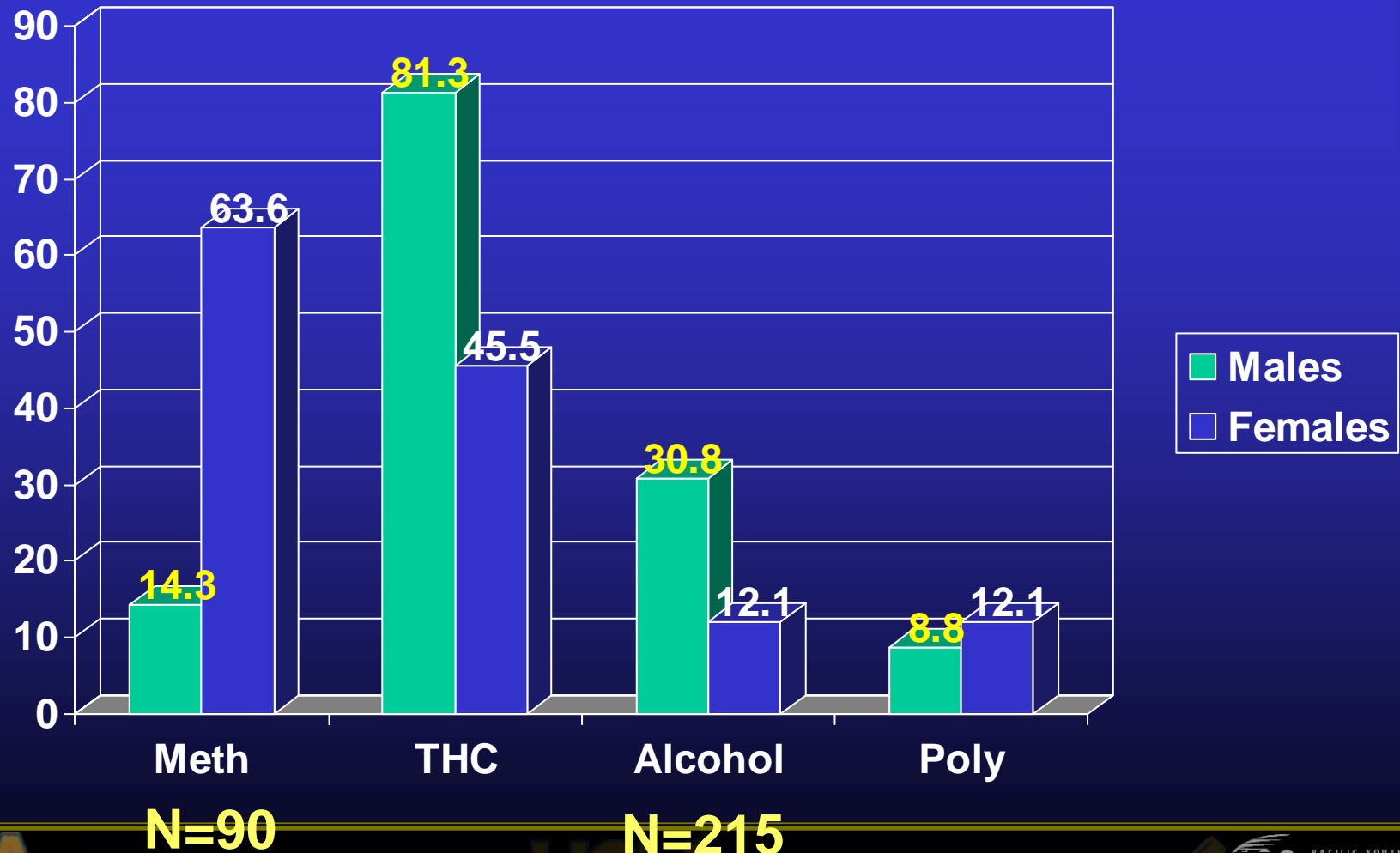
- On average women had 7.8 sexual partners in a two-month period (SD=10.7, range 1-74).
- 84% had casual partners during the past two months.
 - 90% of all casual partners were reported to be meth users.
- 31% had an anonymous partner in the past two months.
 - 76% of anonymous sex partners were meth users.
- No spouses or live-in partners were reported to be HIV-positive.

Sexual Risk Behavior

- Participants engaged in an average of 79.2 sex acts over a two-month period.
- Most sexual activity was unprotected. The average number of unprotected and protected sex acts over the two-month period was 70.3 and 8.8, respectively.
- In terms of unprotected sex:
 - 56% of all vaginal sex acts were unprotected
 - 83% of all anal sex acts were unprotected
 - 98% of all oral sex acts were unprotected

Methamphetamine Use and Adolescents

Matrix Treatment Study N=305 adolescents 13 to 18 years old



Matrix Treatment Study found:

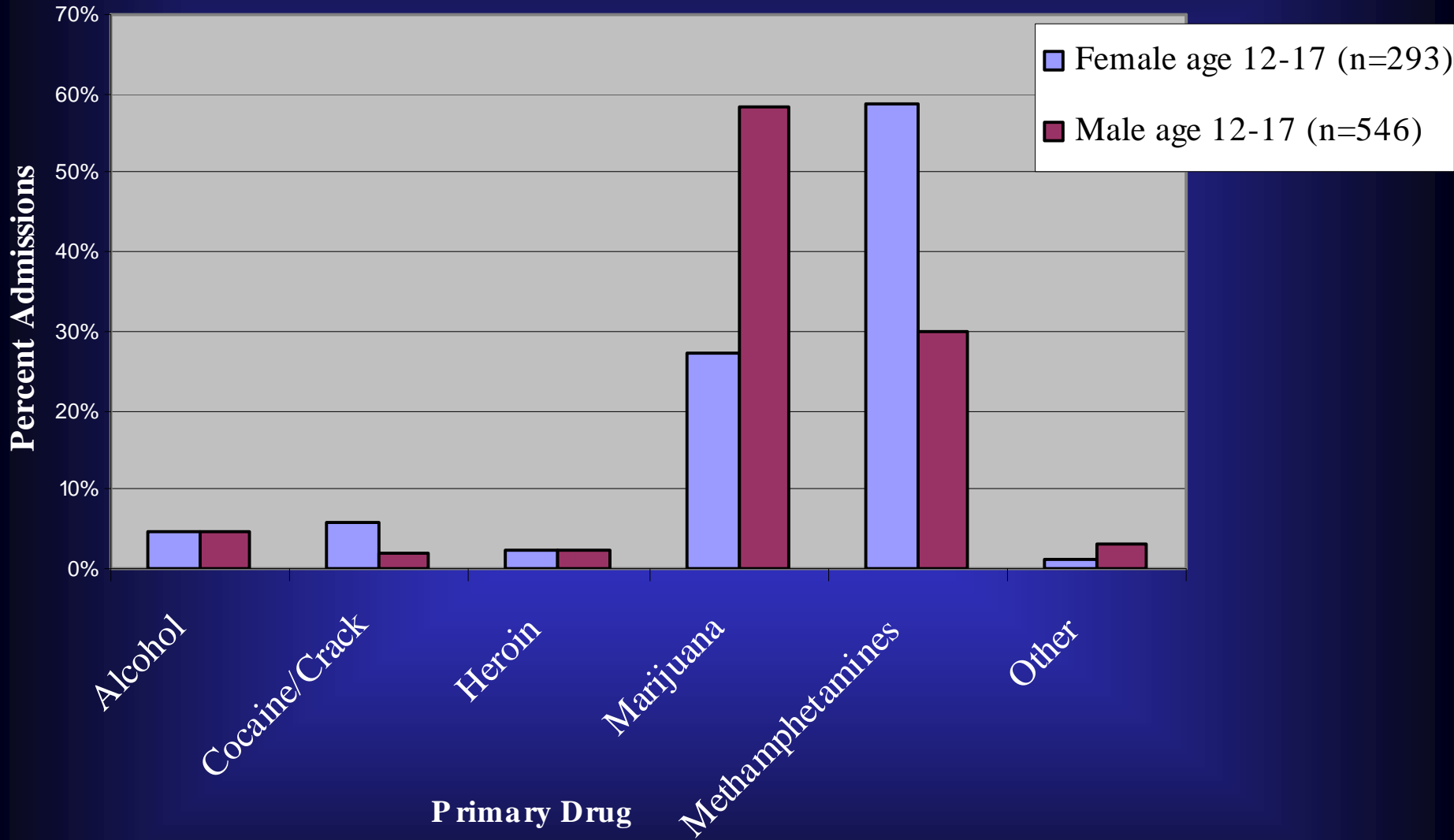
- **Older teens** (ages 17-18) more likely to use than younger youth.
- **Greater psychological & legal dysfunction** than non-MA users.
- **More alcohol and drug use during treatment** than non-MA users.
- **Greater drop out rates** than non-MA users.
- **No injectors** (14% smoke, 12% smoke/snort, 4% snort)

Phoenix House Treatment Found:

- MA accounted for 42.3% of teen treatment admissions in 2005.
- 16% increase in MA admissions between 2002 and 2005 (172 to 210).
- **More youth females** are presenting for treatment with MA problem than males.

<u>Year</u>	<u>Boys</u>	<u>Girls</u>
<u>2002</u>	25%	43%
<u>2003</u>	23%	51%
<u>2004</u>	27%	53%

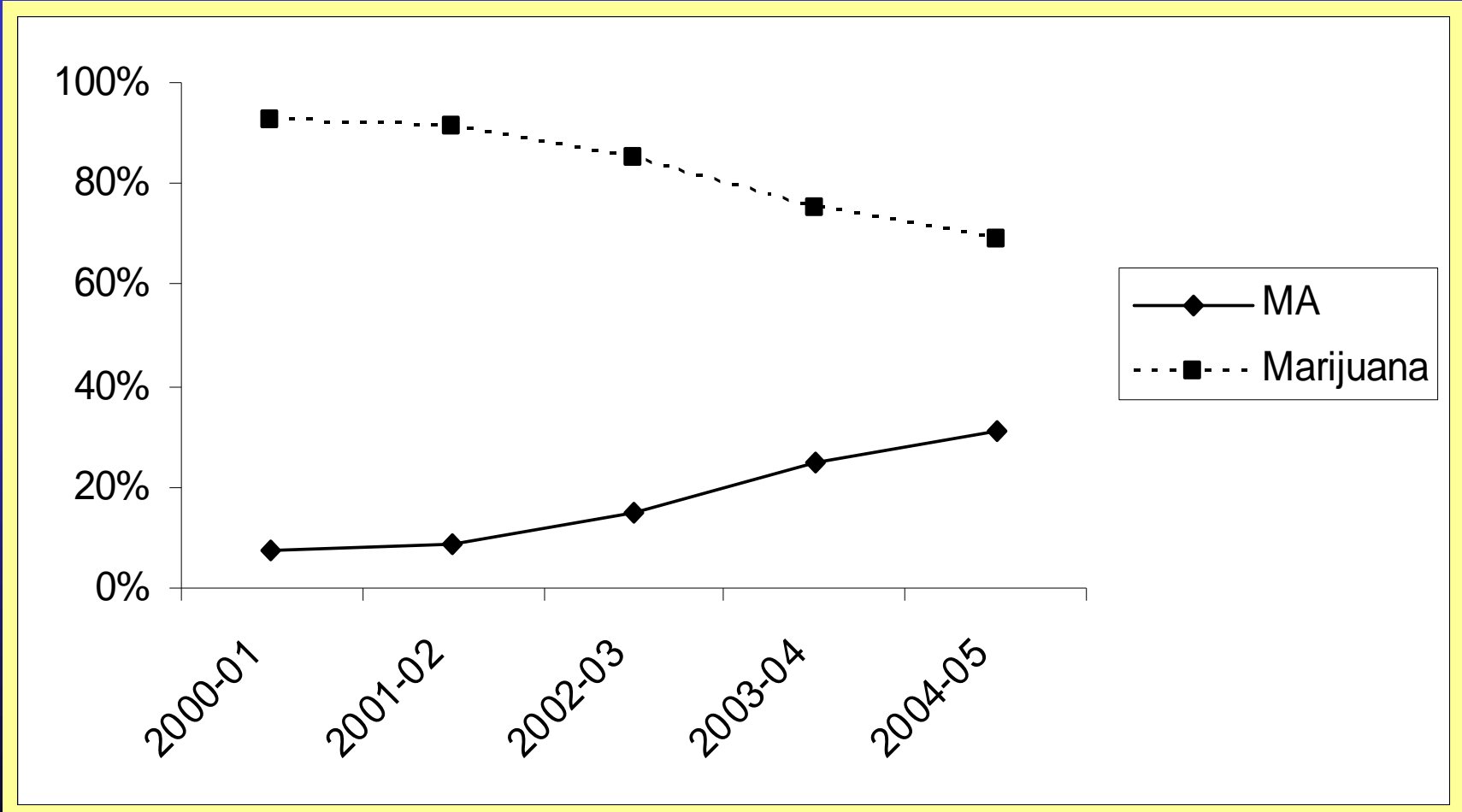
2005 Tarzana Treatment Centers Admissions by Drug of Choice, Gender, and Age



Youth in LA County Treatment

- Study: 4,430 youth (12-24 yrs) who entered outpatient or residential treatment from 2000 through 2005.
- 3,518 primary MJ users & 912 primary MA users.
- Admission and Discharge data

LA County Youth Treatment Admissions for MA and MJ: 2000-2005



LA County Sample Descriptives

	MA Users (<i>n</i> =912)	MJ Users (<i>n</i> =3,518)
Females	60%	20%
Latino	59%	62%
Parole/Probation	46%	61%
Mean (sd) Age 1st Use	14 ± 1.6 yrs	13.1 ± 1.8 yrs
Frequency of Use: Daily	28%	19.6%
Route: Smoking	74.3%	97%
Previous Tx: 2+	10%	5%

LA County: Treatment Patterns

- MJ - 89% outpatient
- MA – 46% residential

	<i>Outpatient (n=3,642)</i>		Residential (n=808)	
	MA	MJ	MA	MJ
Mean Length of Stay (\pm SD <i>in days</i>)	95.8 \pm 86.2	108.3 \pm 93.4	43.05 \pm 70.3	60.1 \pm 94.1
% Completion	21.9%	25.2%	26.7%	19.1%

LA County Study found:

- Compared to MJ users MA users more likely to be:
 - Female
 - On probation/parole
 - Older aged (>17)
 - Have previous treatment episodes
 - Enrolled in residential settings
 - Have poorer treatment retention

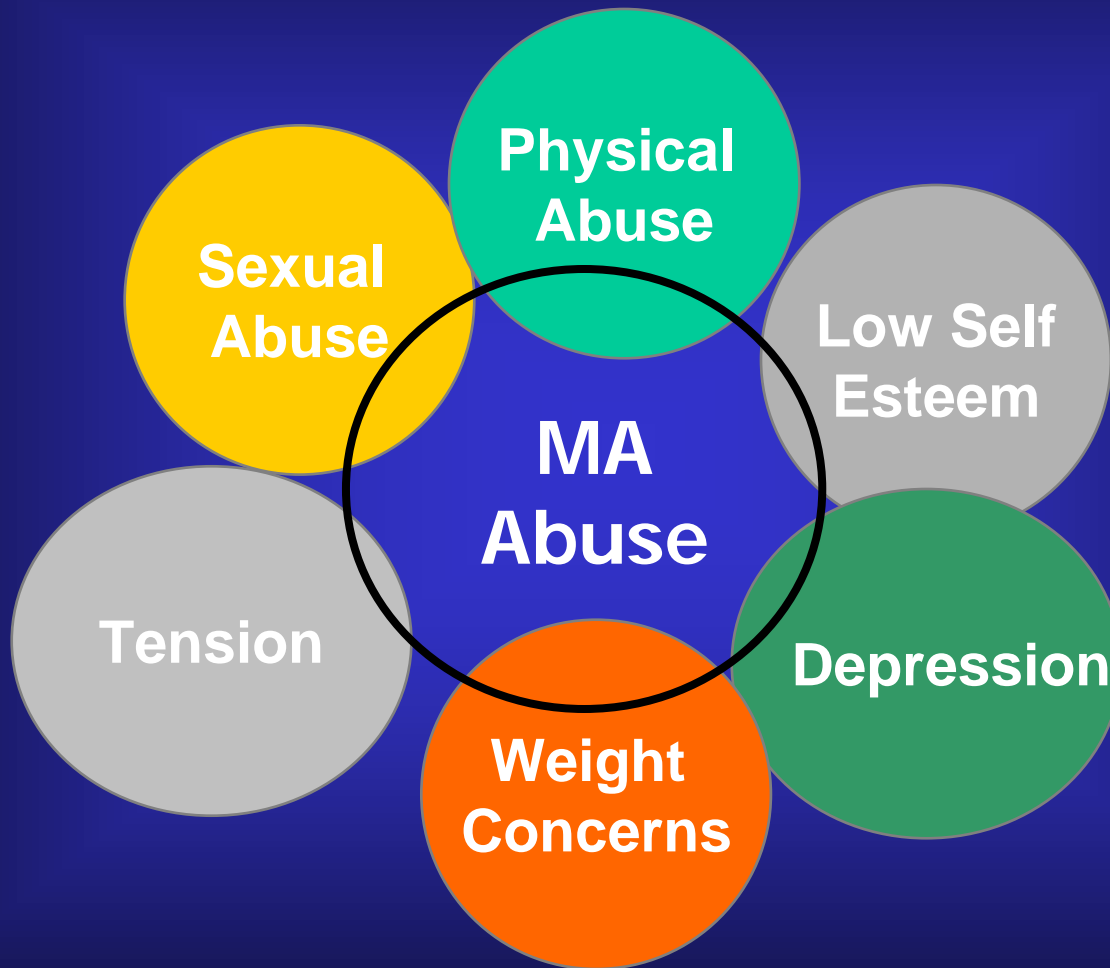
3 year CASA study on adolescents 8 to 22 years old found:

- Females became dependent upon MA faster.
- Females suffered more adverse effects sooner than males.

Anecdotal Reports

- Clinicians indicate low self-esteem, depressive symptoms, & eating disorder make girls especially vulnerable to use and continued misuse of MA
- Deviant behavioral problems in males – ASPD, ADHD make males vulnerable to MA use (Yen & Chung, 2006)

CASA Study: Female Risk Factors



Risk Factors among adolescents in Matrix Treatment

